Northeastern Association of Business, Economics and Technology

Peer Reviewed Proceedings

37th Annual Meeting
October 23rd and 24th, 2014

Editors:

Norman Sigmond
Kutztown University of Pennsylvania

Cori Myers
Lock Haven University of Pennsylvania

Jerry Belloit
Clarion University of Pennsylvania

Marlene Burkhardt
Juniata College

Michael Gallagher
DeSales University

Loreen Powell
Bloomsburg University of Pennsylvania

NABET

The Northeastern Association of Business, Economics and Technology is in its thirty-seventh year of existence. It was originally APUBEF, the Association of Pennsylvania University Business and Economics Faculty. APUBEF was founded by a group of economics and business professors from the fourteen state universities comprising the Pennsylvania System of Higher Education. Their goal was to provide a platform for sharing and exploring scholarly work among the business faculty of the fourteen state universities in Pennsylvania. As a result of their efforts, the organization has sponsored an academic conference each year for the past 37 years.

The fundamental goal of NABET/APUBEF has been to assist the business faculty of the small colleges and universities in Pennsylvania and surrounding states. In 2006 NABET became regional in scope. At the 37th Annual Meeting authors from eight states and 48 colleges and universities presented 89 scholarly works.

The original founders also established a referred journal, the Northeastern Journal of Business, Economics and Technology (formerly the Pennsylvania Journal of Business and Economics). The journal applies a double-blind review process and is listed in Cabell's Directory. It is published at least once each year, and has a devoted editorial staff supported by an excellent corps of reviewers.

Proceedings of the 37th Annual Meeting

At NABET, we encourage conference presenters to complete their articles and submit them for publication. Of the 89 presentations at the 37th Annual Meeting, the following pages contain those papers that were completed by the authors and submitted to the Proceedings editors. Each paper has been reviewed and edited by two reviewers. The final section of the Proceedings is the Official Program from the 37th Annual Meeting which includes the Abstracts for all of the 89 presentations.

TABLE OF CONTENTS

THE EFFECT OF TYPE AND DIRECTION OF INFLUENCE TACTIC ON MANAGERS' WILLINGNESS TO ADD BUDGETARY SLACK
Sean M. Andre, York College of Pennsylvania
Marco Lam, Western Carolina University
Mark O'Donnell, York College of Pennsylvania 6

DESIGNING CLASSROOM ACTIVITIES TO CREATE STUDENT ENGAGEMENT IN INTRODUCTORY ACCOUNTING COURSES
Kathy Baughman, Juniata College 18

ACCOUNTING STUDENTS WRITING-TO-LEARN USING SOCIAL PEDAGOGY AND TECHNOLOGY
Rajendra Bhika, LaGuardia Community College
Andrea Francis, LaGuardia Community College
Hector Fernandez, LaGuardia Community College
Nicole Maguire, LaGuardia Community College 29

***** Winner of the Best Paper Award at the 37th Annual Meeting *****

MORE EVIDENCE OF THE NEVADA EFFECT: SEC, DOJ, FBI, AND IRS REGULATORY ENFORCEMENT ACTIONS
A.J. Cataldo II, West Chester University
Lori Fuller, West Chester University
Thomas Miller, West Chester University 35

HUMAN RESOURCE MANAGEMENTS' PERCEPTIONS OF SUSTAINABILITY AND ITS COMPETITIVE ADVANTAGE: A QUANTITATIVE ANALYSIS
Rhonda Clark, Slippery Rock University of Pennsylvania
John Golden, Slippery Rock University of Pennsylvania 56

CORPORATE TAX AVOIDANCE TRENDS: FACTS AND MISCONCEPTIONS
Robert E. Duquette, Kutztown University of Pennsylvania
David Wagaman, Kutztown University of Pennsylvania 68

SETTING THE FOUNDATION FOR INFORMATION LITERACY IN FRESHMAN BUSINESS MAJORS
Andrea Farro, Rowan University
Michelle Kowalsky, Rowan University 83

FINANCIAL CONSTRAINTS AND ORGANIZATIONAL CULTURE
Susan Flaherty, Towson University
Jeffrey Hillard, Stevenson University
Richard Rosecki, Towson University
Daniel Singer, Towson University 92

MICROFINANCE V. MACRO-FINANCE TECHNOLOGIES WHAT'S THE DIFFERENCE?
Patrice Flynn, Mount St. Mary's University 107

THE FORTE CASE: LEARNING FROM A PONZI SCHEME
Kevin Flynn, West Chester University of Pennsylvania
Phyllis Belak, West Chester University of Pennsylvania
Glenn Soltis, West Chester University of Pennsylvania 120

A STUDY OF THE FAN MOTIVES FOR VARYING LEVELS OF TEAM IDENTITY AND TEAM LOYALTY OF COLLEGE FOOTBALL FANS
David Gargone, Misericordia University 132

WOMEN DIRECTORS ON PUBLIC COMPANY BOARDS: DOES A CRITICAL MASS AFFECT LEVERAGE?
Cindy K. Harris, Ursinus College 139

AN EMIRICAL STUDY ON MOBILE TECHNOLOGIES TO ENHANCE 21ST CENTURY LEARNING
Kathleen Houlihan, Wilkes University 155

CONSUMER DIRECTED HEALTH PLANS AND THE ASSOCIATION BETWEEN MEDICAL SAVINGS ACCOUNTS & PLAN CHOICE
David W. Jordan, Slippery Rock University 161

DO BONDHOLDERS RECEIVE BENEFITS FROM BANK INTERVENTIONS?
Yili Lian, Pennsylvania State University 171

REAL LIFE IN THE CLASSROOM: GETTING OUR STUDENTS TO ENGAGE AND THINK CRITICALLY WITH EXPERIENTIAL LEARNING
Christine Lombardo-Zaun, Cedar Crest College 191

AN EXPERIENTIAL HYBRID MODEL OF BLENDED LEARNING IN A BUSINESS COURSE
Eric Malm, Cabrini College 195

USING TECHNOLOGY TO EASE THE PAIN IN THE…ASSESSMENT
Dr. Cori Myers, Lock Haven University
Dr. Peter Huegler, Lock Haven University 202

CONTEMPORARY MANAGEMENT AUTHORS: DO THEY REALLY HAVE NEW IDEAS FOR SUCCESS?
Cori Myers, Lock Haven University
Marcia Kurzynski, Lock Haven University 209

INTERMEDIATE ACCOUNTING MONOPOLY PROJECT VERSION 6.0
John Olsavsky, State University of New York at Fredonia 217

AN EVALUATION OF INSPECTION AND VIOLATION RATES FOR NATURAL GAS DRILLING IN THE STATE FORESTS OF PENNSYLVANIA
John A. Pendley, Susquehanna University 229

AN EVALUATION OF MBA STUDENT SUCCESS AND STREAMLINING THE ADMISSIONS PROCESS
William R. Pratt, Clarion University of Pennsylvania....237

I'VE GOT A DEGREE, BUT AM I MARKETABLE?!
Darrell Steckler, York College of Pennsylvania....247

WHO OWNS WHAT LIES BENEATH? THE STATUS OF DORMANT OIL AND GAS RIGHTS IN PENNSYLVANIA, AND A CALL FOR REVISION OF THE LAW
Donna Steslow, Kutztown University of Pennsylvania....258

SENSEMAKING APPROACH TO MAKING CORPORATE SOCIAL RESPONSIBILITY DECISIONS UNDER UNCERTAINTY
Zinaida Taran, Penn State Harrisburg
Stephen C. Betts, William Paterson University....263

DOES A PUBLIC TRUST HAVE STANDING IN A FORECLOSURE ACTION?
Anthony P. Vigna, Ramapo College of New Jersey....270

CRITICAL SUCCESS FACTORS FOR HYBRIDSOFTWARE DEVELOPMENT METHODOLOGY: A QUANTITATIVE ANALYSIS
Gerald P. Wright, Husson University....277

OFFICIAL PROGRAM WITH ABSTRACTS; 37th Annual Meeting....287

NABET OFFICERS....322

NABET Executive Board....323

THE EFFECT OF TYPE AND DIRECTION OF INFLUENCE TACTIC ON MANAGERS' WILLINGNESS TO ADD BUDGETARY SLACK

Sean M. Andre, York College of Pennsylvania
Marco Lam, Western Carolina University
Mark O'Donnell, York College of Pennsylvania

ABSTRACT

Prior research in accounting has shown managers may be more likely to make inappropriate decisions when under pressure from their superiors. However, studies from the leadership field show that decision makers may experience alternative forms of influence (such as rational persuasion) and from individuals other than their superiors (such as peers). This study explores the effect of alternative forms and direction of influence on the likelihood that a decision-maker will violate company policy by adding budgetary slack. The authors found that a high number of decision-makers chose to go against policy and add budgetary slack. Furthermore, those who violate company policy once were more likely to do so a second time. However, neither form nor direction of the influence attempt predicted compliance with requests to violate company policy. These findings suggest a need for increased attention to training that more heavily emphasizes reasoning behind company policies, as well as training that heightens managers' awareness of the influence tactics others may use to encourage the violation of such policies. Such training may help encourage adherence to company policies.

INTRODUCTION

The purpose of this study is to determine how different forms of external influence impact managers' willingness to violate corporate policy by creating budgetary slack. Specifically, we examine the effect of the type of influence tactic (pressure or rational persuasion) and the direction from which the influence originates (superior or peer) in determining the likelihood that managers will artificially "pad the budget." We also examine if padding the budget at one point in time increases the likelihood that the manager will again violate that company policy at a future point in time.

This research is motivated by the need to further understand what leads managers and accountants to make inefficient and potentially harmful decisions, such as creating budgetary slack. Adding slack to a budget can be harmful to a company, as it can lead to inappropriate resource allocations, decreased profits, and lost opportunities (Schiff & Lewin 1970; Onsi 1973). By exploring which types of influence attempts are likely to lead to inappropriate decisions, companies can develop training and additional policies that discourage undesirable behaviors and heighten managers' awareness of how others might try to influence them to make such decisions. Knowledge of effective influence behaviors can also be employed by managers to encourage ethical behavior and promote adherence to company policies.

The present study offers a valuable contribution to the literature on budgetary slack. Research has shown that the ultimate decision on whether or not to create budgetary slack can be affected by a number of factors, such as personality (Hartmann & Maas, 2010), pay schemes (Hobson, Mellon, & Stevens, 2011), budgetary control and ethical work climate (Ozera & Yilmaz, 2011), the extent of the manager's participation in the budgeting process (Merchant, 1985), and perceived role conflict (Maas & Matejka, 2009). However, little research has explored the extent to which managers may create budgetary slack because someone else attempted to influence them to do so. Furthermore, the research that has examined attempts to influence managers to add budgetary slack or engage in other inappropriate accounting behavior has primarily focused on one type of influence attempt - obedience pressure from a superior. For example, Davis, DeZoort, and Kopp (2006) found that receiving obedience pressure from a superior increased the likelihood of managers adding slack to their budgets, and Hartmann and Maas (2010) found that managers high on a Machiavellianism scale and highly involved in the management of the organization are more likely to add slack if also under pressure from a superior.

However, obedience pressure from a superior is only one form of pressure that a manager may receive. Research on leadership behavior suggests that: (1) obedience pressure is not even the most commonly used tactic to influence behavior (e.g., Yukl & Falbe, 1991), and (2) peers are also a significant source of influence (Yukl, 2013). Rational persuasion, which is the use of logical arguments to convince another party to carry out a specific request, has been found to be generally more successful than obedience pressure in influencing another party to perform a task (Yukl

2013). The current study builds upon the existing research on pressure and budgetary slack in the accounting field by introducing an additional type of influence tactic (rational persuasion) and by examining different directions (superior and peer) from which an influence attempt may derive.

The present study also contributes to literature on fraud. Well-known fraud and accounting scandals (e.g., Enron, WorldCom, Adelphia, etc.), show fraudulent behavior is often not a one-time event in organizations, and instead occurs over the period of many years. While not necessarily in the same league as financial statement fraud, creation of budgetary slack is nonetheless a serious ethical issue, as managers willingly misrepresent accounting numbers when reporting the budget, which can ultimately hurt other business units and investors (Douglas & Wier, 2000). Such actions seem closely related to how accounting fraud is often defined, for example, "an intentional act that results in a material misstatement in financial statements that are the subject of an audit" (AICPA, 2002). The present study contributes to the understanding on fraud by examining if those who add budgetary slack in response to the first influence attempt are more likely to repeat such behaviors at a future point in time.

Additionally, fraud sometimes not only negatively impacts organizations, but fraud and other policy violations often also cause difficulties for the individual who commits such actions. For example, Murphy and Dacin (2011) suggested that once individuals commit fraud, they are likely to experience negative affect (such as guilt). Therefore, multiple parties and stakeholders benefit from research, such as the present study, that identifies factors that contribute to a manager's willingness to perform unethical actions and thus, provides organizations an opportunity to address such factors and better prevent unethical actions from occurring.

The present study also offers a valuable contribution to the leadership literature. Previous research has found that different forms of influence (e.g., pressure or rational persuasion) and different directions (e.g., a superior or a peer) may impact the effectiveness of an influence attempt (Kipnis, Shmidt, & Wilkinson, 1980; Falbe & Yukl, 1992; Yukl & Tracey, 1992). However, most of these studies were conducted by asking participants to reflect on experiences that they remembered in their professional careers and if they responded with enthusiastic commitment, and not merely compliance. The current paper adds to the literature by employing an experimental design that directly manipulates the type of influence attempt in a decision-making context, thereby assuring consistency of the strength with which each influence tactic is employed and measuring each tactic's immediate impact on a decision. Such experiments are rare and provide important insights that supplement the large number of survey studies on the topic.

THEORY AND HYPOTHESIS DEVELOPMENT

Budgetary Slack

Douglas and Wier (2000) defined budgetary slack as "the difference between planned performance targets and real performance capabilities" (p. 267). Hobson, Mellon, and Stevens (2011) extended this definition by describing it as a situation "when a subordinate understates their capabilities or the capabilities of a business unit in their budget" (p. 88), which can be accomplished by overstating costs, or understating revenues or production estimates (footnote 1). In general, budgetary slack occurs when a manager intentionally misreports the upcoming budgetary numbers in a way that makes the business unit seem worse than the manager actually expects it to be.

Research has shown that whether or not the manager chooses to create slack is an ethical issue. On one hand, managers have incentives to "game the system" and misreport budgets (Salterio & Webb, 2006). Doing so may make it easier to meet performance targets, thereby receiving favorable reviews, monetary rewards, and bonuses (Lukka, 1988; Douglas & Wier, 2000). On the other hand, budgetary slack can be harmful to the firm as it may lead to inappropriate resource allocations and "less than optimum" profits (Onsi. 1973), as well as lost opportunities to the firm and increases to its cost function (Schiff & Lewin, 1970). In other words, managers are intentionally misrepresenting the budget, using their inside knowledge for gain, and potentially hurting other business units and investors (Douglas & Wier, 2000).

As noted earlier, the ultimate decision on whether or not to create budgetary slack can be affected by a number of factors, and the impact of influence attempts on such decisions is deserving of further attention. The present study builds upon the prior work by Davis et al., (2006) and Hartmann and Maas (2010) by further examining the role of influence attempts in impacting a manager's willingness to add budgetary slack. Specifically, our study expands upon these prior studies, each of which examined only obedience pressure from a superior, to examine an additional

type of influence tactic (rational persuasion) and different directions (superior or peer) from which such influence may derive.

Type of Influence Attempt: Obedience Pressure or Rational Persuasion

With respect to external sources of influence, prior research in accounting focused primarily on obedience pressure. However, an examination of research in the field of leadership shows that there are other ways to influence the decisions of others. One of these types of influence tactics is rational persuasion, defined as "the use of explanations, logical arguments, and factual evidence to explain why a request or proposal will benefit the organization or help to achieve an important task objective" (Yukl, 2013, p. 203). This particular influence tactic has been shown to be one of the more common and successful ways that individuals influence others within an organization.

Research suggests that rational persuasion is used more often when one individual wants another to accept a new idea or to initiate change (Kipnis, Schmidt, & Wilkinson, 1980), whereas obedience pressure is used primarily when other attempts to influence someone failed, or when compliance is expected to be difficult (Yukl & Tracey, 1992). Yukl and Falbe (1991) found that rational persuasion is one of the most common influence attempts (more so than obedience pressure). Although Falbe and Yukl (1992) suggested that obedience pressure might be effective when the goal is merely compliance and not commitment (being enthusiastic and supportive), research has found that rational persuasion is more likely to result in commitment to the request; whereas, obedience pressure is more likely to result in resistance, be negatively correlated with commitment, and require unusual effort and persistence from the other party to assure that the action is carried out (Yukl & Tracey, 1992; Yukl, Kim, & Chavez, 1999; Yukl, Chavez, & Seifert, 2005; Yukl, Seifert, & Chavez, 2008).

Additionally, research on financial statement fraud suggests that managers are more likely to commit fraud if they are able to rationalize the fraudulent activity (see Trompeter et al., 2013, for an overview of research on financial statement fraud). Much of the accounting research in this area builds on Festinger's (1957) cognitive dissonance theory, in which individuals attempt to alleviate discomfort that arises when there is a discrepancy between taking a certain action and how they feel about that particular action. Rationalization, as summarized by Trompeter et al. (2013), "can be characterized as a mental process that allows individuals to justify dishonest actions and feel less guilty or uncomfortable about their acts" (p. 293). If an influence attempt is made using rational persuasion, individuals may allow themselves to be convinced that an action—while typically inappropriate—may be justifiable in the immediate situation.

While prior accounting research has focused on obedience pressure, the present study extends this research by also exploring the more common (and generally more successful) influence tactic of rational persuasion. Based on the above discussion, it is expected managers will be more likely to violate a corporate policy and add budgetary slack if the source of the influence attempt uses rational arguments rather than obedience pressure. Stated formally,

H1: Those who receive rational persuasion are more likely to create budgetary slack than those who receive obedience pressure.

Direction of Influence Attempt: Superior or Peer

Obedience pressure is an influence attempt that occurs when an individual is pushed to do something by someone in authority (DeZoort & Lord, 1994; Davis, et al., 2006). Prior research in accounting finds that accountants are susceptible to conforming to obedience pressure from a superior. For example, DeZoort and Lord (1994) found that auditors are more likely to be willing to violate professional policy (e.g., allowing a client the opportunity to potentially falsify inventory records or filing an inaccurate number of continuing education hours) if told by a superior to do so. Lord and DeZoort (2001) reported that auditors are more likely to accept material misstatements on clients' financial records when it is demanded by a superior. Chong and Syarifuddin (2010) found that managers were more likely to escalate commitment to a failing project if under pressure from superiors to do so. Davis et al. (2006) discovered that management accountants are more willing to violate corporate policy and pad a budget when such an act was demanded by their immediate superior.

Each of the above-noted studies examined the outcomes of obedience pressure from a superior. However, obedience pressure may derive from more than one direction, such as obedience pressure being exerted by a peer. Prior research has shown that the influence of peers potentially impacts individuals' perceptions and intent with respect to their own ethical behavior (Jones & Kavanagh, 1996; Keith, Pettijohn, & Burnett, 2003; McManus & Subramaniam, 2009). However, despite this reported influence of peers, very little accounting research has been done with respect to exploring the effect of pressure from a peer when making an ethical decision. One notable exception is Lord and DeZoort (2001) who examined the role of peers in an audit task, but the subjects in their study received only a recommendation from a peer rather than an influence attempt.

While peers have the ability to affect individual judgments and ethics, Yukl (2013) noted that pressure tactics are more likely to be used by superiors than peers. Part of the reason for this may be that peers lack the formal power and authority that superiors possess to strengthen the credibility behind their threats or warnings (Yukl, 2013). Lord and DeZoort (2001) also suggested that the impact of power over the decision maker held by superiors is likely to be greater than that held by peers, arguing that this is "…based in large part on superiors' authority to formally evaluate performance and affect career progression within the firm" (p. 218). Therefore, it is expected that those who receive pressure from superiors are more likely to violate company policy and pad a budget than those who receive pressure from peers. Stated formally,

H2: Those who receive obedience pressure from a superior are more likely to create budgetary slack than those who receive obedience pressure from a peer.

While we anticipate that the effectiveness of obedience pressure will be impacted by whether that pressure is exerted by a superior or by a peer, it is unclear if there will be a difference in effectiveness in rational persuasion exerted by a superior or a peer. On one hand, Yukl and Falbe (1991) found that rational persuasion is one of the most common influence attempts (more so than obedience pressure), regardless of whether the influence is coming from a superior or from a peer, which may indicate that direction may not matter. On the other hand, Yukl and Falbe (1991) also suggest that superiors are generally viewed to have more legitimate and coercive power, so it is possible that managers are more likely to go along with their superiors because of the difference in position. Because it is difficult to predict, ex ante, if there will be a difference, the following hypothesis is stated in its null form:

H3: There is not a significant difference between the likelihood of creating budgetary slack between those who receive rational persuasion from a superior and those who receive rational persuasion from a peer.

As noted earlier, prior research in accounting fraud has typically measured whether the respondents comply with a single request to perform an unethical action. Some reasons cited for why managers engaged in fraudulent activities included: acting for the good of the company, the company has a culture of "making the numbers," and increasing year-end performance-based bonuses (Cohen, Ding, Lesage, & Stolowy, 2010). Similarly, budgetary slack creates an ethical decision situation in which managers may intentionally misstate numbers for many of the same reasons.

As of the writing of this paper, research has not yet examined whether subsequent requests to add budgetary slack are more successful with managers who added budgetary slack in a prior year. While it is expected that requesting an action more than once may increase the likelihood that some individuals who did not comply with the initial request will comply with the subsequent request, we believe the stronger determinant of future action will be the precedent set by an individual's response to the first request of a similar nature. This is aligned with the common adage that "past behavior is the best predictor of future behavior", although we acknowledge that such an adage is highly dependent on the broader circumstances and type of behavior under discussion. In regard to adding budgetary slack, we anticipate that the success or failure of the initial influence attempt will have a substantial impact on a manager's response to subsequent requests, leading to our final hypothesis:

H4: Those who added budgetary slack in response to the first influence attempt are more likely to add budgetary slack in response to a subsequent influence attempt.

METHOD

Participants and Experimental Design

A total of 66 MBA students participated in our study. The MBA students all came from a small liberal arts college and were solicited by email. The email briefly described that the participants would be asked to read through a hypothetical decision making scenario, and then asked to answer a series of questions via an online survey. The email provided a link to the survey, and participants were assured that their responses would remain confidential and that no personal information could be tied to their responses.

In designing the experiment, we adapted the task presented in Davis et al. (2006) as it offered a previously-tested scenario from which we could explore different forms and directions of influence attempts in regard to creating budgetary slack. Similar to Davis et al. (2006), the information presented the participants with a scenario that placed them in the role of a division president at a manufacturing company. One of the jobs as division president was to provide a recommended budget number for the upcoming year and to enforce company-wide fiscal policies within that division of the company. Participants were also told that the final recommendation was important for many reasons, including: (1) it is the first component of a budgeting paper trail that is subject to review by auditors and top executives, (2) meeting spending goals is a factor in calculating annual bonuses for all hourly employees in the division, and (3) the division has a proud legacy of never exceeding its budgeted spending limits (the last two are reasons suggested by Cohen, Ding, Lesage, and Stolowy, 2010, as reasons some managers might be willing to commit fraud).

Also similar to Davis et al. (2006), it was stated that in the past, division presidents typically added a 10% cushion to their final budgeted numbers, but at the beginning of the new fiscal year, the CEO calls a teleconference and indicates a new budget policy is to go into effect—budgeted numbers should be set as accurately as possible and spending levels should represent "challenging but attainable goals."

In our study (see Appendix A), the participants were told that they believed that controllable overhead spending for the upcoming fiscal year is $5,000,000 (therefore, if they were to add the "traditional" 10% cushion, they would submit a final budgeting spending amount of $5,500,000).

Independent Variables: Type and Direction of Influence Attempt

The online survey randomly assigned each participant into one of four scenarios: obedience pressure from a superior, obedience pressure from a peer, rational persuasion from a superior, and rational persuasion from a peer. After reading through the background information, the participants read that they were approached by another party—either their superior (the Chief Operating Officer) or a peer (a fellow division president in the company).

Furthermore, this other party used either obedience pressure or rational persuasion. Obedience pressure occurs when an individual uses threats, warnings, and assertive behavior (Yukl, 2013). In this context, obedience pressure was created by the external party by telling the participants that if they did not go against the new policy and change the $5 million budget to $5.5 million, the external party would make sure everyone within that division would blame the participant when things went badly, and that the external party would remember this later.

In contrast, rational persuasion occurs when the external party uses explanations and rational arguments to explain why a request will benefit the organization or achieve a task objective (Yukl, 2013). Therefore, in this experiment, those who received rational persuasion were given reasons for going against corporate policy and changing the budget from $5 million to $5.5 million, such as that it is important to keep a safety net in the budget because of uncertainty in the company and in the economy, and that adding $500,000 will allow for extra room while not removing the "challenging but attainable goals" set by the CEO.

After reading through the respective scenarios, participants provided a final number to submit as their budgeted overhead spending. The range was anchored between $5 million (the original calculated amount) and $5.5 million (the original amount plus 10% slack added). This number represents the amount of budgetary slack.

To test the fourth hypothesis, participants were told that in the following year the CEO sent out a memo reminding all division presidents to make the budget estimates as accurate as possible. The memo also expressed displeasure because it appeared that some divisions had continued to pad the budget last year. Participants then read that once again, they calculate controllable overhead spending to be $5 million. Finally, before submitting the final recommendation, they were approached by the same external party as the prior year, who once again asked that the participant increase the budgeted amount to $5.5 million, citing the same reasons as before. Participants then submit their final budgeted number as the dependent variable.

RESULTS

The 66 MBA students who participated in the survey consisted of 37 males and 29 females, and the average age was 29.71 years with a standard deviation 6.88 years. The participants reported average years of work experience and management experience to be 9.66 and 3.26 years, respectively (standard deviations of 7.86 and 4.64 years, respectively). Due to random assignment, the four manipulation categories had the following number of subjects: obedience pressure from a superior, 20; rational persuasion from a superior, 10; obedience pressure from a peer, 16; and rational persuasion from a peer, 20.

Table 1 shows how many participants chose the maximum amount for padding the budget, not padding the budget at all, and padding the budget, but less than the maximum amount (and the average amount of those in this category). The table also includes an overview based on the main manipulations (superior vs. peer, and obedience vs. rational persuasion). In total, 68.2% chose to pad the budget by either the full amount (12.1%) or a partial amount (56.1%). In general, across all of the main manipulations, the majority of subjects violated corporate policy.

Table 1: Number of Subjects and Percent of Those Who Submitted the No Budget Padding, Maximum Budget Padding, or Some Budget Padding, Sorted by Source of Influence and Type of Influence

Budget Submission	All Subjects (n = 66)	Pressure from Superior (n = 30)	Pressure from Peer (n = 36)	Obedience Pressure (n = 36)	Rational Persuasion (n = 30)
No Budget Padding ($5,000,000)	21 31.8%	8 26.7%	13 36.1%	11 30.6%	10 33.3%
Maximum Budget Padding ($5,500,000)	8 12.1%	6 20.0%	2 5.6%	2 5.6%	6 20.0%
Some Budget Padding (between $5,000,000 and $5,500,000)	37 56.1% (average 5,232,973; standard deviation 95,186)	16 53.3% (average 5,240,625; standard deviation 100,364)	21 58.3% (average 5,227,143; standard deviation 93,122)	23 63.8% (average 5,244,348; standard deviation 103,609)	14 46.7% (average 5,214,286; standard deviation 79,490)
Average and Standard Deviation within Category	Average 5,191,212; standard deviation 171,926	Average 5,22,833; standard deviation 171,926	Average 5,160,278; standard deviation 154,189	Average 5,183,889; standard deviation 159,647	Average 5,200,000; standard deviation 188,002

Table 2 illustrates the number and percent of participant decisions based on the direction and type of the influence tactic. Similar to Table 1, in each condition, the majority chose to violate the corporate policy by padding the budget to some extent (but outside of the rational persuasion from a superior condition, those who chose not to pad the budget at all were more numerous than those who padded the maximum amount). Among those who padded the budget but not the maximum amount, the average final budget submission was very close to the exact middle (5,250,000) in all the conditions.

Table 2: Number of Subjects and Percent of Those Who Submitted No Budget Padding, Maximum Budget Padding, or Some Budget Padding, Sorted by Manipulation Category

Budget Submission	Superior & Obedience Pressure (n = 20)	Superior & Rational Persuasion (n=10)	Peer & Obedience Pressure (n=16)	Peer & Rational Persuasion (n = 20)
No Budget Padding ($5,000,000)	5 25.0%	3 30.0%	6 37.5%	7 35.0%
Maximum Budget Padding ($5,500,000)	2 10.0%	4 40.0%	0 0.0%	2 10.0%
Some Budget Padding (between $5,000,000 and $5,500,000)	13 65.0% (average 5,253,846; standard deviation 103,000)	3 30.0% (average 5,183,333; standard deviation 76,376)	10 62.5% (average 5,232,000; standard deviation 93,121)	11 55.0% (average 5,222,727; standard deviation 81,742)
Average and Standard Deviation within Category	Average 5,215,000; standard deviation 168,664	Average 5,255,000; standard deviation 226,630	Average 5,145,000; standard deviation 143,297	Average 5,172,500; standard deviation 165,016

Due to the small sample size within some groups, the first three hypotheses were tested using nonparametric two-tailed tests with a significance level of 0.05.[1] Two sets of tests were done for each of the first three hypotheses. First, using the final budgeted number as a dependent variable (between $5 million and $5.5 million, inclusive) the distributions were compared using the Independent Mann-Whitney U test. Second, each respondent was assigned a dummy variable (0 for no and 1 for yes) if their final submission was the maximum budget padded amount ($5,500,000), no budget padding ($5,000,000), or a compromise (between $5,000,000 and $5,500,000). The number of subjects in each of these three categories was tested using the 2-Independent Samples Mann-Whitney U test.

H1 predicts that those who receive rational persuasion are more likely to create budgetary slack than those who receive obedience pressure. To test this, the distributions of the final submitted budget number were compared between those who received rational persuasion and those who received obedience pressure. Differences between those who received rational persuasion (mean 5,200,000, standard deviation 79,490) and those who received obedience pressure (mean 5,183,889, standard deviation 159,647) were not significant ($p = 0.874$). Subsequent tests on the categories of final answers were also not significant (p-values for full padding, no padding, and compromise were 0.076, 0.164, and 0.811, respectively). H1 was not supported.

H2 predicts that participants who received obedience pressure from a superior are more likely to create budgetary slack than those who received obedience pressure from a peer. To test this, the distributions of the final submitted budget number were compared between those who received obedience pressure from a superior (mean 5,215,000, standard deviation 168,664) and those who received obedience pressure from a peer (mean 5,172,500, standard deviation 165,016). The results were not significant ($p = 0.189$). Further testing was done by comparing categories of final answers but no significant findings were found (p-values for full padding, no padding, and compromise were 0.199, 0425, and 0.878, respectively). H2 was not supported.

[1] Throughout the remainder of this section, parametric tests were also conducted (independent sample t-tests and Pearson Chi-Square, depending on the nature of the dependent variable). The results found were the same as the non-parametric tests.

In null form, H3 states that there is no significant difference between the likelihood of creating budgetary slack between those who receive rational persuasion from a superior and rational persuasion from a peer. First, as shown in Table 2, among those who received rational persuasion, 70% of those who received influence from a superior and 65% of those who received influence from a peer added some degree of budgetary slack. This difference is considerably similar. Further significance testing was performed to verify that no statistically significant differences were evident. Those who received rational persuasion from a superior (mean 5,255,000, standard deviation 226,630) were compared to those who received rational persuasion from a peer (mean 5,172,500, standard deviation 165,016), and the results were not significant ($p = 0.448$). Tests on the categories were not significant as well (p-values for full padding, no padding and compromise were 0.57, 0.203, 0.788, respectively). Therefore, the null hypothesis of H3 cannot be rejected.

Finally, H4 predicts that those who added budgetary slack in response to the first influence attempt are more likely to add budgetary slack in response to a subsequent influence attempt. Of those who padded the budget the first year, 74.36% padded the second year, whereas of those who did not pad the budget the first year, 4.76% padded the second year, which was significantly different ($p < 0.001$). Furthermore, the amount the participants were willing to pad the budget was greater among those who padded the budget the first year (mean 5,146,154, standard deviation 142,526), compared to those who did not pad the budget the first year (mean 5,004,762, standard deviation 47,619). This difference was significant (independent sample t-test p-value < 0.001). Significant differences were also found using the subsets of rational persuasion, obedience pressure, peer, superior, and those within each combined category (except for rational persuasion from a superior). Overall, those who pad the budget in response to the first influence attempt were more likely to pad the budget in response to the following influence attempt. H4 was supported.

CONCLUSION

The purpose of this study was to determine whether managers are more likely to pad a budget when receiving different forms of influence (rational persuasion or obedience pressure) and receiving influence from different directions (superior or peer). The results of our study indicate that these different forms and directions do not significantly impact the amount or likelihood of the decision maker to pad the budget. Our study also examined if an individual is more likely to violate company policy and pad a budget if they already did it in a previous year. Among those who padded the budget in response to the first influence attempt, 74.4% chose to pad the budget again in response to a subsequent request.

Perhaps most interesting is that regardless of the type or direction of influence, a high number of participants were willing to pad the budget. Among all subjects, 68.2% chose to violate company policy and add budgetary slack. Also noteworthy is that among those who chose to pad the budget, 84.6% reported that this case presented an ethical dilemma, and 46.2% believed it is wrong to pad a budget. In other words, the findings suggest that most managers are susceptible to multiple influence attempts from multiple directions within an organization, and despite viewing select actions as ethical dilemmas, most are willing to comply with the requested actions.

Such findings suggest a need for increased attention to training that more heavily emphasizes the importance of and reasons behind select company policies, and training that heightens managers' awareness of the influence tactics others may use to encourage the violation of such policies. Managerial training on such influence tactics can also help managers to promote ethical behavior and encourage adherence to company policies. Findings from our study also indicate that equipping managers with such training should be done as early as possible, because once managers respond to an influence attempt once, they are likely to do it again.

In addition to the above-noted practical implications of this research study, there are also theoretical implications for the accounting and leadership fields. Especially insightful was the finding that rational persuasion was not a stronger predictor than obedience pressure in regard to a manager's willingness to add budgetary slack. In regard to the prior accounting research, this finding suggests that perhaps it is not so much receiving obedience pressure from a superior that leads to these decisions, as much as it is receiving one of many possible forms of influence from someone. In light of this, the prior research on obedience pressure and budgetary slack may need to be interpreted in a broader influence context. In regard to prior leadership research, the findings of the present study offer support for the argument that while pressure and rational persuasion produce considerably different outcomes in some

circumstances, in regard to tasks where only compliance is desired, the tactics may be equally effective. Furthermore, our findings suggest that at the managerial level, influence attempts from a peer may be just as effective as influence attempts from a superior.

The present study also provided a valuable contribution in that an experimental design was employed, thus providing consistency in the strength with which each influence tactic was employed and measuring each tactic's immediate impact on a decision, in contrast to survey studies that often ask participants to reflect on past experiences and their reactions to those experiences. However, in addition to its strengths, the present study also has limitations. As with any experiment, it is possible that participants' responses to the online survey in a "safe", experimental context were not indicative of how they would respond if faced with the decision in their actual positions with potential negative consequences. The smaller sample size is also a concern.

In summary, the present study offers important insights and valuable contributions to both the accounting and leadership literatures as well as clear practical implications regarding points of emphasis for managerial training programs. By better understanding the factors that cause managers to add budgetary slack, companies can take appropriate actions to better prevent such behaviors and encourage ethical behavior and adherence to company policies.

REFERENCES

AICPA. (2002). *Statement on Auditing Standards (SAS) No. 99: Consideration of Fraud in a Financial Statement Audit* (American Institute of Certified Public Accountants, Durham).

Chong, V.K., and I. Syarifuddin. (2010). Escalation of commitment to unprofitable projects: An experimental investigation of the effect of conformity pressure and self-esteem. *Accounting, Accountability & Performance 16* (1/2): 1-23.

Cohen, J., Y. Ding, C. Lesage, and H. Stolowy. (2010). Corporate fraud and managers' behavior: Evidence from the press. *Journal of Business Ethics 95*: 271-315.

Davis, S., F. T. DeZoort, and L.S. Kopp. (2006). The effect of obedience pressure and perceived responsibility on management accountants' creation of budgetary slack. *Behavioral Research in Accounting 18* (1): 19-35.

DeZoort, F.T., and A.T. Lord. (1994). An investigation of obedience pressure effects on auditors' judgments. *Behavioral Research in Accounting* 6 (Supplement): 1-31.

Douglas, P.C., and B. Wier. (2000). Integrating ethical dimensions into a model of budgetary slack creation. *Journal of Business Ethics 28* (3): 267-277.

Falbe, C.M., and G. Yukl. (1992). Consequences for managers of using single influence tactics and combinations of tactics. *Academy of Management Journal 35* (3): 638-652.

Festinger, L. (1957). *A Theory of Cognitive Dissonance*. Evanston, Il: Row Peterson.

Hartmann, F.G.H., and V.S. Maas. (2010). Why business unit controllers create budget slack: Involvement in Management, Social Pressure, and Machiavellianism. *Behavioral Research in Accounting 22* (2): 27-49.

Hobson, J.L., Mellon, M.J., and D.E. Stevens. (2011). Determinants of moral judgments regarding budgetary slack: an experimental examination of pay scheme and personal values. *Behavioral Research in Accounting 23* (1): 87-107.

Jones, G.E., and M.J. Kavanagh. (1996). An experimental examination of the effects of individual and situational factors on unethical behavioural intentions in the workplace. *Journal of Business Ethics 15* (5): 511-523.

Keith, N.K., Pettijohn, C.E., and M.S. Burnett. (2003). An empirical evaluation of the effect of peer and managerial ethical behaviors and the ethical predispositions of prospective advertising employees. *Journal of Business Ethics 48* (3): 251-265.

Kipnis, D., Shmidt, S.M., and I. Wilkinson. (1980). Intraorganizational influence tactics: Explorations in getting one's way. *Journal of Applied Psychology 65* (4): 440-452.

Lord, A.T., and F.T. DeZoort. (2001). The impact of commitment and moral reasoning on auditors' responses to social influence pressure. *Accounting, Organizations and Society 26* (3): 215-235.

Lukka, K. (1988). Budgetary biasing in organizations: Theoretical framework and empirical evidence. *Accounting, Organizations and Society 13* (3): 281-301.

Maas, V.S., and M. Matějka. (2009). Balancing the dual responsibilities of business unit controllers: Field and survey evidence. *The Accounting Review 84* (4): 1233-1253.

McManus, L. and N. Subramaniam. (2009). Ethical evaluations and behavioural intentions of early career accountants: The impact of mentors, peers, and individual attributes. *Accounting & Finance 49* (3): 619-643.

Merchant, K.A., (1985). Budgeting and the propensity to create budgetary slack. *Accounting, Organizations & Society 10* (2): 201-210.

Murphy, P.R., and M.T. Dacin. (2011). Psychological pathways to fraud: Understanding and preventing fraud in organizations. *Journal of Business Ethics 101*: 601-618.

Onsi, M. (1973). Factor analysis of behavioral variables affecting budgetary slack. *The Accounting Review 48* (3): 535-548.

Özera, G., and E. Yilmaz. (2011). Effects of procedural justice perception, budgetary control effectiveness and ethical work climate on propensity to create budgetary slack. *Business & Economics Research Journal 2* (4): 1-18.

Salterio, S.E., and A. Webb. (2006). Honesty in accounting and control: A discussion of "The effect of information systems on honesty in managerial reporting: A behavioral perspective." *Contemporary Accounting Research 23* (4): 919-932.

Schiff, M., and A.Y. Lewin. (1970). The impact of people on budgets. *The Accounting Review 45* (2): 259-269.

Trompeter, G.M., T.D. Carpenter, N. Desai, K.L. Jones, and Riley, Jr., R.A. (2013). A synthesis of fraud-related research. *Auditing: A Journal of Practice & Theory 32* (Supplement 1): 287-321.

Yukl, G. (2013). *Leadership in organizations (8th ed.).* Upper Saddle River, NJ: Prentice Hall.

Yukl, G., and C.M. Falbe. (1991). Importance of different power sources in downward and lateral directions. *Journal of Applied Psychology 76* (3): 416-423.

Yukl, G., and J.B. Tracey. (1992). Consequences of influence tactics used with subordinates, peers, and the boss. *Journal of Applied Psychology 77* (4): 525-535.

Yukl, G., Chavez, C., and C.F. Seifert. (2005). Assessing the construct validity and utility of two new influence tactics. *Journal of Organizational Behavior* 26 (6): 705-725.

Yukl, G., H. Kim, and C. Chavez. (1999). Task importance, feasibility, and agent influence behavior as determinants of target commitment. *Journal of Applied Psychology 84* (1): 137-143.

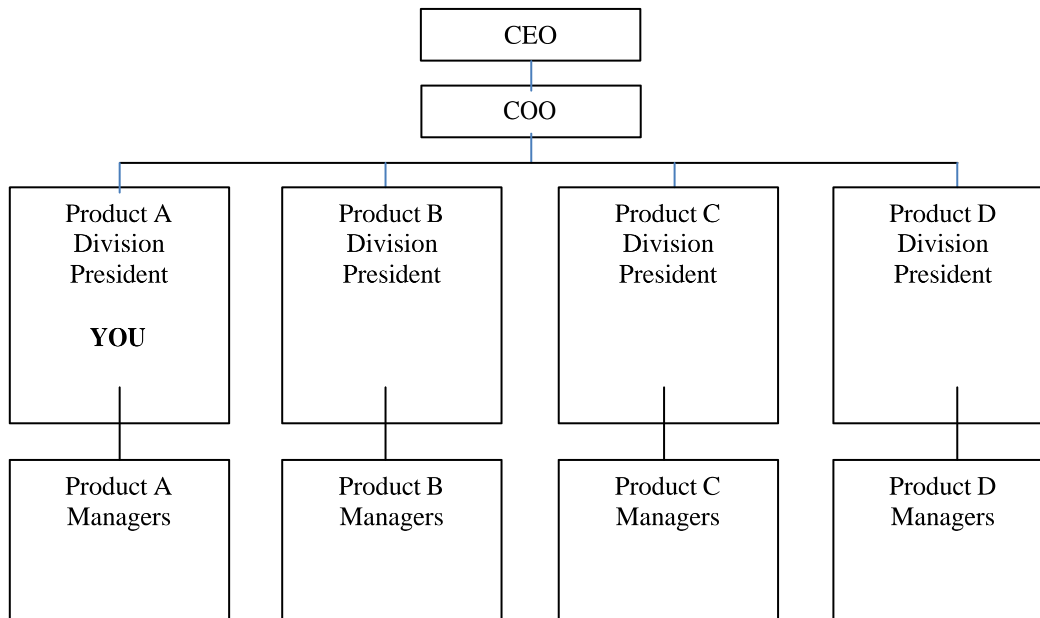
Yukl, G., Seifert, C.F., and C. Chavez. (2008). Validation of the extended influence behavior questionnaire. *The Leadership Quarterly 19* (5): 609-621.

Dr. Sean Andre is an Associate Professor of Accounting at York College of Pennsylvania.
Dr. Marco Lam is an Associate Professor of Accounting at Western Carolina University.
Dr. Mark O'Donnell is an Assistant Professor of Management at York College of Pennsylvania.

APPENDIX A: EXPERIMENTAL TASK

Background

You are employed by Lamdre Manufacturing, Inc. (LMI). LMI is separated into four main product divisions: Product A, Product B, Product C, and Product D. Your job is the Division President overseeing Product A. The LMI corporate hierarchy with respect to operations is shown below.



As the division president of Product A, you report directly to the COO, who completes your performance evaluations and determines your annual raises and promotions. Directly underneath you are the various managers responsible for making sure the manufacturing process runs smoothly and efficiently.

One of your duties is to compile and analyze information provided to you by the senior staff accountant and various managers in order to prepare a single budgeted amount of predicted overhead for the division's overhead spending for the upcoming fiscal year. Your final recommendation is critically important because it is the first component of a budgeting paper trail that is subject to review by auditors and top executives within the organization.

After receiving the necessary reports, you calculate that controllable spending for Product A in its 2013 fiscal year will be $5,000,000. In passing, you have mentioned this calculation to the COO and the other Product Division Presidents.

Historically, it has been an unofficial company policy to include an additional 10% cushion to the calculated budgeted amounts in order to ensure actual spending does not exceed the budget. This practice is common among all four of LMI's divisions. If you were to do this, then your final budgeted number for overhead would be $5,500,000.

Meeting budgeted spending goals is considered important for two reasons. First, annual bonuses for all hourly employees are determined based on actual versus budgeted spending. Second, historically, the Product A Division has never exceeded its budgeted spending limits. This is a matter of division-wide pride among the division managers and is taken very seriously.

The Current Situation

Just after the start of this year's budgeting process, the CEO of LMI called a teleconference to discuss a new budget policy. During the teleconference, the CEO discussed that because of a recent downturn in the economy, spending budgets for divisional overhead should be set as accurately as possible. Specifically, the CEO stated that budgeted spending levels should represent "challenging but attainable goals."

Manipulation—type of Influence Attempt (participants randomly received one of the four following scenarios).

> Pressure/Superior: At the end of the teleconference, the COO, Chris, pulls you aside and says: "I want you to consider changing your $5 million recommendation to $5.5 million. If you do not, I will make sure that everyone knows you are the one to blame when things go badly for your division. Keep this in mind when you make your decision. I will remember this later. This conversation needs to stay between you and me.
>
> Pressure/Peer: At the end of the teleconference, the Product B Division President, Chris, pulls you aside and says: "I want you to consider changing your $5 million recommendation to $5.5 million. If you do not, I will make sure that everyone knows you are the one to blame when things go badly for your division. Keep this in mind when you make your decision. I will remember this later. This conversation needs to stay between you and me.
>
> Rational Persuasion/Superior: At the end of the teleconference, the COO, Chris, pulls you aside and says: "I want you to consider including the traditional 10% cushion and increase your budgeted recommendation from $5 million to $5.5 million. This is entirely your decision to make, but here are some things to consider when making your decision. While I understand the reasoning behind the CEO's policy, we need to continue to keep a safety net in the budget. This is not to make ourselves look good later, but to account for the uncertainty in the company and economy. The additional $500,000 will allow the division managers some extra room while still keeping the "challenging but obtainable" goals. Given these realities, would you consider increasing the budget to $5.5 million? This conversation needs to stay between you and me."
>
> Rational Persuasion/Peer: At the end of the teleconference, the Product B Division President, Chris, pulls you aside and says: "I want you to consider including the traditional 10% cushion and increase your budgeted recommendation from $5 million to $5.5 million. This is entirely your decision to make, but here are some things to consider when making your decision. While I understand the reasoning behind the CEO's policy, we need to continue to keep a safety net in the budget. This is not to make ourselves look good later, but to account for the uncertainty in the company and economy. The additional $500,000 will allow the division managers some extra room while still keeping the "challenging but obtainable" goals. Given these realities, would you consider increasing the budget to $5.5 million? This conversation needs to stay between you and me."

Based on the information presented, and the fact that you report directly to the COO, what overhead budget amount would you recommend?

In the following year, in preparation for 2014's budget, the CEO sends out a memo reminding all of the managers about the corporate policy to make the budget estimates as accurate as possible. According to the memo, the CEO expressed displeasure because it appeared that some division managers had continued to pad the budget in the prior year. Once again, you calculate the controllable overhead for the upcoming year to total $5 million.

Once again, before submitting your final recommendation, you are approached by Chris who asks you to increase your budgeted recommendation by the traditional 10% cushion, citing the same reasons as the previous year. Doing so would increase your final estimate from $5 million to $5.5 million.

What overhead spending would you recommend for 2014?

Does the case present an ethical dilemma? (Yes or No)

Do you believe it is wrong to pad a budget to ensure that the budget is met? (Yes or No)

DESIGNING CLASSROOM ACTIVITIES TO CREATE STUDENT ENGAGEMENT IN INTRODUCTORY ACCOUNTING COURSES

Kathy Baughman, Juniata College

ABSTRACT

This paper reviews the research that has been conducted about creating student engagement in a classroom environment. This research is then applied by analyzing two classroom activities that were designed to increase levels of student engagement with specific content. These activities were utilized in the classroom and then modified based on student comment and instructor observation. The modified activities were then also used in the classroom with instructor observation. The activities were designed to be used in an introductory accounting course with an enrollment size of 40-70.

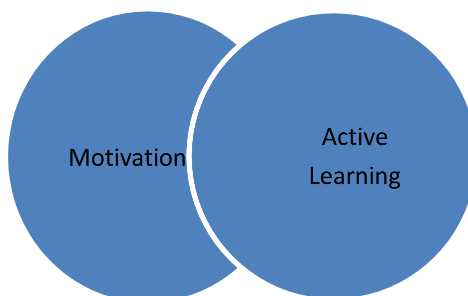
INTRODUCTION

Introductory accounting courses are typically a requirement for students pursuing a variety of business majors. It can be difficult to create student engagement and excitement in the course when students view the content as not essential to their career goals. Another barrier to creating engagement in the course is the larger class sizes. In these larger classrooms, it can be challenging to develop strong faculty and student interactions. This paper will discuss two classroom activities that have been incorporated into an introductory accounting course to create engagement for students. First, the components of student engagement will be reviewed.

STUDENT ENGAGEMENT MODEL

Student engagement appears to be a complex interaction between motivation and active learning. The Venn diagram below illustrates this relationship (Barkley, 2010). In this model, student engagement is in the center of diagram, created by the interaction of motivation and active learning.

Figure 1 –Student Engagement Model



“Student engagement is the product of motivation and active learning. It is a product rather than a sum because it will not occur if either element is missing. It does not result from one or the other alone, but rather is generated in the space that resides in the overlap of motivation and active learning” (Barkley, 2010).

Based on this model when designing classroom activities to create engagement, the faculty must address both motivation and active learning to facilitate student engagement.

Motivation

Motivation is the desire of a student to achieve an outcome. The student demonstrates motivation by performing activities that they believe will enable them to reach the desired outcome. The desired outcome could be internal or external. For example, the pursuit of additional knowledge is an internal outcome, while the pursuit of a particular grade in a course is an external outcome.

The internal or external viewpoint can be expressed in categories of motivational theory. Some theories can be focused on external rewards and punishments or internal needs. Two examples typically used in business textbooks are Taylor’s theory of scientific management which focuses on monetary rewards and Maslow’s hierarchy of needs.

Management and business textbooks also include goal setting as a motivational technique which has been used in organizations (for example, management by objectives).

A well-established application of motivation theory in the college classroom has been the use of external rewards and punishments such as assigning grades to student work. Additionally, the recent focus on student outcomes during the assessment process has created an explicit application and discussion using goal theory components with students.

Active Learning

There is a quote from Sophocles, 400 BC, that seems to apply to our understanding of active learning. He states that "one must learn by doing the thing, for though you think you know it-you have no certainty until you try." The idea of active learning is for students to create knowledge and understanding of a topic by participating in the development of the knowledge and understanding.

Active learning encompasses a large variety of activities and instructional techniques. Using these instructional techniques, there are numerous ways that faculty can design class exercises to encourage active learning. Rather than focus on a specific type of active learning, it is important to identify the overall similarities between these techniques.

Characteristics of active learning include:

- More than passive listening
- Engaged in activities (reading, writing, discussing)
- Greater emphasis on skill development
- Exploration of attitudes
- Immediate feedback
- Higher order of thinking: analysis, synthesis, evaluation (Bonwell & Eison, 1991)

Classroom activities can be specifically designed to include these characteristics. For example, an in-class activity that requires students to solve a problem provides an opportunity where an instructor can give immediate feedback. This may be more preferable than assigning the problem as homework where feedback is delayed until the next class meeting.

The National Survey of Student Engagement (NSSE) identifies four themes related to student engagement. The four themes are Academic Challenge, Learning with Peers, Experience with Faculty, and Campus Environment. Engagement indicators were then developed within each of these themes. "Engagement Indicators were created with a blend of theory and empirical analysis. Items were rigorously tested using both quantitative and qualitative methods during a multi-year development process" (Nsse.iub.edu, 2014). Faculty can incorporate aspects of these themes and engagement factors into classroom activities to help foster an active learning environment. For instance, faculty can place students of diverse backgrounds into small groups to work on a problem together. This would provide an opportunity for students that fit within the learning with peers theme.

Student perceptions

Students have also been asked about their perceptions of motivation. In work performed by Edmund Sass (1989), students were asked to think about a class where they were motivated and a class where they were not motivated. The students identified the following characteristics of a motivating class experience:

1. Enthusiasm – high energy level of the teachers
2. Relevance- material relates to their career goals
3. Organization –obvious teacher preparation
4. Appropriate Difficulty –challenging
5. Active Involvement – active in classroom
6. Variety – different instructional techniques used
7. Rapport – faculty is welcoming
8. Use of Appropriate Examples – concrete examples (Sass, 1989)

There are several specific actions that faculty can take from the above list. Classroom activities that require and overtly show pre-planning would demonstrate a high level of organization to students. As an example, some activities may require the faculty to bring special supplies into the classroom.

It is interesting to note that when asked about motivation in the research above, students identified several aspects of active learning as part of motivation. The overlap of motivation and active learning in the perception of the student may provide additional support of the close relationship between motivation and active learning. This overlap is consistent with Barkley's (2010) definition of student engagement within the classroom which states that "…student engagement is a process and a product that is experienced on a continuum and results from the synergistic interaction between motivation and active learning."

EXAMPLES OF CLASSROOM ACTIVITIES

Two specific classroom activities were used in an introductory accounting course as an experiment to create or increase student engagement in the course. One activity was used to generate an understanding of internal control functions. This activity was designed as a role-play. The second activity was to produce an understanding of inventory costing methods. This activity was designed as a problem-based learning example. The complete description of the internal control is in Appendix A. The complete description of the Inventory Costing is in Appendix B.

Internal Control

This role-play places students in the roles of disbursement employee, employee needing reimbursement, management, accountant and auditor.

Prior to the start of the class and without any knowledge of other students, the instructor identifies a student and asks them to assume the role of the petty cash disbursement employee. The instructor tells this student to 'steal' an amount of money, when she/he is distributing the funds to the employees. When selecting the student for the role of petty cash disbursement employee, the faculty attempts to select a student that has a reputation of following rules, as it will tend to delay the realization of who perpetrated the theft. This student will 'volunteer' during the class to make it seem that role assignment is not preplanned.

The class starts with a brief description of the function of petty cash in an organization. The instructor then asks for volunteers and assigns students to the above roles. Each role is explained to the students. The instructor states clearly that the class is using her money, so it will all need to be returned.

After the roles have been assigned, the exercise starts with the auditor and the disbursement employee both counting the money together and the accountant recording the funding entry.

The role-play then continues with the employees getting their receipts authorized and receiving their reimbursement. As the receipts are turned in, the disbursement employee gives the receipts to the accountant who then records the entries on the board.

During the role-play, the instructor will try to distract the auditor to allow the disbursement employee to 'steal' the money without being noticed.

The auditor then performs reconciliation, and (hopefully) discovers the missing money. The auditor reacts to the missing money and attempts to determine what happened. Common reactions include the accusing employees, stating the money was miscounted in the beginning, looking under the table, recounting the money, and eventually accusing the disbursement employee of taking the money. This discussion can be very lively depending on the personality of the auditor.

This role-play has evolved based on instructor observation and student comments. The first time it was used in class, the faculty did not instruct the petty cash employee to take the cash. In this format, it did provide a variety of instructional methods for the course, but it did not generate a high level of discussion.

Once modified to include the theft, the level of discussion was greater both in increased quantity of student comments and in the depth of the issue explored. In the first version, student comments were limited to the

effectiveness of separation of duties and the importance of reconciliations. In the second version, students expanded the discussion to include misconceptions of employees who commit fraud.

Inventory Costing

The inventory costing exercise is a problem-based learning activity in a small group setting. Prior to the start of the class, students have been instructed to read the related textbook content.

Before the class, the instructor selects groups of students to work together. The desire is to create a diverse group. The instructor also prepares the supplies, which is a bag for each group containing 5 each of Hershey miniatures candy bars (Mr. Goodbar, Krackle, Special Dark, Regular).

Each student group will be running a candy store. They 'make purchases' from the bag of candy at specified costs and place the purchased candy into their inventory. Students complete and record the journal entries for these purchases and create a table of goods available for sale.

They then sell some of the candy and move it out of their inventory as per the instructions. They will then value these transactions using FIFO, and LIFO cost flow assumptions. Students prepare ending inventory listings as well as journal entries. Lastly, they compare the income statement impact of the two cost flow assumptions.

This activity included the use of a visual aid to help provide the students with a concrete example. In the first application of this exercise, student groups were not provided with the visual aid, instead the instructor demonstrated with the visual aid. In the next evolution of the activity, visual aids were provided to each student group. There was an observable increase in the frequency of the student questions and comments when using the visual aids. This is consistent with other research involving visual aids.

"The results from this study provide preliminary indication tht problem-solving learning is enhanced by using a hands-on model within an active learning environment….There is no evidence that an instructor's using hands-on materials in a lecture leads to enhanced learning over what could be attained from a lecture without the model" (Kern, 2002).

As student groups are completing their tasks, the instructor interacts with each group and provides individualized guidance as needed. The instructor then leads a debrief discussion of the impacts of cost flow assumptions on the financial statements.

ANALYSIS OF EXAMPLES

Based on the student engagement model, the classroom exercises were analyzed using the characteristics of motivation theory and active learning.

Analysis of Motivation

The above classroom exercises were not part of a separate grade. However, students do receive a grade for participation. Participation is assessed throughout the course based on homework completion, frequency and quality of class contributions, and attendance. Based on the small portion of the grade (reward/punishment) assigned to this activity, external reward motivation theory would not have a significant impact on the student motivation.

With regards to the internal needs motivation theory, there is an element of this theory embedded in the assignments. The inventory cost assignment allows some students to express their ideas in safer small group environments, while other students can assume a leadership role within the group. The role that students assume within the group can be self-selected to meet their individual needs.

Students do not determine or set goals in these exercises. The goals are set by the faculty. Goal setting is not used in these exercises due to the nature of the activity and the time limitations. Both of these exercises are designed to be completed within one class session.

The above classroom exercises incorporate characteristics of the student identified components of motivation. Table 1 below compares the classroom activities to the student identified motivation.

Table 1: Classroom Activities with Motivation Factors

Student Identified Motivation	Internal Control	Inventory Cost
Enthusiasm	Conveyed by introduction	Conveyed by introduction
Relevance	Using real-life scenarios	Simulation of typical business transactions (purchase/sales)
Organization	Observable plan	Obvious preparation – supplies/group assignments
Appropriate Difficulty	Participation based on direct observation of role-play	Able to be completed within time constraints
Active Involvement	Assigned roles	Group engagement
Variety	Not lecture or homework review	Not lecture or homework review
Rapport	Use of emotion when the instructor's money is 'missing'	Individual conversations with faculty
Use of Appropriate Examples	Understandable Example	Understandable Example

Analysis of Active Learning

The class activities above can also be mapped directly to the engagement indicators identified by NSSE. These activities connect to the following engagement factors:

- Worked with other students on course projects or assignments
- Applying facts, theories or methods to practical problems or new solutions
- Forming a new idea or understanding from various pieces of information
- Encourage contact from students of different backgrounds
- Acquiring job or work related knowledge or skills
- Discussed course topics, ideas or concepts with a faculty member outside of class
- Faculty provide prompt and detailed feedback

In review of the active learning characteristics identified by Bonwell and Eison (1991), the class activities meet several of these characteristics.

- More than passive listening – both activities require student participation
- Engaged in activities (reading, writing, discussing) – both activities involve discussion, the inventory control activity includes application of prior reading
- Greater emphasis on skill development – The inventory costing activity requires small group communication skills and critical thinking. The internal control role play requires critical thinking when determining the cause of the theft.
- Exploration of attitudes – The internal control role play allows students to explore their idea of the traits of embezzlers.
- Immediate feedback – In the inventory control activity, the faculty is able to provide immediate feedback during the problem solving process.
- Higher order of thinking: analysis, synthesis, evaluation- The debriefing of each class activity provides opportunities to explore the issues using higher order of thinking. This is enabled because the activities take place and conclude within a class session.

OBSERVATIONS OF STUDENT ENGAGEMENT

The level of student engagement with the material was determined by faculty observation. The observation methods included instructor observation of student behavior during the activities, the content of instructor discussion with students immediately following the activities, and student comments both solicited and unsolicited.

With regards to the internal control activity, there was increased attention to content, the depth of discussion was increased especially when the 'theft' variable was included in the role-play. This activity also provided for an additional opportunity to increase out-of-class faculty interaction when recruiting the student volunteers. The activity generated student requests for additional similar activities. The activity provided for humorous exchange when discovering the theft, which appeared to increase the approachability of the instructor from the student viewpoint.

With regards to the inventory costing activity, there were an increased number of questions when visual aids were provided to the groups. The small group aspect of the activity appeared to provide students with opportunities to work on communication skills and build relationships with classmates. As the instructor was actively initiating contact throughout the classroom, there was increased interaction between faculty and students. This increase was more observable with students who generally avoided participation in whole class discussions. Students also expressed gratitude after the activity.

One student commented at the conclusion of the course, which was several weeks following the inventory costing activity, "She gave us group work so we could learn from each other and even worked with candy to teach us some of the problems."

Future research on the impact of these classroom activities should include the development of a formal assessment tool that is able to measure the effectiveness of the activity in helping students to retain the skills and content. Based on the above observations, it is possible to design classroom activities to including aspects of motivation and active learning. These exercises can increase the level of student engagement.

REFERENCES

Barkley, E. F. (2010). *Student engagement techniques: A handbook for college faculty*. San Francisco: Jossey-Bass.

Bonwell, C., & Eison, J. (1991). *Active learning: Creating excitement in the classroom*. Washington, D.C.: School of Education and Human Development, George Washington University.

Kern, B. (2002). Enhancing accounting students' problem-solving skills: The use of a hands-on conceptual model in an active learning environment. *Accounting Education,* 235-256.

Nsse.iub.edu, (2014). NSSE engagement indicators. Retrieved October 20, 2014, from http://nsse.iub.edu/html/engagement_indicators.cfm.

Sass, E. J. (1989). Motivation in the college classroom: What students tell us. *Teaching Of Psychology*, *16*(2), 86.

Kathy Bauman is an assistant professor of accounting at Juniata College where she teaches undergraduate courses in financial accounting, business ethics and auditing. At the MBA level, she teaches advanced accounting and forensic accounting. Her research interests include identifying and developing effective strategies for teaching accounting and developments in fraud and forensic accounting.

APPENDIX A

INTERNAL CONTROL ROLE PLAY

Purpose to demonstrate an internal control function related to petty cash

Supplies Needed

Cash - the amount of cash depends on the value of the expenses include on the receipts. Should have the amount needed for the receipt reimbursement, plus an additional $12.

Receipts – At least 4 receipts for various business expenses (example: office supplies, meal reimbursement, postage costs, hardware for production, etc…) the more receipts you have, the more students that can be involved in the role-play.

Student Roles

Petty Cash disbursement employee – will distribute the cash

Employees - needing expense reimbursement (1 employee per receipt)

Manager – who needs to approve receipts for reimbursement

Accountant – takes the receipts and records the journal entry

Petty Cash Auditor- Reconciles the cash to the accounting records

Prior to the start of the class and without any knowledge of other students, the instructor identifies a student and asks them to be the Petty Cash disbursement employee. The instructor tells this student to 'steal' an amount of money, when she/he is distributing the funds to the employees. The instructor could also recruit another student to be an employee, who tries to get paid without getting the manager approval. These students need to 'volunteer' during the class to make it seem that role assignment is not preplanned.

Description of in class Activity

The class starts with a brief description of the function of petty cash in an organization. The instructor then asks for volunteers and assigns students to the above roles. Each role is explained to the students. The instructor states clearly that the class is using her money, so it will all need to be returned.

After the roles have been assigned, the exercise starts with the auditor and the disbursement employee both counting the money together and the accountant recording the funding entry.

The role play then continues with the employees getting their receipts authorized and receiving their reimbursement. As the receipts are turned in, the disbursement employee gives the receipts to the accountant who then records the entries on the board.

During the role-play, the instructor does try to distract the auditor to allow the disbursement employee to 'steal' the money without being noticed.

The auditor then performs reconciliation, and (hopefully) discovers the missing money. The auditor reacts to the missing money and attempts to determine what happened. Common reactions include the accusing employees, stating the money was miscounted in the beginning, looking under the table, recounting the money and eventually accusing the disbursement employee of taking the money.

Debrief

The role play is debriefed with a discussion of the inherent risk of cash, separation of duties related to cash transactions and appropriate internal controls surrounding cash transactions. You can also include a discussion of fraudster characteristics.

APPENDIX B

FIFO/LIFO INVENTORY COSTING

To provide a problem based learning activity in a group setting with visual aids. Prepare a bag for each group containing 5 each of miniatures (Mr. Goodbar, Krackle, Special Dark, Regular).

<u>Individual Costs to acquire:</u>

Goodbar$4

Krackle $3

Special $2

Regular $1

<u>Inventory Purchase Transactions:</u>

Date	**Description**
1/1/14	Purchase 5 Goodbars
1/15/14	Purchase 3 Krackle
1/20/14	Purchase 5 Special
1/21/14	Purchase 2 Regular

Part 1 – Goods Available for Sale

Task #1 – Prepare a table showing the Total Goods Available for Sale, prepare the applicable journal entries, Inventory T-account and use the visual aids to create your inventory

Solution to Task #1

Date	Transaction	Quantity	Unit Cost	Total
1/1/2014	Purchase 5 Goodbars	5	$4.00	$20.00
1/15/2014	Purchase 3 Krackle	3	3.00	9.00
1/20/2014	Purchase 5 Special	5	2.00	10.00
1/21/2014	Purchase 2 Regular	2	1.00	2.00
	Total Available for Sale	15		$41.00

Journal Entries

1/1	Inventory	20	
	Accounts payable		20
1/15	Inventory	9	
	Accounts payable		9
1/20	Inventory	10	
	Accounts payable		10
1/21	Inventory	2	
	Accounts payable		2

Inventory

20	
9	
10	
2	
41	

Part 2 - FIFO

Task #2 – Assume that you sell 10 candy bars –calculate the Cost of Goods Sold using FIFO. Prepare the journal entry and update your T-account. Use the visual aids to move these items out of your inventory.

Solution to Task #2

FIFO - Cost of Goods Sold - Sell 10 candy bars

Transaction	Quantity	Unit Cost	Total
Goodbars	5	$4.00	$ 20.00
Krackle	3	3.00	9.00
Special	2	2.00	4.00
FIFO - COGS	10		$ 33.00

Inventory

20	
9	
10	
2	
41	
	33
8	

Journal Entry

1/30	Cost of goods sold	33	
	Inventory		33

Task #3 – What candy do you have left in Ending Inventory? Does it equal the ending balance in the T account from task#2?

Solution to Task #3

Balance	Quantity	Unit Cost	Total
Goodbars	0	$ 4.00	$ -
Krackle	0	3.00	-
Special	3	2.00	6.00
Regular	2	1.00	2.00
FIFO - Ending Inventory	5		$ 8.00

Part 3 – LIFO

Task #4- Assume that you sell 10 candy bars –calculate the Cost of Goods Sold using LIFO. Prepare the journal entry and update your T-account. Use the visual aids to move these items out of your inventory.

Solution to Task #4

LIFO - Cost of Goods Sold- Sell 10 candy bars

Transaction	Quantity	Unit Cost	Total
Krackle	3	3.00	9.00
Special	5	2.00	10.00
Regular	2	1.00	2.00
LIFO - COGS	10		$ 21.00

Inventory

Debit	Credit
20	
9	
10	
2	
41	
	21
20	

Journal Entry

Date	Account	Debit	Credit
1/30/14	Cost of Goods Sold	21	
	Inventory		21

Task #5 – What candy do you have left in Ending Inventory? Does it equal the ending balance in the T account from task#4?

Solution to Task #5

Balance	Quantity	Unit Cost	Total
Goodbars	5	$ 4.00	$ 20.00
Krackle	0	3.00	-
Special	0	2.00	-
Regular	0	1.00	-
LIFO - Ending Inventory	5		$ 20.00

Part 4 – Comparison of Income Statement

Task #6 – Assume the 10 candy bars were sold for $7 each. Prepare the abridged income statement under both LIFO and FIFO. What caused the difference? This scenario incorporated a decreasing cost of inventory, what would happen if it had an increasing cost of inventory? One of the concerns with adopting IFRS is that they do not allow LIFO. Why might companies prefer LIFO?

Solution to Task #6

	FIFO	**LIFO**
Revenue	70.00	70.00
- Cost of Goods Sold	(33.00)	(21.00)
=Gross Margin	37.00	49.00

In this case, cost of inventory was decreasing, so LIFO had the greater income, if costs were increasing, LIFO would result in lower income.

ACCOUNTING STUDENTS WRITING-TO-LEARN USING SOCIAL PEDAGOGY AND TECHNOLOGY

Rajendra Bhika, LaGuardia Community College
Andrea Francis, LaGuardia Community College
Hector Fernandez, LaGuardia Community College
Nicole Maguire, LaGuardia Community College

ABSTRACT

This article outlines the work of Business faculty at LaGuardia Community College who leveraged their participation in professional development seminars to find an innovative way to help students explore and enhance their general writing and business writing skills. Using ePortfolio and social pedagogical practices, faculty connected students across two *Principles of Accounting I* courses and had them complete low-stakes assignments focusing on writing within the accounting discipline. This initiative allowed students to explore writing within the context of accounting and provided an opportunity for them to dispense with the notion that accounting is 'only number-crunching'. Through the use of ePortfolio-based assignments, along with an in-class writing workshop conducted by faculty from the English and Business & Technology Departments, students were able to understand the importance of writing in accounting, explore their writing abilities, and learn and apply different forms of business communication. The authors also discuss the lessons learned as a result of the initiative, and the impact on their pedagogy.

LaGuardia Community College is an urban, open-access, high-enrollment, two-year College in Queens, New York- one of the most ethnically diverse urban areas in the world. As such, LaGuardia educates many of New York City's immigrant students. Many of these students arrive at LaGuardia with multi-linguistic abilities and a deep multi-cultural understanding, which the faculty attempt to properly harness. According to the 2014 LaGuardia Community College Institutional Profile, its students represent over 157 different countries and speak as many as 111 different languages. During the Fall 2013 semester, LaGuardia had a total student enrollment of 19,770, out of which 2,761 students underwent basic-skills testing. Of this group, 12% or 342 students were required to take basic writing instruction, 20% or 564 students were required to take basic reading instruction, and 15% or 417 students were ESL students.

RATIONALE

When working with such a diverse population of students, an emphasis on basic English reading and writing skills is extremely important. Further, in an ever-increasingly competitive economy, employers demand not only discipline-specific knowledge and skills, but also personal competencies, such as critical thinking and communication skills. According to a 2013 survey of employers commissioned by the Association of American Colleges and Universities (AAC&U), "93% of employers say that a demonstrated capacity to think critically, communicate clearly and solve complex problems is <u>more important</u> than a candidate's undergraduate major. More than 75% want higher education to place more emphasis on…written and oral communication, and applied knowledge" (Hart Research Associates, 2013).

Additionally, over 73% of respondents to the 2015 National Association of Colleges and Employers Job Outlook Survey have indicated that written communication skills are of primary importance when considering new college graduates for job openings (Gray, 2014).

Focusing on the Accounting profession specifically, the AICPA's Core Competency Framework and Educational Competency Assessment states, "Accounting professionals are called upon to communicate financial and non-financial information so that it is understood by individuals with diverse capabilities and interests. Individuals entering the accounting profession should have the skills necessary to give and exchange information within a meaningful context and with appropriate delivery. They should have the ability to listen, deliver powerful presentations and produce examples of effective business writing" (American Institute of Certified Public Accountants, 2006-2014).

Christopher Jones' research concludes that while there is no doubt to the demand for effective writing skills by accounting employers, there are several that are considered "most important: (a) effectively organizing sentences and paragraphs; (b) writing clearly and precisely; (c) spelling correctly; (c) [sic] preparing concise, accurate, and

supportive documents; (d) documenting work completely and accurately; (e) using correct grammar; (f) conscientiously editing and revising documents; and (g) effectively using email" (Jones, 2011).

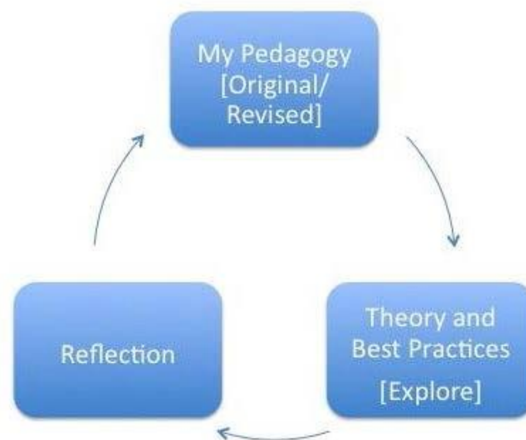
With the demand of exceptional written communication skills placed on prospective employees, higher education institutions are encouraged to take a more conscientious approach to incorporating effective business writing into the accounting curriculum, by providing increased emphasis on written and oral communication (CPAs, 2006-2014), and on "basic writing mechanics, either through a second course in communication or a writing-across-the-curriculum initiative" (Jones, 2011).

LaGuardia's diverse population presents unique challenges in terms of meeting student needs. These challenges, alongside the demands from employers for college graduates to possess exceptional writing skills, make a compelling case for faculty to innovate in the classroom as it relates to writing. Professional development programs such as Writing in the Disciplines and cross-disciplinary approaches to teaching and learning are all ways to blend effective business writing lessons into established courses in the major.

PROFESSIONAL DEVELOPMENT

Professional development played a critical role in helping us to design and implement the Principles of Accounting I Low-Stakes Writing Initiative (hereafter referred to as "the Project").

LaGuardia's approach to professional development facilitates an intentional and systematic process of inquiry, reflection, and integration between practice and theory as illustrated below:



In this framework, faculty are prompted to review their own pedagogy, analyze research, engage in conversations focused on theory and best practices, draw connections between practice and theory, and then revise, implement, and reflect on their own pedagogy, now hopefully more robust.

Two seminars offered by LaGuardia's Center for Teaching and Learning that informed the design, implementation, and evaluation of the Project were *Connected Learning: ePortfolio and Integrative Pedagogy* and *Writing in the Disciplines*.

Connected Learning: ePortfolio and Integrative Pedagogy

At LaGuardia, *Connected Learning: ePortfolio and Integrative Pedagogy* serves as the foundational professional development seminar to help faculty explore and incorporate ePortfolio pedagogy into our courses. Motivated by interdisciplinary perspectives, we examine best practices, engage in fruitful and reflective conversations, and develop prompts, assignments and syllabi to connect and engage students in a teaching and learning experience that utilizes their diverse knowledge and skills, using a dynamic platform to facilitate the process.

Our involvement in this seminar allowed us to consider new and proven approaches to fostering integrative learning, reflection, student interaction, and connection through ePortfolio as we designed and implemented the Project.

Writing in the Disciplines

At LaGuardia, the *Writing in the Disciplines* professional development seminar prompts faculty to examine our current writing practice, examine the literature, and develop, experiment with, and reflect on assignments and projects to help students identify facts, perform research, debate options, and use evidence to support informed decisions.

From our work in this seminar, it is clear that teaching students to write effectively is the responsibility of the entire college community. To that end, we focused our efforts on contextualization, to assess ways business faculty can integrate writing into their accounting lessons and coursework. The Capstone course in the Accounting program requires students to complete a term research paper, but we believed that students were not receiving sufficient writing support in the accounting courses leading up to the Capstone. We were interested in how a series of low-stakes writing activities, separately and holistically, could help students strengthen their writing and business writing skills, develop confidence in their ability to work, and learn accounting.

PRINCIPLES OF ACCOUNTING I LOW-STAKES WRITING INITIATIVE

The Project took place during the Fall of 2013. The work connected two Principles of Accounting I classes through ePortfolio. ePortfolio is fundamentally about connections: both between students and student to faculty. It is a student-centered tool that allows them to direct and document their learning over time. "The ePortfolio helps LaGuardia students make a direct and powerful connection between their classroom learning and the rest of their changing lives" (Eynon, 2009). We created one ePortfolio where all students completed their work, reviewed each other's work, and built, strengthened, and developed a community. The use of one ePortfolio streamlined the assignment completion and review process while facilitating the social pedagogy inherent in the Project. Randy Bass and Heidi Elmendorf define social pedagogies as "design approaches for teaching and learning that engage students with what we might call an 'authentic audience' (other than the teacher), where the representation of knowledge for an audience is absolutely central to the construction of knowledge in a course" (Bass & Elmendorf, n.d.).

In his article, "High Stakes and Low Stakes in Assigning and Responding to Writing," Peter Elbow describes the benefits of low-stakes writing assignments as being numerous. He suggests that, "when [students] do low-stakes writing their prose is usually livelier, clearer, and more natural—often more interesting in spite of careless mistakes" (Elbow, 1997). Elbow suggests that low-stakes assignments help students "find their own language" to tackle key course concepts, and since they tend to involve less stress, they allow students to write more freely (1997). Finally, Elbow also asserts that low- stakes assignments not only improve the quality of high-stakes writing assignments, but more practically, they force students to keep up with the reading.

The goal of the Project was to investigate the outcomes of an active effort to incorporate writing into a Principles of Accounting I course. Thoughtful, careful and purposeful incorporation of writing assignments were coupled with interventions that focused on students identifying the significant impact of sound business writing in the accounting discipline.

The Project was structured as eight assignments and one workshop, which students completed over the course of a semester. Each Principles of Accounting I class, consisting of approximately 36 students, was divided into two groups, Group # 1 and Group # 2. The members of each group were then paired across classes. This structure facilitated a student-centric approach, in which we developed and shared assignments but for the most part remained in the background, with dialogue and peer mentoring occurring across and within the classrooms through the use of ePortfolio. The objectives of the initiative were for students to:

- Explore and strengthen their written communication skills in the context of accounting and business
- Write-to-learn accounting theories and practices
- Examine different types of business correspondence
- Learn about writing and business writing from each other as well as from faculty

ASSIGNMENTS AND WORKSHOP

The Project was grounded in social pedagogy, and in order to create community, the first ePortfolio assignment required students to introduce themselves and write about their backgrounds, as well as their short- and long-term goals. Students then reviewed and commented on their partners' work with an emphasis on finding similarities in their backgrounds and goals, as well as providing their partners with constructive feedback for refining and strengthening their written work. According to Eynon, "Actual engagement with meaningful audiences through the ePortfolio correlates strongly with deeper and more integrative forms of student learning" (2014).

Faculty from the English and Business & Technology Departments conducted a Business Writing Workshop to provide students with information on general writing and business writing. Topics covered included emails, business memoranda, business letters, audience and intent, salutations and greetings, and citations. The workshop was well-received by students, and provided a basis for the rest of their work in the Project.

To disabuse students of the notion that accounting is simply about 'number-crunching,' the second assignment required students to troubleshoot an incorrect Balance Sheet, in their capacity as company accountant. Students then wrote a business memorandum to the company's bookkeeper explaining the rationale for the changes to the Balance Sheet, and how those changes were made. Students subsequently reviewed their partners' work, focusing on assignment completion, accounting content, language, and style. Students then commented on each other's work using the 'Comment' feature on ePortfolio, offering suggestions for revision, as applicable.

In the third assignment, students were asked to provide advice to a junior accountant facing an ethical dilemma at his job. The purpose of the assignment was not only to introduce students to ethics and business ethics through an in-class slide show, but to allow students an opportunity to write a response to the ethical dilemma using their accounting and ethics knowledge. In addressing the ethical dilemma, students used an approach consistent with the *Framework for Ethical Decision Making* developed by the Markkula Center for Applied Ethics at Santa Clara University: "(a) recognize an ethical issue, (b) get the facts, (c) evaluate alternative actions, (d) make a decision and test it, and (e) act and reflect on the outcome" (Markkula Center for Applied Ethics at Santa Clara University, 2009). The impetus for the fourth assignment came from our realization that, given the ubiquity of emails and other electronic correspondence, students are not always aware that business letters are still used by companies. The assignment therefore prompted students to, in their capacity as a company's accountant, draft a letter to a customer who had sent in a complaint regarding a shipment. Students were required to use proper business letter format, to understand and explain shipping terms to the client, and to use the appropriate language and tone.

At the end of the semester, students completed a final reflection discussing their experience working with peers, writing in the discipline, and the skills they learned, which they could use going forward.

All assignments were assessed as part of students' course grades. As part of our review and grading of the work, we also identified common themes, whether positive or negative, in the submissions, and had brief in-class discussions around those themes.

LESSONS LEARNED

The dynamic combination of faculty professional development and classroom innovation resulted in several takeaways that will inform our pedagogy and enable us to navigate obstacles that may present going forward.

Community Building

Students connected with each other through peer review of assignments. This aspect of the Project was especially important considering that LaGuardia is a commuter college, where students do not always have the ability to connect with each other on campus. There were challenges to community building, especially given that students were paired, and if one individual did not complete an assignment or dropped the course, his/her partner was unable to complete his/her review. We overcame this challenge by instructing students to review an alternative individual's work.

Technology

ePortfolio provided a user-friendly platform for the Project, and the use of a single ePortfolio for all students made review of work and community building more effective. Some students were unfamiliar with ePortfolio and required additional help to complete their work, and we addressed this issue by either spending some time to walk students through the process of completing assignments and adding artifacts to the ePortfolio, encouraging students to seek help from their classmates, referring students to online tutorials made available through LaGuardia's Center for Teaching and Learning, and connecting students with ePortfolio technology mentors (i.e., senior students at LaGuardia).

Writing in the Discipline

As a result of the in-class workshop, we created a 20-minute *Writing in Business* video, which provides students with a basic introduction to business communication. The video addresses topics such as proper business letter and memorandum format, drafting appropriate emails, tone, citations, and useful resources. In reflecting on the Project, we strongly believed that writing in the discipline should be introduced to students at an earlier point in their academic journeys. The video has therefore been made a key part of the first week of the newly-created First Year Seminar for Business, a mandatory, credit-bearing course for first year students in the business majors.

Overall the Project was enlightening for us and provided much insight into incorporating low-stakes writing, not only into the accounting program, but also into other business courses. The widespread integration of low-stakes writing into business courses could be facilitated by the creation of a departmental ePortfolio, which would act as a repository for low-stakes writing assignments created by faculty in the various disciplines. Finally, we believe that creating a departmental low-stakes writing rubric could provide a good basis for future initiatives within and across business disciplines.

REFERENCES

American Institute of Certified Public Accountants. (2006-2014). *Core competency framework & educational competency assessment*. Retrieved from http://www.aicpa.org/interestareas/accounting.

Bass, R., & Elmendorf, H. (n.d.). *Designing for difficulty: Social pedagogies as a framework for course design*. Retrieved from https://blogs.commons.georgetown.edu/bassr/social-pedagogies/.

Dickmeyer, N., Gau, Q., Lenchner, E., Weintraub, J., Zhu, C. (2014). LaGuardia community college 2014 institutional profile. Retrieved from LaGuardia Community College, Office of Institutional Research & Assessment Web site: http://www.lagcc.cuny.edu/IR/IR-facts/.

Elbow, P. (1997). High stakes and low stakes in assigning and responding to writing. *New Directions for Teaching and Learning 69*, 5-13. doi: 10.1002/tl.6901.

Eynon, B. (2009). It helped me see a new me: ePortfolio, learning and change at LaGuardia Community College. Retrieved from http://www.academiccommons.org/2009/01/it-helped-me-see-a-new-me-eportfolio-learning-and-change-at-laguardia-community-college/.

Eynon, B. (2014). Preface. In R. Bass, *Social pedagogies in ePortfolio practices: Principles for design and impact*. Retrieved from http://c2l.mcnrc.org/wp-content/uploads/sites/8/2014/01/Bass_Social_Pedagogy.pdf.

Gray, K. (2014). The skills/qualities employers want in new college hires. Retrieved from https://www.naceweb.org/about-us/press/class-2015-skills-qualities-employers-want.aspx?terms=what%20employers%20want.

Hart Research Associates. (2013). *It takes more than a major: Employer priorities for college learning and student success: Overview and key findings.* Association of American Colleges and Universities. Washington, D.C.: Hart Research Associates.

Jones, C. G. (2011). Written and computer-mediated accounting communication skills: An employer perspective. *Business Communication Quarterly*, *74*(3), 247-271.

Markkula Center for Applied Ethics at Santa Clara University. (2014). A Framework for Thinking Ethically. Retrieved from http://www.scu.edu/ethics/practicing/decision/framework.html.

Rajendra Bhika, CPA, MS, is an Associate Professor of Accounting at LaGuardia Community College of the City University of New York (CUNY). Prior to joining LaGuardia, Mr. Bhika was a Senior Financial Analyst with New York's Metropolitan Transportation Authority, and a Senior Auditor with BDO Seidman, LLP.

Andrea Francis, CA (SA), CFA, MS, is an Assistant Professor of Accounting at LaGuardia Community College of the City University of New York (CUNY). Before joining LaGuardia, Ms. Francis was a manager with Deloitte & Touche, LLP in New York. Ms. Francis also served as an auditor in the Financial Services team at Deloitte & Touche South Africa.

Hector Manuel Fernandez, ESQ. is an Associate Professor of Business and Law in the Business and Technology Department at LaGuardia Community College of the City University of New York (CUNY. Prior to joining LaGuardia, Mr. Fernandez was the First Vice President of Branch Operations and Technology at Amalgamated Bank. He has also worked as a New York State Certified Business Advisor for LaGuardia's Small Business Development Center.

Nicole Maguire, **MA** is a Lecturer of Business in the Business and Technology Department at LaGuardia Community College. Her current research interests include the impact of organizational culture on innovation and corporate social responsibility.

MORE EVIDENCE OF THE NEVADA EFFECT: SEC, DOJ, FBI, AND IRS REGULATORY ENFORCEMENT ACTIONS

A.J. Cataldo II, West Chester University
Lori Fuller, West Chester University
Thomas Miller, West Chester University

ABSTRACT

Cataldo, Fuller and Miller (2014) examined a published sample of Securities and Exchange Commission (SEC) and Public Company Accounting Oversight Board Engagement Quality Reviewer violations (Messier, Kozloski, & Kochetova-Kozloski, 2010) and the entire population of 2012 SEC trading suspensions. They found that Nevada firms disproportionately consume scarce Federal regulatory resources. Their results support what has been characterized as *the Nevada Effect*.

Additional evidence in support of *the Nevada Effect* is presented in the current research. In this extension, regulatory enforcement actions by the SEC, Department of Justice, Federal Bureau of Investigation and Internal Revenues Service during 2011 and 2013 are examined. Additionally, measures associated with related stock promoters and promotional schemes are identified. Our methodology used a forensic approach and examined publicly available information not previously executed or explored in the literature. Publicly traded Nevada corporations dominated our analysis of this information at a variety of detectible levels. We discuss our findings, in the context of information asymmetry, hidden and private information.

INTRODUCTION

The Nevada effect was introduced by Cataldo, Fuller and Miller (2014) upon further examination of the data in Messier, Kozloski and Kochetova-Kozloski's (2010) published work as well as the entire population of 2012 SEC trading suspensions. *The Nevada Effect* is characterized as the over representation of firms who chose to incorporate in Nevada with respect to the number of SEC trading suspensions and underrepresentation of audits on those Nevada corporations by the Big 4 audit firms who audit nearly 58% of all US publicly traded companies. The current research extends the investigations of *the Nevada Effect*.

A study and examination of the relevant literature stream produces compelling evidence that *there is a market for corporate law;* where states compete for the fees associated with incorporation. The market share leaders and focus of the present study remain Delaware and Nevada. Academic studies have investigated and forensically examined the impact of Delaware and Nevada corporate law (Cary, 1974; Winter, 1977; Romano, 1993; Daines, 2001; Abramowicz, 2003; Bebchuk & Cohen, 2003; Easmunt, 2004; Barzuza, 2011; and Barzuza & Smith, 2012) and Nevada's increased share of the market.

In this paper, we examine 17 SEC suspensions made in June 2011 as well as 14 arrests made through a combined Department of Justice (DOJ), Federal Bureau of Investigation (FBI) and Internal Revenue Service (IRS) operation completed in 2013. In both instances, Nevada firms disproportionately represented the targets of these regulatory actions. We develop and present information and provide insights into the promotional efforts, practices, and revenues associated with penny stocks. [2] Nevada corporations dominate *pump and dump* promotional campaigns, mainly because Nevada corporate law is lax and facilitates these behaviors.

We frame our examination in the context of information asymmetry, market efficiency and agency theory. Examples of favorable stock price reactions and over-reactions are provided which appear to result from skillfully planned, cleverly crafted and orchestrated timed electronic dissemination of positive information based on both financial fundamentals and non-financial information. We also provide an example of how electronically disseminated non-financial information resulted in a correction to inflated stock prices, very quickly and efficiently; but only after conditions of information asymmetry were corrected and relevant hidden or private information became publicly available.

[2] Penny stocks are operationally defined as any stock trading below $5 per share.

Akerlof (1970) illustrates that asymmetric information can lead to economic inefficiency, and even destroy an efficient market. Barzuza (2011) explains that Nevada has produced a "shockingly lax" corporate law – which represents a differentiated product – that may create competitive pressures and an environment that would be destructive to an efficient market (and consistent with Akerlof's concerns).[3] Nevada is motivated by a desire to generate tax revenue in the form of corporate filing fees; a condition historically and presently enjoyed by Delaware. In fact, Delaware's revenues are so significant that it has no need for a state sales tax.

The remainder of this paper is organized as follows: first, we begin with a broad description and the integration of relevant, related components of hidden and private information. The former is associated with agency (or contract) theory and the latter is associated with market efficiency (or the efficient market hypothesis). Both fall under the broader study of information economics and information asymmetry. Second, we summarize and describe two separate regulatory actions from 2011 and 2013. Combined, these actions involved the SEC, DOJ, FBI and IRS. Nevada corporations dominated the targets for these regulatory actions and arrests. Third, we statistically examine the impact of an early 2013 promotional scheme involving a Nevada corporation. The promotional efforts appear to have been sophisticated in that they were skillfully crafted and carefully coordinated at a variety of levels. We provide some fundamental measures and include a comparable Delaware corporation for comparison and context. Finally, we summarize our findings for academics, professionals and regulatory agencies and encourage others to consider alternative approaches, research designs, and continued and expanded investigations into *the Nevada Effect*.

RELEVANT THEORY: INFORMATION ASYMMETRY AND HIDDEN AND PRIVATE INFORMATION

In an economic game, the economic actor or player with private information is the informed player. The economic actor or player with only public information and without private information is the uninformed player.

An environment with hidden information is sometimes characterized as one that facilitates adverse selection (Cabrales & Charness, 2008). Information has economic value in that information available to the informed player produces an incentive to use his or her superior information to exploit their information premium. Those facilitating this condition of information asymmetry can extract an information rent (Caillaud & Hermalin, 2000).

Adverse selection is pre-contractual. Moral hazard is post-contractual. Just as the former can be linked with hidden information, the latter is more appropriately associated with hidden action. It is, in this fashion, that we illustrate a framework under conditions of information asymmetry that includes both agency theory and market efficiency (see Appendix, Figure 1).

From the managerial accounting and contract theory literature streams, principal-agent problems and issues are examined in terms of adverse selection and moral hazard. To the extent that Nevada corporate law facilitates (and/or encourages) information asymmetry, it can attract those seeking these features, and they will be willing to pay a premium for the associated value. Managerial accounting tends to be associated with internal decision-making.

---

[3] See The Nevada Advantage: Top Reasons to Incorporate in Nevada. Available at <http://nvsos.gov/index.aspx?page=422>, where the Nevada Secretary of State (NVSOS) website lists the reasons and/or advantages associated with incorporation in the state of Nevada as including no (1) corporate income tax, (2) taxes on corporate shares, (3) franchise tax, (4) personal income tax, (5) franchise tax on income, (6) inheritance or gift tax, (7) unitary tax, (8) estate tax, (9) nominal annual fees, (10) Nevada corporations may purchase, hold, sell or transfer shares of its own stock, (11) Nevada corporations may issue stock for capital, services, personal property, or real estate, including leases and options. The directors may determine the value of any of these transactions, and their decision is final, (12) competitive sales and property tax rates, (13) minimal employer payroll tax - 0.7% of gross wages with deductions for employer paid health insurance, (14) Nevada's Business Court, and (15) developed on the Delaware model, the Business Court in Nevada minimizes the time, cost and risks of commercial litigation by: (a) early, comprehensive case management, (b) active judicial participation in settlement, (c) priority for hearing settings to avoid business disruption, and (d) predictability of legal decisions in commercial matters.

From the financial economics and financial accounting literature streams, the efficient markets hypothesis and market efficiency is framed in terms of the speed or level of information efficiency, where public information is nested within private information, but private information might provide an agent with an *informational advantage*. Financial accounting tends to be associated with external reporting.

Agents (board of directors and/or management) are monitored by professional or self-regulatory (e.g., SOX and PCAOB) and regulatory (e.g., FBI, SEC, and the U.S. Attorney or DOJ) agencies to protect principals (shareholders and other stakeholders). In the case of the CPA and/or auditor, the auditor accepts the role of the monitor/agent and the board of directors/management the role of the principal. It is possible for the CPA/auditor, as an agent of the board of directors/management, to encounter a conflict; where monitoring is not optimized with respect to the stockholder's or principal's interests. For example consulting (profitable) and auditing (less profitable) services performed on the same client were compatible functions. However, post-Enron, Worldcom and SOX these functions were found to be incompatible and not in the best interest of the stockholder/principle.

Likewise, financial analysts, underwriters, and broker-dealers may or may not positively contribute to the monitoring function. Underwriting (profitable) and research conducted by financial analysts (less profitable) may be substituted by stock promoters, at least in the lower capitalization, small capitalization or micro-cap markets.[4]

To the extent that Nevada corporate law is designed to favor the agent (management), Nevada generates additional corporate filing fees and/or revenues (information asymmetry-based economics rents), while disproportionately consuming federal regulatory agency resources (*the Nevada Effect)*. Asymmetric or hidden information, and hidden action, by the better informed agent, can lead to adverse selection (pre-contraction or pre-purchase of a stock) and moral hazard (post-contractual or post-purchase of a stock).

While Ball and Brown (1968) suggest that financial accounting provides information useful to stock market participants, only one eighth of all publicly released information is represented by published financial statements (Lev, 1989). Christensen (2010, pp. 295-6) refers to this finding and points out that accounting information is late by construction and asks *why regulate accounting information when most of the information action is going on in the non-regulated regime of other information sources?* As shown below, it is in this arena where several Nevada firms have found an opportunity for exploitation and exemplify *the Nevada Effect*.

REGULATORY ENFORCEMENT ACTIONS

This section describes results from two contemporary Securities and Exchange Commission (SEC), Department of Justice (DOJ), Federal Bureau of Investigation (FBI) and Internal Revenues Service (IRS) regulatory enforcement actions occurring in 2011 and 2013, respectively. We provide descriptive measures with a focus on only the state of incorporation and, in particular, on the market share leaders - Delaware and Nevada. Despite the fact that more than 50% of the publicly traded firms in the U.S. are incorporated in the state of Delaware, Nevada corporations were involved in the majority of these regulatory enforcement actions.

2011 SEC Suspensions

On June 7, 2011, the SEC suspended trading for 17 Companies, in their proactive effort to combat microcap stock fraud (SEC 2011). Robert Khuzami, Director of the SEC's Division of Enforcement, included auditors in his list of "gatekeepers":

> *The SEC's new Microcap Fraud Working Group is targeting the insiders and promoters, as well as the transfer agents, attorneys, auditors (emphasis added), broker-dealers, and other "gatekeepers" who flourish in the shadows of this less-than-transparent market.*

"Less-than-transparent" suggests the presence of hidden or private information and could also suggest hidden action (see Appendix, Figure 1). *The Nevada Effect* is evident in that the firms incorporated in the state of Nevada are disproportionately over-represented and firms incorporated in the state of Delaware are disproportionately under-represented in this SEC suspension of 17 Companies.

---

[4] Micro cap stocks might be said to be *neglected* and referred to as *generic* stocks by traditional financial analysts, which is not an issue in the case of big-cap or *brand name* stocks.

Table 1 summarizes the firms and state of incorporation, where 59% were incorporated in the state of Nevada. This compares to 8.3% of total US firms incorporated in the state of Nevada (see Appendices A & B). Therefore, Nevada corporations represented more than six times the proportion one might anticipate and a disproportionately high percentage of these suspensions. Only two of the 10 firms incorporated in the state of Nevada actually operated or headquartered their operations in that state.

Only two of the seventeen suspensions, or less than 12%, were for firms incorporated in the state of Delaware. This compares to 54.3% of total US firms incorporated in the state of Delaware (see Table 1 and Appendices A & B). Therefore, Delaware corporations represented less than one-quarter of the proportion one might anticipate and a disproportionately low percentage of these suspensions.

2013 DOJ, FBI and IRS Arrests

On February 14, 2013, the DOJ (U.S. Attorney's Office for the Central District of California) released news of the arrest of 14 individuals and identified the entities involved (FBI, 2013). The case involved market manipulation and the sale of stock at inflated prices, estimating investor losses in excess of $30 million ($11.4 million attributed to Nevada). Therefore, 38% of the illegal proceeds were directly linked to five Nevada corporations (see Table 2).

With only 8.3% of the US firms incorporated in the state of Nevada (see Appendices A & B), and 38% of the illegal proceeds from the DOJ arrests involving Nevada corporations, it is apparent that a disproportionately high amount of scarce, Federal regulatory resources were consumed to identify and make arrests of those associated with these Nevada corporations.

The fiscal year 2012 budget for the Nevada Secretary of State (NVSOS) Securities Division approximated $25.5 million (NVSOS, 2012a). The NVSOS Securities Division is responsible for administering the state's securities law, and their mission is to protect Nevada investors from securities fraud by licensing investment professionals, registering securities offerings, enforcing the state's securities law, and educating the public through community forums, presentations and the distribution of publications.

As of June 30, 2012, the Division's staff totaled 17 full-time employees including seven criminal investigators and four compliance audit investigators. In addition to performing securities investigations, the Division's criminal investigators also conduct corporate filing and election fraud related investigations in their capacity as sworn peace officers. There was no mention of assistance from NVSOS regulatory authorities in the February 14, 2013, news release.

Recall that the estimate of investor losses exceeded the $25.5 million amount for the entire NVSOS Securities Division, where estimated investor losses were in excess of $30 million. We suggest, based on these measures, that the state of Nevada is free-loading – benefitting from the inflow of corporate filing fees or revenues for Nevada's benefit; while relying on Federal regulators and taxpayers/citizens from all other states to participate in bearing the costs and resources associated with DOJ, FBI, and IRS regulatory actions.

In the next section we provide examples of two firms who were involved in *pump and dump* schemes while we were contemporaneously writing our paper.

EXPLORATORY FINDINGS AND INVESTOR SENTIMENT

In the internet age, small and micro-cap stock promotion has become big business. An activity that was relegated to cold-calling in years passed can now be swiftly coordinated and executed through websites, email, pop-up ads, and message boards. This is dangerous for investors as this promotion is often associated with an illegal scheme known as the *pump and dump*. In the scheme the promoters make misleading or greatly exaggerating claims about the stock when trying to entice buyers. After the stock price has been inflated the perpetrators of the scheme (the promoters themselves or those who hired them) dump their positions in the stock, ideally for huge gains, causing the stock price to fall precipitously – leading to heavy losses for most new investors. While this practice is technically illegal, state corporate law influences the liability managers have in these cases, and as stated above, Nevada state law is by design lax in this area.

This leads us to an interesting finding we made in the process of examining and developing measures for the preceding section. While conducting a Google search, we identified a February 20, 2013, electronic article entitled *Seeking Alpha* authored by an organization referring to itself as the Fraud Research Institute (2013). Recall that the second fact pattern in the preceding section of this paper provided descriptive measures from a February 14, 2013, announcement from the DOJ. Therefore, these public releases occurred within a single week.

Our attention was directed to an *in-process* stock promotion for Swingplane Ventures, Incorporated (SWVI), also a Nevada corporation. The *Seeking Alpha* article named 12 other firms, to illustrate associations and support the author's position – one of negative investor sentiment toward SWVI. We identified the state of incorporation for SWVI and all other firms mentioned in this article. This information is summarized in Table 3.

Eleven of the thirteen firms (85%) were Nevada-based. The high incidence of firms incorporated in the state of Nevada was not discussed in the article. The focus was, instead, on two individuals acting as officers and directors of some of these firms, including one barred from the securities industry.[5] Apparently, these officers and/or directors were roommates operating out of a condo in Colorado. The stock promoter used by SWVI was *Awesome Penny Stocks*.

Whether coincidental or causally linked, the *Seeking Alpha* article was released on February 20, 2013, and the stock price per share for SWVI dropped, significantly, at the market open on February 21, 2013, the following trading day.[6] We captured these data, which is presented in Figure 2. While not possible to statistically/causally link the release of this electronic *Seeking Alpha* article, scientifically, to the nearly immediate and significant decline in SWVIs stock price, the events are precisely correlated and consistent with Christensen's (2010) hypothesis that accounting information, per se, is not the most significant or relevant information used by investors or resulting in stock price reactions. If presumed to be causally linked, the stock price reaction is consistent with the efficient market hypothesis, where previously hidden or private information, once disclosed and made public, reduces the level of information asymmetry.

StockPromoters.com monitors newsletter activity.[7] Table 4 lists the 10 most promoted penny stocks for the week ended February 24, 2013.

SWVI ranked second in the top ten of the most promoted penny or micro-cap stocks for the week. We investigated the state of incorporation for each of the top 10 firms. Eight of the top 10 most promoted stocks are incorporated in the state of Nevada.

Upon further investigation, 75 (90%) of the 83 newsletters used to promote SWVI were from (1) *Awesome Penny Stocks*, (2) *Penny Stock Expert*, (3) *PennyStocks.com*, and (4) *Victory Stocks*. The headlines and content are comparable for all four of these electronic newsletters, where the cost for a single newsletter is disclosed as 10,200 BRL or more than $90,000 for 18 dates/deliveries (i.e., $5,171 multiplied by 18) by a single promoter.We examined the impact of the frequency of these promotions on stock price and volume. As is often the case in these *weak form* tests of market efficiency, a comparable analysis, this time by stock price, did not yield significant results. However, the frequency of these stock promotions and volume produced precisely the results one might anticipate. These results are summarized in Table 5.

---

[5] See Securities and Exchange Commission. (2011). *Roundtable on the Execution, Clearance and Settlement of Microcap Securities (Monday, October 17).* Available at <http://www.sec.gov/news/otherwebcasts/2011/microcaproundtable101711.shtml>, where the primary "red flags" drawing the attention of a variety of regulatory agencies include director and officer associates and spouses, particularly those already barred from the industry.

[6] It should be noted that two other online articles, favorable mentioning SWVI were published: (1) Eastman, J. (2013). "Why Copper, Why Now?" *The Motley Fool (February 20)*; available at <http://beta.fool.com/johneastman00/2013/02/20/why-copper-why-now/25077/> & (2) Stocks on Wall Street. (2013). "Copper Rally Continues to Give A Buy Signal For These Two Stocks," *Investing.com (February 21 06:03AM GMT)*; available at <http://www.investing.com/analysis/copper-rally-continues-to-give-a-buy-signal-for-these-two-stocks-156137>.

[7] Available at <http://stockpromoters.com/News-Letters.aspx?symbol=SWVI>.

Table 5 provides the results from equation [1a]. We used the natural log of volume of shares traded (LnVol) as the dependent variable in our examination of the impact of the eight sources of promotion issued and paid for by SWVI from October 23, 2012, through February 22, 2013.

$$LnVol_i = \alpha_i + \beta_1 Marketwire_{1i} + \beta_2 PRNewswire_{2i} + \beta_3 Accesswire_{3i}$$

$$+ \beta_4 CanadaNewswire_{4i} + \beta_5 AwesomePennyStocks_{5i} + \beta_6 PennyStockExpert_{6i}$$

$$+ \beta_7 PennyStocks.com_{7i} + \beta_8 VictoryStocks_{8i} + \varepsilon_i \quad [1a]$$

Multicolinearity resulted in the elimination of *PennyStocks.com* and *VictoryStocks*. *AwesomePennyStocks* contributed little to the regression model, was insignificant, and was also removed. (Recall that we reviewed these three and *PennyStockExpert* for content, and they appeared to contain the same or similar content in their headlines and the body of these promotional electronic newsletters.) The result, after eliminating three of the eight newsletters and relative event date-based dummy variables, was equation [1b], as follows:

$$LnVol_i = \alpha_i + \beta_1 Marketwire_{1i} + \beta_2 PRNewswire_{2i} + \beta_3 Accesswire_{3i}$$

$$+ \beta_4 CanadaNewswire_{4i} + + \beta_4 PennyStockExpert_{4i} + \varepsilon_i \quad [1b]$$

For equation [1b], all four (presumably) independent public relations and/or promotional releases are statistically significant at the .05 level, and explain nearly 98% of the variability in trading volume for SWVI stock.

In addition to these promotional newsletters, individuals appear to have been retained to *tout* the stock on stock chat message boards. Table 6 provides a summary of posts made by an alias (*Hooka*) on a variety of the IHUB stock chat message boards. In an effort to approximate the economic incentives for one to engage in this form of promotional engagement, we identified N=27 posts over a 90 minute period. The self-disclosed compensation was $50, or a bit more than $65 thousand per year, based on a 40 hour week.

Fundamentals for SWVI – A Nevada Corporation

SWVI had zero revenues, less than $50 thousand in cash and cash equivalents, and a negative working capital position.

From the September 30, 2011, Form 10-Q/A:

> *On September 6, 2011, the Company raised $35,000 through the issuance of 35,000,000 shares of common stock to unrelated parties.*

From the December 31, 2011, Form 10-Q:

> *We have not generated positive cash flows from operating activities. The primary source of capital has been from the sale of equity securities…*

The cost of these shares was $0.0001 per share, representing 74.1% of the common shares and sold to an individual acting as the president, secretary, treasurer, chief financial officer, and sole director of SWVI. This is permitted under Nevada corporate law.

During February 2013,[8] after a series of positive news releases and/or advertisements, SWVI reached a 52-week high of $1.00 per share. This represents a 10,000% increase from the cost of $0.0001 per share. Alternatively, consider that a $1,000 investment was valued at as much as $10 million during February 2013, less than 18 months after acquisition.

[8] It is, sometimes, helpful or insightful to actually trade some small amount of money to examine the liquidity of these stocks. In the case of SWVI, one of the authors purchased some shares on February 8 and 11 and sold these shares on February 12 for a tiny, round-trip profit. Both buy and sell executions appeared to be efficient and there was no evidence of any lack of liquidity or *front-running*.

From the December 31, 2012, Form 10-Q:

> *(SWVI)…was incorporated in the state of Nevada on June 24, 2010, as a development stage company with the a principal business objective of selling men's and women's golf apparel…(o)n August 22, 2012, the Company went through a change in control and management…(o)n October 15, 2012, the Company entered into an assignment agreement with Mid Americas…whereby Mid Americas has the rights to acquire 75% of certain mining concessions in Chile….*

This quote from the 10-Q not only establishes SWVI as a Nevada firm, but also shows a rather abrupt change in business model from a golf apparel company to one dealing in Chilean mining concessions. This puzzling conversion raises some suspicion as to the legitimacy of SWVI's business. This information, though publically available, seemed to have been largely ignored by investors as the stock price soared. As of the end of the third quarter of 2013 (September 30), SWVI was trading at $0.01 per share.

Fundamentals for CYIG – A Delaware Corporation

Stock promoters rely on the retention of their subscribers to sell their services. To do this, they remind subscribers of their successes. While aggregate compensation measures were not available for *Awesome Penny Stocks*, in the case of the SWVI promotion (a Nevada corporation), they were available for *TribecaInvestments, Ltd*., involved in the March 3, 2012, promotion for China YCT International Group, Inc. or CYIG (a Delaware corporation). They pre-empted this promotion with a reminder:

> *So far this year we've had some amazing alerts with stocks seeing* ***gains of +6,122%, +1,039%, & +570%.*** *Now we've also had some alerts that haven't been as impressive, but that is all part of trying (sic) to alert you to companies that present actionable opportunities for you to secure trading profits.*

Table 7 provides the self-disclosed promotional revenues reported by *TribecaInvestments, Ltd*., which we have partitioned into both Nevada and other corporations. Table 7 reveals that 61% of their revenues originate from the promotion of firms incorporated in the state of Nevada. This again represents disproportionally large amount relative to the total number of US firms incorporated in Nevada.

CYIG can be thought of as a comparable company to SWVI, in the sense that they are both micro-cap stocks that hired firms to promote their shares. While the evidence may only be anecdotal, the fundamentals of the Delaware incorporated CYIG are in sharp contrast to those of SWVI. In March 2012, CYIG filed a 10-Q with the SEC that contained unaudited financials with a positive working capital position, positive net assets and equity, and positive net earnings per share.

The opening stock price on the Monday following the weekend promotion for CYIG *gapped up* from $0.003 per share to $0.30 per share, hitting a high price per share of $2.84, or nearly a 95,000% increase in a single trading day. CYIG had an unaudited book value of $1.86 per share, positive working capital, little or no debt, and favorable earnings per share measures. It was, of course, not possible to purchase the share at the $0.003 price over the weekend promotion. However, the firm's 10-Q, providing the firm's balance sheet and favorable fundamental measures, were publicly available. It had been filed two weeks prior to the promotional announcement.

As of the end of the third quarter of 2013 (September 30), CYIG was trading at $0.24 per share – a fraction of the firm's liquidation value. Ultimately the story of CYIG was very similar to that of SWVI, despite the stark contrast in their financial fundamentals. This lends even further credence to Christensen's (2010) argument regarding the importance of non-fundamental information from unregulated sources. Although no regulatory action has commenced on either company, the classic *pump and dump* schemes of SWVI lend anecdotal support to *the Nevada Effect*.

SUMMARIZING THE RESULTS OF OUR FORENSIC INVESTIGATIONS: SEC AND DOJ, FBI AND IRS ENFORCEMENT ACTIONS AND OUR EXTENSIONS

We use Table 8 to summarize and present the results of our forensic examination of the Nevada effect.

We have examined the June 2011, SEC trading suspensions for 17 corporations (Table 1) and the results from a combined effort conducted by the DOJ, FBI and IRS; which was announced in a February 2013 press release (Table 2). In both cases, Nevada corporations were over-represented and Delaware corporations were either under-represented or not represented. These results support the contemporary persistence of *the Nevada Effect*.

We chronicle the steps taken in our forensic examination, which identified far more dramatic Nevada corporation over-representations, publicly available during February and March 2013. The *Seeking Alpha* article (Table 3 and Figure 2), a penny stock monitoring website, *Penny Stock Promotions* (Table 4), and a public disclosure of the source of revenues for a stock promoter, *TribecaInvestments, Inc.* (Table 7), all suggest that Nevada is leading Delaware and other states in attracting effective and profitable stock promoters and promotional efforts (Tables 5 and 6). Figure 3 is supported by Appendices A and B, illustrating the market share increases enjoyed by Nevada, perhaps to Delaware's detriment, focusing on 2008, 2009, 2010 and 2011 Compustat data.

Both SWVI (Nevada) and CYIG (Delaware) engaged stock promoters and experienced dramatic stock price increases during late February and early March, 2013. At the end of the 2013 calendar year, SWVI was trading at less than $0.02 per share (from a 52-week high of $1.00 per share) and CYIG was trading at $0.40 per share (from a 52-week high of $2.84 per share). These mini-cases were not selected randomly. We selected them to illustrate the very significant stock promotional outcomes that can be achieved. In the case of SWVI, a Nevada corporation, the promotional activity appears to represent what stock traders and the SEC characterizes as a *pump and dump*. While promoted, CYIG, a Delaware corporation, does not appear to have been a *pump and dump*. Regulators and academic researchers may find these mini-cases helpful when designing research methodologies to further investigate *the Nevada Effect*.

REFERENCES

Abramowicz, M. 2003. "Speeding up the Crawl to the Top," *Yale Journal on Regulation 20*(1) *(Winter)*: 139-205.

Akerlof, G. 1970. "The Market for Lemons: Qualitative Uncertainty and the Market Mechanism," *Quarterly Journal of Economics, 89*: 488-500.

Ball, R., and P. Brown. 1968. "An empirical evaluation of accounting income numbers'. Reprinted in *Journal of Accounting Research* (1989) 27: 202-217.

Barzuza, M. 2012. Market segmentation: The rise of Nevada as a liability-free jurisdiction. *Virginia Law Review 98*(5): 935-1000.

Barzuza, M. and Smith, D.C. 2011. What Happens in Nevada? Self-Selecting into Lax Law. *Unpublished Working Paper*. Available at <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1644974>.

Bebchuk, L., and A. Cohen. 2003. "Firms' Decisions Where to Incorporate," *Journal of Law and Economics 46*: 383-425.

Cary, W.L. 1974. "Federalism and Corporate Law: Reflections upon Delaware 83," *Yale Law Journal*: 663-669.

Cataldo, A.J., L. Fuller and T. Miller. 2014 (forthcoming). "An Analysis of SEC and PCAOB Enforcement Actions against Engagement Quality Reviewers: A Comment and Extension in Support of *the Nevada Effect*," *Journal of Forensic & Investigative Accounting*.

Christensen, J. 2010. "Conceptual frameworks of accounting from an information perspective. *Accounting and Business Research 40*(3): 287-299.

Daines, R. 2001. "Does Delaware Law Improve Firm Value?" *Journal of Financial Economics 62*: 525-558.

Easmunt, B. 2004. "Delaware's Dominance in the Field of Corporate Law: Actual Superiority, or Merely the Assumption Thereof?" *Unpublished Working Paper*. George Mason University of Law: 36 pages.

Federal Bureau of Investigation (FBI). 2013. "Fourteen Arrested for Market Manipulation Schemes That Caused Thousands of Investors to Lose More Than $30 Million," *U.S. Attorney's Office: Central District of California (February 14)*. Available at <http://www.fbi.gov/losangeles/press-releases/2013/fourteen-arrested-for-market-manipulation-schemes-that-caused-thousands-of-investors-to-lose-more-than-30-million>.

Fraud Research Institute. 2013. "Swingplane Ventures: An Inflated Stock Promotion Balloon That Will Pop." *Seeking Alpha* (February 20). Available at <http://seekingalpha.com/article/1207501-swingplane-ventures-an-inflated-stock-promotion-balloon-that-will-pop>.

Lev, R. 1989. "On the usefulness of earnings and earnings research: lessons and directions from two decades of empirical research." *Journal of Accounting Research 27*(3) Supplement: 153-192.

Messier, W.F., T.M. Kozloski & N. Kochetova-Kozloski. 2010. "An Analysis of SEC and PCAOB Enforcement Actions against Engagement Quality Reviewers," *Auditing: A Journal of Practice and Theory, 29(2) (November)*: 233-252.

Nevada Secretary of State (NVSOS). 2012. Biennial Report July 1, 2010 – June 30, 2012 From the Office of Secretary of State Ross Miller and Why Nevada. Available at
<http://nvsos.gov/Modules/ShowDocument.aspx?documentid=2571>;
<http://nvsos.gov/Modules/ShowDocument.aspx?documentid=2569>;
<http://whynevada.com/commercialrecordings/legaladvantagescorps.asp>;
<http://whynevada.com/commercialrecordings/legaladvantagesdelaware.asp>;
<http://whynevada.com/capitalmarkets/exemption.asp>;
<http://whynevada.com/capitalmarkets/qualification.asp>.

Romano, R. 1993. *The Genius of American Corporate Law*. Washington, D.C.: AEI Press.

Securities and Exchange Commission (SEC). 2011. "SEC Suspends Trading in 17 Companies in Proactive Effort to Combat Microcap Stock Fraud," (June 7). Release No. 34-64612. Washington, D.C. Available at <http://www.sec.gov/news/press/2011/2011-120.htm>.

U.S. House of Representatives. 2002. The Sarbanes-Oxley Act of 2002. Public Law 107-204 [H.R. 3763], Washington, D.C.: Government Printing Office.

Winter, Jr., R.K. 1977. "State Law, Shareholder Protection, and the Theory of the Corporation 6," *Journal of Legal Studies*: 251-290.

Dr. A. J. Cataldo II is a professor of accounting at West Chester University. He teaches various financial accounting courses. His research interests include information asymmetry, the Nevada effect, and most recently, U.S. and Canadian marijuana firms accessing U.S. capital markets and with related party transactions and toxic convertibles.

Dr. Lori Fuller is chair and professor of accounting at West Chester University. She teaches auditing, fraud and accounting information systems. Her research interests include the Nevada Effect, fraud, accounting ethics and individual differences in decision making.

Dr. Thomas Miller is an assistant professor of finance and economics at West Chester University. He teaches courses in corporate finance and financial markets and institutions. His research interests include corporate finance, dividend and payout policy, financial markets, mergers and acquisitions, investments, and derivatives.

APPENDIX

Table 1
SEC Trading Suspension for 17 Companies

June 7, 2011

Firm Name[9]	NV	DE
1-American Pacific Rim Commerce Group is a California corporation based in Florida.	0	0
2-Anywhere MD, Inc. is a Nevada corporation with its principal place of business in California.	1	0
3-Calypso Wireless, Inc. is a Delaware corporation based in Texas.	0	1
4-Cascadia Investments, Inc. is a Nevada corporation based in Washington State.	1	0
5-CytoGenix, Inc. is a Nevada corporation based in Texas.	1	0
6-Emerging Healthcare Solutions, Inc. is a Wyoming corporation based in Texas.	0	0
7-Evolution Solar Corporation is a Colorado corporation based in Arizona.	0	0
8-Global Resource Corporation is a Nevada corporation based in North Carolina.	1	0
9-Go Solar USA, Inc. is a Nevada corporation based in Louisiana.	1	0
10-Kore Nutrition, Inc. is a Nevada corporation based in Nevada.	1	0
11-Laidlaw Energy Group, Inc. is a New York corporation based in New York.	0	0
12-Mind Technologies, Inc. is a Nevada corporation based in California.	1	0
13-Montvale Technologies, Inc. is a New Jersey corporation based in New Jersey.	0	0
14-MSGI Technology Solutions, Inc. (f/k/a MSGI Security Solutions, Inc.) is a Nevada corporation based in New York.	1	0
15-Prime Star Group, Inc. is a Nevada corporation based in Nevada.	1	0
16-Solar Park Initiatives, Inc. is a Nevada corporation based in Florida.	1	0
17-United States Oil & Gas Corporation is a Delaware corporation based in Texas.	0	1
Totals Incorporated in Nevada & Delaware	10	2
Percentage Incorporated in Nevada & Delaware	59%	12%

[9] The state of operation is underlined, where n=2 of the N=10 of the firms incorporated in the state of Nevada are actually operating or have their principal place of business in the state of Nevada.

Table 2
Jurisdiction or State of Fraudulent Inflated Stock Values
U.S. Attorney's Office – Central District of California
Illegal Proceeds, Specified by Identifiable Jurisdiction or State
February 14, 2013 Press Release

Firm[10]	Jurisdiction or State[11]	Illegal Proceeds (millions)
1-FrogAds	NV	$6.8
2-GenMed	NV	$2.1
3-Empire Post Media	NV	$1.0
4-Sport Endurance	NV	$1.0
5-Biostem	NV	$0.5
6-Calbridge Capital LLC	NV	unspecified
7-Imobolis, Inc.	NV	unspecified
8-Apache Capital LLC	FL	unspecified
9-Big Dog International LLC	FL	unspecified
10-London Finance Group, Ltd.	unknown	unspecified
11-8 Sounds, Inc.	unknown	unspecified
12-ScrIpted Consulting Group	unknown	unspecified
13-Taylor Financial, Ltd.	unknown	unspecified
Total Identified as NV Corporations		$11.4
Total Identified		$30.0

[10] The names of firms in the article were imprecise. FrogAds is FrogAds, Incorporated, GenMed is Genmed Holding Corporation, Empire Post Media is Empire Post Media, Incorporated, Sport Endurance is Sport Endurance, Incorporated, and Biostem is Biostem U.S. Corporation, based in Clearwater, Florida.
[11] If Internet searches failed to reveal any information on these firms with respect to state of incorporation, they are listed as "unknown."

Table 3
Jurisdiction or State of Firms Examined by the *Fraud Research Institute*
***Seeking Alpha* Article**
February 20, 2013

Firm	Jurisdiction or State
***1-Swingplane Ventures, Incorporated**[12]*	***NV***
2-Tapslide, Incorporated[13]	NV
3-PaperFree Medical Solutions, Incorporated[14]	NV
4-TheraBiogen	NV
5-Xpention Genetics, Incorporated[15]	NV
6-HS3 Technologies, Incorporated[16]	NV
7-World Moto, Incorporated*	NV
8-TagLikeMe Corporation*	NV
9-Superior Venture*	NV
10-Amwest Imaging, Incorporated*	NV
11-USA Graphite, Incorporated	NV
12-Kushi Resources[17]	CO
13-Great Wall Builders, Limited*	TX

* These firms engaged *Awesome Penny Stocks*, a stock promoter.

[12] When incorporated on June 24, 2010, Matthew Ryan Diehl was the company's sole Officer and Director.
[13] Matthew Diehl formerly acted as Chief Operating Officer and Director. This stock was suspended by the Securities and Exchange Commission from trading on January 19, 2012, for a lack of current and accurate information.
[14] Matthew Diehl was formerly employed as the Chief Executive Officer.
[15] Aaron Lamkin, an associate (and roommate) of Matthew Diehl, was barred by the Securities and Exchange Commission on November 16, 2011, and can no longer be associated by a registered broker or dealer, for the unregistered distribution of shares.
[16] Aaron Lamkin, an associate (and roommate) of Matthew Diehl, was barred by the Securities and Exchange Commission on November 16, 2011, and can no longer be associated by a registered broker or dealer, for the unregistered distribution of shares.
[17] Matthew Diehl was a former Officer and Director.

Table 4
Most Promoted Penny Stocks
Ticker Symbol, Specified by Identifiable Jurisdiction or State
Week Ending February 22, 2013

8 of the Top 10 are Nevada Corporations

	Jurisdiction	
Firm	or State	Newsletters
1-HVYW	NV	122
2-SWVI	***NV***	***83***
3-XCHC	NV	83
4-OPIX	NV	69
5-FUEG	FL	56
6-CNCT	FL	46
7-GRPH	NV	43
8-ACGX	NV	40
9-RARS	NV	40
10-GVIT	NV	39

Table 5
Results of Equation [1b] from the Examination of Stock Trading Volume and the Source and Frequency of News Releases and News Wires for SWVI
October 23, 2012 through February 22, 2013

Regression Results

Description	N	coefficient	t-statistic	p-value
Intercept		0.9881	2.46	0.016
Marketwire	49	1.5059	2.97	0.004
PRNewswire	14	4.2797	4.57	0.000
CanadaNewswire	1	-7.7160	-2.17	0.033
PennyStockExpert	19	11.1570	9.71	0.000
Overall F-statistic				82.7
Adjusted R-squared				97.8

Pearson Correlation Results[18]

	PRNewswire	Accesswire	CanadaNewswire	AwesomePennyStocks	PennyStockExpert	PennyStocks.com	VictoryStocks
Marketwire	0.540	0.369	0.143*	0.654	0.679	0.679	0.679
PRNewswire		0.463	0.416	0.297	0.281	0.281	0.281
Accesswire			-0.022*	0.211	0.201	0.201	0.201
CanadaNewswire				0.210	0.202	0.202	0.202
AwesomePennyStocks					0.966	0.966	0.966
PennyStockExpert						1.000**	1.000**
PennyStocks.com							1.000**

[18] *Not significant at the .10 level. **Perfectly Collinear.

Table 6
SWVI Posts by *Hooka* and on the IHUB Stock Chat Message Board
February 25, 2013

	Posts by Hooka	Board	Date/Time
1-	SWVI .7251 +9%	Momentum Players	11:03:54 AM
2-	SWVI .7251 +9%	Swingplane Ventures Inc (SWVI)	11:03:42 AM
3-	SWVI - Copper Rally Continues To Give A	MOMO'S BREAKOUT BOARD	11:02:30 AM
4-	Investing.com has new Article about SWVI - http://www.investing.com/analy	STOCKGOODIES PLAYS OF THE WEEK	11:01:30 AM
5-	Investing.com has new Article about SWVI - http://www.investing.com/analy	BB's Stock Haven	10:59:58 AM
6-	SWVI - Why Copper, Why Now?	Momentum Players	10:58:48 AM
7-	SWVI - Why Copper, Why Now?	Penny Stock Millionaire	10:58:21 AM
8-	SWVI - 4 Metal Stocks To Buy On	MOMO'S BREAKOUT BOARD	10:57:15 AM
9-	SWVI - 4 Metal Stocks To Buy On	.0001 PICKS ONLY	10:56:50 AM
10-	SWVI - As it pushes to evaluate the	Swingplane Ventures Inc (SWVI)	10:56:11 AM
11-	SWVI - As it pushes to evaluate the	Stock Legends	10:55:51 AM
12-	$SWVI - Company officials admit that production is	BB's Stock Haven	10:55:19 AM
13-	$SWVI - Company officials admit that production is	MOMO'S BREAKOUT BOARD	10:55:08 AM
14-	$SWVI - Trading as a pink sheet stock,	Momentum Players	10:27:28 AM
15-	$SWVI - Demand for copper is falling, but	Money Runners	10:26:51 AM
16-	$SWVI - Demand for copper is falling, but	MOMO'S BREAKOUT BOARD	10:26:37 AM
17-	SWVI - This Company Has Copper Mining On	The Hunt for the Next 10 Bagger	10:24:55 AM
18-	$SWVI - Copper is found in many places	STOCKGOODIES PLAYS OF THE WEEK	10:23:52 AM
19-	$SWVI - Copper is found in many places	Swingplane Ventures Inc (SWVI)	10:23:36 AM
20-	SWVI - Copper prices have rallied over the	BB's Stock Haven	10:23:04 AM
21-	SWVI - Copper prices have rallied over the	MOMO'S BREAKOUT BOARD	10:22:44 AM
22-	SWVI….. Copper Rally Continues To Give A Buy	Swingplane Ventures Inc (SWVI)	9:55:34 AM
23-	SWVI….. Copper Rally Continues To Give A Buy	STOCKGOODIES PLAYS OF THE WEEK	9:55:04 AM
24-	SWVI….. Copper Rally Continues To Give A Buy	BB's Stock Haven	9:36:01 AM
25-	Huge Article about SWVI	Swingplane Ventures Inc (SWVI)	9:34:52 AM
26-	Huge Article about SWVI	BB's Stock Haven	9:32:29 AM
27-	Huge Article about SWVI	MOMO'S BREAKOUT BOARD	9:31:54 AM

Table 7
Self-Reported Promotional Campaign Revenues for *TribecaInvestments, Ltd*.
Nevada (NV) and Other States of Incorporation
10 Month Period through February 2013

		NV	Other
$40,000	Up to $40,000 for OREO by a third party, Winning Media. (4/15/2012 - 4/27/2012)	$40,000	$0
$40,000	Up to $40,000 for AEDC by a third party, Winning Media. (4/24/2012)	$40,000	$0
$40,000	Up to $40,000 for RACK by a third party, Winning Media. (5/6/2012)	$40,000	$0
$50,000	Up to $50,000 for PFNI by a third party, Winning Media. (5/8/2012)	$50,000	$0
$40,000	Up to $40,000 for BRFH by a third party, Winning Media. (5/13/2012)	$0	$40,000
$40,000	Up to $40,000 for ORYN by a third party, Winning Media. (5/27/2012)	$40,000	$0
$40,000	Up to $40,000 for LBGO by a third party, Winning Media. (6/17/2012)	$0	$40,000
$50,000	Up to $50,000 for IMUN by a third party, Winning Media. (7/31/2012)	$0	$50,000
$50,000	Up to $50,000 for TNIB by a third party, Winning Media. (8/7/2012)	$0	$50,000
$45,000	Up to $45,000 for FUEG by a third party, Winning Media. (9/4/2012)	$0	$45,000
$42,500	Up to $42,500 for LBGO by a third party, Winning Media. (9/5/2012)	$0	$42,500
$40,000	Up to $40,000 for SEFE by a third party, Winning Media. (9/11/2012)	$40,000	$0
$40,000	Up to $40,000 for ORYN by a third party, Winning Media. (9/16/2012)	$40,000	$0
$40,000	Up to $40,000 for CHMR by a third party, Winning Media. (9/19/2012)	$40,000	$0
$40,000	Up to $40,000 for GNGR by a third party, Winning Media. (9/26/2012)	$0	$40,000
$40,000	Up to $40,000 for LBGO by a third party, Winning Media. (10/01/2012)	$0	$40,000
$40,000	Up to $40,000 for ORYN by a third party, Winning Media. (10/14/2012)	$40,000	$0
$40,000	Up to $40,000 for GRST by a third party, Winning Media. (10/18/2012)	$0	$40,000
$35,000	Up to $35,000 for CUAU by a third party, Winning Media. (10/28/2012)	$35,000	$0
$30,000	Up to $30,000 for AVXL by a third party, Winning Media. (11/05/2012)	$30,000	$0
$30,000	Up to $30,000 for FSTC by a third party, Winning Media. (11/13/2012)	$0	$30,000
$25,000	Up to $25,000 for IMUN by a third party, Winning Media. (11/27/2012)	$0	$25,000
$30,000	Up to $30,000 for URBF by a third party, Winning Media. (1/13/2013)	$30,000	$0
$60,000	Up to $60,000 for ZPPB by a third party, Winning Media. (1/22/2013)	$60,000	$0
$60,000	Up to $60,000 for CWNM by a third party, Winning Media. (1/23/2013)	$60,000	$0
$60,000	Up to $60,000 for ITNS by a third party, Winning Media. (1/29/2013)	$60,000	$0
$65,000	Up to $65,000 for HKTU by a third party, Winning Media. (2/3/2013)	$0	$65,000
$60,000	Up to $60,000 for PMCM by a third party, Winning Media. (2/7/2013)	$0	$60,000
$60,000	Up to $60,000 for BFLD by a third party, Winning Media. (2/10/2013)	$60,000	$0
$60,000	Up to $60,000 for RARS by a third party, Winning Media. (2/19/2013)	$60,000	$0
$60,000	Up to $60,000 for GRPH by a third party, Winning Media. (2/20/2013)	$60,000	$0
$50,000	Up to $50,000 for USTU by a third party, Winning Media. (2/26/2013)	$50,000	$0
$1,442,500		$875,000	$567,500
	Percent of total revenues	61%	39%

Table 8
Nevada (NV) versus Delaware (DE) Percentage Comparisons
Selected Summary, Back-Tested, and Extended Measures

	NV	DE	Year	Description
Regulatory Enforcements				
Table 1	59%	12%	2011	June 7 SEC Trading Suspensions for 17 Corporations
Table 2	54%	0%	2013	February 14 DOJ-FBI-IRS Press Release
Supplemental				
Table 3 & Figure 2	85%	0%	2013	February 20 *Seeking Alpha* Article
Table 4	80%	0%	2013	February 22 Penny Stock Promotions
Table 7	61%	0%	2013	March 3 Promotional Revenues self-reported by *TribecaInvestments, Ltd*.
1993 through 2008				
Table 9	5%	54%		Mean measures for Nevada and Delaware
2008 through 2011 Trend				
Figure 3	7.0%	56.0%	2008	Market Share from Compustat
Figure 3	7.4%	55.6%	2009	Market Share from Compustat
Figure 3	8.1%	55.0%	2010	Market Share from Compustat
Figure 3 & Table 9 & 10	8.3%	54.3%	2011	Market Share from Compustat

Table 9
Nevada (NV), Delaware (DE) and Combined Market Share
Compustat

Year	NV	DE	NV & DE
1987	2.9%	46.9%	49.9%
1988	3.0%	47.7%	50.7%
1989	3.1%	48.7%	51.8%
1990	3.0%	49.8%	52.8%
1991	3.0%	50.7%	53.7%
1992	3.1%	51.8%	55.0%
1993	3.1%	50.4%	53.5%
1994	3.0%	51.2%	54.2%
1995	3.0%	52.8%	55.8%
1996	3.0%	53.6%	56.6%
1997	3.0%	54.2%	57.3%
1998	3.1%	55.8%	59.0%
1999	4.6%	54.5%	59.1%
2000	5.5%	54.2%	59.7%
2001	6.0%	53.9%	59.9%
2002	5.9%	54.4%	60.3%
2003	6.2%	54.5%	60.7%
2004	6.2%	54.8%	61.0%
2005	6.1%	55.5%	61.6%
2006	6.3%	55.6%	61.9%
2007	7.0%	55.8%	62.8%
2008	7.0%	56.0%	63.0%
2009	7.4%	55.6%	63.0%
2010	8.1%	55.0%	63.1%
2011	8.3%	54.3%	62.6%

Table 10
Corporations in the Compustat Database by State or Jurisdiction for Fiscal Year 2011
(including Foreign countries and U.S. Only)

	State of Incorporation (including Foreign)	Number of Firms	Percent of Total		State of Incorporation (U.S. Only)	Number of Firms	Percent of Total
1	AK	4	0.06%	1	AK	4	0.07%
2	AL	7	0.11%	2	AL	7	0.13%
3	AR	8	0.12%	3	AR	8	0.15%
4	AZ	10	0.15%	4	AZ	10	0.19%
5	CA	121	1.87%	5	CA	121	2.24%
6	CO	61	0.94%	6	CO	61	1.13%
7	CT	21	0.32%	7	CT	21	0.39%
8	DC	7	0.11%	-			
9	***DE***	***2,928***	***45.21%***	8	***DE***	***2,928***	***54.26%***
10	Foreign	1,081	16.69%	-			
11	FL	109	1.68%	9	FL	109	2.02%
12	GA	48	0.74%	10	GA	48	0.89%
13	GU	1	0.02%	-			
14	HI	6	0.09%	11	HI	6	0.11%
15	IA	18	0.28%	12	IA	18	0.33%
16	ID	7	0.11%	13	ID	7	0.13%
17	IL	23	0.36%	14	IL	23	0.43%
18	IN	60	0.93%	15	IN	60	1.11%
19	KS	10	0.15%	16	KS	10	0.19%
20	KY	18	0.28%	17	KY	18	0.33%
21	LA	19	0.29%	18	LA	19	0.35%
22	MA	57	0.88%	19	MA	57	1.06%
23	MD	283	4.37%	20	MD	283	5.24%
24	ME	7	0.11%	21	ME	7	0.13%
25	MI	52	0.80%	22	MI	52	0.96%
26	MN	87	1.34%	23	MN	87	1.61%
27	MO	38	0.59%	24	MO	38	0.70%
28	MS	12	0.19%	25	MS	12	0.22%
29	MT	6	0.09%	26	MT	6	0.11%
30	NC	41	0.63%	27	NC	41	0.76%
31	ND	4	0.06%	28	ND	4	0.07%
32	NE	6	0.09%	29	NE	6	0.11%
33	NH	2	0.03%	30	NH	2	0.04%
34	NJ	61	0.94%	31	NJ	61	1.13%
35	NM	3	0.05%	32	NM	3	0.06%
36	***NV***	***450***	***6.95%***	33	***NV***	***450***	***8.34%***

	State of Incorporation (including Foreign)	Number of Firms	Percent of Total			State of Incorporation (U.S. Only)	Number of Firms	Percent of Total
37	NY	136	2.10%		34	NY	136	2.52%
38	OH	114	1.76%		35	OH	114	2.11%
39	OK	19	0.29%		36	OK	19	0.35%
40	OR	36	0.56%		37	OR	36	0.67%
41	PA	121	1.87%		38	PA	121	2.24%
42	PR	4	0.06%		-			
43	RI	6	0.09%		39	RI	6	0.11%
44	SC	18	0.28%		40	SC	18	0.33%
45	SD	4	0.06%		41	SD	4	0.07%
46	TN	24	0.37%		42	TN	24	0.44%
47	TX	93	1.44%		43	TX	93	1.72%
48	UT	27	0.42%		44	UT	27	0.50%
49	VA	81	1.25%		45	VA	81	1.50%
50	VT	1	0.02%		46	VT	1	0.02%
51	WA	53	0.82%		47	WA	53	0.98%
52	WI	52	0.80%		48	WI	52	0.96%
53	WV	7	0.11%		49	WV	7	0.13%
54	WY	5	0.08%		50	WY	5	0.09%
	Total	6,477	100.00%			**Total**	5,396	100.00%

Figure 1
Information Asymmetry:
Mapping Agency Theory to Market Efficiency
As adapted from Cataldo

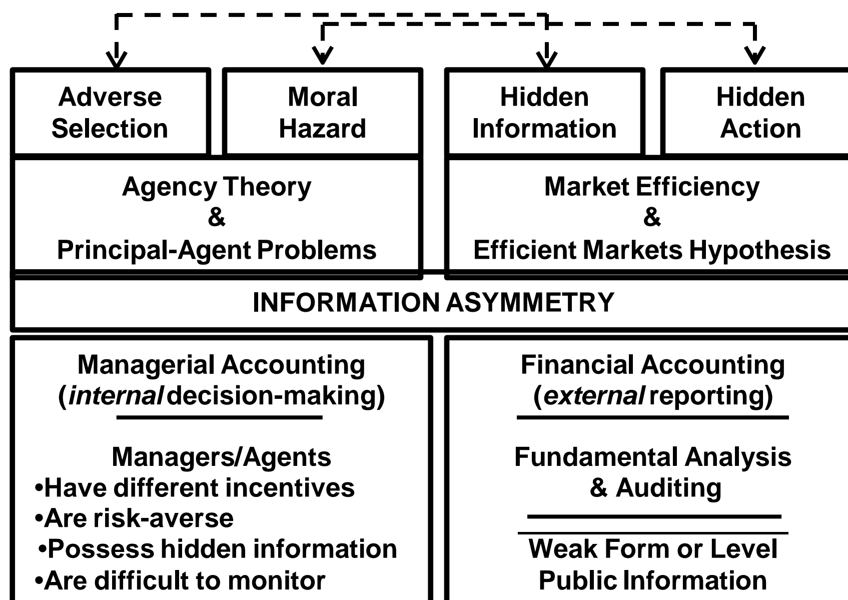


Figure 2
***Fraud Research Institute – Seeking Alpha* Article - February 20, 2013**
January 24 through February 21, 2013
Daily Stock Price Trading Ranges for SWVI

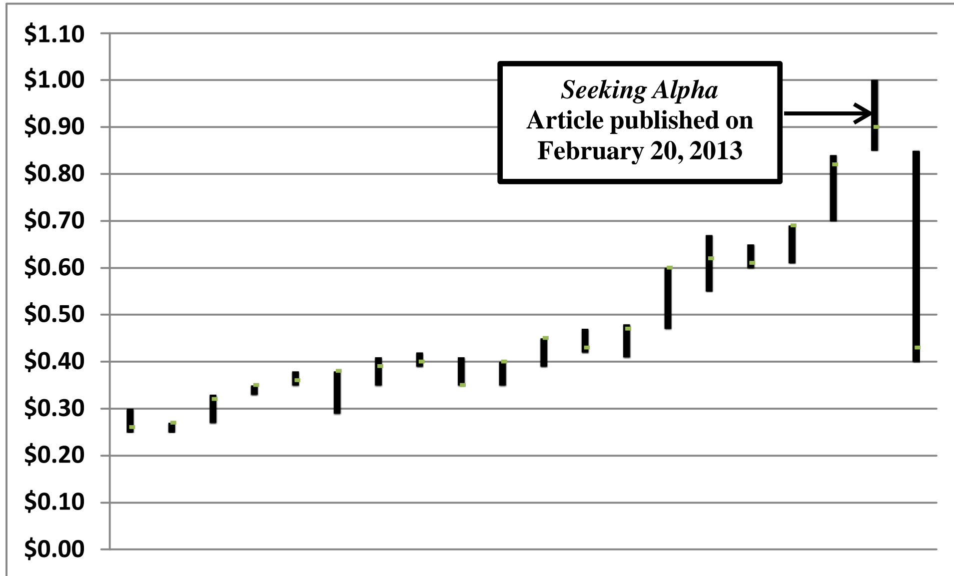
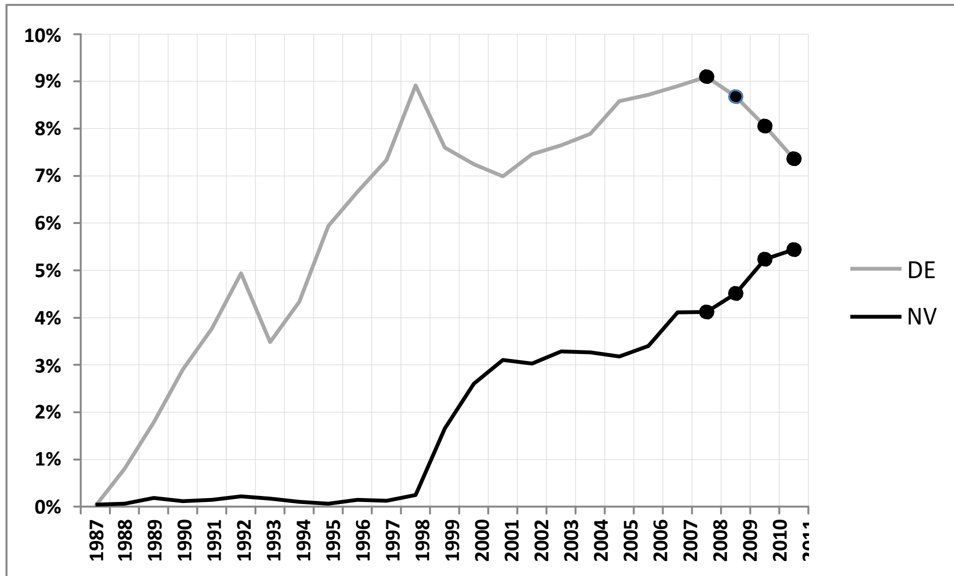


Figure 3
Delaware and Nevada Market Share Trend – Percentage Increase
Compustat - 1987 through 2011 (1987 base year)
Developed from Table 9 & 10



HUMAN RESOURCE MANAGEMENTS' PERCEPTIONS OF SUSTAINABILITY AND ITS COMPETITIVE ADVANTAGE: A QUANTITATIVE ANALYSIS

Rhonda Clark, Slippery Rock University of Pennsylvania
John Golden, Slippery Rock University of Pennsylvania

ABSTRACT

This paper explores Human Resource Management's (HRM) capacity to impart sustainability to for-profit businesses in the United States by surveying the perceptions of Human Resource professionals. In addition, it examines HRM perceptions as to whether sustainability can lead to a competitive advantage in the marketplace. A quantitative analysis is provided.

INTRODUCTION

U.S. business leaders are realizing sustainability practices can make their companies more competitive (SHRM, BSR, & Aurosoorya, 2011) and therefore, regard sustainability as a business strategy. For the purpose of this research study, sustainability is defined by SHRM et al. (2011) "as the commitment by organizations to balance financial performance with contributions to the quality of life of their employees, the society at large and environmentally sensitive initiatives" (p. 5). This definition demonstrates that in sustainability-driven organizations, sustainability practices are included in every aspect of doing business and therefore, need to be embedded across all organizational levels (Cohen, Taylor, & Muller-Camen, 2012). However, many scholars have found that organizations' sustainability strategies and practices differ greatly and there are no clear guidelines or organizational leaders spearheading sustainability initiatives (Marshall & Brown, 2003; SHRM, 2008).

One way of overcoming these hurdles in a sustainability-driven organization is to involve the Human Resource (HR) function. The HR function is uniquely positioned to be a leader in bringing about this profound culture and process change. According to Cohen, Taylor, and Muller-Camen (2012) "since the primary focus and skills of HR professionals include organizational process, change management and culture stewardship, they should take the leading role in developing and implementing sustainability strategy" (p. 1). In addition, SHRM et al. (2011) asserted that sustainability is a natural fit for HR and presents an opportunity for HR professionals to demonstrate leadership and to enhance their strategic roles (Harmon, Fairfield, & Wirtenberg, 2010). For example, sustainability is a significant factor in training, recruiting, and engaging employees (SHRM, 2008).

Furthermore, according to Lawler and Mohrman (2003), studies show that Human Resource Management (HRM) is "spending less time on administrating and auditing functions and more time on developing new systems, practices, and on being a strategic business partner" (p. 21). This means that developing sustainability systems and practices could be a new role for the HR function. Ulrich explained that if this new type of role occurs, it can create tremendous opportunities for the human resource profession (as cited in Vosburgh, 2003). For example, current research now identifies sustainable HRM as a field of study (Cohen et al., 2011).

Berry and Rondinelli (1998) argue that corporations who do not adopt a proactive approach to sustainability would simply not be competitive in the 21st century global economy. Many organizations now understand that sustainability can strengthen their competitive advantage as well as increase innovation in new products and services, processes, markets, business models or methods of management and reporting and many other opportunities (Aaron, 2010; SHRM et al., 2011). Therefore, Blackburn (2007) posits that sustainability is not just a fad for organizations.

LITERATURE REVIEW

Although many of the organizational sustainability research studies have taken place over the last two decades, the sustainability studies relating to the field of HRM have only just begun within the past decade. The recent and growing body of evidence indicates that HR plays an important role in supporting organizations realizing their sustainability strategies.

Over the course of the past two decades, society has demanded organizations become more "eco-friendly." As the role of HRM has expanded upon organizational sustainability initiatives (SHRM, 2011), in turn, organizations

should be able to rely on HRM to help meet these demands. In essence, HRM plays an important role in organizational sustainability and is revealed through the literature review.

Sustainability Reports

One method of sustainability measurements used for business is The Global Reporting Initiative (GRI). The GRI was established in 1997, and is a non-profit organization that produces world-wide standards and generally accepted framework on sustainability reporting for organizations to create a level of transparency and standardization (globalreporting.org, 2011). The GRI includes over 100 indicators for its standards and 20 (or 20%) of the indicators refer to HR's involvement and responsibility (Fox, 2008). Dow Jones Sustainability Index (DJSI) was established in 1999. Another method of sustainability measurements is the Dow Jones Sustainability Index (DJSI). The DJSI tracks the performance of the world's leading organizations that includes economic, environmental, and social criteria (Sustainability-Indices.com, 2012).

Reilly's (2009) study compared organizational sustainability reports documenting sustainability and communication initiatives in order to link it with implications to organizational change. The study reported that each company views performance and reporting sustainability differently as well as using dramatically different terminology.

Reilly emphasized the importance for future research of sustainability as a critical organizational strategy by effectively communicating organizational sustainability initiatives and their outcomes to both internal and external stakeholders. In his view, this would be an important way for organizations to enhance their reputation and sustainability focus offering long-term strategic advantages (Reilly, 2009).

Linking HRM and Sustainability

Wagner's (2011) study improved upon the empirical knowledge by exploring the link between HRM and sustainability. In particular, this quantitative study analyzed HRMs actions in relation to sustainability and the benefits these bring to employee job satisfaction, recruitment, and retention. The findings indicated significant increases in 25 out of 37 environmental activities. Wagner (2011) indicated some of the significant increases were between 19–32 percent in the adoption of performance indicators, the implementation of systems to identify and evaluate legal requirements, implementation of an environmental program and system, implementation to attain environmental goals, measurable environmental goals, written environmental policy, and environmental training program. Wagner concluded that HRM must become more engaged with the fundamentals of sustainability as other business functions have, for example, marketing and operations. HRM can become more active and involved in all of these strategic initiatives such as measuring environmental goals and implementing environmental systems and programs.

The study by Lee (2009) explored the process and adoption of sustainability management in small to medium-sized enterprises (SMEs). Lee believes it is important to identify, measure, and understand how firms change through a process of adopting and implementing sustainability internal and externally. This study argued that green management was deficient in the SME literature. The case study uses qualitative methods to show that SMEs can become greener by incorporating changes in strategic planning, organizational structure, and HR. However, Lee posits that most SMEs lack the HR to make the desired changes of green practices. The study concluded by recommending more studies and research on SMEs green management practices.

The Greening of the American Workplace 2009 report commissioned by SHRM (2010) surveyed 100 U.S. companies. This study found that green programs increased from 43 percent in 2009 to 53 percent in 2010. The three key findings revealed that involvement from the top appears critical (80 percent), being green is good for the bottom line (94 percent), Operations (50 percent) and HR (47 percent) were typically the main organizational drivers. The results of this study clearly indicated that HRM plays an important role in organizational sustainability initiatives.

HRMs Role in Sustainability

SHRM (2008) conducted a Green Workplace study to examine the environmentally-responsible practices of organizations, the role of HR professionals, and the perceptions of the employees of both the organization and HR professionals. The quantitative survey used five main categories: environmental responsibility policy, environmentally-responsible practices, demonstrating commitment to environmental responsibility, drivers and barriers of environmentally-responsible programs, and HR professionals' role in the Green Workplace.

The key findings of this research study indicated (a) improved employee morale as a result of environmentally-responsible programs; (b) one-half of the HR professionals indicated a formal or informal environmental responsibility policy in their organization; (c) Seven out of ten HR professionals reported that the contribution to society is a key driver of their environmental responsible program; and (d) the top three environmental practices by HR professionals were encouraging employees to work more eco-friendly, create recycling programs, and donate/discount used furniture/supplies (SHRM, 2008).

Colbert and Kurucz (2007) conducted a multiple case study to examine 13 sustainable companies embracing the Triple Bottom Line (TBL) approach of public reporting in order to determine implications for key HRM processes. The companies had been selected through the Dow Jones Sustainability Index (DJSI) that helps to exemplify a basis for comparison among the different global companies. The qualitative data collected came from semi-structured interviews for a total of 40 interviews of executives (CEOs, vice presidents, managers, and directors). Through the analysis and key findings, the research reported that HRM plays a critical and important role in regards to TBL and sustainability. The study also determined that the implications for key HR roles and processes for sustainability included organization effectiveness/change management (dialogue and communications), strategic HR planning (aligning the business strategy with sustainability vision), talent management/staffing (integrating sustainability in processes and new hires), and training & development (skill-building to support sustainability objectives and processes).

Wirtenberg, Harmon, and Fairfield (2007) conducted a qualitative exploratory case study followed by a quantitative study. There were nine MNCs selected from The Global 100 Most Sustainable Corporations in the World. The following nine companies chosen from that list included Alcoa, Bank of America, BASF, The Coca Cola Company, Eastman Kodak, Intel, Novartis AG, Royal Philips, and Unilever. Although these nine companies were from different countries and industries, remarkably they also have some similarities by all having an average of over 120,000 employees and were all established over an average of 100 years ago.

This study used semi-structured interviews (qualitative) and a Likert survey (quantitative) research method among selected key executives in each company in order to examine important issues about their sustainability journeys and the role HR is playing. The key executives that were chosen for the interview had vast knowledge in both sustainability issues and HR activities. The study found that five of the nine companies' HR leaders were seen as strongly positioned for strategic influence. However, in contrast, one of the companies considered HR to be reactive and having little initiative with sustainability leadership.

In a 2010 study, *Advancing Sustainability: HR's Role* by SHRM and in conjunction with two organizations, Business for Corporate Responsibility (BCR) and Aurosoorya, a quantitative study was sent to U.S.-based organizations including MNCs. The results of the study indicated that sustainability is most effective when integrated into an organization's strategic framework. The data also showed that sustainability increases the bottom line as well as supports the argument that sustainability programs should be leveraged to attract and retain talent to enhance an organization's brand. Although this means that HR's involvement played an important strategic role in sustainability, the survey found that HR professionals strategic involvement in creating and implementing sustainability was "somewhat of a disconnect." Only about 6 percent of HR professionals responded that they are involved in the creation of strategic sustainability programs. However, about one out of four of the HR professionals responded that they are involved on the implementation of the sustainability programs.

The study called to action for HR professionals to take on a greater role in the strategic planning process and undertake more of a leadership position on this important topic (SHRM, 2011). Although this limitation is not solely related to sustainability planning, HRM finds it hard to contribute to strategic planning in general. This is clearly a barrier to the role of HRM and the study also revealed several other barriers and challenges to sustainability that HR must overcome.

Harmon, Fairfield, and Wirtenberg's (2010) study further extended the research on HR leadership and sustainability. The primary goal and purpose of their study "was to extend the findings of Lawler and Boudreau (2009) and Ulrich et al. (2009) into the area of sustainability strategy" (p. 17), because HRM in general still does not possess the competencies or influence to be considered strategic partners. This quantitative study surveyed HR executives, HR managers, non-HR execs and managers (total of 248 responses) to learn HRs role, competency, and influence over sustainability strategy (Harmon et al., 2010).

The study examined the extent of organizations implementing sustainability. They found that the majority (64 percent) said their organization was deeply ingrained in sustainability values. However, only 27 percent of HR managers reported that they were involved with the sustainability implementation process. More specifically, the sustainability practices used were related to operations management such as energy and waste efficiency, and worker health and safety. The least sustainability practices used consisted of HRM responsibilities such as talent and performance management systems, recruitment, selection, and compensation. Harmon and colleagues suggested that this was a missed opportunity on the part of HRM to become the leader in sustainability strategies. Especially when the growing body of evidence supports sustainability practices by improving business and employee performance such as attracting, retaining, and engaging the best talent. The study also indicated that HR managers were perceived as having a low rating on various types of knowledge, influence, and competence regarding sustainability strategy. However, the majority agreed "that HR leaders understand the potential impacts of sustainability issues on corporate brand, talent management, and strategic opportunities and risks" (Harmon et al., 2010, p. 19).

Overall, the study revealed that HRM was moderately active in sustainability (Harmon et al., 2010). According to the Harmon et al. (2010) study, when HR leaders were asked about their own actions and interests, they said that they "do not perceive many concrete incentives or other payoffs to offset the added burdens of sustainability activities to their workloads" (p. 19). This is perhaps why Harmon and colleagues suggested that HRM missed the opportunity for leadership in strategic sustainability. In order for HRM to become the strategic partner, they must be aware and understand trends and their impacts on strategic-business opportunities and risks (Harmon et al., 2010). Although this sounded like discouraging news, there was still hope for HRM and that this was only an obstacle they must overcome in order to become the driving force behind sustainability. Harmon et al. (2010) asserted that there is a great need for HRM to play a more strategic role in helping organizations move towards sustainability now more than ever.

The encouraging news was that the study found some HR leaders are strategically involved with sustainability and see themselves as more influential, competent, dedicated, and committed to contributing to sustainability efforts and to its organizational effectiveness. Perhaps most importantly, the study found there was a strong correlation between the amount of time HR leaders spend on sustainability efforts and the extent to which their organizations implemented sustainability strategies ($r = .50$). In other words, the more the organization is committed to implementing sustainability, the more committed HR leaders are to the contribution to sustainability efforts (Harmon et al., 2010).

This comprehensive literature review on organizational sustainability and HRM has shown many relevant and significant studies. There were several common threads revealed throughout many of the studies such as HRM in relation to the strategic and implementation initiatives of sustainability. The literature showed that HRM are key contributors and play an important role in the deployment of sustainability practices within organizations. Studies from the literature have linked HRM to implementation, strategy and environmental performances of sustainability. However, several research studies have revealed that although HRM is involved with sustainability, there is a need for HRM to become more active and engaged during the strategic planning process of sustainability. As previously stated, HRM is appropriately positioned to develop strategies and best practices and the HR function is the main communicator between top management and all other divisions (Jabbour & Santos, 2008; & SHRM et al., 2011). HRM is primed for possessing these important factors in successfully incorporating sustainability within organizations. Subsequent studies build on this notion, exploring through original research factors that mitigate for and against HRM involvement in sustainability.

METHODOLOGY

This study examined the current role and perceptions of HRMs strategic involvement in sustainability within organizations. It endeavors to expand the body of research and find a solution to the research problem, which is to find out if HRM is developing a strategic role in sustainability.

The following two research questions were addressed and their hypothesis:

Q1: What (if any) strategic role does HRM play in organizational sustainability in for-profit organizations?

Q2: What are the HR Leaders' perceptions of the importance of HRMs strategic role (if any) in organizational sustainability in for-profit organizations?

This study asked a sample of 202 HR professionals for their perceptions of the importance of HR leadership in organizational sustainability. The survey instrument is a questionnaire conducted online via Qualtrics and sent anonymously to HR participants working in companies using sustainability practices. The data analysis is statistically analyzed through SPSS software. Data analysis procedures include descriptive statistics, hypothesis testing, and crosstabulation.

This study's research questions were measured by Harmon, Fairfield, and Wirtenberg's (2010) survey instrument: HR Leadership and Sustainability. This instrument is grounded and based on the prior research studies from American Management Association (2007), Lawler and Boudreau (2009) and Ulrich, Brockbank, Johnson, and Younger (2009), and Wirtenberg et al. (2007) and is validated by Harmon et al. (2010).

There were a total of 17 questions with 7 of those using sub-questions. The questionnaire used a five-point Likert scale, ranging in *1=don't know to 5=strongly agree*. This instrument level of measurement identified interval data that described the order of data points as well as the size of the intervals between the data points. This questionnaire measured the level of HR professionals' perceived attitudes regarding sustainability across four main dimensions: extent of organization's sustainability management, HR leader's role, competence of HR leaders and strategic influence, and the extent of HR leader efforts towards sustainability.

RESULTS

Ten demographic questions asked for information on gender, age, education, job title, years of experience, size of organization, organization total revenue, organizational operation, location of the organization by U.S. state and type of industry. The demographic questions were analyzed through SPSS. These results can be viewed in Appendix A.

Questions 14 and 15 measured the study's two research questions. The results reveal the majority of participants perceive the role of HRM as important to sustainability and are involved with the strategies of sustainability especially when viewed from a long-term perspective of their organizations.

Q1: What (if any) strategic role does HRM play in organizational sustainability in for-profit organizations?

Table 1: Question 14 Mean Results

To what extent do you agree that HR leaders in your organization:	Mean
Understand sustainability (social and environmental) trends and their potential impact on this organization's strategic business opportunities and risks	4.00
Are strong advocates for making the appropriate sustainability issues central to our business strategy	4.06
Are strong advocates for taking a balanced short-term and long-term view in developing our business strategy	4.07
Understand the potential impact of environmental and social responsibility on our corporate brand and ability to attract, retain and engage talent	4.11
Help non-HR leaders see the connection between environmental and social responsibility and talent management	3.94
Understand and help our non-HR leaders see how HR investments can drive a sustainability strategy	4.06
Understand the needs of all our key external non-investor stakeholders (e.g., communities, customers, government agencies)	4.03
Are strong advocates for the needs of all our key external stakeholders being taken into account in formulating our strategy	4.02
N = 202	

Likert scale: *1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree.*

In order for HRM to have a strategic sustainability role, it is important for HRM to understand trends and their potential impact on strategic business opportunities and risks, translate needs into strategic HR activities (training programs, talent and performance management systems, and leadership and knowledge behaviors), and take these needs into account when formulating sustainability strategy (Harmon et al., 2010). The participants herein report above average on all of these practices, means ranging 3.94-4.11 on a five-point scale. The results in question 14 helped to answer Q1 (Table 1), that HRM plays an important strategic role for sustainability management in organizations. However, when it comes to HRM helping non-HR leaders see the connection between sustainability and talent management (mean of 3.94); there is much room for improvement. Although the mean results for question 14 were well above average.

Q2: What are the HR Leaders perceptions of the importance of HRMs strategic role (if any) in organizational sustainability in for-profit organizations?

Table 2: Question 15 Mean Results

Most HR leaders in your organization are extremely competent at:	Mean
Translating strategic sustainability directions into Strategic HR activities	4.00
Clearly articulating what leadership knowledge and behavior align with sustainability	4.16
Designing and delivering sustainability criteria for recruitment and promotion	3.99
Formulating and implementing measures and rewards to support sustainability	4.00
Designing and delivering training programs to support sustainability	4.12
Designing and facilitating organizational change management programs to meet sustainability transformation challenges	3.95
N = 202	

Likert scale: *1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree.*

The participants herein report above average on question 15 (means range of 3.95-4.16, on a five-point scale), and measures Q2 in Table 2. The results indicate HR leaders understand the importance of translating strategic sustainability directions in strategic HR activities (mean of 4.00), clearly articulate leadership knowledge and behavior aligned with sustainability (mean of 4.16), formulating and implementing measures and rewards to support sustainability (mean of 4.00), and designing and delivering training programs to support sustainability (mean of 4.12). Therefore, the results from question 15 and the answer to Q2 find that the majority of participants agree and strongly agree that it is important that HRM has a strategic role in organizational sustainability. The participants from this sample view sustainability in a positive light and understand the importance of sustainability management. This is an exciting find and creates an opportunity for HRM to take the leadership role in strategic sustainability.

DISCUSSION

One initial theme development of this study revealed from the demographic questions (Appendix A) is that most participants are college educated, around 30–39 years of age, have an average of 6–10 years of HR experience, with both genders well represented. Although both genders are well represented, findings appear to show that the female participants tend to have less years of work experience and are underrepresented in the HR executive roles. This limits their strategic decision making power when compared to the male participants.

A major theme was that most participants rated questions 11-17 regarding HRMs involvement in sustainability as quite high on the Likert-scale with nearly all of the questions results averaging around 4 *(agree)*, out of a five-point scale. This indicates the participants in this study believe they are very active in their organizations' sustainability strategies. While not asked, one wonders if participants' personal views are related to their choices of organizations for employment. Evidence of this can be found in MonsterTrack's 2007 survey of college graduates found that 80% of those surveyed said they are interested in a job that has a positive impact on the environment and 92% said they would choose working for an environmentally-friendly company (Greenbiz.com, 2007). The Greenbiz.com (2007) article also stated that the benefits of participating in sustainability and CSR activities include "increasing an organization's competitive advantage when recruiting; setting the organization apart from the competition in terms of employment brand; creating an elevated sense of teamwork among employees; and helping to establish an emotional tie between the employees and the organization" (p. 1). Interestingly, in light of the 2007 MonsterTrack study, findings inspired the launch of GreenCareers.com—the first online recruitment service focusing on green employment.

CONCLUSIONS AND FUTURE DIRECTION

HRM, like no other unit, extends its tentacles into all of the fibers of the organizational structure. At a time when it is witnessing a drive to outsource many of its functions, HRM can use its ubiquitous organizational presence as a competitive advantage in the realm of sustainability strategy. Below are some specific items that emerged from this study that are not only actionable, but could also serve to thrust HRM to the forefront as champions of sustainable influence and decision-making:

1. Recruitment – HR can be instrumental in hiring like-minded people with passion for sustainability (Greenbiz.com, 2007).
2. Retaining Talent – Employees who feel a connection to their organizations share the same sustainability values and usually want to maintain that connection (Greenbiz.com, 2007).
3. Employment Branding – HR can showcase and promote their organization's sustainability practices when hiring online via recruitment services that focus on *green employment* and *green careers* (Greenbiz.com, 2007).
4. Training programs to support sustainability (Harmon et al., 2010; Savitz & Weber, 2013) – integrating sustainability into all training programs helps to build and maintain a culture of sustainability within the organization.
5. Employee benefits – paperless services provided via online platform. Provides easy access for employees and to make changes.
6. Leadership and knowledge of sustainability (Harmon et al., 2010; and Savitz & Weber, 2013) – HR, as champions of sustainability, could muster their knowledge and expertise in sustainability to rise to important leadership positions within the organization.
7. Creating a culture of sustainability (Savitz & Weber, 2013) – As a ubiquitous function within organizations, HR can serve as the driver for cultural change in sustainability.

8. Employee engagement – by encouraging stakeholder buy-in to sustainability, HR can facilitate higher employee satisfaction, customer satisfaction, business performance, etc. (Greenbiz.com, 2007).
The above suggestions are not meant to be an exhaustive list. However, they do provide important focus points for today's HR professionals as they continue to engage sustainability in their organizations.

REFERENCES

Aaron, S. (2011). Sustainability: Harnessing the collective innovation of all employees. *People & Strategy*; *14*.

Berry, M. & Rondinelli, D. (1998). Proactive corporate environmental management: A new industrial revolution. *Academy of Management Executive, 12*(2), 38-50.

Blackburn, W. (2007). *The sustainability handbook: The complete management guide to achieving social, economic, and environmental responsibility*. Washington D.C.: Environmental Law Institute.

Cohen, E.; Taylor, S.; & Muller-Camen, M. (2012). HRM's role in corporate social and environmental sustainability. *SHRM Foundation.* United States.

Colbert, B., & Kurucz, E. (2007). Three conceptions of triple bottom line business sustainability and the role for HRM. *Human Resource Planning, 30*(1), 21-29.

Global Reporting .org. (2011). Global reporting initiative. Retrieved from https://www.globalreporting.org/Pages/default.aspx.

Greenbiz.com. (2007). Working for the earth: Green companies and green jobs attract employees. Retrieved from http://www.greenbiz.com/news/2007/10/16/ working-earth-green-companies-and-green-jobs-attract-employees.

Harmon, J., Fairfield, K., & Wirtenberg, J. (2010). Missing an opportunity: HR leadership and sustainability, *People & Strategy, 33*(1), 16-21.

Jabbour, C., Santos, F. (2008). The central role of human resource management in the search for sustainable organizations. *The International Journal of Human Resource Management, 19* (12), 2133-2154.

Lawler III, E., & Boudreau, J. (2009). What makes HR a strategic partner?. *People & Strategy*, *32*(1), 14-22.

Lawler, III, E., & Mohrman, S. (2003). *Creating a strategic human resources organization: An assessment of trends and new directions*. CA: Stanford University Press.

Lee, K.-H. (2009). Why and how to adopt green management into business organizations? *Management Decision*, *47*(7), 1101-1121.

Marshall, R., & Brown, D. (2003). The strategy of sustainability: A systems perspective on environmental initiatives. *California Management Review*, *46*(1), 101-126.

Reilly, A. (2009). Communicating sustainability initiatives in corporate reports: Linking implications to organizational change. *S.A.M. Advanced Management Journal, 74*(3), 33-43.

Savitz, A., & Weber, K. (2013). *Talent, transformation, and the triple bottom line: How companies can leverage human resources to achieve sustainable growth.* San Francisco, CA: Jossey- Bass.

SHRM.org. (2008). 2008 executive roundtable symposium on sustainability and human resource management strategy. Retrieved from http://www.SHRM.org.

SHRM.org. (2008). Green workplace. Retrieved from http://www.SHRM.org.

SHRM.org. (2010). Green company programs increase in U.S. Retrieved from http://www.SHRM.org.

SHRM, BSR, & Aurosoorya (2011). Advancing sustainability: HR's role. Retrieved from www.SHRM.org.

Sustainability-Indices.com. (2012). Dow Jones Sustainability Indices. Retrieved from http://www.sustainability-indices.com/about-us/index.jsp.

Wagner, M. (2011). Environmental management activities and sustainable HRM in German manufacturing firms -- Incidence, determinants, and outcomes. *Zeitschrift für Personalforschung*, *25*(2), 157-177.

Wirtenberg, J., Harmon, J., Russell, W., & Fairfield, K. (2007). HR's role in building a sustainable enterprise: Insights from some of the world's best companies. *Human Resource Planning, 30*(1), 10-20.

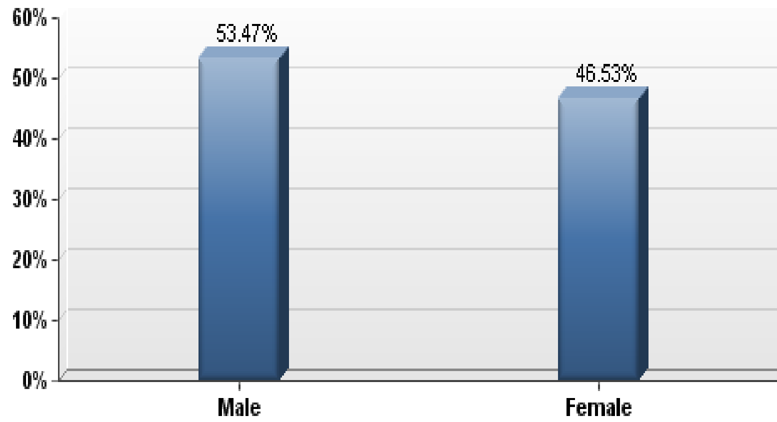
Dr. Rhonda Clark teaches management courses in the School of Business at Slippery Rock University of Pennsylvania. Her research interests include sustainability, entrepreneurship, economic development, and human resource management.

Dr. John Golden teaches law, finance and management in the School of Business at Slippery Rock University where he also serves as the university's Entrepreneur-in-Residence and Chair of the President's Commission on Sustainability. He is the managing director of the Sustainable Enterprise Accelerator (SEA) at Slippery Rock University.

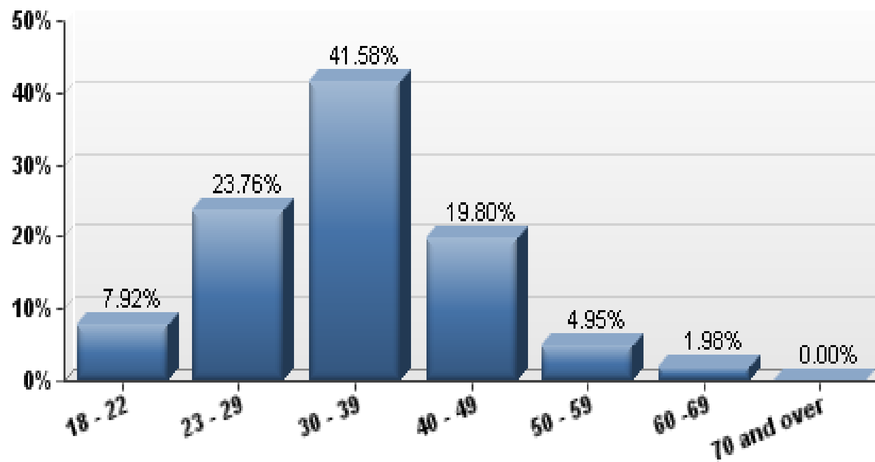
APPENDIX-A

DEMOGRAPHIC RESULTS

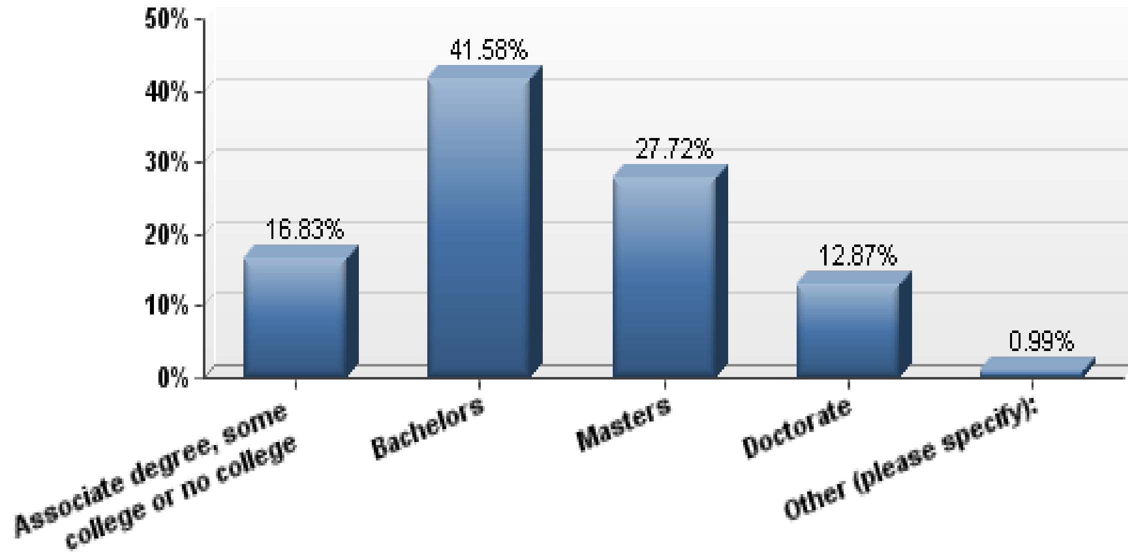
Gender



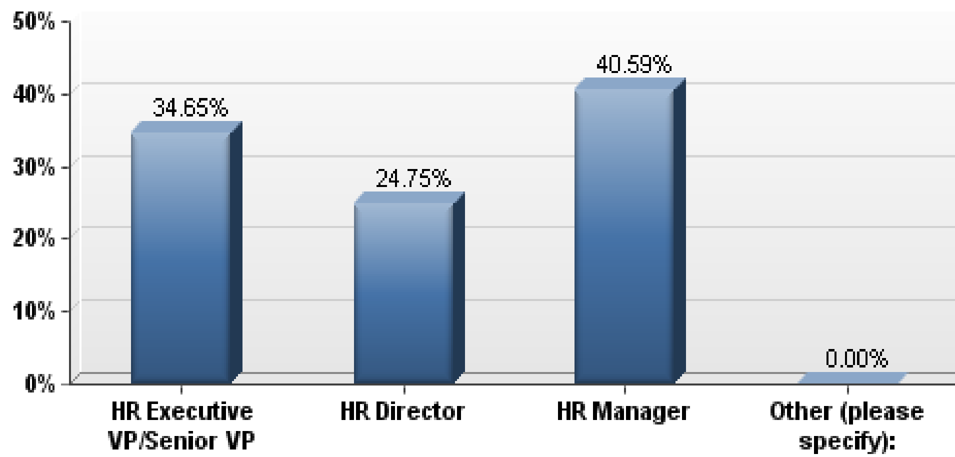
Age



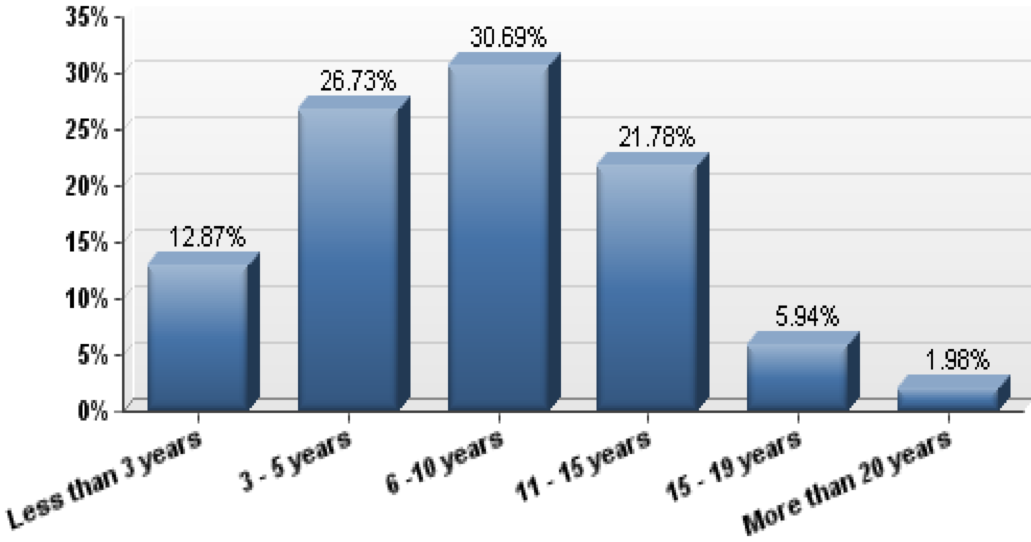
Education



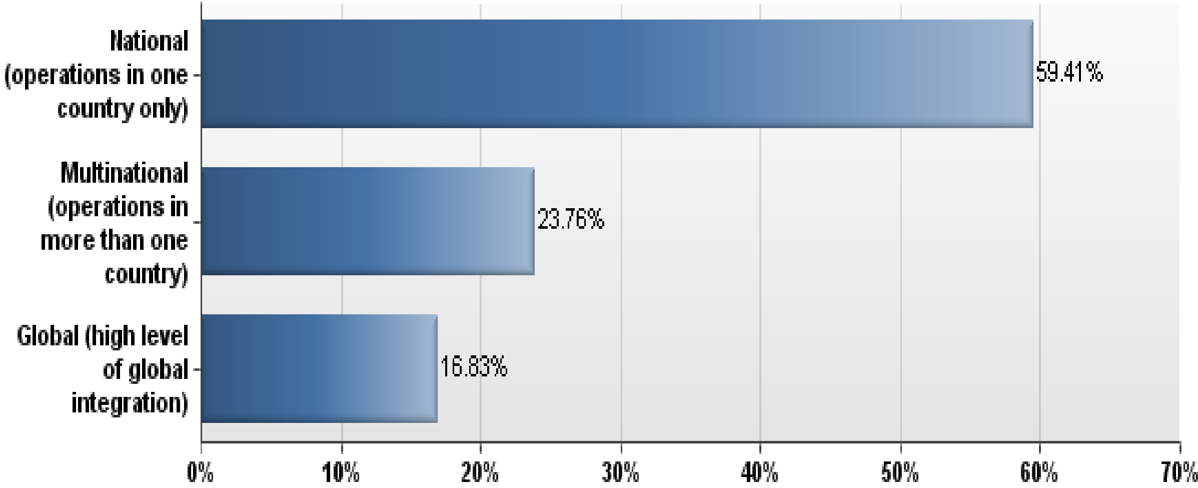
HR Job Titles



Years of HR Experience



Types of Organizational Operation



CORPORATE TAX AVOIDANCE TRENDS: FACTS AND MISCONCEPTIONS

Robert E. Duquette, Kutztown University of Pennsylvania
David Wagaman, Kutztown University of Pennsylvania

ABSTRACT

The United States presently has the highest statutory corporate tax rate in the world. However, there has been much discussion recently, including Congressional hearings, about abusive corporate tax avoidance strategies that have shed light on how most U.S. large multinational corporations (MNCs) pay a much lower "effective" tax rate. The more recent techniques, referred to as "BEPS" (Base Erosion and Profit Shifting), serve to shift US profits to low tax foreign jurisdictions. What many have taken from these hearings is that these abuses have reduced corporate tax receipts to one-third of their level in the mid-1980s, which has worsened our national debt. In addition, the hearings suggested that effective tax rates for corporations have declined by 50% since the mid-80s. The most recent form of abuse is known as a "corporate inversion", whereby the U.S. MNC is effectively acquired by a foreign corporation allegedly to immediately reduce the U.S. tax base and move jobs overseas. Therefore, our presentation is intended to: 1) shed an objective light on the facts of these transactions; 2) discuss how the U.S corporate tax code discourages U.S. investment compared to the rest of the world; 3) explore a key defense of U.S. MNCs - they have a fiduciary responsibility to minimize taxes; 4) highlight the facts about the historical level of corporate tax receipts and why its apparent decline may also be caused by other factors besides BEPS; 5) summarize conflicting studies that attempt to determine the true effective U.S. corporate tax rate after considering preferences, incentives, loopholes, and its historical trend ; and 6) summarize the factors that support why substantive corporate tax reform is needed; the criteria for sound reform; and a summary of the more significant corporate tax reform proposals.

1) BASE EROSION AND PROFIT SHIFTING STRATEGIES AND INVERSIONS: THE FACTS

Base Erosion and Profit Shifting

Essentially, these strategies involve using certain loopholes in the federal tax code to structure transactions over many years which effectively appear to be very aggressive, if not abusive. These techniques, collectively referred to as Base Erosion and Profit Shifting (BEPS) strategies, serve to shift U.S. profits to a lower tax (or no-tax) foreign jurisdiction.

Without getting into too many of the intricacies of what is involved with these techniques, the most well-known strategy involves the use of transfer pricing rules relating to the sale or licensing, or cost sharing of a U.S. Multinational Corporation (MNC)'s intellectual property in an attempt to shift profits to a controlled foreign corporation (CFC) in a lower, or no-tax, country. What is not reported as often is that these transfers are done with the IRS's blessing through what is referred to as an APA, or Advanced Pricing Agreement. An APA establishes the intellectual property's fair value at the time of transfer to those lower tax jurisdictions, which is usually several years prior to the possibility of its appreciation in value. The CFC subsequently charges other related members of the worldwide group more current (and higher) fair value royalty or license rate for the use of the name. This effectively shifts income to the CFC, creates substantial deductions in the operating companies, thereby reducing the related member's current taxable income, and deprives the U.S. parent company of a significant source of revenues. The U.S. cannot generally tax the CFC income until it is repatriated.

The U.S. Senate Permanent Subcommittee on Investigations (Senate, 2012, 2013, 2014) investigated several US MNCs (Microsoft, HP, Apple, and Caterpillar) over the past 2 years in regard to the practices described above and discovered several other variations of how U.S. MNCs have effectively eroded the U.S. tax base through the use of several other loopholes in the tax code, (i.e. check the box elections on the CFCs, the CFC look-through rule, and revolving short term loans of the foreign cash back to the U.S. temporarily).

However, despite this intense federal level of scrutiny on these MNCs, the following is what we have learned to date from these hearings:1) no criminal charges have been filed to date; 2) there is no consensus within the committee that anything illegal has occurred,; 3) some members of the committee have suggested that US MNCs are simply doing their job to preserve shareholder value by finding legal ways to avoid the onerously high US tax rate ; 4) the IRS itself at these hearings seemed to agree that the problem is with the way the tax code is written; 5)

there does not appear to be a political consensus on whether these strategies should be stopped; and 6) base erosion will continue as long as other industrialized countries have a substantially lower rate than the U.S.

The success of BEPS strategies can result in huge cash reserves held outside the U.S. Generally, the repatriation of this cash from a CFC would trigger a current net U.S tax on those earnings (after allowing a credit for the lower foreign taxes already paid on those earnings.) As a result, the Senate (2013) observed that undistributed foreign earnings of U.S. multinational corporations have quadrupled over the last decade to almost $2 trillion. This phenomenon has been commonly referred to as the lock out effect.

Inversions

Recently we have heard of many U.S. companies that plan to or actually do move their headquarters to, typically, a low-tax foreign country. For example, Burger King Worldwide Inc. recently announced a deal to acquire Tim Hortons Inc., a Canadian based company (Hoffman and Mattioli, 2014). Companies engaging in these inversions have been labeled by critics as deserting the U.S. According to Bloomberg (2014), there have been 77 inversions over the past 30 years, 47 of them in the past 10 years, and 14 of those in 2014 through the end of September. Due to the success of BEPS, the primary driver of these inversions is to get cash that is locked out to shareholders by using a newly reorganized company that is domiciled outside the U.S. It is widely reported that President Obama and others argue that these companies are abandoning their patriotic duty to pay their fair share of taxes by dodging billions in taxes they otherwise would have paid on their future profits (Huffington Post, 2014; Wood in Forbes, 2014).

In May2014, Senator Carl Levin introduced legislation to curb this strategy, the Stop Corporate Inversions Act, but it has not enjoyed widespread support. The Treasury subsequently announced new restrictions to narrow the circumstances in which an inverted U.S. MNC will be regarded as a true foreign corporation (IRS, 2014). Despite this Notice, most observers believe that inversions will continue as long as the benefits exceed the costs. And, based on what they know about inversions, most Americans appear to be opposed to them. With regard to this, the implications are not what most Americans believe they are. Here are the facts:

1. Inversions are transactions by which a U.S. corporation becomes a foreign company, usually in a low tax jurisdiction. This is accomplished through a usually complex foreign acquisition of the U.S. company stock. In actuality, the foreign company usually acquires only about 21% of the US company stock, which is just enough to qualify the transaction as an inversion for U.S. tax purposes.
2. After the inversion, the U.S. MNC is foreign owned. However, all U.S. operations are still subject to U.S. taxation just as they were before the inversion.
3. There will also usually be a U.S. income tax up to 23.8% (a 20% capital gains tax plus the new net investment income tax of 3.8%) on any appreciation in the U.S. MNC stock held by the U.S. shareholders;
4. There are no foreseeable jobs leaving the U.S. after an inversion; and
5. The only U.S. income tax truly being avoided is the hypothetical federal income tax that would have been assessed on the currently unrepatriated foreign earnings of their CFCs, which the authors believe were, for the most part, indefinitely locked out anyway.

In fact, the Congressional Joint Committee on Taxation (JCT, 2014) recently studied all the above implications and concluded that the recent proposals to curb inversions would only raise about $20 billion over 10 years, approximately $2 billion a year, in a federal budget of about $350 billion in corporate tax receipts.

Conclusion – Part 1

The inversion phenomena, as well as BEPS, is indicative of how our tax code drives businesses out of the U.S. Specifically, i) the Senate investigators concluded that BEPS was largely due to loopholes in the tax law that Congress needs to fix; ii) inversions themselves are not really causing a substantial reduction in U.S. tax receipts; and iii) BEPS and inversions will continue as long as the U.S. continues to adhere to its current tax code.

2) HOW THE INTERNAL REVENUE CODE DISCOURAGES CORPORATE INVESTMENT IN THE U.S.

The U.S. stands out in terms of how we tax businesses as compared to most of the rest of the world - we tax foreign earnings in a very different manner. Our system, called a worldwide tax system, is one where a domestic corporation is taxed on both its domestic income and its foreign earnings. Specifically, the active business income of a controlled foreign corporation (CFC) of the multinational enterprise will be subject to U.S. tax when it is repatriated, either when a dividend is paid by the foreign affiliate to the U.S. corporate shareholder or when that foreign investment is sold. As previously mentioned, this creates a disincentive for U.S. multinational corporations to repatriate foreign earnings and invest them in the U.S the so-called lock out effect, which is the primary driver for the current trend of corporate inversions.

By contrast, under a pure territorial tax system, a corporation is taxed only on earnings generated in the country of incorporation (home country). Foreign earnings are not taxed by the home country, either when repatriated or when the foreign investment is sold. According to a recent study (PwC, 2013), in 2012 more than 90% of companies in the Forbes 500 from member nations of the Organization of Economic Co-operation and Development (OECD) other than the U.S. were headquartered in countries with a territorial tax system, compared with only 17 percent in 2000.

Therefore, many believe most of the best-known U.S. MNCs are keeping their foreign profits offshore in order to achieve the benefits of a territorial system. Republicans believe that a move to a territorial system would encourage repatriation of foreign earnings, since those earnings would not be taxed again in the U.S. Additionally, it is thought that foreign investors would be encouraged to invest more in the U.S. if they knew their future CFCs under the U.S. would not be subjected to such high U.S. tax when those CFC foreign earnings would be repatriated back to the U.S.

On the other hand, the Democrats believe that a territorial system would further erode the U.S. tax base. Specifically, the President's Framework for Business Tax Reform (U.S. Treasury, 2012) argued the following: "If foreign earnings of U.S. multinational corporations are not taxed at all, these firms would have even greater incentives to locate operations abroad or use accounting mechanisms to shift profits out of the United States. Furthermore, such a system could exacerbate the continuing race to the bottom in international tax rates."

The implications of adopting a territorial system were studied by the Congressional Research Service (CRS) (Gravelle, 2012), and they concluded that it is not entirely clear as to how significant an impact there would be on the level of repatriation or the level of capital exodus from the U.S. Specifically, they found that the economic evidence suggests that "a large share of income is retained for permanent reinvestment." They did acknowledge that the level of unremitted earnings has increased substantially since 2004 (the last time when the U.S. allowed the foreign earnings to be repatriated at a very low level of tax.) And regarding the possible impact of capital leaving the U.S. to invest more offshore under a territorial system, they concluded that impact is also likely to have a small effect on the U.S. economy. They also suggested that certain measures could be written into the law to mitigate the harmful effects of a territorial system. .

Furthermore, the Senate (2012, Exhibits p.18) discovered something completely unexpected when they looked into how the unrepatriated funds were actually being used; i.e. to what extent those earnings are really redeployed as active investments in CFC operations. They discovered that almost half was invested in U.S. Treasuries or shares of unrelated U.S. corporations, raising the question as to how indefinitely reinvested these funds really were overseas.

The U.S. Statutory Tax Rate

It is now well known that the U.S. has the highest combined federal and state statutory corporate marginal income tax rate, at an average 39.1% for 2014 among the 34 OECD member countries (OECD, 2014). The CRS (Gravelle, 2014) found that the average OECD combined statutory rate of all government income-based taxes (and without U.S. considered in the calculation) is 29.6 percent when weighted for size of GDP (and about 25.5 percent when not weighted).

However, back in 1986, immediately after the Tax Reform Act, the comparable U.S. statutory rate was about 39 percent, well below the weighted average statutory rate of 45 percent for the non-U.S.OECD countries at the time. According to the Business Roundtable (2013), the cause for this shift is simple: "32 of the 34 OECD member nations have lowered their rates over the past 30 years, while the United States has not."

According to the Wall Street Journal (Fairless & Raice, 2014), there have been 7 U.S. inversions to the U.K. in the past 18 months, a country that recently transitioned to a territorial system after years of having a worldwide system. In fact, the U.K. also lowered their corporate tax rate to 21% this year and to 20% next year from a relatively high 30% back in 2007 and 52% back in 1980. It has been reported that the combination of those two reforms has supported an average 8% per year growth in the number of corporations filing in the U.K., now up to 1.1 million filings, and that they will have more corporations than the U.S. by 2017 (McBride, 2014).

Tax Code Complexity

One thing that is indisputable in the debate about what to do with the corporate tax code is that it is extremely complex. In fact, over the past 50 years it has become extremely unwieldy and compliance is exceedingly difficult. It has also failed to adapt to changes in the global economy, as well as contributing to the lower income tax burdens of our foreign commercial competitors.

Admittedly, much of the complexity has been due to the creation of exceptions, preferences, and incentives for various sectors of the economy. Additional complexity was caused by the need for equity in the Code to do such things as mitigating the double taxation of profits earned overseas. As a result, the foreign tax credit was born with its underlying jungle of loopholes and arcane formulas.

As taxpayers, upon the advice of tax professionals, exploited loopholes to minimize their tax burden even more, Congress tried to keep up with the planners by imposing various restrictions, e.g. transfer pricing, interest expense limitations, foreign tax credit limitations, and the alternative minimum tax. The result is a system that has evolved into a very complex, compliance intensive regulatory burden.

One interesting statistic published by an industry analyst, Commerce Clearing House (CCH, 2012), reports that their explanation of the tax code and the related regulations and summary of relevant rulings and court cases used to be 400 pages back in 1913 when the tax code was born. “It now takes 73,608 pages, 25 volumes and 9 feet of shelf space, to explain the 4 million word tax code.”

The IRS Office of National Taxpayer Advocate in their 2012 report to Congress (IRS, 2012), reports that an analysis of IRS data shows that taxpayers and businesses spend 6.1 billion hours a year complying with tax-filing requirements. To place this number in context, it would require more than three million full-time employees to work 6.1 billion hours, making tax compliance one of the largest industries in the United States. Additionally, they determined that the costs of complying with the code in 2010 amounted to close to $200 billion, or a staggering 15% of total income tax receipts. These estimates exclude the time relating to IRS correspondence, audits and planning. They also concluded that such complexity encourages perverse results - taxpayers who try to comply without assistance end up making numerous errors and those who seek help sometimes engage in very aggressive strategies. Specifically, they found that only 16% of business taxpayers felt the code was fair, and 12% believed that Americans pay their fair share of taxes.

Conclusion – Part 2

1) Most U.S. MNCs admit that they are not really indefinitely reinvested (and up to half is already invested back in the U.S).

2) We also know that under our present system of having the highest tax rate and having a worldwide system of taxation that corporations are leaving our country and, by extension, countless others are deciding to not come here. Shouldn’t we follow the U.K. example and at least try to see what a transitional phase to a territorial approach would do, especially if accompanied with a substantial lower rate (see above)?

3) The corporate income tax code and its complexity have been on life support for far too long. While Congress procrastinates, the nation’s tax needs fall on domestic corporations and on individuals. To the extent those tax receipts fall short of government expenditures, creditors lend to us to cover our annual deficits, betting that somehow all our current and new debt will be repaid. Ironically, it will probably take a pro-growth type overhaul of the tax code to generate the increases in tax base necessary to provide meaningful reduction in the rate of our annual deficits.

3) IS THERE A CORPORATE FIDUCIARY RESPONSIBILITY TO AVOID TAX?

In defending their company's tax practices regarding BEPS and inversions, several CEOs and other observers have stated that management has a fiduciary responsibility to minimize their taxes through all legal means (Frost, 2014; Kumar & Wright, 2012). It is apparently based on two principal arguments. First, the U.S. tax court system has supported tax avoidance, citing former U.S. Court of Appeals Judge Learned Hand, "Over and over again the Courts have said that there is nothing sinister in so arranging affairs as to keep taxes as low as possible. Everyone does it, rich and poor alike and all do right, for nobody owes any public duty to pay more than the law demands" (Gregory v. Helvering,1934). And secondly it is argued that a company has a "fiduciary responsibility" under their bylaws to exercise whatever legal actions are necessary to avoid tax.

Unbeknownst to most is that Judge Hand's famous quote is actually from a dissenting opinion in a Circuit Court case which ruled against the taxpayer because he did not have an overriding business purpose for positions taken that culminated in significant tax savings.

With regard to the bylaw defense, that question has been litigated twice in the Delaware courts recently. In Seinfeld v. Slager, (2012) the Court of Chancery of the State of Delaware reviewed the merits of a shareholder's claim that the board of directors had breached their fiduciary responsibility to minimize corporate taxes in paying its CEO a retirement bonus of $1.8 million to the extent that the compensation did not meet the documentation and approval requirements for deductible performance-based compensation above the $1 million limit under IRC Section 162(m). The Court's conclusion was there is no general fiduciary duty to minimize taxes and added that a decision to pursue or forgo tax savings is generally a business decision for management and their board of directors so long as it is exercised in an appropriate fashion. Accordingly, despite the Plaintiff's contentions, Delaware law is clear that there is no separate duty to minimize taxes, and a failure to do so is not automatically a waste of corporate assets.

The Court also cited a case they had just decided earlier--Freedman v. Adams (2012). In that case, the Court had concluded the same way in very similar circumstances involving $130 million of compensation paid by XTO Energy that the plaintiff alleged was a waste of corporate assets for failing to minimize taxes by not conforming the plan to the criteria of Section 162(m) for maximum deductibility. The Court stated, "Tax strategy is a complex, dynamic area of corporate decision-making that affects and is affected by many other aspects of a company. …... As such, decisions regarding a company's tax policy are not well-suited to after-the-fact review by courts and typify an area of corporate decision-making best left to management's business judgment, so long as it is exercised in an appropriate fashion. This Court rejects the notion that there is a broadly applicable fiduciary duty to minimize taxes, and, therefore, the Plaintiff's argument that the Board failed to act despite a duty to minimize taxes is unavailing."

In 2013, at appeal, the Delaware Supreme Court affirmed the lower court decision, stating that the Board was fully aware of the tax issue and chose to not conform the compensation plan to section 162(m) as it would not have been necessarily the most appropriate plan for what the Board's goals were, and that "the decision to sacrifice some tax savings in order to retain flexibility in compensation decisions is a classic exercise of business judgment."

The above conclusions have also been cited at the U.S. District Court level *(*Warhanek v. Verisign, 2013)

Conclusion – Part 3

Although minimizing income taxes may be a prudent strategy for management and the board to strive for, one can hardly point to a legal requirement to do so. Certainly minimizing taxes will increase earnings and is in the spirit of enhancing shareholder value. However, if a more efficient tax strategy was not adopted, it appears that only in a case involving an act of gross negligence would there be a reasonable possibility a court would hold the board and management liable. Many legal observers have written recently that these cases are probably the death knell for the claim that there is a fiduciary responsibility to minimize taxes (Practical Law, 2014).

4) THE DECLINE OF CORPORATE TAX RECEIPTS: CAN WE DETERMINE HOW MUCH IS CAUSED BY TAX AVOIDANCE?

According to the Congressional Budget Office (CBO, 2013), for the fiscal year ended September 30, 2013, regular, so-called C corporations (C Corps) paid approximately $275 billion of the total federal income taxes, or approximately 10% of Treasury's $2.8 trillion in receipts. According to the Office of Management and Budget (OMB, 2013), that percentage 60 years ago was about 30%. Which taxes increased to offset this reduction? According to the CBO, the burden effectively shifted to individuals through greater individual income and payroll taxes. Specifically, payroll taxes accounted for about 11% of total receipts back in 1950, but now comprise about 33% of all tax receipts. Individual taxes accounted for about 40% back in 1950, and have crept up to 47% for 2013. Many observers say this is proof of corporate America finding ways to dodge their tax responsibilities and, consequently, placing the burden on the rest of us.

The Senate hearings on BEPS (2014, p. 8-10) tied aggressive corporate tax strategies to why corporate tax receipts have fallen by two thirds since the mid 80s, why the effective U.S. tax rate of these MNCs is half of what it was back then, the resulting shift of the tax burden to individuals, and how this trend is significantly aggravating our national debt, "…..while the percentage of tax revenues collected from corporations has declined for years, the U.S. federal debt has continued to swell, now surpassing $16 trillion. The result is a greater burden on individual taxpayers and future generations. At its post-WWII peak in 1952, the corporate tax generated 32.1% of all federal tax revenue. In that same year the individual tax accounted for 42.2% of federal revenue, and the payroll tax accounted for 9.7% of revenue. Today, the corporate tax accounts for 8.9% of federal tax revenue, whereas the individual and payroll taxes generate 41.5% and 40.0%, respectively, of federal revenue."

Could there be other factors that may help explain the shift in the tax burden away from C Corps? First, consider changes to the tax code that were made as part of the Tax Reform Act of 1986 (TRA 86). This landmark legislation actually encouraged businesses to convert from the traditional C Corp structure and instead have their business profits passed through and taxed at the individual level. Specifically, TRA 86 lowered the highest marginal rate for individuals to below the top marginal corporate tax rate, thus incentivizing formations and organizational restructurings. Alternative business organizations like the partnership and the small business corporation, now widely referred to as S corporations (S Corps), ensured that business profits would be taxed once at the relatively lower individual tax rates. Then there was the growing popularity of Limited Liability Corporations (LLCs) to continue the limited liability protection on those businesses. Couple those factors with the decline and exodus of the U.S. manufacturing base to foreign nations and the increased dependence on service businesses, which do not benefit as much from the C Corp form. It should therefore be no surprise that there are substantially more pass through businesses being taxed at the individual level than ever before, and considerably less from C Corps. In fact, according to the CBO (2012), when you go back to 1980, you find that 83 percent of businesses were organized as pass-through entities, including partnerships, S Corps and sole proprietorships, and they accounted for 14 percent of all business receipts. In 2007, 94 percent of businesses were organized as pass throughs and represented 38% of all business receipts.

Another report, this time from the IRS (2011), indicates that for 2011 pass-through corporate entities (primarily consisting of S Corps) accounted for about 72% of all active corporate tax returns. They also report that the number of tax returns filed in 2013 for C Corps was approximately 2.2 million, 8.2 million for S Corps and partnerships, and 24 million for sole proprietorships and farmers. Compare that to just 10 years ago when the number of tax returns filed in 2003 for C Corps was 2.6 million and only 5.7 million for S Corps and partnerships.

Another factor cited (GAO, 2013) for the general decline in corporate tax receipts is the increase in debt rather than equity financing of U.S. corporations. This has resulted in substantially greater interest deductions over the past 50 years. Finally, corporate tax receipts have declined with the increase in Congressionally-authorized preferences such as accelerated depreciation, tax credits and numerous other items discussed later when we analyze effective tax rates.

Now that we have identified the more probable drivers for the general long-term relative decline in the level of C Corp tax receipts as a percentage of total tax receipts, we should not ignore whatever role aggressive tax planning still may have had in causing this shift, and investigate other metrics that could shed light on the empirically measurable extent of this behavior. For that, we examine the more recent history of the past 10 years, which encompasses the growing popularity of BEPS but does not yet include the impact of inversions.

Here is what the Office of Management and Budget (OMB, 2013) found: C Corporate tax receipts were 10% of all tax receipts in the fiscal year ended 2013, 10% in 2012, and 8% in 2011. They were also 10% ten years ago in 2004, as low as 6.6% in 2009 (during the great recession) and as high as 13% in 2005 and 14.7% in 2006. In fact, the percentage was also about 10% back in 1987, right after the passage of TRA 86. To find significantly lower corporate tax contribution percentages, one has to go to the pre TRA 86 era, e.g. 13% in 1980, 17% in 1970, and 23% in 1960, and around 30% back in the early 50s.

Conclusion – Part 4

Looking at the decline in C Corp tax receipts over the last 60 years as a percentage of all federal tax receipts, and also focusing on the trend of that data over the past 10 years that involved BEPS activity, one cannot clearly conclude on how much of a direct correlation there may be between the declining percentage of C Corp tax receipts and the degree of tax avoidance though BEPS. Therefore, we shall now focus on the effective tax rate trends to determine the degree to which aggressive tax planning has reduced U.S. MNCs federal tax burden over time and the degree that it is due to Congressionally-authorized preferences.

5) U.S. EFFECTIVE TAX RATE: THE FACTS

The Difficulty in Comparing Effective Tax Rate (ETR) Studies

Consider these complications, discrepancies, caveats, and inconsistencies we discovered in our research of the numerous ETR studies:

1) Which income taxes should be included in the numerator—federal, state, foreign, provincial, Value Added Taxes (VAT), or other special purpose income taxes?
2) Should the numerator include all other government imposed taxes and fees for doing business in that jurisdiction?
3) Should the comparison be just on worldwide tax systems, territorial systems or both?
4) Should the result be adjusted for size of that country's GDP to get a comparison of the more industrialized economies instead of averaging all rates such as Iceland's?
5) Which tax expense amount should be pulled from the financial statements---the current tax expense, the total current and deferred tax expense, or the current cash tax expense actually paid in that year?
6) What about the impact of loss carryovers and carrybacks?
7) Should the rate be reported on the basis of the special federal subsidies that are already built into the tax code--that almost all corporations will take advantage of without any aggressive tax planning?
8) Over what period of time should the comparison be made and were there other factors that would help explain trends in rates, such as massive disruptions in the economic cycle during the Great Recession of 2007-2010?
9) What should be the source of the underlying data: tax filings, data from the Bureau of Economic Analysis or regulatory-filed financial statements?
10) How extensive is the sample size: all Fortune 1000 companies, all publicly traded companies, all corporate filings with the IRS, only U.S. headquartered companies, foreign corporations doing business in the U.S. and traded on a U.S. exchange?
11) Does the sample include pass through businesses that pay no corporate income taxes, such as S Corps?
12) Should the denominator in the effective rate calculation for the sample group also include the impact of net operating losses which serve to reduce the denominator thereby increasing the effective tax rate for the sample? (In the alternative, the exclusion of loss corporations would serve to inflate the denominator, and reduce the reported effective rate.)
13) If the denominator includes foreign income, does it inadvertently double count the earnings of CFCs if they simply add up all foreign earnings reported on their tax filing with the IRS, since many of those CFCs flow up to parent company CFCs?

Finally, how does an ETR study account, if at all, for the recent increase in BEPS activity? As U.S. MNCs have created more foreign earnings over the past 30 years as a result of normal business globalization, and as they have more recently been engaging in profit shifting strategies to lower tax jurisdictions, these profits are not included in their U.S. GAAP-based financial statements. Therefore, these profits will not impact the reported ETR based on methodologies which focus on just U.S. book or U.S. taxable profits in the denominator. The studies would have to

look at worldwide income, which would include the income that has been eroding from the U.S., and look at just the current portion of the federal income tax expense, since the deferred portion can be misleading for various complex accounting and tax reasons.

Summary of Widely Referenced ETR Studies

1) PwC (2011) reviewed the 2000 largest companies in the world for the years 2006-2009 and found that US headquartered companies had a combined worldwide ETR of 27.7%. Their foreign counterparts had a combined ETR of approximately 19.5%. For their purposes, they included all income taxes worldwide, current and deferred.

2) The Tax Foundation (McBride, 2011, Beyond the Headlines: What Do Corporations Pay In Income Tax?) reviewed IRS data for the years 1994-2008 and found the average current federal rate was 26%; and for 2008 it averaged 22.8%. When the current foreign tax expense was included, the combined worldwide ETR was closer to 33% for the recent years, which is very close to the statutory rate.

3) The Tax Foundation also released a report (McBride, 2011, U.S. Corporations Suffer High Effective Tax Rates By International Standards) analyzing the data for 19 different widely referenced studies and found that the combined federal and state ETR was close to 27 percent (with a low of 23% and a high of 35% among the 19 studies). They further found that the 27 percent combined ETR was among the highest in the world with the average of other comparable nations at least 7 percentage points lower. Unfortunately for this purpose, almost all of the 19 in the summary excluded worldwide income and therefore their ETRs exclude the impact of BEPS. The two studies in the group that clearly included worldwide income, found total worldwide ETRs at 27.7% and 28.5% given a marginal rate at the time of 40%. This is not meaningfully different from the overall composite average of all 19 studies, 27%. (This was probably due to the fact that those 2 particular studies focused on 2006-2009, before the recent dramatic increase in BEPS.)

4) The Congressional Research Service (Keightly & Sherlock, 2014) reported that while the U.S. statutory tax rate is about 10 percentage points higher than the other OECD countries, the U.S. effective tax rate is about the same as effective rates found elsewhere.

5)The Citizens for Tax Justice (McIntyre, Gardner, & Phillips, 2014) and the Institute on Taxation and Economic Policy studied 280 of the largest U.S. corporations for the period 2008-2012 and found the average effective current federal income tax rate was just 19.4% in contrast to the federal statutory rate of 35%. (They only included the profitable Fortune 500 companies in their study and only at the current portion of the federal rate. That is, they excluded foreign income tax expense and all foreign earnings from the denominator.)

6) The Government Accountability Office (GAO, 2013) reviewed all 2010 Schedule M-3s filed with the IRS for all profitable *and loss* C Corps, (thus shrinking the denominator), included worldwide income, and found a combined worldwide ETR of approximately 20%, with the federal portion being about 16.6%.When just the profitable M-3 filers were considered (and thus the denominator of income would increase), the combined worldwide ETR was only 17%, with the federal portion being only 12.6.

These studies indicate that the range of the ETR is from a low of 13% to an apparent high of 28%. As you can see, the various "results" are not easily comparable due to the various factors previously summarized. Nor do the studies make clear how they may have accounted for BEPS activity or how much of the ETR difference from a statutory rate may have been attributable to Congressionally-authorized preferences built into the code without any aggressive tax planning. It is *unlikely* that much of the disparity between the stated rate and the ETR could be due to inversions, at least not yet, since these are a relatively recent phenomenon. This means one has to carefully challenge the methodologies of any ETR study being referenced in policy making.

As an example of how potentially misleading references to "effective tax rates" can be, the Senate (2014, p. 8-10) stated that during the late 1960s and early 1970s the companies in the Dow 30 were reporting U.S. federal tax expenses that were 25% to 50% of their worldwide profits. By 2013, most were reporting less than half that amount as federal tax expenses. The inference of such a statistic in the context of a Congressional hearing on corporate tax avoidance is that the reduction is primarily due to aggressive tax strategies. However, our research (Tax Policy Center, 2014) shows two other significant factors that explain a large portion of that trend. Specifically: 1) over that same period, the percentage of normal active corporate profits earned overseas had also substantially increased for

non-tax reasons such as migration of the manufacturing base to offshore locations for lower wages, access to expanded global suppliers, greater global customer base, etc.; and 2) the marginal rates on C Corp taxable income averaged 50% for most of the period 1950-1990, and eventually dropped to 35% after 1987.

Congressionally Authorized Preferences

The CRS (Keightly & Sherlock, 2014; and Gravelle, 2014) and the JCT (2013) summarized the following regarding certain subsidies in the corporate tax code and their impact on the statutory marginal rate when considering the average savings among all C Corp filers:

1) The exemption for muni bond income represents about 1 point;

2) The R&D credit and Low income housing credit is about 1.5 points;

3) The Sec. 199 "Domestic Production Activities" deduction is about 1 point;

4) LIFO: about a ¾ point savings;

5) Accelerated depreciation over straight line is about 3 points;

6) Deferral on installment sales and like kind exchanges is 1 point; and

7) Deferral of *active* foreign earnings appears to cost about 1 to 4 points depending on the various interpretative complexities of their underlying provisions.

Collectively, the CRS estimated that the elimination of all key subsidies (base broadening), would allow the rate for all C Corps to be reduced at least 8 points lower. Also consider there are many other preferences not listed in the CRS report, such as the deduction for stock option expense greater than book, and amortization of intangibles such as goodwill not deducted for books. By inference, any particular U.S. MNC that is able to utilize most of these preferences would enjoy an even greater reduction in their ETR.

So now we have a better understanding that the gap between the statutory rate and the effective rate is not entirely caused by aggressive tax planning. At least 8 points of the difference is actually corporate subsidies sanctioned by Congress. Based on the studies, we suggest as a starting point a current ETR of 27% for the federal current rate, not the statutory 35%, and a combined federal and state rate of approximately 31%, instead of the actual combined statutory rate of 39%. This is a starting point in measuring the impact of aggressive tax planning on corporate tax receipts. Furthermore, we should expect to see the influence of the introduction of those preferences on a 30 year trend on the historical ETR.

30 Year Trend in the U.S. ETR

The CTJ and the Institute on Taxation and Economic Policy actually conducted a periodic study of current Federal ETRs (McIntyre, Gardner, & Phillips, 2014) Let's examine their specific findings throughout the past 30 years, with some observations of tax law changes authorized by Congress, which we parenthetically include to explain what perhaps supports this trend, as opposed to aggressive tax avoidance (JCT, 2011; & Tax Policy Center, 2010.)1) Prior to TRA 86, a federal ETR of 14.1% for the period 1981-83. (This has been widely cited as one of the major reasons why TRA 86 was enacted);

2) In 1988, it increased to 26.5%. (Despite TRA 86 dropping the highest rate from 46% to 34%, the ETR increased apparently due to the new TRA 86 limitations such the alternative minimum income tax; introduction of the passive loss rules; loss of bad debt reserves until written off; loss of almost all current deductions under the economic performance rules; the uniform capitalization rules for inventories; depreciation slowed down from the old ACRS system to MACRS; limitations on pension contribution deductions; and several other limitations) Given the ETR was 27% (rounded) post TRA 86, there must have been several favorable provisions that existed before TRA 86 that survived the changes, since that 27% ETR is 7 points lower than the 34% C Corp rate in 1988.

3) In 1996-1998, the federal ETR came down to 21.7% and further dropped to 17.2% in 2002-2003. This drop in the ETR was attributed by CTJ to changes in the tax laws as well as by tax-avoidance schemes devised by major

accounting firms. However, consideration should be given to some of the changes in tax laws over that decade: the expansion of the Research & Development credit; liberalized Section 179 immediate expensing provisions for many productive use assets; the introduction of additional 30% first year depreciation in 2002 and expanded to 50% in 2003; the ability to carry net operating losses back 5 years instead of 2; the 2002 creation and expansion of business tax credits such as the work opportunity tax credits, targeted jobs credits, energy credits; the low income tax credit for businesses; and the introduction of Sec 197 amortization of intangibles over 15 years effective in 1993; and

4) As previously noted, the federal ETR ticked up to an average 19% for the period 2008-2012. We note that this uptick occurred despite the increased proliferation of BEPS, the expansion of additional first year deprecation to 100% for a few years in the post 2008 recession era and the continued preference of allowing stock option deductions in a gradually appreciating stock market.

It therefore is well supported that the federal (current) ETR has decreased substantially over the past 30 years, but it appears to the authors that a substantial portion of it has been driven by Congressionally authorized preferences and subsidies built into the tax code, many that survived TRA 86 and many more that have been added since then.

Impact of BEPS in Eroding the U.S. Tax Base

Given how difficult it is to properly isolate the impact that BEPS has had on the U.S. ETR, without gross generalizations about downward trends, the best evidence to detect its impact for now may therefore be the estimate placed on the level of unremitted foreign earnings. The Senate Subcommittee hearings revealed that amount to be approximately $2 trillion. Citing the aforementioned GAO study, the Senate (2014, p. 10) claimed that this has contributed greatly to reduced corporate effective tax rates.

Conclusion – Part 5

Whichever study is used, and whatever definition of effective rate is used, it is clear that the effective tax rate for US MNCs is significantly lower than the statutory rate. What is not clear is by how much, and how much of it is caused by BEPS.

Although BEPS does not apparently account for lower federal tax rates, it does apparently contribute to very low worldwide ETRs when all income taxes and all worldwide profits are considered and given a substantial shift of earnings to low tax or no tax jurisdictions. This conclusion is partially based on the one GAO study of worldwide rates referred to above. In addition, the documented tracking of the increases in unremitted foreign earnings over the past few years is very indicative of a substantial amount of profit that has escaped U.S. taxation.

However one should not attribute the entire erosion to date on aggressive tax avoidance like BEPS. We should not ignore the fact that there would have been a reduction in U.S. taxable income anyway over the past 30 years due to:
1) normal globalization for sound business reasons; 2) the increased number of Congressionally authorized tax preferences other than BEPS, and 3) as long as the U.S. has a worldwide tax system and the highest statutory corporate income tax rate in the world, the C Corporation tax base will continue to shrink. This will be a result of prudent business decisions to expand overseas instead of in the U.S., as well as deferring substantial repatriations back to the U.S.

6) THE CRITICAL NEED FOR CORPORATE TAX REFORM

The Federal Debt in Perspective

In July 2014, the Congressional Budget Office (CBO, July and August 2014) projected that the federal budget for 2014 will run a $500 billion deficit or 3% of Gross Domestic Product (GDP). This is consistent with the overall average annual deficit as a percentage of GDP over the past 40 years. The President, and several leading political commentators, economists, and the media have trumpeted this as substantial progress in the battle to contain our deficits.

The total federal debt of the U.S. has been pushed to approximately $18 trillion, consisting of $5 trillion to other U.S. government agencies (such as the Social Security and Medicare Trust Funds) and $13 trillion held by the public (U.S. Treasury, 2014) To put this in perspective, the total public debt is 74% of GDP, twice what it was in 2007, and

the total debt is already exceeding our GDP. It is interesting to contrast that with the prior high of 106% in 1946 when Americans had pent up savings to fund long-term post-World War II expansion. The CBO's long term forecast using realistic assumptions, has the ratio at 180% in 25 years, and multiple times that over its 75 year forecast period (CBO, July 2014, p. 75-86). The largest contributor to these rather dire forecasts is the exploding demand on the entitlement programs, which collectively have an unfunded present value liability of close to $50 trillion, after considering payroll tax contributions (SSA, 2014).

The CRS (Labonte, 2012) in a recent report to Congress entitled "The Sustainability of the Federal Budget Deficit: Market Confidence and Economic Effects" explained what the point of unsustainability would look like, and concluded that, " As private investors observe that the government is unable or unwilling to make policy changes to prevent the debt burden from increasing, they will decide to flee the country's debt before the point where the government is forced to default or monetize." Fortunately, it appears that investors still believe in U.S. Treasuries and that for the foreseeable future our debt level seems sustainable. However, much more can be done for the long term to prevent the point of unsustainability, and the sooner we start, the less painful it will be. To lessen the impact of any one measure in curbing our deficits, the authors believe that a pro-growth tax reform should be part of the overall debt reduction approach.

Criteria in Reforming the Corporate Tax Code

If properly structured, the authors believe that tax reform should: 1) lower the statutory rate with appropriate base broadening thereby generating more tax revenues by encouraging additional foreign investment in the U.S., as well as keeping U.S. businesses and jobs here; 2) serve to significantly simplify the corporate tax code; 3) adopt a more territorial approach to taxing foreign earnings so that the current $2 trillion of locked out foreign earnings can be distributed to the U.S. parent for more direct job creation.; 4) free up the productivity drain caused by the existing compliance burden and constant controversy with tax authorities through tax simplification, and have that effort deployed towards developing new intellectual capital that could spur job creation; 5) close the tax gap if not directly through mechanisms that would reduce noncompliance, at least indirectly through an increased sense of fairness with the overall code; 6) address excessive base erosion strategies so that our purely domestic businesses are not at a competitive disadvantage compared to the larger MNCs; and 7) provide certainty with regard to business investment and expansion planning.

Such tax reform, although probably having to be scored by the Joint Committee of Taxation as revenue neutral under conventional rules in Congress (and to have any chance of passage), should be viewed as a substantial revenue raiser when dynamically scored by taking into account the probable direct and indirect economic implications of consumer and business behavior (Hederman, Greszler,& Ligon, 2014).

Significant Proposals

The good news is that both major parties agree that substantial overhaul is needed to the corporate tax code. Several proposals have been submitted, the most recent of which were Congressman Camp's 2014 Discussion Draft (U.S. House Committee on Ways and Means, 2014); the President's "Framework for Business Tax Reform" (U.S. Treasury, 2012), and Senator Levin's 2014 proposals on curbing multinational tax avoidance and corporate inversions (Sen. Carl Levin, 2014).

Here is what the proposals have in common with regard to making U.S. MNCs more competitive with the rest of the world: 1) reduce the corporate tax rate to 25% - 28%; 2) broaden the tax base significantly through the elimination of many of the preferences and subsidies built into the code as previously described; and 3) numerous base erosion protections.

Where the proposals disagree is as follows: 1) The Republicans insist that business tax reform be tied to individual tax reform so that the individual rate could also be cut to be closer to the new C corporate tax rate. Otherwise, individual owners of pass through businesses would be at a competitive disadvantage, since they would be taxed at rates as high 40%, while their C Corp counterparts would enjoy a 25% to 28% rate. 2) The Democrats insist that if anything, there should be more revenue from individuals, not less. 3) The Democrats prefer to keep a worldwide tax system while the Republicans insist on a territorial system.

Conclusion – Part 6 and Future Prospects

With the new Republican Congress, prospects may have improved significantly for business tax reform in 2015, since they want to demonstrate they can govern. The House has an overwhelming Republican majority, and their new Ways and Means Committee chair will be Paul Ryan, who has championed business tax reform for several years as head of the House Budget Committee. On the Senate side, they have a major tax reform supporter in Orrin Hatch, the new chair of the Senate Finance Committee. Although they do not have 60 votes to prevent a Democrat filibuster, tax bills can be attached to the budget through the reconciliation process and such amendments then only require a simple majority.

Another favorable change that Congress is beginning to seriously consider is adopting a dynamic scoring approach as Congressman Camp utilized in his tax reform proposals. Hopefully, this will result in more revenues from economic growth. This may help to reduce the resistance of taxpayers who will consider themselves losers as a result of the base broadening provisions.

Long term, there are also proposals to alter the structure of business taxation even more extensively. For example, there are proposals that would require U.S. MNCs to pay tax on the basis of an apportionment percentage of worldwide income, based on principles that are similar to state tax apportionment factors involving property, payroll, and sales. Another proposal would eliminate the corporate income tax completely or create a new form of business consumption tax. These subjects are profoundly complex and will have to await analysis in a future paper.

REFERENCES

Bloomberg. (2014, October 15). Tracking tax runaways. [Graph illustration U.S. Inversions by Year]. *Bloomberg News.* Retrieved from http://www.bloomberg.com/infographics/2014-09-18/tax-runaways-tracking-inversions.html.

Business Roundtable. (2013, July). *Corporate tax reform – The time is now*. 7-8. Retrieved from http://www.usahomecourt.org/sites/default/files/BRT%20ComprehensiveTax%20Reform-Exec%20Summ_final.pdf.

CBO. Congressional Budget Office. (2012, December 6). *Taxing businesses through the individual income tax*. 1-2. Retrieved from http://www.cbo.gov/sites/default/files/43750-TaxingBusinesses2.pdf.

CBO. Congressional Budget Office. (2013, September). *Monthly budget review-Summary for fiscal year 2013.* 1-3. Retrieved from http://cbo.gov/sites/default/files/cbofiles/attachments/44716-%20MBR_FY2013_0.pdf.

CBO. Congressional Budget office. (2014, July). *The 2014 long-term budget outlook*. 1-6 & 75-86. Retrieved from http://www.cbo.gov/sites/default/files/45471-Long-TermBudgetOutlook_7-29.pdf.

CBO. Congressional Budget Office. (2014, August). *An update to the budget and economic outlook: 2014 to 2024*. 1-4. Retrieved from http://www.cbo.gov/sites/default/files/45653-OutlookUpdate_2014_Aug.pdf .

CCH. Commerce Clearing House. (2012). *When it comes to tax law, it's complicated*. Retrieved from http://www.cch.com/wbot2012/020TaxCode.asp.

Fairless, T. & Raice, S. (2014, July 28). In inversion deals, U.K. is a winner. *The Wall Street Journal*. Retrieved from http://online.wsj.com/articles/in-inversion-tax-deals-u-k-is-a-winner-1406551914.

Freedman v. Adams (XTO Energy). ,No. 4199, 2012 WL 1345638, (Del. Ch. Mar. 30, 2012) ; and Freedman vs XTO et al. No. 230, 2012, 58 A.3d 414 (Del. 2013). Court of Chancery C.A. No. 4199.Affirmed by Delaware Supreme Court 58 A.3d 414 (Del. Jan.14, 2013). Retrieved from http://courts.delaware.gov/opinions/download.aspx?ID=183340.

Frost, P. (2014, July 6). Walgreen CEO aware of his fiduciary responsibility. *The Chicago Tribune.* Retrieved from http://www.chicagotribune.com/business/ct-wasson-walgreen-0706-biz-20140706-story.html.

GAO. United States Government Accountability Office. (2013, May). *Corporate income tax—Effective tax rates can differ significantly from the statutory rate.* 4-6 & 17-18. Retrieved from http://www.gao.gov/assets/660/654957.pdf.

Gravelle, J. G. (2012, July 25). Moving to a territorial income tax: Options and challenges. Summary page. *Congressional Research Service*. Retrieved from http://fas.org/sgp/crs/misc/R42624.pdf.

Gravelle, J. G. (2014, January 6). International corporate tax rate comparisons and policy implications. 3-4 Table 1 & 20-21. *Congressional Research Service*. Retrieved from https://www.fas.org/sgp/crs/misc/R41743.pdf.

Gregory v. Helvering. 69 F.2d 809, 810 (2d Cir. 1934) aff'd, 293 U.S. 465, 55 S.Ct. 266, 79 L.Ed. 596 (1935). Retrieved from https://supreme.justia.com/cases/federal/us/293/465/case.html.

Hederman, Jr., R. S., Greszler R., & Ligon, J. L. (2014, February). Chairman Camp's tax reform plan a milestone for dynamic analysis. *The Heritage Foundation*. Retrieved from http://www.heritage.org/research/reports/2014/02/chairman-camp-s-comprehensive-tax-reform-proposal-and-dynamic-scoring.

Hoffman, L. & Mattioli, D. (2014, August 25). Burger King in talks to buy Tim Hortons in canada tax deal. *The Wall Street Journal*. Retrieved from http://online.wsj.com/articles/burger-king-in-talks-to-buy-tim-hortons-1408924294.

Huffington Post. (2014, July 26). Obama: Offshore 'tax inversions' are unpatriotic. *Huff Post Politics*. Retrieved from http://www.huffingtonpost.com/2014/07/26/obama-tax-inversions_n_5623222.html.

IRS. Internal Revenue Service. (2011). *Corporate income tax returns, tax year 2011*.Single sheet. Retrieved from http://www.irs.gov/pub/irs-soi/2011CorporateReturnsOneSheet.pdf.

IRS. Internal Revenue Service. (2012). *National Taxpayer Advocate Annual Report to Congress.* 53-55. Retrieved from http://www.taxpayeradvocate.irs.gov/userfiles/file/2012-Annual-Report-to-Congress-Executive-Summary.pdf.

IRS. Internal Revenue Service. (2014, September 22). Notice 2014-52. Rules regarding inversions and related transactions.

JCT. Congress. Joint Committee on Taxation. (2011, January 18). *Present law and historical overview of the federal tax system.* Retrieved from https://www.jct.gov/publications.html?func=startdown&id=3719.

JCT. Congress. Joint Committee on Taxation. (2013, February 1). *Estimates of federal tax expenditures for fiscal years 2012-2017.* Retrieved from https://www.jct.gov/publications.html?func=startdown&id=4503.

JCT. Congress. Joint Committee on Taxation. (2014, May 23). *Revenue estimate* request. Retrieved from http://democrats.waysandmeans.house.gov/sites/democrats.waysandmeans.house.gov/files/113-0927%20JCT%20Revenue%20Estimate.pdf.

Keightly, M. P., & Sherlock, M. F. (2014, December 1). The corporate income tax system: Overview and options for reform. Table 2, 12-13. *Congressional Research Service.* Retrieved from http://fas.org/sgp/crs/misc/R42726.pdf.

Kumar, N., & Wright, O. (2012, December 13). Google boss: "I'm very proud of our tax avoidance scheme" *The Independent*. Retrieved from http://www.independent.co.uk/news/uk/home-news/google-boss-im-very-proud-of-our-tax-avoidance-scheme-8411974.html.

Labonte, M. (2012, December 14). The sustainability of the federal budget deficit: Market confidence and economic effects. 1-3. *Congressional Research Service*. Retrieved from http://fas.org/sgp/crs/misc/R40770.pdf.

McBride, W. (2011, September). Beyond the headlines: What do corporations pay in income tax? 1-3. *Tax Foundation*. Retrieved from http://taxfoundation.org/sites/default/files/docs/sr194.pdf.

McBride, W. (2011, September). U.S. corporations suffer high effective tax rates by international standards. 1- 4. *Tax Foundation*. Retrieved from http://taxfoundation.org/sites/default/files/docs/sr195.pdf.

McBride, W. (2014, October 14). Tax reform in the U.K. reversed the tide of corporate tax inversions. *Tax Foundation*. Retrieved from http://taxfoundation.org/article/tax-reform-uk-reversed-tide-corporate-tax-inversions.

McIntyre, R. S., Gardner, M. & Phillips, R. (2014, February). The sorry state of corporate taxes, what Fortune 500 firms pay (or don't pay) in the USA and what they pay abroad — 2008 to 2012. *Citizens for Tax Justice.* Retrieved from http://www.ctj.org/corporatetaxdodgers/sorrystateofcorptaxes.pdf.

OECD. Organization for Economic Co-operation and Development. (2014). *Corporate and capital income taxes. Table II.1-Corporate income tax rates: basic/non-targeted [Data File]. (2000-2014)* Retrieved from http://www.oecd.org/tax/tax-policy/tax-database.htm#C_CorporateCaptial.

OMB. Office of Management and Budget. (2013). *Historical tables- Budget of the U.S. Government*. 7 & 32. Retrieved from http://www.whitehouse.gov/sites/default/files/omb/budget/fy2013/assets/hist.pdf.

Practical Law. (2014, July 31). Inversions and phantom fiduciary duties. *Thomson Reuters*. Retrieved from http://us.practicallaw.com/7-576-5485.

PwC. (2013, April 2). *Evolution of territorial tax systems in the OECD.* 1-2. Retrieved from http://www.techceocouncil.org/clientuploads/reports/Report%20on%20Territorial%20Tax%20Systems_20130402b.pdf.

PwC. (2011, April 14). *Global effective tax rates.* Summary results 2-3. Retrieved from http://businessroundtable.org/sites/default/files/Effective_Tax_Rate_Study.pdf.

Seinfeld v. Slager., *No. 6462–VCG, 2012 WL 2501105. (*Del. Ch. June 29, 2012). Retrieved from http://www.delawarelitigation.com/files/2012/07/SEINFELD-V.-SLAGER-U0048597.pdf.

Sen. Carl Levin. U.S. Senate. Congress. (2013, September 19) Senator Carl Levin 's summary of the Levin-Whitehouse-Begich-Shaheen stop tax haven abuse act. S. 1533. Retrieved from http://www.levin.senate.gov/newsroom/press/release/summary-of-the-levin-whitehouse-begich-shaheen-stop-tax-haven-abuse-act.

SSA. Social Security Administration. (2014). *Status of the Social Security and Medicare programs*. Retrieved from http://www.ssa.gov/oact/TRSUM/tr14summary.pdf; and 232-238 from http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/downloads/tr2014.pdf; and 191-201 from http://www.ssa.gov/oact/tr/2014/tr2014.pdf.

Tax Policy Center. (2010). *Major enacted tax legislation*. Retrieved from http://www.taxpolicycenter.org/legislation/allyears.cfm.

Tax Policy Center. (2014, April 16). *Historical top bracket and rate*. Retrieved from http://www.taxpolicycenter.org/taxfacts/displayafact.cfm?Docid=65.

U.S. House. Congress. Committee on Ways and Means. (2014, February 26). *Camp releases tax reform plan to strengthen the economy and make the tax code simpler, fairer and flatter.* Retrieved from http://waysandmeans.house.gov/news/documentsingle.aspx?DocumentID=370987.

U.S. Senate. Congress. Permanent Subcommittee on Investigations. (2012, September 20). *Offshore profit shifting and the U.S. tax code-Part 1 (Microsoft and Hewlett-Packard)*. Retrieved from http://www.hsgac.senate.gov/subcommittees/investigations/hearings/offshore-profit-shifting-and-the-us-tax-code.

U.S. Senate. Congress. Permanent Subcommittee on Investigations. (2013, May 21). *Offshore profit shifting and the U.S. tax code-Part 2 (Apple Inc.)*. Sen. Carl Levin's Opening Statement. Retrieved from http://www.hsgac.senate.gov/subcommittees/investigations/hearings/offshore-profit-shifting-and-the-us-tax-code_-part-2.

U.S. Senate. Congress. Permanent Subcommittee on Investigations. (2014, April 1). *Caterpillar's offshore tax strategy*. Majority Staff Report. Retrieved from http://www.hsgac.senate.gov/subcommittees/investigations/hearings/caterpillars-offshore-tax-strategy.

U.S. Treasury. (2012, February). *The President's framework for business tax reform*. Retrieved from http://www.treasury.gov/resource-center/tax-policy/Documents/The-Presidents-Framework-for-Business-Tax-Reform-02-22-2012.pdf.

U.S. Treasury. (2014, November). Retrieved from http://www.treasurydirect.gov/NP/debt/current

Warhanek v. Verisign. WL 5273112, D. Del. Sept. 18, 2013. Retrieved from http://www.ded.uscourts.gov/sites/default/files/opinions/srf/2013/september/12-263.pdf.

Wood, Robert W. (2014, July 27). Obama calls offshore deals 'unpatriotic' yet funds, investors, boards jump aboard. [Web contributor]. Retrieved from http://www.forbes.com/sites/robertwood/2014/07/27/obama-calls-offshore-deals-unpatriotic-yet-funds-investors-boards-jump-aboard/.

Robert E. Duquette, CPA, MBA is an Instructor at Kutztown University and adjunct instructor at Lehigh University in Bethlehem, after retiring as a senior tax partner with one of the Big 4 global accounting firms. He serves on PICPA's Federal Tax Committee and its task force studying federal tax reform. He can be reached at duquette@kutztown.edu or red209@lehigh.edu.

David D. Wagaman, CPA, MS Tax is an associate professor of accounting at Kutztown University and a member of the Pennsylvania CPA Journal Editorial Board. He can be reached at dwagaman@kutztown.edu

SETTING THE FOUNDATION FOR INFORMATION LITERACY IN FRESHMAN BUSINESS MAJORS

Andrea Farro, Rowan University
Michelle Kowalsky, Rowan University

ABSTRACT

Rowan University requires all first semester freshmen to take the Rowan Seminar course. The Rowan Seminar is embedded in many majors' introductory courses, and includes components that facilitate the students' transition to college life and college-level work and acquaints them with the University's resources. With multiple sections of our introductory Rowan Seminar for business, the Rohrer College of Business capitalizes on this opportunity to set the foundation for information literacy in all business majors. Through a partnership, faculty members and business librarians develop activities to help students learn about the library resources which support each of our business programs in management & entrepreneurship, marketing & MIS, and accounting & finance. This study reports on an information literacy activity that asked students to predict employers' questions and determine which resources would meet their information needs. Five sections of freshmen business majors, including two in management and marketing, along with two sections of management and entrepreneurship juniors, were able to demonstrate through this activity various critical thinking skills which reached beyond previous instructional goals.

INTRODUCTION

With multiple sections of our introductory business course for freshmen, Rowan Seminar, the Rohrer College of Business capitalizes on this opportunity to set the foundation for information literacy in all business majors. Embedded into the course curriculum across campus is the Passport Program, which requires students to participate in a variety of activities throughout their first semester at the University. The activities must be spread across several different categories such as artistic, athletic, community engagement, multi-cultural, and student success. Library activities are an integral part of the student success category and are always part of the Passport requirement for business. However, in many cases, the library instruction previously consisted of simple library assignments such as scavenger hunts and standard facility tours; a more targeted method of developing information literate business majors was clearly needed.

This study resulted from a new articulation of practical shared goals by a faculty member and a librarian to get the students to move beyond Google and -- more importantly -- to move beyond the simpler questions that Google can answer readily. When students in the Rowan Seminar classes were asked if they've been in the library building, all hands went up. Admittedly, this was a very limited survey method but with the overwhelming consensus, it was clear that between pre-admission tours, parent visits, and orientation, students had sufficient opportunities to get familiar with the actual building and library facilities. Naturally, it was subsequently hypothesized that incoming freshman would not be familiar with the library databases, even though they may have seen the library's website or used some of its other services like group study rooms or computer labs. With that in mind, the faculty members collaborated to develop an exercise to administer to several Rowan Seminar courses in the College of Business, with the goal of introducing students to the online library resources needed for their major.

The purpose of this study was to determine the students' incoming level of understanding of business concepts as they relate to library research, as well as to determine their ability to think critically and quickly about new information resources. During the course of a 75-minute lesson, students were asked to create questions that future employers or professors might ask of them, and to insure that those questions could be answered by one of the information resources demonstrated to them by the librarian. The student-generated questions would help instructors determine the existing conceptual backgrounds of students who intend to be business majors, as well as provide pilot data to help determine the types of gains that students could expect as they move through their business program. The same activity was repeated with two junior and senior elective course sections, through the willingness of their professor who had also requested library instruction in these areas.

BACKGROUND LITERATURE

Natt (2013) explains that the first step in Business Information Literacy (BIL or IL) is knowing where to look for business information, and further specifies "three information worlds:"

1. Business literature: Whether it be academic literature or news relating to business or finance

2. Financial information: Broadly financial data and economic information

3. Competitor/industry information: In particular the location of industry research and peer analyses (p. 162).

Through experiences with information in these three worlds, business students are able to gain self-efficacy in searching and in generation of both questions and answers to solve business problems. These dovetail with the common information literacy competencies of problem-solving skills, self-directed learning skills, the ability to find and use appropriate resources, and critical thinking. Universities have approached the task of building IL skills in different ways, often also using collaboration between business professors and reference librarians in an introductory business course.

As in Bowers, et al. (2009), librarians provided both instruction and feedback to students at various times throughout the semester, but this may seem to be an unrealistic proposition for many schools. Embedding a librarian into a semester-long course may be challenging due to personnel issues, scheduling issues, and a host of other reasons. However, this practice opens up a conversation about a derivative approach: embedding a librarian into the business curriculum starting with the introductory courses for freshmen, and then reappearing again in subsequent years to teach sophomores, juniors and seniors (and then, if possible, to scale up from there). This approach has the potential to insure that library skills are reinforced and then sequenced, with increasing difficulty over time.

Additional literature provides evidence that students and faculty prefer having instruction early in their academic career, yet after information literacy instruction, students report a "reduction in effort to find information" (Julien, et al., 2011, p. 359). Other research offers support for mandatory and active information literacy instruction. Detlor, et. al. (2011) says that students do not show interest in or attend voluntary offering IL instruction that is not part of a class nor do they express any interest in a voluntary IL course. Since no one-fits-all practice has been found, individual organizations must insure that library searching and finding skills are part of the university culture in a way which matches its constituents.

A particular study of interest discusses an exploratory understanding of how information skills are perceived and evaluated in the workplace. Sokoloff (2012) details arguments for "a better balance between core information literacy standards and direct preparation for the experience of information usage in the workplace" (p. 14), especially in workplaces where Google is primarily used. In addition, unethical use and sharing of proprietary material is commonplace and accepted. If this is an ongoing trend in the workplace, an even greater urgency exists for business school faculty and librarians to partner and develop curricula that not only fosters information literacy but also stresses the ethical use of information and sources. The results of Julien, et al. (2011) call for more specific examination of higher order thinking skills in order to improve student searching outcomes, and "increased focus on developing sophisticated searching skills, and on the transferability of those skills to information searching outside of the academic context" (p. 361). Results from 52 students from three different schools showed that the students' perceptions were that IL skills are not needed beyond school or useful once they graduate.

Both faculty and librarians need to communicate the transferability of these skills from academic life to work life in order to change student perceptions. Business school curricula should promote IL as an important skill which business students need to develop and hone while in their undergraduate studies. Ensuring that bad habits do not continue into the workplace, or that a "shortcut mindset" does not permeate our next generation or workers, must become an overarching goal of information literacy education. One compelling way to prepare our students and future business leaders is to increase their comfort level and skill in searching now, while they can be taught, monitored, and rewarded for their efforts.

This study is a first step towards focusing information literacy instruction on smaller and specific types of business thinking and business research skills, and for discussions regarding decision-making about information sources.

METHODS

Students participated in a lesson by the librarian in their usual Rowan Seminar classroom or in a computer lab in the library, each equipped with an Internet-enabled podium and overhead data projector. The librarian demonstrated the business databases that are available to them through the university's online library resources, while the professor observed and occasionally participated from the back of the classroom. Throughout the instruction, the students simultaneously filled out a worksheet in order to try to apply the information presented and describe how it might be used in a business environment they expect in the future (Appendix A, attached). Student consent for this research was provided passively, with worksheets collected by the librarian at the end of the session and student identities kept confidential; neither grades nor feedback was provided to students at the conclusion of the activity. This research was approved via our university's Institutional Review Board for the protection of human subjects.

A business professor and the business librarian independently reviewed the 588 item responses from 112 individual students. The reviewers independently categorized them either as correct or incorrect offerings, based on agreement of the ranges of accurate answers. The two met to achieve consensus on items for which either had questions or concerns, especially since partially correct answers were previously decided to not be an option during review. Inter-rater scores could not be reliably computed since both reviewers did not have access to the exact same information about the content of the lessons during each session, nor the examples used to illustrate concepts during teaching of the lesson.

One type of item which triggered reviewer conversation revolved around whether or not a response topic was directly demonstrated during the lesson (such as examples about Nike or Wal-Mart), especially since the students' worksheet directions instructed, "You can't use any of the examples given in class, nor plagiarize them directly!" Since both reviewers were not present at each class, a decision had to be made on whether some examples were indeed too close to those offered explicitly by the librarian instructor. Essentially, substitution of a company name or industry was considered an appropriate response, but not those that directly recounted the provided lesson examples, since this would not directly show transfer of skill or additional critical thinking. Many student answers fell clearly into either category, and these were not discussed if both reviewers agreed on their placement.
When a consensus item necessitated a decision on whether or not a question could actually be answered by the named database (even if the question showed good critical thinking), the two searched the database together in order to make the correct determination on the student response, and recorded the consensus decisions simultaneously.

RESULTS

Data

Results of the reviewers' determinations appear in Table 1, which indicates both the number and percentage of "good questions" and "bad questions" offered by students. Where students did not attempt an answer for an individual item, no penalty was recorded and these questions omitted from the totals. When a student offered more than one question for a particular database, these subsequent questions were not counted additionally if at least one question offered was correct. A section code with an L (ie, "BL"), indicates that the section took place in a computer lab in the library.

Table 1. Student Responses from All Sections, by Section and Quality

Section	*#Good*	*#Bad*	*Totals*	*%Good*	*%Bad*
A	43	32	75	57%	43%
BL	98	45	143	69%	31%

C	176	34	210	84%	16%
D	57	27	84	68%	32%
EL	10	20	30	33%	67%

A categorization of results by database, which may show either greater understanding or better teaching, appears in Table 2. The ratio of correct to incorrect answers, in other words, of "the good to the bad," is listed for each database discussed. Note that due to individual differences between class sections, not all sections covered the same databases (some covered only the first half of the list below). Similarly, no penalty was recorded for items left blank.

Table 2. Student Responses from All Sections, by Database and Quality

IBIS World		*Mergent Online*		*Privco*		*ABI Inform*		*Reference USA*	
Good	Bad	Good	Bad	Good	Bad	Good	Bad	Good	Bad
65	36	54	28	49	29	48	19	54	35
Ratio	64%	*Ratio*	66%	*Ratio*	63%	*Ratio*	72%	*Ratio*	61%

Bus Source Elite		*Passport GMID*		*Hoovers*		*Conf Board*		*Lynda.com*	
Good	Bad	Good	Bad	Good	Bad	Good	Bad	Good	Bad
27	6	38	4	26	5	20	9	22	6
Ratio	82%	*Ratio*	90%	*Ratio*	84%	*Ratio*	69%	*Ratio*	79%

Freshmen courses contained 17 to 25 students each. Section A in the tables actually represents two sections of freshmen students whose course was with the same professor in the same classroom. Study results from freshmen-only sections appear in Table 3 below.

Table 3. *Student Responses from Freshmen Sections, by Database and Quality*

Section	*#Good*	*#Bad*	*Totals*	*%Good*	*%Bad*
A	43	32	75	57%	43%
BL	98	45	143	69%	31%
EL	10	20	30	33%	67%

Generally, all freshmen sections covered the first five databases in the list, according to the frequency of their predicted use in upcoming courses. Results of this subcategory are listed below in Table 4.

Table 4. Student Responses from Freshmen Sections, by Database and Quality

IBISWorld		*Mergent Online*		*Privco*		*ABI Inform*		*Reference USA*	
Good	Bad	Good	Bad	Good	Bad	Good	Bad	Good	Bad
33	27	25	19	21	18	20	11	24	29
Ratio	55%	*Ratio*	57%	*Ratio*	54%	*Ratio*	65%	*Ratio*	45%

Further analysis is underway to determine the various subgroups of performance suggested here.

Highlights

- Of those 40 students who attempted all/most items (21 Freshmen and 19 Juniors) achieved 67% or better overall on these items
- 13 of those students achieved 100% “good” on all of their items offered (9 Freshmen)
- No one database was difficult for students
- A computer lab helped improve freshmen with more sophisticated upcoming projects

Examples of Great Items

- “In the past five years, what has been the trend in textbook sales from McGraw Hill?”
  Mergent Online, from FR MGT 18
- “How many times has Coca-Cola been in the news for environmental problems?”
  ABI/Inform, from FR MGT 18
- “What are the top 3 areas to sell children’s toys in Maine?”
  Reference USA, FR MGT 18
- “How many investors does Apple have? Are they making a profit?”
  Mergent Online, FR MGT 22

- "Is competition for coffee stores in the U.S. low or high?"
  IBIS World, FR MKT 11

- "Did the Kardashians use a sweatshop?"
  ABI/Inform, from FR MKT 17

Examples of Poor Items

- "What are some lawsuits against Chobani?" FR MKT 25 (exact example used in class)

- "What is the revenue for the fast food industry in the last 5 years?" NVC JR 18
  (item offered for wrong database, given for *Mergent* should have been *IBIS*)

- "How many people want more food options in New Jersey?" FR MKT 28 (assumes incorrect forecasting)

- "Can we compete with the major businesses in our field?" NVC JR 20 (answer requires a decision later)

DISCUSSION AND IMPLICATIONS FOR FUTURE PRACTICE

Prior to this study, the hypothesis was that incoming freshman are not familiar with the databases and the goal was simply to familiarize them with the business databases. However, upon completion, several other important conclusions have been drawn. Instructors need to make information literacy appropriately serious. Emphasis needs to be placed on the importance of sources and on ethical usage of sources. In addition, both librarians and instructors should be aware that the way they present IL instruction affects the students' behaviors and perceptions. It is important to make the connections between both IL and their academic lives and IL and their eventual work lives so that students can see the transferability and start to place importance on the skillset.

With the freshman, we saw that after an hour instruction they have some awareness and demonstrated some critical thinking. Using this data, we advocate for further library instruction and for full participation in the Freshman Seminar classes. In the Rohrer College of Business, there were eight Seminar Sections that did not participate in this activity. Two classes received library tours and six MIS sections didn't give any library instruction that the business librarian is aware of.

CONCLUSION

This study reported on an information literacy activity that asked students to predict employers' questions and determine which resources would meet their information needs. Student practice in questioning is crucial for increasing students' comfort level with information resources; for demonstrating and explaining ethical use of information; and for learning skills to supply appropriate answers, both in their college courses and in their chosen careers.

The literature indicates that more research in student learning outcomes needs to occur not just at the course level but also at the curricular level (Fiegen, A.M. 2011 p. 279). This project was the first stage. The business faculty member and business librarian who collaborated on this project are going to try to align the points in the curriculum where library research is involved so that IL instruction is sequentially more involved each time to build information literacy skills on a continuous basis throughout their business courses.

REFERENCES

Bruce, C. (1997). *The seven faces of information literacy*. Blackwood, South Australia: Auslib Press.

Conley, T. M., & Gil, E. L. (2011). Information literacy for undergraduate business students: Examining value, relevancy, and implications for the new century. *Journal of Business & Finance Librarianship, 16*(3), 213-228. DOI:10.1080/08963568.2011.581562.

Detlor, B., Julien, H., Willson, R., Serenko, A., & Lavallee, M. (2011). Learning outcomes of information literacy instruction at business schools. *Journal of the American Society for Information Science and Technology, 62*(3), 572-585. DOI:10.1002/asi.21474.

Fiegen, A.M. (2011) Business information literacy: A synthesis for best practices. *Journal of Business & Finance Librarianship, 16:*4, 267-288. DOI: 10.1080/08963568.2011.606095.

Haigh, A. E. (2013). You can lead students to the library, but can you make them do research? The effect of syllabus design and content on undergraduates' perceptions and use of the academic library. *Journal of Business & Finance Librarianship, 18*(1), 33-48. DOI:10.1080/08963568.2012.737658.

Julien, H., Detlor, B., Serenko, A., Willson, R., & Lavallee, M. (2011). Preparing tomorrow's decision makers: learning environments and outcomes of information literacy instruction in business schools. *Journal of Business & Finance Librarianship, 16*(4), 348-367. DOI:10.1080/08963568.2011.605669.

Kelly, A. S., Williams, T. D., Matthies, B., & Orris, J. B. (2011). Course-integrated information literacy instruction in introduction to accounting. *Journal of Business & Finance Librarianship, 16*(4), 326-347. DOI:10.1080/08963568.2011.605651.

McInnis Bowers, C. V., Chew, B., Bowers, M. R., Ford, C. E., Smith, C., & Herrington, C. (2009). Interdisciplinary synergy: A partnership between business and library faculty and its effects on students' information literacy. *Journal of Business & Finance Librarianship, 14*(2), 110-127. DOI:10.1080/08963560802362179.

Natt, A. (2013). What is business information literacy and can the corporate librarian contribute anything to the discourse? *Journal of Business & Finance Librarianship, 18*(2), 146-174. DOI:10.1080/08963568.2013.769290.

Skipton, M. D., & Bail, J. (2014). Cognitive processes and information literacy: Some initial results from a survey of business students' learning activities. *Journal of Business & Finance Librarianship, 19*(3), 181-233. DOI:10.1080/08963568.2014.915080.

Sokoloff, J. (2012). Information literacy in the workplace: Employer expectations. *Journal of Business & Finance Librarianship, 17*(1), 1-17. DOI:10.1080/08963568.2011.603989.

Andrea Farro is an Instructor in the Management & Entrepreneurship Department, Rohrer College of Business, Rowan University.

Michelle Kowalsky is the business librarian at Rowan University's Campbell Library and holds an Ed.D. in Educational Technology from Pepperdine University.

APPENDIX A

Rowan Seminar Management Library Orientation

Directions:

Construct a student question ("information need") which can be answered by each of these business databases. You can't use any of the examples given in class, nor plagiarize them directly! Be creative.

For instance,

A) **IBIS World.**
Explanation from class: Use this database to find trends in an industry like transportation or computing.

Your question: "What is demand for pet stores in the future?" or "How tough is the competition if I wanted to get into the pet accessories industry right now?"

1) **IBIS World**
Explanation from class:

Your question:

2) **Mergent Online**
Explanation from class:

Your question:

3) **Privco**
Explanation from class:

Your question:

4) **ABI Inform**
Explanation from class:

Your question:

5) **Reference USA**
Explanation from class:

Your question:

6) **Business Source Elite**
Explanation from class:

Your question:

7) **Passport (Euromonitor)**
Explanation from class:

Your question:

8) **Hoover's**
Explanation from class:

Your question:

9) **Conference Board**
Explanation from class:

Your question:

10) **Lynda.com Online Training**
Explanation from class:

Your question:

FINANCIAL CONSTRAINTS AND ORGANIZATIONAL CULTURE

Susan Flaherty, Towson University
Jeffrey Hillard, Stevenson University
Richard Rosecki, Towson University
Daniel Singer, Towson University

ABSTRACT

This paper examines the impact of financial structure on organizational culture. We find that the internally generated financial attributes of a firm play a significant role in determining whether an organization adopts a traditional culture that is resistant to change or a positive culture which embraces change. Binary Logistic Regression is used to analyze a set of internal and external financial attributes that impact organizational culture. Our results suggest the importance of a complex of internal financial attributes in the formation of Traditional or Positive cultures.

INTRODUCTION

This paper seeks to clarify whether or not internal financial attributes impact a firm's organizational culture. Financial determinants of organizational culture may be internal, that is driven by firm performance, or external, driven by market factors over which the firm has no control, or organizational culture may be unaffected by financial performance. This relationship is important because if organization culture is impacted by the results of a firm's financial strategy over which it has control, the recognition of that impact then allows financial strategy to become a tool to affect organizational culture, and thus firm performance.

The culture that defines an organization is critical to its success because it determines the norms and values of individuals within the organization that result in a greater or lesser degree of organizational effectiveness. Schein (1992, 1996) sees culturally shared norms, values and assumption as key factors to successfully adapting to changing market conditions. Whether the environment of the firm is static or dynamic, core competencies and capabilities need to reflect the reality of that environment. As most market environments are subject to some degree of change, the key factor in organizational effectiveness becomes successfully adapting to that change. Without cultural support, organization members will tend to resist change, resulting in an increasingly ineffective organization over time (Cristian-Liviu, 2013). Camerer and Vepsalainen (1988) see a positive corporate culture as a mechanism to be employed in lieu of traditional management practices when outcomes are "unimaginable". In a dynamic and unpredictable context, providing employees with a measure of independence and self-control is found to be more efficient than using traditional methods of authoritarian control.

Recent research suggests a correspondence between organizational culture and organizational performance (Su,Yang, and Yang, 2012). Wei, Samiee, and Lee (2014) find organic cultures lead to superior performance in emerging economies. They find that either an adhocracy or clan culture may lead to superior performance. They also found that when a firm is characterized by a combination of these cultures, internal conflicts between the two cultures interfere with creating a competitive advantage that leads to superior performance. An investigation of the relationship between culture and financial performance in Korean hotels revealed Clan and Adhocracy cultures supported superior financial performance, while Market and Hierarchical cultures did not (Han, 2012). Iriana, Buttle and Ang (2013) found culture to have a strong impact on the financial metrics of customer relationship systems. Murphy, Cooke, and Lopez (2013) found cultural intensity a key to achieving high performance through its impact on cooperation within the firm.

Organizational culture is important because it influences the behavior of individuals within the organization (Kluemper, DeGroot, and Choi, 2013). Barney (1986) suggests that organization culture can be a source of sustained competitive advantage. While organizational performance at a point in time will be sensitive to the correspondence between the organization's environment and the norms and values of individuals within that environment, organizational performance may be expected to be superior in positive organization found in a dynamic environment (Wright and Quick, 2009). Additional research finds that a positive culture in an organization increases productivity and organizational success (Cheung, Wong, and Lam, 2012). Mussel (2013) found that curiosity, a trait outcome in positive organizations, was positively related to job performance. Further research suggests that when new organization entrants perceive their relationship with the organization as supportive, caring,

and entailing positive social exchanges they become increasingly committed to the organization (Allen and Shanock, 2013). Rich, Lepine, and Crawford, 2010) found the job engagement of organization members to be an important factor in job performance. In contrast, ignoring the organizational culture and attempting to stimulate innovation and organizational learning through the use of financial incentives often proves a "blunt instrument" (Baumann and Stieglitz, 2014).

As organizational performance is sensitive to the fit between an organization's culture and its environment, it would seem appropriate that management proactively create the most appropriate culture in the organization. It appears that in some organizational contexts, leaders are able to bring about cultural change directly, while in other contexts culture determines the style and effectiveness of leaders (Kramer and Shuffler, (2014; Chatman, 2014). In either case, management has the strategic responsibility to promote an effective culture for the organization. This study argues that the internal financial structure of the organization can be used strategically by management to create the most effective culture for the organization.

Internal and External Factors

The issue of whether internal or external factors impact the formation of organizational culture is not settled in the literature on this topic. It may be argued the organization culture is most impacted by external factors largely beyond the control of management (Gaile, 2013; Bozemann, 2011; Porter, 2008 ; Molinsky, 1999.) If this assertion is correct then management will be ineffective in attempting to change organizational culture through its financial strategy. Alternatively, other research has suggested that management has the capability to shape culture and transform the organizational response to its external environment (Dauber, et. al., 2012; Cameron and Quinn, 2006; Fiol and Lyles, 1985). French and Holden (2012) found the type of organizational culture impacts both how organizations communicate and how they respond to crisis.

Kor and Mesko (2013) consider environmental and strategic interdependencies to be the key to firm's reconciling their internal fit, external fit and evolutionary fit. These are considered within the context of literature on dynamic capabilities which is the hallmark characteristic of learning organizations. Dynamic capabilities refer to the ability of the organization to successfully evolve by adapting its resource base to the external environment. Lumby (2012) considers this process from the perspective of organizational leadership, rather than through cultural shifts which transcend all levels of the organization.

External factors (those outside the organization's control) would include the severity of competition, market structure, technology, industry growth, and government social and economic policies. The impact of external factors on organizational behavior goes back for decades. Burns and Stalker (1961) in investigating the process of innovation were among the earliest to note the impact of these external forces on organizational strategy and culture. Lawrence and Lorsch (1967) saw the adaption to change in the external environment as requiring organizations to simultaneously be "highly differentiated and well integrated" although they recognized that such differentiation and integration is dependent on both the external environment and the internal performance of the organization. Michael Porter (2008) in arguing the power of five external forces on organizational performance does not take into account the importance of culture as a conditioning response to those forces. In contrast, other research has suggested that the cultural response to changes in the external environment is key to continuing organizational effectiveness (Kahn, Barton, and Fellows, 2013).

Internal factors impacting organizational culture result from decisions under management control (Heskett, 2012). These would not only include the metrics of financial performance (organizational goals, sales, sales growth, profitability, debt, capital structure, income and market capitalization, but also organizational policies, procedures and internal cultural values (Schein, 1997). This literature, in general, sees the impact of financial metrics on organizational behavior as filtered through the cultural set of norms and values (McKinley, et.al,, 2014; Shi, et. al., 2012).

This is not to argue that external and internal financial attributes are mutually exclusive in terms of their impact on organization culture. The interactive nature of the internal and external factors shaping firm performance is captured in a growing literature on organizational learning culture (Cameron and Quinn, 2006). Internal and external factors are not seen as mutually exclusive categories, but rather as reciprocating factors each influencing, and in turn being influenced by, the other. From a research perspective, the interaction between internal and external factors is seen to

create of problem in separating "cause" and "effect" in determining organizational success or failure. To better understand the process of organization learning, Fiol and Lyles (1985) propose a more organic approach towards adaptation and learning in organizations. Gaile (2013) concludes that creating a learning culture is basically an internally driven process, constrained by the dynamics of the external environment. Whether culture is considered primarily driven by internal or external factors, it remains a critical factor to organizational performance in the long run (Kotter and Heskett, 1992).

Numerous taxonomies exist for describing organization culture (Handy, 1976; Hofstede, 1991; O'Rielly, et. al., 1991; Cooke, 1995; Cameron and Quinn, 1999). Differences in taxonomies may arise from the different perspectives, life experiences and circumstances of the observer describing cultural diversity. Cultural taxonomies differ by how norms, value and behavior within the organization differ in their response to a variety of internal and external stimuli. Aside from the external and internal organizational attributes considered, all organizational cultures fall along a continuum that ranges from those that resist change to those that embrace change. Alvin Toffler (1970) saw adaptation to the meta-integration of culture and technology as the supreme challenge for organizations and individuals in the future. The following typologies are representative of common ways of describing organizational culture.

ORGANIZATIONAL CULTURES RESISTANT TO CHANGE

Hierarchical Culture

Cultures resistant to change are often characterized by a rigid hierarchy of power. Hierarchical cultures value tradition, stability, order, efficiency and predictability (Friesen, et. al, 2014). Hierarchical cultures encourage risk-adverse behaviors, with organization members having little autonomy. Behavior is controlled by rigid rules, policies and direct observation. All activities are subservient to the goal of efficiency in a narrow sense. Management style is autocratic and communication is downward with a hierarchical structure (Quinn and Cameron, 1999).

Bureaucratic Culture

Bureaucratic cultures are characterized by a formal set of explicit values reflected in a traditional set of rules, regulations and policies. Adherence to such rules is the prime behavioral requisite within this culture. The purpose of this set of formal prescribed behavior is to create an organization that is both predictable and efficient (Höpfl, 2006). The structure of the organization is hierarchical and the management style is authoritarian. The efficiency of the organization is dependent on how well the formal, rules, regulations, and policies are aligned with the external environment. (Weber, 1947.)

Despotic Culture

At the far end of the spectrum of cultures resistant to change, one might find despotic culture. The despotic culture is characterized by absolute power being embodied in the person of the organizational head. All individuals, values, and behavior in the organization are subservient to that power. Dominance of the head is maintained through the threat of punishment or violence. Despotism typically completely limits individual freedom and discourages originality and creativity by organization members (Ambrose, 2008). Despotic cultures eventually fail because of the inability to respond to changes in their environment.

ORGANIZATIONAL CULTURES EMBRACING CHANGE

Clan Culture

Clan cultures have been described by Quinn and Cameron (1999) as having norms and values focused on the hegemony of group success. The Clan culture derives its name from the high value placed on teamwork in a family-like structure. This culture is seen to be dominated by the value of inclusion. The clan provides opportunities for individuals to have decision-making input and independence in their individual behaviors within the clan's basic framework. Thus, individuals are encouraged to promote organizational adaptation for the good of the clan. Management style is permissive, since subservience to the common goals is assumed. Organizations supported by a Clan culture are responsive to environmental change because of its ability to quickly process information and act on

it. Some observers argue that the ability of this type of organization to respond to change is limited by an absence of diversity, group thinking and a lack of centralized authority (Strain, 2014).

Adhocracy Culture

An adhocracy culture may be said to actively embrace change, placing an emphasis on the importance of individuals developing original and creative solutions to problems (Mintzberg, 1985). Risk-taking is encouraged and entrepreneurial activity is expected from organization members. Such cultures have a high tolerance for uncertainty and welcome dynamic change. Management style is transformational. (Quinn and Cameron, 1999). Authority is not hierarchical. The organization relies on individual initiative to identify and solve problems rather than formal rules and policies.

Market Culture

In hyper-competitive markets some organizations may be said to have a market culture. Market cultures have value structures focused on direct competition with entities outside the firm (Pinho, et.al., 2014).. Success in competition is measured by a series of financial goals which reward organization members and owners. Market cultures are adaptive where success requires adapting to any external or internal changes (Gallagher, et. al., 2008). Management style will be participatory where market success needs to quickly process great amounts of rapidly changing data (Quinn and Cameron, 1999).

While this study posits two polar organization cultures, those resistant to change (referred to following as Traditional Cultures) and those embracing change (referred to following as Positive Cultures), it is recognized that real world organizations frequently have heterogeneous cultures, embracing elements of both sets of shared values. Nevertheless, organizations may be said to have distinct personalities reflecting a greater or lesser degree of traditional and positive values and behaviors (Reigle, 2013; Bradley-Geist, and Landis, 2012; De Vries, Kets, and Miller, 1986). Differing management styles between traditional and positive organizations have been found to reflect differing assumptions about the behaviors and values of organization members (Seligman, 2004; Hoffman, et. al., 2011).

These relative aspects of organizational culture may be described as occurring within a Competing Values Framework that differentiates organizations on the values attached to collaboration, competition, controlling and creativity (Cameron and Quinn, 2011; Quinn and Rohrbaugh, 1983). Within this context flexibility and control are seen as two differentiated sets of values. Flexibility values characterize positive organizations because they encourage individuals to be open to change, and spontaneously adapt and respond to that change to accomplish organizational objectives. Control values may be said to characterize traditional organizations as they presume a stable and predictable environment where a formal adherence to rules and conformance to precedent are the keys to organizational success.

Positive organizations are successful in complex, dynamic, and turbulent environments, where information is incomplete, the predictability of outcomes is low and the uncertainty associated with decisions is high. Positive organizations succeed in this environment because individuals can access information quickly and are expected to show initiative by acting immediately in the interests of the organization without being directed by a formal organizational chain of command. Individual discretion means that top management cedes a level of control, but that this is appropriate to address issues and problems posed by the dynamic environment. This means that errors may be made, but such errors are seen as the price necessary to successfully adapt to changing environmental conditions.

In contrast, traditional organizations will perform best in a static environment where predictability and the certainty of outcomes are important. Individual discretion and creativity are seen as undesirable behaviors, as they increase the chance of errors in areas where appropriate behaviors are defined by rules and policies. Typically, conformance to such rules is enforced by direct observation. Where the organization has correctly judged the environment, programmed responses to environmental conditions reduces the risk from potential errors in individual judgment.

CODING ORGANIZATIONAL CULTURES

Positive organizations in this study were identified from a data base created to find the "100 Best Companies to Work For" (Moskowitz, Levering, Akhtar, Leahey, and Vandermey, 2013), which was constructed by Fortune Magazine in partnership with the Great Place to Work Institute (GPWI). Inclusion in this database was based on a score that derived from a company's "Trust Index" and "Cultural Audit" created by GPWI. Employees in 259 firms were randomly surveyed to create a "Trust Index."

The survey investigated attributes of the organization's culture such as "teamwork" (a Clan attribute), "tolerance for uncertainty" (an Adhocracy attribute) and "sensitivity to market performance" (a Market culture attribute). The survey asked other questions related to their attitudes about management's credibility, job satisfaction, and camaraderie in the organization. Two-thirds of a company's total score were based on the results of the institute's "Trust Index" survey. The other third was based on responses to the institute's "Culture Audit", which includes detailed questions about pay and benefit programs and a series of open-ended questions about hiring practices, methods of internal communication, training, recognition programs, and diversity efforts. For the purposes of this study, the top 100 scoring firms by the Great Place to Work Institute were classified as positive organizations. This universe in our database was then paired down to 37 firms by excluding companies domiciled overseas and companies that are not publicly traded corporations.

A group of organizations considered comparable by size and industry were then surveyed to determine if they could be classified as traditional organizations. This determination was made through an examination of statements in their current Annual Report and the "Letter from the President" that reflected a commitment to a command and control hierarchical management style. Organizations were identified as traditional when these documents emphasized the role the executives played in performance, relative to the role of employees (a Hierarchical attribute), when there was an emphasis on organizational hierarchy, rather than an emphasis on problems addressed or solved (a Bureaucratic attribute), or these documents appeared to place an undue emphasis on the organization leader to the point of promoting a personality cult (a Despotic Culture attribute). Thirty seven comparable organizations with the attributes noted above were then identified as traditional.
As a result, those firms identified as having positive cultures were coded 1, while firms with traditional cultures were coded 0.

DISCUSSION OF FINANCIAL VARIABLES

An array of standard financial variables were drawn from the identified organization's SEC 10k filings for their fiscal year ending in 2013. Market data for the respective organizations were taken as of December, 2013. Following Wang and Branch (2009), an initial array of 17 variables were pared down to the ten variables presented in Table 1 below.

Three of these ten financial variables (Beta, Market Capitalization, and the Price/Earnings Ratio) may be considered externally determined by the market. The remaining seven variables (Dividend Yield, Return on Investment, Return on Equity, Revenue, Debt Ratio, Operational Cash Flow, and Operational Cash Flow/Revenue) may be considered as internal variables resulting from financial policies adopted by the firm.

As can be seen from Table 1, both the external and internal financial attributes of the two types of organizations varies widely within each group and do not differ significantly from each other. The large variance in the financial metrics between the two groups of firms may be interpreted to suggest either the existence of other differentiating factors not included in this study or that there is a variegated pattern of interaction among these variables that is associated with organization culture.

Table 1
Traditional and Positive Organization Characteristics

	Beta	Mkt. Cap ($ Billions)	P/E Ratio	Dividend Yield (%)	ROA (%)	ROE (%)	Revenue ($ Billions)	Debt Ratio	Current Ratio	Operational Cash Flow ($ Billions)	OCF/ Revenue
Traditional Organizations*											
Average	1.12	32.15	21.10	1.28	6.06	25.44	18.90	43.28	1.64	3.98	0.24
Std. Deviation	0.51	43.20	18.01	1.08	5.82	49.72	28.96	68.83	0.93	7.12	0.26
Positive Organizations*											
Average	1.10	39.17	28.54	1.89	6.83	16.94	17.70	6.39	2.03	62.93	8.19
Std. Deviation	0.45	77.17	32.53	1.80	3.74	10.31	33.44	14.81	1.29	198.50	22.88

* N = 37
Beta is the standard measue of systematic risk.
Market Capitalization is the product of the price of the firm's stock in December, 2013 and the number of shares outstanding.
P/E is the ratio of stock price in December 2013 to net income in 2013.
Dividend yield is the annualized endof the year dividend divided by the stock price in December, 2013.
ROA is Net Income divided by Total Assets in 2013.
ROE is Net Income divided by Shareholders equity in 2013.
Debt Ratio is long term debt divided by total assets in 2013.
Operational Cash Flow is the sum of EBIT + Depreciation - Capital Expenditures - the change in net working capital

Hypotheses Formulation

Our understanding of the relationship between organizational culture and financial structure based on prior research is incomplete. This reflects methodological difficulties surrounding the identification of financial performance, financial structure and organizational culture. Nolsøe Grünbaum and Stenger, (2013) were not able to find a positive relationship between innovation and profitability or innovation and leverage in positive organizations. Innovation based on asymmetric knowledge should presumably produce higher profits as a result first-mover advantages. Capital Pecking Order Theory suggests that in the presence of asymmetric knowledge (which companies embracing change should presumably acquire as a result of their innovative activities), firms should show a preference for debt financing, as opposed to equity financing (Myers and Majluf, 1984). However Bartoloni, (2013) found no relationship between innovation and financial leverage *per se*. Although she did find a positive impact on innovation from the combined effect of debt and cash flow. Brown, et. al. (2009) found that the availability of cash flow from either debt or equity financing was important for funding innovation in young firms, but was not important for mature firms.

As a result, we hypothesize:
H(1) That traditional organizations will be less leveraged than positive organizations.
This hypothesis reflects the findings in the literature above and a presumed risk-adverse preferences of traditional firms.
H(2) That positive organizations will be characterized by larger cash flows than traditional organizations.
This hypothesis reflects the fact that innovative behaviors in less predictable markets will require a greater amount of cash reserves than conservative behaviors in traditional markets to ensure against unanticipated outcomes. Larger cash flows may be necessary to support a positive organization's culture because of the possible consequences of the riskier behavior characterizing creative and innovative behaviors.
H(3) That positive organizations will exhibit greater profitability than traditional organizations.
Positive organizations are presumed to be more profitable than traditional organizations because they are able to adapt more quickly to adapt to changing market conditions. This allows them to exploit innovative products and markets because they are able to move before their competition does.

Analysis

Binary Logistic Regression was used to identify those financial attributes which predict an organization culture. Weunsch (2014) suggests that "Logistic regression is used to predict a categorical (usually dichotomous) variable from a set of predictor variables". He further states, "… the predicted dependent variable is a function of the

probability that a particular subject will be in one of the categories…" Binary logistic regression has been used for many predictive purposes. For example, Lussier (1995) used binary logistic regression to predict "Nonfinancial Business Success Versus Failure." Lussier's predictive variables were "…capital, record keeping and financial control, industry experience, planning"… and ten other variables. Wang and Branch (2009) used binary logistic regression about "Takeover Success Prediction and Performance of Risk Arbitrage" in which the binary dependent variable was success (coded as a "1") or failure (coded as a "0"). Their initial predictor variables were numerous (11), but produced insignificant results. When they pared down the number of variables they obtained significant results. Their overall classification success was 69%. Similarly, success in the form of product development success was predicted by de Sousa Mendes and Devos Ganga (2013) using a number of independent variables.

The ten variables indicated in Table 1 were entered originally into the Binary Logistic Regression. The results suggest a pattern of significance for predictive purposes among internal financial variables. An 85.1 % overall predictive success rate was found to be accomplished by six internal financial attributes (Table 2).

Table 2

Traditional and Positive Classification Table

Observed	Predicted		Percentage
	Group 0	Group 1	Correct
Group 0	30	7	81.1%
Group 1	4	33	89.2
		Overall Percentage	85.1 %

Note: The cut value is 0.50

Table Three displays the variables used in the equation that predicts group membership. It should be noted that the variables used can be considered as a totality. If one were to eliminate a variable, say the "OCF" variable, the predicted accuracy would decline. These variables represent a complex of internal financial variables predict organizational culture.

Table 3

Predictive Variables for Traditional and Positive Cultures

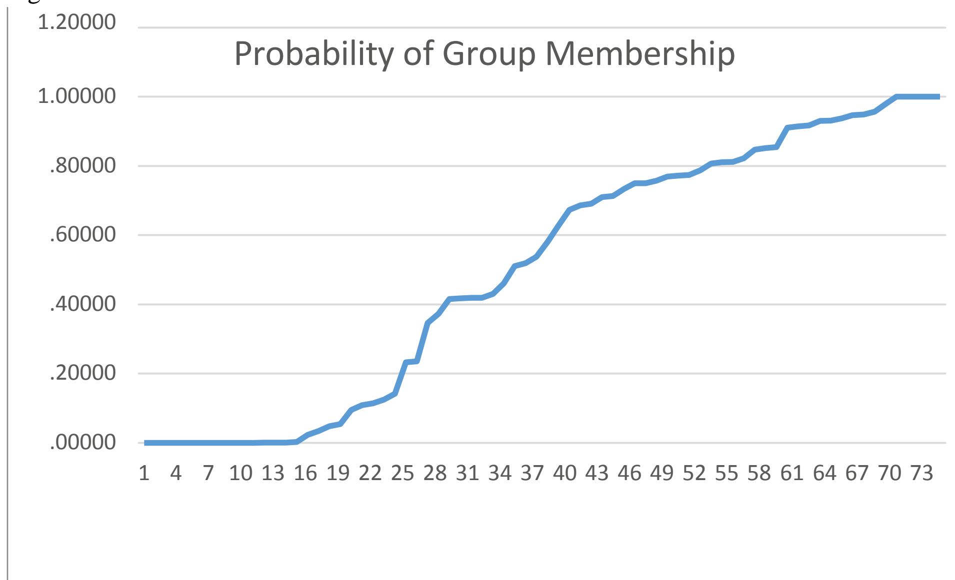
Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Yield	.331	.272	1.485	1	.223	1.393
	Revenue	.033	.024	1.973	1	.160	1.034
	DebtRatio	-.256	.083	9.494	1	.002	.774
	Curratio	.796	.457	3.029	1	.082	2.216
	OCF	-.102	.108	.900	1	.343	.903
	OCFRevenue	3.114	1.852	2.826	1	.093	22.514
	Constant	-1.223	1.195	1.046	1	.306	.294

a. Variable(s) entered on step 1: Yield, Revenue, DebtRatio, Curratio, OCF, OCFRevenue.

Very clearly the variable with the largest weight is the "OCF Revenue" variable. The other variables do not contribute as much as the OCF Revenue variable. However these variables cannot be directly examined as one could with a traditional multiple regression analysis. The variables should be considered as a totality. The removal or addition of one other independent variable would lessen the predictability of the model.

Figure One



An examination of the above diagram plot in Figure 1 shows the expected "S" shape of the curve. It is interesting to note that for about the first 13 firms, the classification method is 100 percent sure that the coding of the firm is and should be a zero. Similarly those final three firms are sure to be accurately coded as "1". The way binary logistic regression works is that those firms with a probability of less than 0.50 are coded as "0". Those firms in which the model shows a probability of 0.50 or greater are coded as a "1".

Insight into the meaning of the variables selected as predictors of organizational culture in Table 3 is provided by Tables 4 and 5 below. As can be seen from Table 4, organization culture is only significantly related to the debt ratio and none of the remaining internal financial variables are significantly related to each other. The negative correlation to the binary dependent variable means that firms with a traditional culture can be seen to have more debt than firms with a positive culture. The absence of any other significant correlations is interpreted as indicating that each of these variables has an independent impact in formulating organizational culture.

Table 4
Correlations of Internal Financial Attributes

	Culture	Dividend Yield	Total Revenue	Debt Ratio Ratio	Current Ratio	Operational Cash Flow	Cash Flow/ Revenue
Organizational Culture	1.000						
Dividend Yield	0.171	1.000					
Total Revenue	0.044	-0.052	1.000				
Debt Ratio	-0.387**	-0.193	0.124	1.000			
Current Ratio	-0.133	-0.002	0.069	-0.030	1.000		
Operational Cash Flow	0.197	0.073	-0.043	-0.083	-0.073	1.000	
OCF/Revenue	0.190	-0.028	-0.077	-0.080	-0.068	.906**	1.000

* Significant at p = .05
** Significant at p = .01

An analysis of the characteristics of traditional and positive organizations for which the Logit had 100% accuracy is revealing about the archetypical financial climate in the two different organizational cultures. These differences are presented in Table 5.

Table 5
Traditional and Positive Organization
with 100% Predictive Accuracy

	Beta	Mkt. Cap ($ Billions)	P/E Ratio	Dividend Yield (%)*	ROA (%)	ROE (%)	Total Revenue	Debt Ratio**	Current Ratio**	Operational Cash Flow**	OCF/ Revenue**
Traditional Organizations[1]											
Average	1.05	39.14	17.67	1.07	5.78	34.19	27.93	94.23	1.72	4.10	0.20
Std. Deviation	0.45	45.21	13.64	0.86	5.10	74.27	36.10	86.23	0.89	5.43	0.30
Positive Organizations[2]											
Average	1.08	65.25	-6.72	1.58	4.74	7.34	10.55	2.53	7.61	465.84	78.62
Std. Deviation	0.45	98.49	75.63	1.80	6.76	12.16	9.25	2.77	14.54	459.39	85.97

[1] N = 15; [2] N = 4
* Significant difference at P = .05
** Significant difference at P = .01

In comparison to Table 1, Table 5 reveals the significant internal financial variables (debt ratio, current ratio, operational cash flow, and OCF/revenue as differentiating between traditional and positive organizations.

Findings

The meaning of Tables 2, 3, and 4 above is that the culture of an organization is clearly sensitive to the indicated cluster of internal financial variables. The market-generated external variables did not prove to have good predictive ability for organizational culture. While the most predictive power in the Binary Logistic Regression above derives from the debt ratio and operational cash flow, it is worth noting other internal financial variables also play a role in forming organizational culture. The inclusion of the Dividend Yield, Revenue, and Current Ratio variables in the Binary Logistic Regression suggests that despite their lack of individual significance, they may play a role in determining an internal financial climate which contributes towards a specific type of organizational culture. Depending on the firm's specific external context, Dividend Yield, Revenue, and the Current Ratio may be important for some firms and not important for others. The correlations in Table 4 reinforce the Binary Logistic Regression analysis presented in Table 3 in that organization culture is not so much unilaterally impacted by one financial attribute, but that the financial structure of the organization has a multidimensional impact on organizational culture. It is the internal financial context that is important for organizational culture.

As a result, with respect to the degree of financial leverage and operational cash flow characterizing Traditional and Positive organizations hypothesized above:

H(1) is rejected.

Traditional organizations are found to be more leveraged than positive organizations. Financial strategies resulting in a high degree of financial leverage expose an organization to risk. The creation of debt requires the payment of interest and the return of principle regardless of the success of the firm's business strategy. The inability to repay debt or principle threatens bankruptcy or may result in substantial constraints placed on the firm which limit its potential for future success.

In this context, a firm with substantial leverage must conduct itself in a manner which makes its cash flow stream predictable. A culture limiting individual discretion enforced by bureaucratic rules and an authoritative management style makes the results of its operation much more predictable, thus mitigating the risks of that leverage.
Conversely, organizations with relatively little debt have a greater freedom to experiment with original and innovative behaviors because they are not constrained by the necessity repaying debt. Consequently, it may be shareholder wealth maximizing behavior to encourage a positive organizational culture in an organization with little leverage because the financial risks associated with riskier business strategies is less.

H(2) is confirmed.

Positive organizations do have larger cash flows than traditional organizations. The larger cash flow in positive organizations may be thought of as the fruit of adaptive behavior in dynamic markets that arises from acquiring "first mover" and other competitive advantages.

The significantly larger cash flow characterizing positive organizations may be further seen as providing a safety margin to the firm which supports risky business strategies arising from creative and innovative employees unconstrained by bureaucratic rules and authoritarian management. Ample cash flow reduces the risk of the organization engaging in less predictable behaviors and encourages individual discretion to maximize potentially profitable activities.

Conversely, the smaller cash flow characterizing traditional organizations is seen to constrain their ability to experiment with new products or markets. A corollary of innovation is possible failure. Failures can result in unanticipated reductions in cash flow which organizations with small cash flows do not have the luxury to support. As a result the cultural values in such organizations limit the opportunities for individual discretion and possible innovation.

H(3) is rejected.

A comparison of Table 1 with Table 3 indicates the profitability measures of return on assets (ROA) and return on equity (ROE) did not enter into the Logit regression. This may be explained by the fact that while innovation may lead to greater profitability for some firms, it may lead to greater losses for others. Innovative firms are not necessarily successful firms. Positive firms appear to have the financial attributes (low leverage and high cash flow) that permit them a positive culture in their quest for shareholder wealth maximization. In contrast, the cultural response in traditional firms to high debt and low cash flow is to limit individual discretion within the organization, thus reducing risk and maximizing shareholder wealth. The outcomes resulting from a mitigating cultural response to an external environment are seen as stochastic. This may be the underlying explanation of the wide variance exhibited by the financial attributes in Table 1.

CONCLUSIONS

The interpretation of Tables 3 and 4 suggest that traditional organizations have a capital structure that is debt heavy and cash flow light relative to positive organizations. While, both types of organizations may be concerned with maximizing shareholder wealth, the relatively large debt supported by traditional organizations requires a predictable cash flow with which to service that debt. The smaller cash flows characterizing traditional organizations narrow the room for error in servicing that debt. Failure to adequately service that debt raises the threat of bankruptcy which would reduce shareholder wealth. In traditional organizations, the heavy debt service is coupled with relatively low cash flow. The size of that cash flow makes the predictability of cash flow even more imperative. The low cash flow in traditional organizations leaves little room for unexpected losses.

The response of traditional organizations to higher debt levels and less certainty of cash flows is to create a culture with a climate of control, permitting for little room for individual discretion or innovative behavior. Behavior must be controlled by a set of norms and values that relies on the effective use of rigid rules, policies, and behavioral stipulations. This can best be accomplished in a hierarchical organization where decisions are made at the top and communicated downward by authoritarian leaders. The culture of the organization reflects not so much a taste for authoritarianism, as it does a necessary and appropriate response to the financial strategy of the organization.
In contrast, the financial context of positive organizations is characterized by relatively little debt and ample operational cash flow. Thus, the predictability of cash flows is not nearly as important in positive organizations because (1) they have relatively little debt to service and as a result, little threat of bankruptcy from unforeseen variations in cash flow, and (2) the magnitude of their current cash flows is sufficient to absorb any likely downward fluctuations in cash flows and still remain positive. Consequently, creating an organizational culture that supports creative and innovative behaviors in the pursuit of potentially profitable, but uncertain, profits is rational, since positive organizations have the cash to fund such activities and have little risk resulting from the failure of these activities.

Creative and innovative behaviors can be supported by a setting that empowers individuals and tolerates failure (a necessary occasional consequence of experimentation with the unknown). In positive organizations, transformative leadership provides support for individual discretion and does not require controls that restrict the individual from defining their contribution to the goals of the organization themselves. A positive culture in organizations with these financial attributes does not reflect a normative set of values based on achieving Maslow's self-actualization for its own sake, but a rational and appropriate path to maximize shareholder wealth.

The findings above strongly suggest the importance of internally determined variables in creating a financial setting which is capable of promoting either a traditional or positive cultural environment. As a result of the methodological limitations of the study (the difficulty in determining organizational culture and the difficulty in measuring external financial variables) we do not wish to assert that external financial variables do not play a role in determining organizational culture, only that internal financial variables do.

This is an important finding because the internal financial variables are endogenous in nature and therefore subject to management control. To the extent management deems it appropriate to enhance their organization's ability to learn and adapt, it is within their power to create the conditions for a positive organization through the adoption of appropriate strategic and financial policies.

Recognizing the impact of financial policies on organizational culture opens a new dimension to thinking about financial policy. For example, in the financial literature it is typical to recognize that the degree of financial leverage adopted can increase or reduce bankruptcy risk. However, financial leverage is never thought of as a tool which can be used to create an organization that is more adaptable and open to change and thus, to greater organizational success.

REFERENCES

Ambrose T. 2008. *The nature of despotism: From caligula to mugabe, the making of tyrants*. New York: New Holland Press.

Bartoloni, Eleonora. 2013. Capital structure and innovation: causality and determinants. *Empirica*, *40*(1): 111-151.

Bozeman, B. 2011. Toward a theory of organizational implosion. *The American Review of Public Administration*, *41*(2): 119-140.

Baumann, O., Stieglitz, N. 2014. Rewarding value-creating ideas in organizations: The power of low-powered incentives. *Strategic Management Journal*, *35*(3): 358-375.

Brown, J.R., Fazzari, S.M., Peterson, B.C. (2009). Financing innovation and growth: Cash flow, external equity, and the 1990s R&D boom. *Journal of Finance, 64*(1): 151-185.

Burns, T. and Stalker, G.M. 1961. *The Management of innovation*, London:Tavistock.

Camerer, C. and Vepsalainen, A. 1988. The economic efficiency of corporate culture. *Strategic Management Journal.* 9(Summer): 115-126.

Cameron, Kim S. & Quinn, Robert E. 1999. *Diagnosing and changing organizational culture based on the competing values framework*. New Jersey: Prentice Hall.

Chatman, Jennifer. 2014. Cultural change at Genentech: Accelerating strategic and financial accomplishments. *California Management Review*., *56*(2), 113-129. DOI: 10.1525/cmr.2014.56.2.113.

Cooke, R.A. 1995. *Organizational effectiveness inventory*. Arlington Heights, IL: Human Synergistics/Center for Applied Research.

Cristiam-Liviu, Vele. 2013. Organizational culture and strategy. how does it work? An empirical research. *Annals of the University of Oradea: Economic Science Series*, *22*(1).

Dauber, D, Fink, G. and Yolles, M. 2012. A Configuration model of organizational culture. *SAGE: Open. March, 22*.

Fiol, C.M. and Lyles, M.A. 1985. Organizational learning. *The Academy of Management Review*, *10*(4): 803-813.

Friesen, Justin, Kay, A., Eibach, R., Galinsky, A. 2014. Seeking structure in social organization: Compensatory control and the psychological advantages of hierarchy. *Journal of Personality & Social Psychology*, *106*(4): 590-609.

Gaile, Anita. 2013. External factors facilitating development of the learning organizational culture. *Journal of Business Management. 7*: 130-140.

Gallagher, S.; Brown, C.; Brown, L. 2008. A strong market culture drives organizational performance and success. *Employment Relations Today*. *35*(1): 25-31.

Han, Hyun Jeong. 2012. The Relationship among corporate culture, strategic orientation, and financial performance. *Cornell Hospitality Quarterly*, *53*(3): 207-219.

Handy, Charles B. 1976. *Understanding organizations*. New York: Oxford University Press.

Heskett, J. 2012. *The culture cycle*. New York: FT Press.

Hofstede, Geert. 1991. *Cultures and organizations: Software of the mind*. Englewood, NJ: McGraw-Hill Professional.

Höpfl, Harro M. 2006. Post-bureaucracy and weber's "modern" bureaucrat. *Journal of Organizational Change Management., 19*(1): 8-21.

Iriana, Reinyl, Buttle, F., and Ang, L. 2013. Does organizational culture influence CRM's financial outcomes? *Journal of Marketing Management*, *29*(3/4): 468-493.

Kahn, W.A., Barton, M.A., Fellows, S. 2013. Organizational crises and the disturbance of relationship systems. *Academy of Management Review*, *38*(3): 377-396.

Kotter, J. P.; Heskett, James L. 1992. *Corporate culture and performance*. New York: The Free Press.

Kor, Yasemin Y., Mesko, Andrea. 2013 Dynamic managerial capabilities: configuration and orchestration of top executives' capabilities and the firm's dominant logic. *Strategic Management Journal*, *34*(2): 233-244. DOI: 10.1002.

Kramer, William S., Shuffler, Marissa L. 2014. Culture's consequences for leadership: the role of context in affecting leadership perceptions and performance. *Industrial & Organizational Psychology*, *7*(2): 199-203.

Lawrence, P. and Lorsch, J. 1967. Differentiation and integration in complex organizations. *Administrative Science Quarterly*, *12*(1): 1-47.

Lumby, J. 2012. Leading organizational culture: issues of power and equity. *Educational Management, Administration & Leadership, 40*(5): 576-591.

Lussier, Robert N. 1995. A nonfinancial business success versus failure prediction model for young firms. *Journal of Small Business Management*, *January*: 8-20.

McKinley, W., Latham, S. and Braun, M. 2014. Organizational decline and innovation: turnarounds and downward spirals. *Academy of Management Review*, *39*(1): 88-110.

Mintzberg, Henry. 1985. Strategy formation in an adhocracy. *Administrative Science Quarterly*, *30*(2): 160-197.

Mintzberg, Henry. 1989. *Mintzberg on management: Inside our strange world of organizations*. New York: Free Press.

Molinsky, A,L. 1999. Sanding down the edges: paradoxical impediments to organizational change. *Journal of Applied Behavioral Science*, *35*(1): 8-24.

Murphy, Patrick J.; Cooke, Robert A.; Lopez, Yvette. 2013. Firm culture and performance: intensity's effects and limits. *Management Decision*, *51*(3), 661-679.

Myers, Stewart C., Majluf, Nicholas S. 1984. Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics 13*(2): 187–221.

Nolsøe Grünbaum, Niels; Stenger, Marianne. 2013. Dynamic capabilities: do they lead to innovation performance and profitability? *IUP Journal of Business Strategy*. *10*(4), 68-85.

O'Rielly, Chatman & Caldwell. 1991. People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, *34*: 487–516.

Pinho, José Carlos; Rodrigues, Ana Paula; Dibb, Sally. 2014. The role of corporate culture, market orientation and organisational commitment in organisational performance: the case of non-profit organisations. *Journal of Management Development*, *33*(4): 374-398.

Porter, Michael E. 2008. The five competitive forces that shape strategy. *Harvard Business Review*, *86*(1): 78-93.

Quinn, R. and Rohrbaugh, J. 1983. A spatial model of effectiveness criteria: towards a competing values approach to organizational analysis. *Management Science*, *29*(3): 363-377.

Schein, E.H. 1996. Culture: The missing concept in organizational studies. *Administrative Science Quarterly, 41*(2): 229-240.

Shin, Jiseon; Taylor, M. Susan; Seo, Myeong-Gu. 2012. Resources for change: the relationships of organizational inducements and psychological resilience to employees' attitudes and behaviors toward organizational change. *Academy of Management Journal, 55*(3): 727-748.

Sine, W., Mitsuhashi, H. and Kirsch, D. 2006. Revisiting Burns and Stalker: formal structure and new venture performance in emerging economic sectors. *Academy of Management Journal*, *49*(1): 121-132.

Strain, Mary. 2014. The Disadvantages of clan culture in business. Retrieved from http://smallbusiness.chron.com/disadvantages-clan-culture-business-34708.html, June, 2014.

Su, Z., Yand, D., Jang, J. 2012. The match between efficiency/flexibility strategy and organisational culture. *International Journal of Production Research*, *50*(19): 5317-5329.

Toffler, A. and Toffler, H. 1970. *Future shock*. New York: Bantam Books.

Waterman Jr., Robert. 1990. *Adhocracy: The power to change. Knoxville, TN*: Whittle Direct Books.

Weber, Max. 1947. *The theory of social and economicoOrganization*. Translated by A.M. Henderson and Talcott Parsons. London: Collier Macmillan Publishers.

Wang, Jia, and Ben Branch. 2009. Takeover success prediction and performance of risk arbitrage. *Journal of Business & Economic Studies*, *15*(2):10-25.

Wei, Y., Samiee, S., and Lee, R. 2014. The influence of organic cultures, market responsiveness, and product strategy on firm performance in an emerging market. *Journal of the Academy of Marketing Science*, *42*(1): 49-70.

Wuensch, Karl L. 2014. Binary Logistic Regression with SPSS®. Retrieved from http://core.ecu.edu/weunschk/MV/Multreg/Logistic-SPSS.PDF, on June 13, 2014.

Dr. Susan Flaherty is an Associate Professor of Finance at Towson University. Her research interests are in market regulations and policy, international finance and corporate governance.

Dr. Jeffrey Hillard is a Professor of Accounting at Stevenson University.

Dr. Richard Rosecki is an Associate Professor of Marketing (Emeritus) at Towson University.

Dr. Daniel Singer is a Professor of Finance at Towson University. Dr Singer has numerous publications. His research interests cover a broad range of topics in economics and finance.

Appendix 1
Organization Predictive Probabilities

Symbol	Corporate Name	Traditional Culture = 0 Positive Culture =1	Probability Prediction = 1
AMD	Advanced Micro Devices	0	0.00
APC	Andarko Petroleum	0	0.00
ATVI	Activation Blizzard	0	0.00
CI	Cigna	0	0.00
EMC	EMC Corporation	0	0.00
HRB	H & R Block	0	0.00
JAKK	Jakks	0	0.00
KR	Kroger	0	0.00
M	Macys	0	0.00
MHFI	McGraw-Hill Financial	0	0.00
ORCL	Oracl	0	0.00
PSO	Pearson Plc	0	0.00
FOX	Twenty-First Century Fox	0	0.00
UNH	United Health	0	0.00
YHOO	Yahoo	0	0.00
ZMH	Zimmer Holdings	0	0.02
USB	U. S. Bankcorp.	0	0.03
BAH	Booz Allen	1	0.05
ERIC	Ericsson	0	0.05
GS	Goldman Sachs	1	0.10
MS	Morgan Stanley	0	0.10
JNPR	Juniper Networks	0	0.11
CMA	Comerica	0	0.12
DASTY	Deessault Solutions	0	0.12
ROST	Ross Stores	0	0.21
JVA	Coffee Holding Company	0	0.30
WMB	Williams Company	0	0.32
AN	Autonation	0	0.33
CIT	CIT Group (Citibank)	0	0.38
COF	Capital One	1	0.39
DIN	DineEquity	0	0.42
AIV	Apartment Investment and	0	0.43
TER	Teradyne	0	0.46
K	Kellog	0	0.49
AXP	American Express	1	0.50
DFS	Discover	0	0.51
CHK	Cheseapeake Energy	1	0.52
ULTI	Ultimate Softwear	1	0.62
ADP	Automatic Data Processing	0	0.64
CHH	Choice Hotels	0	0.67
ECA	Encama Corporation	0	0.67
GIS	General Mills	1	0.68
JWN	Nordstrom	1	0.70
WFM	Whole Foods	1	0.71
ACN	Accenture	1	0.72
DRI	Darden Restaurants	1	0.73
DVN	Devon Energy	1	0.73
INTU	Intuit	1	0.75
KMX	Carmax	1	0.75
MORN	Morningstar	1	0.75
UMPQ	Umpqua Holdings	1	0.76
HAS	Hasbro	1	0.78
MW	Mens Wearhouse	1	0.80
FORR	Forrester Research	0	0.81
IBM	International Business Mac	0	0.81
CPT	Camden Property Trust	1	0.82
ADSK	Autodesk	1	0.83
BFAM	Bright Horizons	1	0.84
NTAP	Netapp	1	0.85
SYK	Stryker	1	0.89
ADBE	Adobe	1	0.92
GOOG	Google	1	0.93
MAR	Mariott International	1	0.93
NS	Nustar	1	0.93
CSCO	Cisco	1	0.94
INTC	Intel	1	0.94
MAT	Mattel	1	0.95
NATI	National Instruments	1	0.95
SIVB	SVB Financial	1	0.96
QCOM	Qualcomm	1	0.98

MICROFINANCE V. MACRO-FINANCE TECHNOLOGIES WHAT'S THE DIFFERENCE?

Patrice Flynn, Mount St. Mary's University

ABSTRACT

Microenterprise development first came on the scene in the 1970s thanks to a $27 loan by Dr. Muhammad Yunus to a group of 42 weavers in Bangladesh. Over the past four decades, millions of women with low incomes across the world have lifted themselves out of dire poverty through small business development made possible through microfinance. Today, a new economic development model is in the making that builds on microfinance but is best understood as *macrofinance*. What is the difference between microfinance and macrofinance technologies? Why the shift? What are the implications for the poor? How does an institutional or retail investor know the difference between a traditional microfinance development program and a macrofinance investment program?

INTRODUCTION

Something new is happening in the world of high finance: a new financial model is in the making. The model is not getting a lot of attention despite its potential impact on hundreds of millions of people living in poverty around the world and the potential to alter our fundamental notion of socio-economic development. This paper identifies and examines in-depth this new financial technology, which I define as *macrofinance*.

The new model has its roots in traditional microfinance founded by Nobel laureate Muhammad Yunus in the 1970s. After numerous conversations with Bangladeshi women who lived in dire poverty and aspired for better living conditions, Yunus realized their need for seed capital to start small businesses that could generate a little money. Given that funding at such a small level did not exist at the time, Dr. Yunus reached into his pocket one day in 1974 and gave a group of 42 weavers the equivalent of $27 to pay-off an outstanding high-interest loan (Yunus, 2007). The money was repaid in full, and more women asked for start-up fund for small businesses. Thus emerged the Grameen Bank.

The rest is history. By 2014, Grameen served borrowers in 81,367 Bangladesh villages (Grameen Bank, 2014). The model has been replicated in 58 countries through some 1,500 microfinance institutions (Rosenberg, Gaul, Ford and Tomilova, 2014).

The success of microfinance has attracted the attention of wealthy financiers (Evans, 2010; FINCA International, 2013, Firth, 2014; Flynn, 2007a; G20, 2009; Hummels, Bol, & Röntgen, 2013; Reed, 2014; Steger, 2012; UBS, 2014; UNSGSA, 2014; Yunus, 2011a). Heretofore, microfinance had been off their radar because providing tiny loans to the non-collateral poor is not a viable financial strategy. Today, financiers want to capitalize on the success of microfinance and change it into a more lucrative strategy. The emerging model involves new players, new financial instruments, a new business strategy, a rebranding of traditional microfinance, and an expansion of the size and scope of traditional microfinance programs.

There is no name for the new model because there are many moving parts and no coherent framework from which to examine the phenomena. Therefore, I propose a name for this emerging model: *macrofinance technology*.
Some of the questions to be explored in this article include: What is the difference between microfinance and macro-finance technologies? Who are the economic players in the new macrofinance industry? What types of financial products are being marketed? To whom are the new products sold? How does this type of financing work in the developing and developed countries, including the United States? What are the implications of this new model? What do the trends portend for those living in poverty?

Section one begins with an exploration into how traditional microfinance is being redefined. Section two articulates key characteristics that distinguish microfinance from macrofinance activities. Section three identifies the new macrofinance financiers and their clients. Section four explores what recent changes in microfinance and macro-finance portend for lenders, borrowers, and investors.

REDEFINING MICROFINANCE

Microfinance has its roots in the work of Nobel laureate, Muhammad Yunus, in the 1970s. As an economist, Dr. Yunus was concerned with the well-being of Bangladeshi women living in dire poverty and aspiring for better living conditions. He came to understand the fundamental difficulties women had securing seed capital to work their way out of poverty through small business development. So one day in 1974, Dr. Yunus reached into his pocket and gave a group of 42 weavers the equivalent of $27 to pay off their high-interest loans from local lenders and start afresh. The money was repaid in full, and more women asked for start-up funds to establish microenterprises. Thus emerged Grameen Bank.

Within the first 10 years, Grameen Bank loaned $40 million to Bangladeshi peasants through 241 branch banks. The money was dispensed for survival – "for a cow, a bullock cart, carpentry tools, wheat thrashers, sewing machines or light industrial equipment" (McCarthy, 1986). Loans ranged in size from $1 to $200 with the average being $60, thus, the "micro" part of microenterprise. A remarkable 99% of the notes were repaid on time and in full. Grameen Bank now serves 8.29 million borrowers in 81,367 villages across Bangladesh and employs 19,800 staff members who process an average of $1.5 million in weekly installments on microloans (Grameen Bank, 2014). Ninety-seven percent of the borrowers are women, and 97% of the loans are repaid.

Until recently, microfinance has been off the radar of shareholder-investors and wealthy financiers who ignore the non-collateral poor without assets upon which to secure bank loans. Micro lending is not a lucrative business model. Even if the average default rate remains marginal (i.e., 1% to 3% non-performance rate), administrative costs are prohibitive. Thus, the provision of small loans to the poor has been perceived by financiers as having no commercial value.

The only way to make microfinance lucrative for lenders is to expand the number and types of services that borrowers secure. A microloan may initially cost the lender more in human capital to administer than is received in interest payments and fees. The risk-return ratio changes, however, when small borrowers become long-term consumers of a financial firm that offers multiple products such as savings accounts, ATM cards, disability insurance, credit cards, mortgages, mobile banking, plus fees for overdraft protection, ATM usage, and phone-in queries. These lucrative changes are further enhanced when issuers bundle microloans (or microinsurance policies) into securitized assets (e.g., social investment bonds or development investment bonds) and sell the securities as investment-grade products along the lines of mortgage-backed securities in the early-2000s.

Due to the lack of a coherent way to examine these phenomena, I propose using the term *macrofinance* to capture this emerging financial technology and clearly differentiate it from traditional microfinance. The goal of the new macro-finance technology model is to replicate microfinance but on a much larger scale and scope to make banking with poor people a lucrative endeavor for the investors who supply seed capital. Investors in macrofinance are co-opting the language of microfinance, the successes of microfinance, and the good will people associate with small business development to create a whole new financial industry. Furthermore, the money loaned for small business development often comes with stringent development performance conditions and sometimes guarantees (by government agencies and/or philanthropic foundations) that ensure investors that they will be made whole if the investments do not yield expected returns.

Origins of the new Macrofinance Model

The idea of rebranding the microfinance model to attract big money had its Latin America roll-out at the Inter-American Development Bank (IDB) in June of 2006 in Washington, D.C. The concept was presented as "banking the unbanked" (Flynn, 2007a). It was noted that in Latin America, there were roughly 360 million poor people without access to financial services. While most of these people lived on less than $2 a day, together their purchasing power exceeded $510 billion per year. IDB President Luis Alberto Moreno wanted to profit from this untapped market, "These people . . . are smart consumers and entrepreneurs who constantly look for goods and services that improve their quality of life at an attractive price. And the tragedy is that those goods and services are either not available or too expensive" (IDB, 2006:2).

The Inter-American Development Bank approach built on the United Nation's *2005 International Year of Microcredit.* At the opening ceremony, Secretary-General Kofi Annan remarked that the stark reality is that most

poor people in the world still lack access to sustainable financial services, whether it is savings, credit or insurance. The great challenge before us is to address the constraints that exclude people from full participation in the financial sector.

UN support of the "banking the unbanked" model continues today under the leadership of Her Majesty Queen Máxima of the Netherlands who was designated in 2009 by UN Secretary-General Ban Ki-moon as Special Advocate for Inclusive Finance for Development. Speaking at the World Bank's 2014 CGAP Annual Meeting in the Netherlands, Queen Máxima underlined the following priorities for the new agenda: ". . . achieving scale and sustainability as well as ensuring impact on development outcomes. She pointed out that meeting a clear client demand, profitability for providers and affordability for clients are all crucial in order to achieve scale and sustainability in financial inclusion" (CGAP, 2014).

Institutions that provide financial services to people who live in poverty are growing in number and scale in a concerted effort to capitalize on the traditional microfinance concept—and associated good will—to expand the reach of global financiers. Wealthy investors are marketed to delve into this bourgeoning industry marketed under the moniker of financial inclusion. The motive is to find an accessible way for international bankers to access a previously untapped customer base that offers both profitable and attractive financial margins. It seems to me there is a shift away from a focus on personhood—inherent in traditional microfinance programs—to a focus on the person as a consumer in the new programs, which I refer to in this paper as macro-finance technology to clearly differentiate such activities from traditional small banking services for the poorest of the poor as begun by Muhammad Yunus in the 1970s under the name of microfinance.

The new players are aiming high. The 2014 State of the Microcredit Summit Campaign's two goals for the financial ecosystem are to: (1) reach 175 million of the world's poorest families and (2) help 100 million families lift themselves out of extreme poverty (Reed, 2014). The aim of providing small loans for business start-ups has morphed into a drive for profit maximization through product sales on a large scale.

This is a game changer in the world of global finance and creates a new financial technology that directly competes with small-scale, locally-based microfinance. There is a stark difference between the notion and practice of traditional microfinance technology and the new model described below as macrofinance technology, which is now a $22 to $72 billion industry that is growing rapidly (Hummels and Röntgen, 2013; Steger, 2012).

DISTINCTIONS BETWEEN MICROFINANCE AND MACROFINANCE

What is the difference between traditional microfinance and the emerging *macrofinance* technology? Below, three key distinctions are identified. The first is macrofinance's consumer-orientation in contrast to microfinance's person-orientation. The second is macrofinance's preference for selling financial products that maximize profits for far-away investors, rather than local communities. The third distinction is women's empowerment, a hallmark of traditional microfinance largely excluded from the *macrofinance* model.

Turning Persons into Consumers

The driver behind traditional microfinance is assisting those living in poverty improve their quality of life. Microfinance projects created in 58 countries around the world over the past three-plus decades were established by people who believed in helping the poor to work themselves out of destitution through small business development. Maximizing financial returns for those donating the seed capital was not the goal.

I saw a similar microfinance model first-hand when I joined Catholic Relief Services (CRS) in 1980 as an International Food and Nutrition Service Supervisor in Africa. CRS was one of the largest integrated aid programs world-wide funded by the U.S. Agency for International Development (75%) and individual donors (25%). The program was designed by Rev. Carlo Capone, M.D., the CRS medical director in Sub-Sahara Africa. After a lifetime of working with the poor as a physician, Fr. Capone acknowledged that the etiology of poor health was poverty itself. So he created an economic development model that provided immediate food assistance to mothers with low-incomes while simultaneously teaching women ways to lift themselves out of poverty.

By the time I arrived in Rwanda (and later the Islamic Republic of Mauritania), Dr. Capone's program had been in operation for 25 years in Africa, providing food and nutrition services side-by-side with income-generating and educational programs for poor women with children under the age of five. In Rwanda, we ran monthly clinics for 57,000 children in 93 maternal-child health clinics. The results were astounding. When food aid, education, and income-generating activities were offered in a single integrated program, children's health improved significantly (The Hilton Record, 1968; CRS, 1979).

Dr. Capone's linkage of social work and economics was breaking new ground in the field of international development. He advanced the proverb, "Give a man a fish, and you feed him for a day; show him how to catch fish, and you feed him for a lifetime" by advocating, more simply, to *teach women how to fish* through good health, education, and small business generation and fewer families will live in dire poverty. The CRS Food and Nutrition program directly altered the U.S. Department of Agriculture P.L. 480 surplus food program by adding an economic development dimension to international aid. Fr. Capone and his model cracked open my world and led me from my work as an international social worker in Africa to the University of Chicago to study economics.

While socio-economic development was transforming Africa, Muhammad Yunus was introducing a parallel effort in Bangladesh through the creation of new banking services to assist the rural poor. Small business loans—known as microcredit or Grameencredit—were availed to Bangladeshi women who wanted to work their way out of destitution. The focus was on group solidarity and community development to help alleviate poverty (Yunus, 2012).

Fast forward to 2014, and we see that unfortunately, the focus on integrated socio-economic development through microfinance is lost on the newer macrofinance technologies where the primary concern is investor returns. Macro-finance strives to turn microfinance programs into commercial enterprises that focus on profit maximization, cost minimization, efficiency, and shareholder returns. A risk with macrofinance is that donors who want to investment money in helping the poor will not be able to differentiate between bona fide microfinance programs and their guised competitors. This makes responsible philanthropy difficult for the ill-informed.

If poverty alleviation is not the goal, what is? To be successful in macrofinance, the lending institution must go beyond small loans and sell an array of banking products with higher profit margins. Microloans induce millions of women living in poverty to engage in global finance at multiple levels.

Securing small loans is the entry point to a much larger banking system. The next step is to encourage the borrower to open a savings account with the lender, a service currently availed by less than ten percent of low-income households around the world (Women's World Banking, 2013), including an estimated 17 million adults in the United States (FDIC, 2012). To attract new customers, banks often offer starter savings accounts that require small initial sums of money (e.g., $0 to $25) and low minimum balances (e.g., $10 a month).

In cases where a household member is employed abroad, workers are then encouraged to deposit remittances into the family's new savings account, accessible via Automated Teller Machines (ATMs) for a fee. The World Bank (2013) reports that developing countries receive more than $410 billion in remittances annually, often exceeding the dollar value of development aid. Heretofore, remittances have been commonly transferred through Money Service Businesses (MSB) that have arrangements with commercial banks to facilitate money transfers for migrant workers. Under new macrofinance plans, MSBs may be squeezed out, leaving fewer remittance transfer providers. In the summer of 2013, for example, Barclays Bank in London announced that it would stop offering international payment services to MSBs in Somalia (Hassan, 2013). Small Money Service Businesses are then replaced by transnational banks.

The next product offered by the lender is mobile-phone banking. In the developing world, mobile phones are ubiquitous, thanks to limited regulations and low-cost providers. Macrofinance institutions market mobile banking to their microloan customers to foster dependence on the bank. Mobile banking allows for wide-spread money transfers around the world as well as local payment of electricity bills and school fees using a text-based menu, accessible on basic mobile phone.

Microinsurance is one of the latest products offered by macrofinance institutions capitalizing on the popularity and success of microfinance. Once the poor have received a microloan from the lending institution and set-up a savings account accessible through mobile devices, customers are actively marketed to purchase microinsurance products

advertised as “the protection of low-income people against specific perils in exchange for regular monetary payments (premiums) proportionate to the likelihood and cost of the risk involved” (Church, 2006). Examples of microinsurance products include disability insurance, health insurance, dental insurance, death insurance, funeral insurance, rainfall insurance, motorcycle insurance, crop insurance, and livestock insurance. Such products are sold across India, Asia, and Africa (Allianz Group, 2014).

In some cases, insurance policies would seem to be potentially valuable especially for savvy customers who understands the intricacies of insurance and know how to manage their money and a business simultaneously. However, the idea of selling insurance policies also raises serious questions: How are the illiterate to understand complex insurance policies that highly educated people sometimes find opaque? More fundamentally, why would a person living hand-to-mouth forgo basic human needs to pay insurance premiums to mitigate against tragedy? The poor live with tragedy daily with or without microinsurance.

Another question to consider is whether microinsurance will be voluntary or involuntary for customers who obtain microloans. The Banco del Trabajo in Peru that offers credit cards, consumer loans, remittances, and mortgages to 1.4 million clients also requires its 78,000 microcredit clients to purchase life insurance to cover the loans in the event that the debtor dies. Automatic bundling of insurance with microloans is becoming more commonplace (Allianz SE & GIZ, 2013). Can people with low-incomes afford to pay principal, interest, plus mandatory insurance on a loan? If so, what is the advantage of using microfinance institutions instead of traditional predatory lenders? Microinsurance may really be insurance for macrofinance institutions, rather than for the poor.

Insurance for borrowers could be beneficial per se but not as it is tied to the new macrofinance model, which shifts the focus of socioeconomic development from helping an individual in need to seeing the poor as customers. Global financiers are significantly shaping international aid by moving into the development territory through macro-finance programs.

Local to Transnational Stakeholders

A second fundamental difference between traditional microfinance and the newer macrofinance model is the locus of beneficiaries. Microfinance has its roots in serving the local community. Successful microfinance programs operate within a specific village, hire local staff, and bank locally. Any profits are re-invested into the local community as a public benefit. Microfinance programs serve the program participants who are considered to be the clients.

In stark contrast, macrofinance serves a global constituency of investors that includes private foundations, private equity firms, investment houses, pension funds, and commercial banks. Investors do not actually run the programs: they give seed capital to local providers responsible for finding clients and executing lending activities. Profits are distributed to shareholders wherever they may live, which is not likely to be in the poorest countries. The clients of macrofinance programs are the financial investors, not the poor who seek small loans to start microenterprises.
Grounded in the reality of the local people, traditional microfinance organizations set themselves up with a social purpose in mind of helping to alleviate poverty. This is the primary concern built into microfinance institutions’ mission, operations, and governing documents. Large financial firms interested in microfinance are not in the business of poverty alleviation; they are in the business of selling financial products and maximizing returns to shareholders.

Macrofinance investors are also not social entrepreneurs; they are business entrepreneurs. The process of creating a microfinance program that fosters social entrepreneurship is more complicated than simply selling financial products to people who are unbanked. Success requires a strong presence on-the-ground coupled with deep knowledge of a people and its culture. Traditional microfinance is grounded in the local economy; the newer macrofinance is grounded in global capitalism, which has no home.

Empowerment to Profit

A third key difference between micro- and macrofinance is the former’s coupling of monetary and non-monetary outcomes to produce positive social outcomes, whereas, macrofinance programs are focused on profit despite the socio-economic development rhetoric. Commercial entities are very clear in their interest in working with the poor

as a means of generating profits by finding new customers around the globe. In contrast, locally-based microfinance groups focus on how money can help empower people through education, training, community organizing, and small business development.

Although the initial focus of microfinance was women's development, this has shifted as today only 73 percent of borrowers are women, far below the 97 percent at the start of the Grameen Bank (Women's World Banking, 2013). As large commercial entities enter the microfinance arena, the percentage of women borrowers is dropping despite a consensus that compared to men: (a) women are better credit risks, (b) funds given to women are more likely to be used for poverty reduction, improved family living conditions and children's education, and (c) women need smaller loan amounts to achieve higher profitability.

Profit, not empowerment, is the focus of macrofinance programs. In order to make microcredit profitable for investors, increasing economies of scale are necessary. *Harvard Business Review* provides advice on ways that nonprofit start-ups could grow into large-scale successful businesses: "Why do effective business start-ups grow into large, successful corporations while their nonprofit counterparts struggle to achieve national scale? We believe that a lack of development in the mechanisms and institutions that channel information and money between donors and nonprofits is to blame. The good news, though, is that a new generation of charitable foundations and intermediaries is changing the game by measuring the social impact of donations and offering ways to funnel dollars to the most-effective nonprofits" (Kaplan and Grossman, 2010).

The aim is to sculpt nonprofits in the image of for-profits while leveraging the microfinance needs of local communities and moving away from the goal of empowering women with low-incomes.

The above three shifts—turning persons into customers, focusing on global not local stakeholders, and valuing profits over empowerment—characterize macrofinance portfolios today in contrast to traditional microfinance. However, the distinction between these two models is not always made clear.

MACROFINANCE PLAYERS

Macrofinance activities are referred to variously as social investing, inclusive finance, and impact-first investing. The idea is marketed as distinct from standard debt and equity investments in that macrofinance investments are specifically targeted to emerging or growth nations with large numbers of people with very low incomes. Sometimes these new investment vehicles are sold to institutional and retail investors who have a desire to be socially responsible with their money. The problem, however, is that most investors do not understand the difference between what they associate with microfinance programs and what the new macrofinance initiatives are all about.
To further confuse matters, some long-standing microfinance nonprofit entities are changing their business model to appeal to big donors. One example is FINCA International, a microcredit nonprofit with programs in 22 countries, staffed by more than 12,000 employees, providing loans to 1.7 million clients as part of an $877 million loan portfolio with a 98.2% on time repayment rate over its 25-year history (FINCA, 2014).

To appease donors, in 2010 FINCA International, created FINCA Microfinance Holding (FMH), a for-profit limited liability entity with an initial capital investment of $74 million from a mix of public and private investors. FMH enables FINCA International to receive funds from non-traditional sources, convert international FINCA subsidiaries into commercial for-profit businesses, and expand financial products to include mortgages, remittance transfers, and microinsurance. Thus far, the new strategy has been successful according to FINCA's Director of Transformations, Equity, and Mergers & Acquisitions, Chikako Kuno, who indicated that a second infusion of $74 million from investors in 2012 "will help fund the planned growth of our Subsidiaries around the world and enable our existing Subsidiaries in 22 countries to continue to transform into licensed deposit-taking institutions" (FINCA International, 2013). Microfinance holding companies, like FINCA's FMH, comprise an estimated 10% of the $22.1 billion microfinance investment business (Hummels and Röntgen, 2013).

FINCA is leveraging its prominence in the field of microcredit to rebrand itself as a for-profit macrofinance institution. As a result, FINCA has a new clientele: private investors who want to invest in the poor in return for above-market rates of return. No longer are poor women who come to FINCA for help starting small businesses the primary beneficiaries. Investors have become FINCA's primary clientele. In this sense, FINCA has morphed from being a traditional microfinance institutions into a macrofinance institution.

Another leader in small business investing that is rebranding itself is the faith-based cooperative society, Oikocredit Ecumenical Development Cooperative Society UA, founded at the World Council of Churches meeting in 1968. Currently, Oikocredit funds 806 partner organizations in 63 countries in Latin American, Asia, Central and Eastern Europe, and Africa. Eight-two percent of the funding is for microfinance programs, primarily loans. In order to expand operations and bring in non-member investment money, Oikocredit established the Oikocredit International Share Foundation to market to institutional investors that want to invest in social finance (Oikocredit, 2014).
ACCION International is also actively moving from microfinance to macrofinance. The organization was formed in 1961 in Venezuela by a group of community organizers who wanted to directly help the poor through local empowerment. In 1972, microenterprise development was introduced as one of their programs. Since then, ACCION has become one of the largest microfinance institutions around the globe offering grants, loans, loan guarantees, financial literacy education, and business training.

Like FINCA and Oikocredit, ACCION is building on its fifty-plus years of experience in economic development to expand its microfinance activities into the new arena of macrofinance. In 2012, Bamboo Finance, a Luxembourg-based private equity firm, bought the Boston-based ACCION Investment Fund for $105 million. Bamboo Finance's interest in financing the poor has expanded into Mongolia, Kyrgyzstan, India, and Southeast Asia given attractive returns on investment of up to 20% for their clients who include Dutch pension fund ABP, Abu Dhabi's Aabar Investments, and high net worth individuals and families. In an interview with the *Wall Street Journal*, Bamboo Finance's chief investment officer, Xavier Pierluca, estimated that "about $72 billion of assets around the world are being invested in microfinance right now, having grown significantly over the last 10 years" (Steger 2012). Pierluca believes that part of the growth is because some traditional microfinance institutions are accumulating assets of up to $1billion, making them "relevant for the large private-equity funds."

The once obscure, small scale microfinance industry has become a mature industry and one that invites commercial lenders and stakeholder-investors promoting a new macrofinance agenda.

TRENDS IN MACROFINANCE TECHNOLOGY

Given the novelty of macrofinance institutions and their investment vehicles, little empirical evidence exists on the success and/or failure to deliver value for investors. One of the well-publicized macrofinance entrants in 2007 was Microplace, founded by eBay. After investing $58 million in macrofinance activities over a seven-year period, the entity closed on January 14, 2014 because it had not "scaled to the widespread social impact we aspire to achieve through our business efforts" (Microplace, 2014). Macrofinance is in an experimental phase.

Tensions exist between traditional microfinance institutions and the newer macrofinance entrants viewed as competitors as evidenced in Bangladesh where microfinance originated. In 2006, after the Grameen Bank received the Nobel Prize and Dr. Yunus considered setting up a political party, the Bangladesh Bank forced Yunus to resign from his role of Managing Director of Grameen Bank. Yunus went on to establish Grameen America in 2008 to expand microfinance into the United States, beginning with a program in Queens, NY. In 2014, the government in Bangladesh further admonished Yunus by taking away the power of Grameen Bank to appoint its own board of directors and transferred authority to the central bank. All this transpired upon the release of a World Bank report on the empirical successes of Grameen Bank in Bangladesh, including significant increases in household spending, labor force participation, and school enrollment among participants (Khandker & Samad, 2014).

Tension stems from Dr. Yunus' questioning newer institutions that are turning into commercial enterprises and for-profit organizations, leading to abuses and other problems in the microfinance sector:

"Commercialisation has been a terrible wrong turn for microfinance, and it indicates a worrying "mission drift" in the motivation of those lending to the poor. Poverty should be eradicated, not seen as a money-making opportunity. There are serious practical problems with treating microcredit as an ordinary profit-maximising business. Instead of creating wholesale funds dedicated to lending money to microfinance institutions, as Bangladesh has done, these commercial organisations raise larger sums in volatile international financial markets, and then transmit financial risks to the poor.
Furthermore, it means that commercial microcredit institutions are subject to demands for ever-increasing profits, which can only come in the form of higher interest rates charged to the poor, defeating the very purpose of the loans

. . . The community needs to reaffirm the original definition of microcredit, abandon commercialization and turn back to serving the poor" (Yunus, 2011a).

The head of microfinance investments at Triodos Bank, Marilou van Golstein Brouwers, comments on the influx of private capital into these newer institutions, "If the mission … is only to maximize profit, then the social goal of helping people out of poverty is not reached. The problem is that a lot of the new private investors in the sector see it mainly as a way of making a lot of money" (Evans, 2010).

This new form of financing the poor, which I term macro-finance, portends significant changes. First is the definition of small or micro. Commercial banks define microfinance institutions as those with up to $50 million in deposits, well-beyond "micro" for a community living in poverty. Second, as the number of microcredit financiers increases, so does competition to gain a foot-hold into new geographic locations. As a result, macro-finance institutions are exerting tremendous pressure on front-line staff members to increase small loan volume because the for-profit business model imposes bottom line quarterly earnings growth to justify new loans. Hence, staff members must become earnest salespersons to keep their jobs. The focus on "small" business development is lost to the economies of scale business model.

Third, as new and larger financial players enter the microfinance arena, the supply of money available for microloans has rapidly increased to an estimated $22 to $72 billion. Some of the big investors are the Bill and Melinda Gates Foundation, Michael and Susan Dell Foundation, McGraw-Hill Publishers, Omidyar Networks, MasterCard, Visa, Deutsche Bank, Citi Microfinance, Moody's Analytics, and NYSE Euronet. Because of the scale of these funds risks crowding out quality, some lenders have reported a drop in loan portfolio quality and an erosion of lending discipline (Viada and Gaul, 2012; Evans 2010). These changes put pressure on microfinance institutions (MFIs) that were once small enough to ensure high-quality operations but now, according to the Microfinance CEO Working Group, "Due to high growth, the MFI's systems are overstretched, and the controls appropriate to a smaller MFI are no longer sufficient" (Firth, 2014:3).

Financiers are willing to provide financial capital for poverty programs, moreover, only with strict conditions (i.e., measurable impact) and often implicit guarantees. Such are the conditions on social impact bonds (SIB) and development impact bonds (DIB), which are recently-introduced experiments in funding aid programs with money from institutional and retail investors. To encourage such investments, governments in several countries actually guarantee that investors will earn a portion of the promised returns even if the goals are not met (U.S. National Advisory Board on Impact Investing, 2014).

The first social impact bond was issued in England in 2010, followed by the United States in 2012. In the U.S., one of the lead investors was Goldman Sachs, which secured a guarantee of repayment from Bloomberg Philanthropies in an effort to encourage other financiers to enter the new macro-finance arena (*The Economist*, 2013a). Development impact bonds are available through the U.S. Agency for International Development's (USAID) Development Credit Authority and the Overseas Private Investment Corporation as backstops for financiers entering the small business arena to insure investments are not lost if programs fail to deliver expected rates of return. This is a key feature of the new macro-finance model in need of careful research and analysis (UBS, 2014).

It is not clear what happens on the frontlines if the outcomes or impacts are not achieved. In traditional microfinance programs, funds would not necessarily be pulled if participants failed in their endeavors. Programs are equipped to deal with failure through counseling and training programs, which help participants learn from their mistakes and remained engaged in the effort. Commercial investors are not engaged in this way for the long-term.

Charity Washing

Global financiers and philanthropists are marketing new financial technologies associated with microcredit as a form of financial inclusion to help disadvantaged people become part of the global economy, to reduce poverty, to increase social inclusion, and to improve living conditions. United Nations Special Advocate for Inclusive Finance for Development, Queen Máxima, notes that "financial inclusion enables and accelerated progress toward numerous national priorities such as job creating, equitable growth, poverty alleviation, health, education, food security, and more" (UNSGSA, 2014).

However, new macro-finance activities are not necessarily charitable in nature as marketed. With returns exceeding 20 percent, Wall Street is now a macro-finance creditor because microfinance is profitable.
While macro-finance investment vehicles are new, the rhetoric is familiar and suggests that we may be seeing a new form of green washing or "charity washing" in the making. The risk is that new products will be mistaken as benevolence. Bankers and financiers are not in the business of charity. They are wed to the bottom line of generating sufficient profits to stay in business. At the opening of the gala of the United Nations *2005 International Year of Microcredit*, Secretary-General Kofi Annan reminded the group that "microfinance is not charity but a way to extend the same rights and services to low-income households that are available to everyone else" (UN, 2005).
In the ever expanding reach of global capitalism, macro-finance technology aims to align traditional microcredit for poor women with the mainstream market system.

SOLUTIONS TO CONSIDER

How does an institutional or retail investor know the difference between a traditional microfinance development program and a macro-finance investment program? One of the ways to mitigate against charity washing is for nonprofit entities to help guide the process of moving from small-scale microenterprise development to the new macro-finance model in order to maintain some basic premises to protect the poor (Flynn, 2007b). The temptation for nonprofits to partner with for-profit financial institutions is tempting. One of the goals of the Inter-American Development Bank's expansion into microfinance in 2006 was to assist "nonprofit lending organizations in transforming into for-profit, regulated financial institutions" (IDB, 2006). This idea is seductive at a time when U.S.-based nonprofit organizations are modeling themselves on for-profit entities to raise annual revenues generated from fee income, now estimated to be almost 50 percent (Salamon, 2012).

To maintain their unique role, nonprofit financial institutions may want to stay true to their charitable, tax-exempt purposes by serving as an intermediary between households and commercial institutions entering the macro-finance arena. Nonprofits could also work with governments that will be called upon to develop codes of conduct to regulate this rapidly growing financial sector, including establishing a microcredit regulatory authority in each country, capping the maximum interest rate on microloans, establishing provisioning policies that limit the number of loans per customer, overseeing money wires from transfer centers, and addressing taxation issues. The Dutch Platform for Inclusive Finance (NpM) is exploring mechanisms for fair taxation in jurisdictions with tax regimes that are favorable to macro-finance investors such as the Netherlands, Luxembourg and Mauritius (Hummels and Röntgen, 2013).

A closer examination of these newer forms of "banking the unbanked" apply equally to developing and developed countries, including the United States given that microfinance is no longer a Third World issue. In 2013, Walmart and American Express jointly introduced the Bluebird Card that offers direct deposit, ATM, bill payment, check-writing, and sub-savings account capabilities (*The Economist*, 2013b). Bluebird is a way for Walmart's Money Center™ to provide macro-financial services in the U.S. in the aftermath of a rejection by the Federal Deposit Insurance Corporation of its application to open an industrial bank in Utah to service its low-income customers (Barbaro, 2005; Walmart, 2014). Walmart is demonstrated how commercial institutions can meet the banking needs of the growing underclass in the United States. Will the next step be to issue small business loans to the poor who shop at Walmart?

As with every technology humans have adopted, the introduction of microfinance has no educational or community building component. It raises the concern that many customers may not be able to read the fine print on a microloan, credit card, or microinsurance policy applications. They may not know whether interest is being charged on the full amount of the loan or the declining balance. They may not understand compounded interest calculations and the impact on the bottom line. Moreover, individuals may not have the ability to re-negotiate with a bank, credit card company, or mortgage firm if they get in over their heads.

Evidence of microfinance in Latin America and India shows that some heavily indebted individuals who cannot meet interest rate payments in excess of 20 percent and/or who do not see a way out of their indebtedness have committed suicide (AP, 2012; Biswas, 2010). In the Arabian Gulf, migrant workers have succumb to over-borrowing through credit cards in order to send more money home. Many end up in Arab debtor's prison for non-payment. *The New York Times* describes the process as follows: "Technically, debtors go to jail for bouncing 'security checks' they must sign when accepting a card. If borrowers fail to pay, banks can deposit the checks for the

sum owed, and bouncing a check is a crime" (DeParle, 2011). The Philippine Embassy to the United Arab Emirates has made debt reduction a part of a financial literacy campaign to improve conditions for migrants.

In South Africa, the African Bank raised money from global financiers to meet demand from its 2.4 million customers for loans to buy middle-class lifestyles. Borrowers were disproportionately poor and put up no collateral. When one-third of the loans went into arrears, African Bank had to turn to the central bank for a bailout. *The Economist* (2014b) reports that "new unsecured loans nearly trebled from 30 billion [South African] rand in 2008 to 86 billion" in 2013, resulting in "almost half of all South Africans struggling to service their debts."

Such reports beg the question as to what kind of expectations society has for citizens who do not fare well economically or become financially vulnerable as a result of products that aim to "bank the unbanked" through macro-finance technologies. Societies have always assumed there was a group of people not able to make "correct" economic choices, and therefore, programs and policies were established to mitigate the damage created by poor decision making. It seems as if global capitalism treats all people as if they have the capacity to make "good" choices. But when people do not, who is held accountable, the lender or borrower? Perhaps we need to consider ways to hold to account institutions that prey on peoples' vulnerabilities as a way to protect citizens.

Over-indebtedness was the focus of a 2014 study conducted by the Microfinance CEO Working Group comprised of the leaders of eight dominant microfinance organizations: ACCION International, FINCA International, Freedom from Hunger, Grameen Foundation USA, Opportunity International, Pro Mujer, Vision Fund International, and Women's World Banking that have a collective reach of 250 microfinance institutions in 70 countries, representing over 40 million clients (Firth, 2014). The group's recommendations to mitigate against over-indebtedness include: mandatory reporting by MFIs, stronger borrower screening, avoidance of micro-competitive hotspots, and a limit on the number of loans per borrower. The report recognizes that non-payment may be due to other factors aside from over-indebtedness.

Another fundamental question is what will happen to all the small loans being issued under the guise of economic development? Will macro-finance products sold to the poor be bundled and re-sold as investment-grade bonds as we saw with mortgage-backed securities in the 2000s and today's rental-backed securities? Who will determine if a small loan is a worthy investment-grade asset? Given that crediting agencies failed the system leading up the Wall Street crash of 2007, how will oversight be different this time?

Green bonds provide some parallels to consider. These are debt instruments created to raise money for environmental investments. Two recent green bond trends parallel current macro-finance investments. In the first half of 2014: (a) green bonds reached $20 billion, twice as much as in all of 2013 and (b) half of all green bonds were issued by for-profit businesses, surpassing those sold by international agencies such as the World Bank for the first time. The rapid growth in size coupled with the commercialization of macro-finance funds parallel green funds. Thus, *The Economist's* warning, "Green bonds are a case study not only in how markets grow, but what needs to be done to keep them from imploding . . . The World Bank has helped by proposing eligibility criteria for projects financed by green bonds, deciding on a system for ring-fencing proceeds to ensure they go to the right things and sketching out what sort of reporting and compliance systems investors would need" (*The Economist* 2014a). This paper argues for the same type of scrutiny of social funds comprised of macro-finance technologies moving forward.

To address critical human needs through bourgeoning macro-finance technologies, all three sectors of the economy—business, nonprofits, and government—have a role to play as articulated by IMF Managing Director Christine Lagarde at the June 2014 International Forum for Financial Inclusion where she argued: "I see promoting financial inclusion as a collective responsibility. It is a task for both the government and the private sector. Each has a role to play—the private sector in harnessing technology and adapting to consumer needs, the government in creating an enabling environment for greater financial inclusion. Civil society also has a role to play, of course, by providing informal support and oversight" (Lagarde, 2014).

CONCLUSIONS

The entry of large commercial financial institutions and private foundations into the business of small-scale banking and credit services in growth markets is a game changer for economic development. The nascent interest builds upon a history of successful microenterprise development, defined as making small amounts of capital available to women with low-incomes to work their way out of poverty. Microenterprise began as a charitable effort to help people who live in poverty earn small sums of money to feed their children. Seed money is offered as either a non-collateralized loan (with below market interest rates) or a grant (that creates no future financial obligations).
The newer *macro-finance* technology, discussed in this paper, brings the commercial profit maximization/cost-minimization business model to poor communities by "banking the unbanked" and bringing new customers into the commercial banking system, initially through microloans but eventually as full-fledged commercial banking customers with credit cards and insurance policies. If indeed the goal of these new macro-finance institutions is to treat the poor as any other customer, why the guise of presenting the operations as charitable? Is it a means of making the donors feel good about helping the poor?

There appears to be a certain degree of naïveté among business people who enter the world of socio-economic development. Because of their financial successes in the world of high finance and transnational business, they assume they have the requisite knowledge to be successful as social workers. In reality, they lack an understanding of the day-to-day lives of people who live in poverty. Thus, business models superimposed in growth economies are at risk of failure. Can we find ways that wealthy people can both feel good about donating their money while respecting professionals in the field of socio-economic development? Perhaps this is a place for further discussion.
Microfinance is a powerful financial technology that provides access to capital, community, and training that transforms the quality of life of the poor. Based on the principles of small banking, microcredit taps into the fields of social work, economic development, and community organizing to meet basic human needs. In the years to come, macro-finance, which rebrands microfinance, may prove to be a sound technology for savvy individuals who need investment capital and other banking services. Others, however, who obtain easy money through credit may not do as well due to a lack of education or self-restraint as we saw with emerging market governments that received windfall loans in the 1990s and the millions of Americans who ended up with underwater mortgages in the 2000s. What will happen if large numbers of individuals become overextended on credit cards or default on mortgages? What cultural, legal, and social institutions will be needed to ensure that the newest financial technologies benefit society in the short and long term?

While the benefits of microfinance programs have been widely recognized, Dr. Yunus cautions that "There are always people eager to take advantage of the vulnerable. But credit programmes that seek to profit from the suffering of the poor should not be described as "microcredit," and investors who own such programmes should not be allowed to benefit from the trust that microcredit banks have rightly earned" (Yunus, 2011b). Perhaps by more accurately identifying commercial financiers as engaging in *macro-finance technology*, we can clarify any obfuscations moving forward for the benefit of borrowers, lenders, and investors.

REFERENCES

Allianz Group (2014). *Microinsurance annual report 2013*. Retrieved May 2014from: www.allianz.com.

Allianz SE & GIZ (2013). *Microinsurance definition and assessment tool v3.3: getting to grips with the details*. Retrieved April 2013from: www.allianz.com.

Associated Press (2012). Hundreds of suicides in india linked to microfinanceo organizations. *Associated Press*, February 24, 2012.

Barbaro, M. (2005). Bankers oppose wal-mart as rival. *The New York Times,* October 15, 2005.

Biswas, Soutik (2010). India's micro-finance suicide epidemic. *BBC News*, December 16, 2010.

Catholic Relief Services. (1979). Proposal for a program operations/technical assistance grant between catholic relief services united states catholic conference, inc. and the agency for international development for djibouti. *Catholic Relief Services*, September 19, 1979: New York.

Church, C. (2006). Protecting the poor: a microinsurance compendium. *The World Bank's Consultative Group to Assist the Poor (CGAP)*: Washington, DC.

Consultative Group to Assist the Poor (2014). *Queen Máxima at CGAP Annual Meeting*. Retrieved from http://www.cgap.org/news/queen-maxima-cgap-annual-meeting.

DeParle, J. (2011). In emirates, credit cards can lead to jail time along with the big bills. *The New York Times,* August 20, 2011: New York.

Economist (2014a). Green bonds: green grow the markets, o. *The Economist,* July 5, 2014.

Economist (2014b). South african banks: payday may day. 61. *The Economist,* 61August, 16, 2014.

Economist (2013a). Social impact bonds: commerce and conscience. *The Economist*, 71, February 23, 2013.

Economist (2013b). Finance and the american poor: Life on the edges of america's financial mainstream. *The Economist,* February 16, 2013.

Evans, Julian (2010). Microfinance's midlife crisis: companies that provide banking services in developing countries are attracting private investment. But is the industry losing sight of its mission to alleviate poverty? *Wall Street Journal,* March 1, 2010.

FDIC (2012). National survey of unbanked or underbanked households. *2011 FDIC:* Washington, DC.

FINCA International. (2013). Microfinance holding company LLC makes good globally on double bottom line – receives second round of investment. *FINCA*, November 21, 2013: Washington, DC.

Firth, Barry and Green, M. (2014). Over-indebtedness: A risk management approach. *Microfinance CEO Working Group*: Washington, DC.

Flynn, P. (2007a). Microfinance: The newest financial technology of the washington consensus. *Challenge: The Magazine of Economic Affairs,* March – April 2007.

Flynn, P. (2007b). Microfinance technology: Implications for nonprofit financial institutions. *Exempt Magazine*: Financial, Endowment & Asset Management for the Nation's Largest Nonprofits. G20, September 2009. *Financial Inclusion Action Plan*. Pittsburgh Summit.

Grameen Bank. Bank for the Poor. Retrieved October 1, 2014. www.grameen-info.org.

Hassan, Farhan. (2013). Barclays says no to remittance lifeline. *New Internationalist*, July 18, 2013. Retrieved from http://newint.org/blog/2013/07/18/barclays-remittance-money-transfer-somalia/.

Hilton Record (1968). New idea guards african preschoolers. *The Hilton Record*, May 31, 1968: Hilton, NY.

Hummels, H, Bol, Y. and Röntgen, A. (2013). Paying taxes to assist the poor? Balancing social and financial Interests. *NpM Platform for Inclusive Finance*. The Netherlands.

Inter-American Development Bank (2006). Building opportunity for the majority. *Inter-American Development Bank*: Washington, DC.

Kaplan, R.S. and Grossman, A.S. (2010). The emerging capital market for nonprofits. *The Harvard Business Review,* October 2010.

Khandker, S., & Samad, H. (2014). Dynamic effects of microcredit in bangladesh. *World Bank Policy Research Working Group, Paper 6821*: Washington, DC.

Lagarde, Christine. (2014, June 26). Empowerment through financial inclusion. *Address to the International Forum for Financial Inclusion.* Mexico.

McCarthy, C. (1986). Third world bank that lends a hand. *The Washington Post*, November 2, 1986. Microplace. Retrieved September 15, 2014. www.microplace.com.

Oikocredit Ecumenical Development Cooperative Society UA. (2014). *OEDCS, UA*. Retrieved September 15, 2014 from www.oikocredit.org.

Prahalad, C.K. (2004). *The Fortune at the Bottom of the Pyramid: Eradicating Poverty through Profits*. Wharton School Publishing: Philadelphia, PA..

Reed, Larry. (2014). Resilience. *State of the microcredits summit campaign report, 2014*. Washington, DC.

Rosenberg, R. & Gaul, S., Ford, W. and Tomilova, O. (2014). Microcredit interest rates and their determinants. *Mix Market,* 2014.

Salamon, Lester. M. (2012). *America's Nonprofit Sector: A Primer* (3rd ed.). New York: Foundation Center.

Steger, Isabella. (2012). Microfinance growing in attraction to private equity. *Wall Street Journal,* November 18, 2012.

UBS. (2014). Furthering the fight against poverty. *UBS E-News for Banks*, July 2014, Zurich, Switzerland.

UNSGSA (2014). Does china plan to back the yuan with gold and make it the primary global reserve currency. *United Nations Secretary General Special Advocate for Inclusive Finance for Development Report,* New York. Retrieved from www.unsgsa.org/index.php/download_file/view/322/167.

U.S. NABII (2014). Private capital public good: How smart federal policy can galvanize impact investing – and why it's urgent. *U.S. National Advisory Board on Impact Investing*, June 2014. Washington, DC.

Viada, L., & Gaul, S. (2012). The tipping point: Over indebtedness and investment in microfinance. *Microbanking Bulletin*, February, 2012.

Yunus, M. (2011a). Wrong turn for microcredit. *International Herald Tribune*, January 9, 2011.

Yunus, M. (2012, March). What is microcredit?. *Grameen Bank, Admin Comment*, March, 2012, Bangladesh. Retrieved from www.grameen-info.org.

Yunus, M. (2010). Creating a world without poverty: Social business and the future of capitalism. *PublicAffairs Convocation*, Missouri State University, 2010.

Women's World Banking. (2013). Gender performance indicators: How well are we serving women?, *Women's World Banking,* 2013. New York.

World Bank. (2013). Developing countries to receive over $410 billion in remittances in 2013, Says *World Bank*, October 2, 2013. Washington, DC.

Patrice Flynn, PhD is the Morrison Professor of International Studies with the Bolte School of Business at Mount St. Mary's University. Her research focuses on global capitalism, labor markets, and civil society.

THE FORTE CASE: LEARNING FROM A PONZI SCHEME

Kevin Flynn, West Chester University of Pennsylvania
Phyllis Belak, West Chester University of Pennsylvania
Glenn Soltis, West Chester University of Pennsylvania

ABSTRACT

In recent years, investors have lost billions of dollars resulting from a common fraud known as a ponzi scheme. Using a real-life ponzi scheme, we prepared a fraud case study that is designed to be a comprehensive assignment in a fraud examination or forensic accounting course. The case may be assigned to students after fraud in general, and ponzi schemes in particular, are covered in class. This case is relevant for two reasons: 1) it focuses on an actual Ponzi scam perpetrated in the Mid-Atlantic Region, and, 2) it comprehensively depicts the many aspects of a fraud scheme including: motivation, ethics, red flags, the clawback process, income tax implications, and strategies for future deterrence.

INTRODUCTION

In recent years, investors have lost billions of dollars resulting from a common fraud known as a ponzi scheme, which is a form of investment fraud characterized by the proffering of an investment opportunity promising a high return and minimal risk. The reality is that the perpetrator of the fraud is utilizing money received from new investors to provide returns to previous investors who request redemption. Typically, victims forfeit not only promised returns, but their principal investments as well.

Ponzi schemes are named after Charles Ponzi, an Italian immigrant who in 1920, started an investment company in Boston. Ponzi professed to be netting a fortune speculating in International Postage Coupons. Specifically, Ponzi publicized that his company bought Italian Postage Coupons, then redeemed them in the United States where the dollar was more valuable. Thus, Ponzi claimed to me making arbitrage-type profits on the difference in the exchange rates between Italy and the United States. Ponzi guaranteed investors a 50 percent return within 45 days, and a 100 percent return within 90 days. Although profits were not earned on postal speculation, Ponzi did deliver this promised return to early investors by distributing the investment dollars of later investors to early participants. Massachusetts regulators became suspicious and audited Ponzi's company. They soon realized that Ponzi was $7 million in debt. After publishing their findings, investors began to cash-out their investments, which created a run on Ponzi's company. About one year after starting his company, Ponzi's firm collapsed and investors lost millions. Ponzi was eventually jailed, but a scheme was named.

Bernie Madoff, the former chair of NASDAQ, perpetrated the largest Ponzi scheme in United States history. According to Madoff, his scheme began in the 1990's. He marketed a sophisticated investment strategy to his clients, promising favorable returns. The truth is that he was not actually investing in the market, but rather operating a Ponzi scheme. The scheme collapsed in 2008 when the world experienced an economic downturn. Madoff no longer had enough cash coming in from later investors to pay earlier investors. Prosecutors estimate the size of the fraud to be $64.8 billion dollars. Not only is it the largest Ponzi scheme in history, but it is also the largest accounting fraud in history.

Fallout from the Madoff case effected the uncovering of other Ponzi schemes. Joseph Forte, sometimes referred to as Mini Madoff, was originally a gym owner living in southeastern Pennsylvania. Forte apparently desired to live the high life, a life of luxury and wealth. So, in the mid-1990's, Forte began operating an investment firm, initially out of his basement. He became the general partner of Joseph Forte, L.P. an investment firm supposedly investing in options. Forte lured investors promising returns ranging from 18 percent to 38 percent. By 2008 when his scheme collapsed shortly after the Madoff scheme collapsed, Forte had defrauded investors, mostly in the Mid-Atlantic region, out of $80 million.

Using the facts from the Forte Ponzi scheme, we developed a case study that is designed to be used in a fraud or forensic accounting course. The case is comprehensive, focusing on the perpetrator, the crime, and the restorative justice to victims. The case analyzes the many aspects of a fraud scheme including: elements of fraud, accountant ethics, red flags, income tax implications, and the clawback process.

The remaining sections of this paper analyze the Forte Ponzi scheme; present the case study; and present solutions to the case study. Finally, conclusions are drawn after the case is tested with students.

FRAUD SCHEME ANALYSIS

I. Elements of Fraud

Before any fraud can be perpetrated, three elements must be present: financial pressure, opportunity, and rationalization. These three elements are said to be the three points on the fraud triangle. We analyze these three elements and discuss how they pertain to the Forte scheme.

a. Financial Pressure

Financial pressure involves the perceived pressure from a non-shareable financial problem that creates the motive for committing fraud. Forte's investment firm consistently lost money. Rather than admit failure, Forte apparently felt pressure to lie. He apparently felt pressure not to disappoint family and friends who had entrusted significant amounts of their wealth in his care. Finally, Forte apparently felt pressure to maintain his lavish lifestyle.

b. Opportunity

Opportunity is the perception that controls are weak, and that there is a minimal risk of getting caught. Forte had tremendous opportunity to commit fraud. He was a valued, visible, and trusted member of the community. He was a philanthropist who seemingly made large donations to local charities on a regular basis. Upon the collapse of his scheme, it was discovered that he was not donating his own money to charities, but rather the monies received from investors. Forte was also active in his church, and regularly coached youth sports teams. In addition to being trusted in his community, Forte was the Managing General Partner of his investment firm. In this capacity, he had sole control and responsibility for investment choices and partnership finances. Elementary internal control principles suggest that these two functions must be segregated. Finally, the firm's financial information was not audited by an independent CPA firm. As a result, Forte was able to provide fictitious information to the other partners.

c. Rationalization

Rationalization is the fraudster's attempt to justify the fraud while still maintaining that he/she is a good person. Forte rationalized that the money he earned was justified because he supported his family, and he donated to several local not-for-profit organizations. Forte convinced himself that his investment model would eventually be successful; he would recover earlier losses; and the investment firm would eventually be profitable. Forte rationalized that he was not a bad person, but a person who made some bad investment decisions. In fact at his trial after the collapse of the scheme, Forte contended that all along he intended to pay all his investors back for all their money invested. He appeared to delude himself into thinking that he was not stealing their money.

II. Accountant Ethics

Forte hired a local certified public accountant (CPA) to prepare (not audit) the investment firm's financial statements. The American Institute of Certified Public Accountants states in its Code of Conduct that a CPA shall:

- Maintain objectivity and integrity;
- Be free of conflicts of interest;
- Shall not knowingly misrepresent facts; and
- Shall not subordinate his/her judgment to others.

If the CPA knew that the information provided to him by Forte was fictitious, then the CPA violated his ethical responsibility. If the CPA did not know about the fraud, but had performed his responsibilities with due diligence, he should have discovered the fraud. The CPA appears to have violated the Code of Conduct and thus acted unethically. However, the CPA has not yet been criminally charged with any crime in this case.

III. Red Flags

Numerous red flags should have caused the CPA to be skeptical about Forte's firm. From 1995 – 2002, the CPA received 1099 forms that visibly appeared to be altered, supposedly sent to Forte from the partnership's brokerage firm, and then forwarded to the CPA by Forte. Beginning in 2003, the CPA did not receive 1099 forms at all from Forte. Forte had exclusive control of his partnership's banking and brokerage accounts. Forte's partnership consistently reported higher rates of return than competitors reported. Finally, compensation received by Forte in the form of a management fee and an incentive fee were tied to the partnership's performance.

IV. Income Tax Implications

Investors who lose money in a Ponzi scheme are entitled to take a theft loss deduction on their federal income tax return. The deduction is from adjusted gross income, and is not subject to any floors (10 percent, 2 percent, or $100). The amount of the loss deduction is computed as the amount of the taxpayer's adjusted basis, less any loss recovery. However, it could take investors years to recover anything. Therefore, in order to determine their adjusted basis amount, investors must multiply by one of two percentages: 95 percent if the victim does not pursue third party recovery or 75 percent if the victim pursues third party recovery. If recovery is eventually received, the investor must apply the tax benefit rule. This rule states that when a deduction taken one year is recovered in a later year, the recovery is included in income to the extent a benefit was previously derived.

V. The Clawback Process

A court appointed receiver seeks the recovery of payments made with fraudulent funds. Typically, this process involves recovering payments (both profits and principal) made to former investors who had already redeemed their investments. As part of a clawback arrangement, a previous investor who repays amounts that were previously recorded in income receives on his/her federal income tax return a deduction, a credit, or both. If a deduction is chosen, the deduction is classified as a non-theft investment loss and is limited to $3,000. The amount in excess of $3,000 is then recognized as a credit. Or, the investor may choose to recognize the entire amount as a credit. In Forte's case, this process not only involved recovering payments made to investors, but also involved recovering donations made to charitable organizations since Forte made those donations with fraudulent funds.

THE CASE

Part 1: The Offer

Assume you are now a highly respected and well compensated executive. Your student loans are paid back. You live a dream life complete with new car and comfortable residence. It is time to plan for the future. You heard from your friend Rob about a successful investment advisor, Joseph S. Forte, the general partner for Joseph Forte, L.P., a limited partnership which sells partnership interests to investors. Partner's investments are invested in an account which trades in security futures contracts. Rob says John Irwin, a Partner of Joseph Forte, L.P. and well-respected certified public accountant (CPA), has a dual role in the Forte firm. He recommends that the clients of his CPA firm, Jacqueline Associates, invest with Joe. He also prepares and mails quarterly and year end statements, detailing an individual's account balance and annual return. Rob enjoys exceptionally high annual returns ranging from 18 to 38 percent.[1] Last quarter, the fund reported assets of over $154 million and returned almost 19 percent to investors. Everyone knows Joe Forte. He is an alumnus of a local university, is married with four children, and is active in the community. He serves as a trustee and volunteer strength coach at a local college preparatory school. Rob tells you he often runs into Joe locally and that most of Joe's clients are friends or acquaintances. In addition, Rob states that Joe's clients are all happy customers.

Joe coaches youth football and has made substantial donations of cash and athletic equipment to several of the local schools. Rob's son played on Joe's football team for years in both middle school and high school. Rob highly recommends that you consider investing with Joe.

<u>Required</u>

1. Based on this information, would you invest in Joseph Forte, L.P.?

2. What additional information would you like to know before investing in Joseph Forte, L.P.?

Solutions

1. Based on this information, would you invest in Joseph Forte, L.P.?

Considering that this case is presented in a Fraud class it is unlikely students would immediately consider investing with Forte. The most obvious red flag that students should note is the partnership's history of exceptionally high returns. In addition, students should demand additional information to enable them to make an informed decision.

2. What additional information would you like to know before investing in Joseph Forte, L.P.?

The prudent investor would want additional background information on Forte, including the specifics of previous fund management experience and whether Forte is registered is registered with the U.S. Commodity Futures Trading Commission (CFTC) as a commodity pool operator. In addition, the prudent investor should carefully examine audited financial statements.

Research would indicate that Forte previously owned an unsuccessful business and a gym. He had little investment experience. [2] He is an unregistered commodity pool operator.[3] Also, the partnership was not audited.[4]

Part 2: The Facts

Joe Forte coached youth football, donated substantial time and money to not-for-profit organizations, and appeared to be an all-around good guy.

Joe Forte currently serves a 15 year sentence in prison, has an additional five years of supervised release, and is ordered to pay restitution of $34.9 million. He pleaded guilty in criminal court to money laundering, wire fraud, mail fraud, and bank fraud. He lied to investors about the return on their investment and the value of partnership assets. The reality is that Forte consistently lost money on his trades. He was successful at attracting new investors, so he used new investment dollars to pay back any older investors who wanted to withdraw from the fund. Forte operated the typical Ponzi scam from 1995 to 2008, victimizing over 100 individuals, primarily friends and acquaintances. Because he was unable to continue the scheme, he turned himself in to authorities in December of 2008. When news of the Bernie Madoff Ponzi scam erupted, it made current investors wary, and alerted potential investors to be cautious. Current investors began withdrawing funds and the previously constant stream of new investors dried up.[1]

Required

1. Why were so many investors fooled by Forte?

2. What factors may have motivated Forte to commit fraud? (Hint: Consider the three sides of the Fraud Triangle.)

3. Assess the ethical behavior and integrity of the CPA in this case. (Hint: Consider the CPA's Code of Ethics)

4. Consider that John Irwin is the chairman of the board at Hilltop School. The school had an endowment invested with Forte. What is the CPA's obligation to this organization?

5. In your opinion, how should the court enable victims of the Ponzi scam to recover some or all of their investment? Should investors be required to give back gains and/or principle? Should charities who received donations from Forte be required to return the donation?

Solutions

1. Why were so many investors fooled by Forte?

Based on investor reports of high returns and a growing asset valuation, word spread of Forte's investing expertise. Forte's target market consisted of friends and acquaintances, individuals who trusted him. Forte employed the services of a respected CPA thus adding credibility to his operation. He lived the "good life" and appeared successful while gaining the respect of others for donating time and money to several not-for-profit organizations.

2. What may have motivated Forte to commit fraud? (Hint: Consider the Fraud Triangle)

Motivation to commit fraud is examined by considering three key elements essential to fraud: perceived pressure, rationalization, and perceived opportunity.[5] These elements emerge in fraud literature as the fraud triangle. Perceived pressure from a non-shareable financial problem creates the motive for the crime. Opportunity is the perception that controls are weak and there is minimal risk of being caught. Finally, rationalization is the fraudster's attempt to justify the fraud while still maintaining that they are a good person[6].

All elements of the fraud triangle may be theoretically applied to the Forte case. He consistently lost money with his investment choices and rather than admit failure, he felt pressure to lie. His ego would not allow him to admit a third failed business. He felt pressure not to forsake family and friends who had entrusted assets in his care. He felt pressure to maintain his current lifestyle.

Forte had tremendous opportunity to commit fraud. He was valued and trusted in the community which made it easier to attract investors to Joseph Forte, L.P. As general partner of Joseph Forte, L.P., Forte had sole control and responsibility for investment choices and partnership finances. Forte provided financial information to Irwin who reported this fictitious information to the other partners. Irwin, a locally respected CPA, added creditability to the Forte operation. There were not sufficient internal controls in place. Irwin did not question operations and there was not an audit.

Forte rationalized that the money he earned was well spent supporting his family and several not-for profit organizations. According to personal statements, Forte rationalized that at some point his investment model would be successful and the partnership would earn a profit and recover early losses.[2] He rationalized that he was not a bad person but instead a person who had made some bad investment decisions.

3. Assess the ethical behavior and integrity of the CPA in this case.

The AICPA ET Section 102 on Integrity and Objectivity states: "In the performance of any professional service, a member shall maintain objectivity and integrity, shall be free of conflicts of interest, and shall not knowingly misrepresent facts or subordinate his or her judgment to others." [7]

If Irwin was aware that the financial information provided to him by Forte was fictitious, he violated rule 102. Furthermore, an objective CPA would not recommend investing in Joseph Forte, L.P. to clients of Jacqueline Associates.

4. Consider that John Irwin was the chairman of the board at Hilltop School. The school had an endowment invested with Forte.[8] What is the CPA's obligation to this organization?

Irwin, Forte's CPA, knew or certainly could have known about the fraud that Forte was perpetuating. As a board member, especially chairman, of the Hilltop School, Irwin had a fiduciary responsibility to this organization. Irwin did not fulfill this obligation of trust and did not act with objectivity. He neglected to perform due diligence.

5. In your opinion, how should the court enable victims of the Ponzi scam to recover some or all of their investment? Should investors be required to give back gains and/or principal? Should charities who received donations from Forte be required to return the donation?

Student opinion will be interesting. A complete response should address recoveries from Forte, his family, investors who withdrew their principal and some profit (net winners), and not-for-profit organizations.

Part 3: The Aftermath

Many individuals entrusted their life savings to Joe Forte. The victims' impact statements read at Forte's sentencing spoke of ruined lives, lost inheritances, healthcare concerns, and worthless retirement accounts. Adding to the victims' devastation was the fact that many considered Forte a trusted personal friend.

On March 30, 2009 the United States District Court for the Eastern District of Pennsylvania established a receivership taking jurisdiction and possession of the assets and records owned by Joe Forte and the limited partnership. The court states "The goal and purpose of the receivership is to assume control of, marshal, pursue, and preserve the Receivership assets with the objective of maximizing the recovery of defrauded investors and, to the extent that the assets recovered may be inadequate to make them whole, ensuring that the distribution of those assets is as just and equitable as practicable."[9]The court appointed Marion A. Hecht, CPA, CFE, CIRA, CFF, MBA as receiver, whose primary role is to locate all assets owned by Forte, and file claims to these assets on behalf of the receivership. The goal of the receiver is to maximize recoveries for fraud victims. If enough assets are not located to pay back all investors in the entirety, then an equitable system of distribution must be determined. This system must be approved by the Court.[9]

Ultimately investor losses should be shared equitably among all investors. The receiver and her team determine if each investor is a net winner or a net loser. Net winners withdrew their principal and some profit; while net losers withdrew less than their principal. Investors may fall into one of the following groups:

(1) Net winners – subject to clawback of net winnings only;
(2) Net winners – subject to clawback of net winnings plus some or all principal;
(3) Net losers – subject to clawback of some or all principal;
(4) Net losers – not subject to clawback of any principal but claims will be denied in whole or in part; and
(5) Net losers - claims allowed. [10]

Clawback includes dollars previously distributed fraudulently to investors that are now required to be returned to the receivership. Cashing out of a Ponzi scheme early does not guarantee that one will keep their profits. Clawbacks also relate to fraudulent gifts to individuals and charities.

Investors who have lost money must submit a claim to the receivership. For the Forte case, Hecht has indicated she will determine investor payouts based on qualitative and quantitative analyses. A qualitative analysis will focus on an investor's state of mind, specifically considering whether the investor was a culpable participant in the scheme or on inquiry notice. (Inquiry notice is the point at which an investor should have realized that a fraud is being committed.) Investors deemed culpable will not receive a distribution. If it is determined an investor is on inquiry notice, they will share equitably in distributions if they return withdrawals made after on inquiry notice or if a court approved agreement is made reflecting a recommended claim amount. Finally, investors not on inquiry notice will receive their equitable share of distributions. [1]

In the Forte case, Hecht will use a hybrid method of distribution. She will distribute 50 percent of the assets using the Rising Tide Method, and the remainder using the Net Investment Method.[11] The Rising Tide Method focuses on percentages lost. The method requires that assets are first distributed to investors who lost the highest percentage of their investment until investment percentage losses are even for all. The Net Investment Method focuses on total dollars lost. Under this method:

Distributions = Investor Loss X (Total Distribution to all investors/Total Loss to all investors)

Also consider the plight of the not-for-profit organizations that received Ponzi scam dollars in the form of Joe Forte contributions. The receivership is demanding that these donations be returned.

Required

1. Comment on the fairness of the role of the receiver.

2. Comment on the potential income tax implications for victims of the scam.

3. The Thomas D. and Elizabeth S. Hooper Foundation is a victim of the Forte scam. The Foundation made donations to the Hilltop School as well as other non-profit organizations. As a result, who else automatically becomes a victim?

4. Who may have been on inquiry notice and alerted by red flags while the Forte fraud was in process?

Solutions

1. Comment on the fairness of the role of the receiver.

The receiver is utilizing both qualitative and quantitative methods to determine distributions. Although qualitative methods are difficult to implement, it is critical that they be considered to obtain a fair distribution.

The Rising Tide Method favors investors with larger percentage losses. The Net Investment Method favors investors with larger dollar losses. The court ruled, "because more than half of the losses in absolute dollars were incurred by a handful of investors, while about half the losing investors lost over half of their investment, employing both methodologies is fairest". [12]

2. Comment on the potential income tax implications for victims of the scam.

Investors who lose money in a Ponzi scheme are entitled to take a theft loss deduction on their federal income tax return. The Internal Revenue Service (IRS) allows a victim to take an itemized deduction in the year the loss is discovered. An individual who invested in Joseph Forte, L.P. firm, did so with the intent to make a profit. Therefore, the theft loss amount is not subject to the personal loss limitations [$100 floor and 10 percent of adjusted gross income (AGI) floor] that apply to the theft loss of personal use property. In addition, the theft loss amount is not subject to the 2 percent of AGI floor or the overall limit on itemized deductions that other miscellaneous itemized deductions are subject to. The amount of the loss deduction is taxpayer's adjusted basis in the account, which is the invested amount, plus any amount included in gross income that was reinvested into the fund, less amounts withdrawn. The loss deduction is then further reduced by amounts that can be reasonably expected to be recovered[13].

Determining the amount that is expected to be recovered can be difficult to do in the year of discovery. Often it takes years to reach a settlement. Thus in the year of discovery, the IRS allows victims of a Ponzi scheme to deduct either the adjusted basis amount multiplied by 95 percent if the victim does not intend to pursue third-party recovery, or the adjusted basis amount multiplied by 75 percent if the victim intends to pursue third-party recovery. This amount must be reduced by any actual or potential insurance recovery.[14]

The situation gets interesting if a victim realizes a recovery in a later year. If a loss that is deducted in one year is recovered in a later year, then the taxpayer uses the tax benefit rule to compute the amount included in income in the year of recovery. The tax benefit rule states that the amount included in income equals the benefit derived by taking the deduction in the previous year. In addition, if less than expected is recovered in a later year, then the victim would have an additional deduction in the later year.[13]

In a Ponzi scheme, all the investors typically lose, even the investors who recovered their investments before the Ponzi scheme was discovered. Often, a bankruptcy trustee or receiver will seek the recovery of investments and profits paid to investors who had already redeemed their investments. Recovering from a previous investor is known as a clawback. A previous investor who repays amounts as part of a clawback arrangement receives a deduction, a credit, or both. Amounts that were previously recorded in income and then repaid can be deducted as a non-theft investment loss up to $3,000. Those amounts in excess of $3,000 are then recognized as a tax credit under IRC § 1341. Or, the investor may choose to recognize the entire amount as a § 1341 credit[15]

3. Thomas D. and Elizabeth S. Hooper Foundation are victims of Forte. As a result who else automatically becomes a victim?

The not-for-profit organizations that received donations from the foundation are also victims of Forte. These donations are considered by the courts to be fraudulent transfers and/or unjust enrichment, and as such are subject to clawback.

4. Who may have been considered on "inquiry notice" and alerted by "red flags" while the Forte fraud was in process?

The Securities and Exchange Commission has provided to the Court a "list of facts constituting inquiry notice with respect to each investor":[16]

a. Those investors who performed accounting or other functions for Joe Forte, L.P. (the "Partnership") and, in that capacity, had access to and knowledge of books and records, the trading methodology and its likely returns, and/or the operation of the partnership;

b. Investors to whom deficiencies in the operation of the Partnership were communicated in the context of raising questions or concerns about the investment;

c. Investors who had knowledge of financial difficulties of the Partnership, such as repeated bouncing of checks, the repeated failure of the Partnership to honor request(s) for redemption, and active, unrelenting solicitation of investments;

d. Investors with a good understanding of the operation of the futures market and with knowledge of Forte's claimed investment strategy, and who thus had reason to question the claimed rates of return, the consistency of those returns, or otherwise see inconsistencies in Forte's investment claims;

e. Investors aware of significant irregularities in disseminated documents, such as quarterly statements, including repeated errors in account balances, returns, and/or recorded transactions;

f. Investors who suddenly made large, unexplained withdrawals of all or most of their principal, and, based on discovery, appear to have been aware of information or persistent rumors that raised concerns about the Partnership.

Part 4: Red flags

According to the Securities and Exchange Commission [4], John Irwin ignored several red flags associated with the falsified financial information provided by Forte, including:

1. Receipt of 1099 forms that visibly appeared altered, supposedly sent to Forte from the partnership's brokerage firm, then forwarded to Irwin by Forte from 1995-2002. No receipt of the 1099's from Forte beginning in 2003.

2. Exclusive control by Forte of the partnership's banking and brokerage accounts.

3. Consistently high rates of return reported by Forte.

4. Compensation received by Forte in the form of a management fee and an incentive fee that were tied to the partnership's performance.

<u>Required</u>

1. How should Irwin have responded to the aforementioned red flags?

Solution

1. How should Irwin have responded to the aforementioned red flags?

Irwin is a well-trained and experienced CPA who had the respect and trust of the community. Upon receipt of questionable 1099 forms from Forte, Irwin should have requested that forms be sent directly from Forte's brokerage firm to him. He should have made a similar request in 2003 when he did not receive the forms.

As a CPA, Irwin should have known that Forte's exclusive control of banking and brokerage accounts provided substantial opportunity for fraud. In addition, Irwin should have been skeptical of the high rates of return reported by Forte, and should have considered that Forte's compensation package was motivation for Forte to inflate his numbers.

Irwin was motivated to ignore the red flags of the Forte Ponzi scam because Irwin and his firm received over $5 million in gains and fees from Forte.[4]

Part 5: Lessons Learned

Charles Ponzi perpetrated his scam in the early 1900's. Although Ponzi scams are named after Charles, he was not the first to perpetrate this type of fraud. Unfortunately, he also was not the last.

Required

1. How do we deter the perpetrating of Ponzi scams?

Solutions

1. How do we deter the perpetrating of Ponzi scams?

Education is the key to deterring future Ponzi schemes. CPA's and Financial Advisers must inform clients:

a. If it sounds too good to be true, it probably is. Beware of investment opportunities promising a high return with minimal risk or a history of consistent returns as the economy is changing.

b. Don't select an investment adviser based on familiarity. Affinity Fraud is fraud which targets individuals with shared ethnicity, religious beliefs, or another mutual factor. The fraudster targets members of a particular group, identifies himself as part of the group, and exploits the trust within the group.

c. Do not make impulsive investment decisions. Perform due diligence. Verify if investments are registered with the SEC or state regulators and if advisers are licensed and firms registered. Finally, check if the Financial Industry Regulatory Authority (FINRA), the SEC or state security regulators have taken disciplinary actions against your seller.

d. Investor account statements should be generated and mailed from the investment custodian and not your adviser.

d. Check for an audit.

The general public, particularly the elderly, must also be made aware of the aforementioned recommendations.

CONCLUSION

The case was tested with students once, and currently is in the process of being tested a second time. Students have found the case to be interesting and beneficial. They particularly find clawbacks to be fascinating. They are amazed that charitable organizations are forced to return donations.

REFERENCES

AICPA. Integrity and Objectivity Rule, Retrieved from http://pub.aicpa.org/codeofconduct/Ethics.aspx #4293967589.

Brubaker, H. (2009, December 30). A rough test Hill Top School took a hard but survivable fiscal hit as the victimof a supposed friend: Crooked investment counselor Joseph S. Forte. *Philadelphia Inquirer*. Retrieved November 16, 2014, from http://articles.philly.com/2009-12-30/business/25270778_1_investment-fraud-endowment-board-member.

Commodity Futures Trading Commission v. Joseph S. Forte, No 09-64, United States District Court for the Eastern District of Pennsylvania, 2009.

Cressey, D. R. (1950). The criminal violation of financial trust. *American Sociological Review*, *15*(6), 738-743.

Dale, M. (2009, November 24). Update: Broomall man gets 15 years in $20.5 million Ponzi scheme. *The Delaware County Daily Times*.

Dorminey, J., Fleming, A., Kranacher, M., & Riley Jr., R. A. (2012). The evolution of fraud theory. *Issues in Accounting Education*, *27*(2), 555-579.

IRS Revenue Ruling 2009-9.

IRS Revenue Procedure 2009-20.

IRS "FAQs Related to Ponzi Scenarios for Clawback Treatment", printed 8/14/2013.

Securities and Exchange Commission v. Joseph S. Forte and Joseph Forte,L.P.; Commodity Futures Trading Commission v. Joseph S. Forte (2009, March 30). Order appointing a receiver.

Securities and Exchange Commission v. Joseph S. Forte and Joseph Forte,L.P.; Commodity Futures Trading Commission v. Joseph S. Forte (2010), Submission of the Securities and Exchange commission to the court pursuant to order dated March *16*, 2010, p2-3.

Securities and Exchange Commission v. John N. Irwin, CPA and Jacklin Associates, Inc.,No11-cu-4429,United States District Court for the Eastern District of Pennsylvania, 2011.

Securities and Exchange Commission v. Joseph S. Forte and Joseph Forte,L.P.; Commodity Futures Trading Commission v. Joseph S. Forte (2012, May 16). Order setting a claims bar date, establishing claims resolution procedures, and approving distribution methodology.

Securities and Exchange Commission v. Joseph S. Forte and Joseph Forte,L.P.; Commodity Futures Trading Commission v. Joseph S. Forte (2012, May 16). Memorandum.

Securities and Exchange Commission v. Joseph S. Forte and Joseph Forte,L.P.; Commodity Futures Trading Commission v. Joseph S. Forte (2013, September 3). Ninth report of Marion A. Hecht, court-appointed receiver for Joseph S. Forte and Joseph Forte, L.P.

Securities and Exchange Commission v. Joseph S. Forte and Joseph Forte,L.P.; Commodity Futures Trading Commission v. Joseph S. Forte (2014, September 3). Eleventh report of Marion A. Hecht, court-appointed receiver for Joseph S. Forte and Joseph Forte, L.P.

Kevin Flynn, PhD, CPA is an Associate Professor of Accounting at West Chester University of Pennsylvania. He teaches Federal Income Taxation and Governmental & Not-For-Profit Accounting. His research interests include individual federal income taxation.

Phyllis Belak, MBA, CPA, CFE is an accounting professor at West Chester University of Pennsylvania. She primarily teaches not-for-profit and governmental accounting, and fraud examination for managers. Her research interests include individual income taxation and fraud.

Glenn Soltis, MBA, CPA, is an accounting professor at West Chester University of Pennsylvania. He teaches numerous accounting courses including financial accounting and international accounting. His research interests include financial accounting.

FOOTNOTES

[1] Securities and Exchange Commission v. Joseph S. Forte and Joseph Forte,L.P.; Commodity Futures Trading Commission v. Joseph S. Forte (2014, September 3). Eleventh report of Marion A. Hecht, court-appointed receiver for Joseph S. Forte and Joseph Forte, L.P.

[2] Dale, M. (2009, November 24). Update: Broomall man gets 15 years in $20.5 million Ponzi scheme. *The Delaware County Daily Times*.

[3]Commodity Futures Trading Commission v. Joseph S. Forte, No 09-64, United States District Court for the Eastern District of Pennsylvania, 2009.

[4]Securities and Exchange Commission v. John N. Irwin, CPA and Jacklin Associates, Inc.,No11-cu-4429,United States District Court for the Eastern District of Pennsylvania, 2011.

[5]Cressey, D. R. (1950). The criminal violation of financial trust. *American Sociological Review*, *15*(6), 738-743.

[6]Dorminey, J., Fleming, A., Kranacher, M., & Riley Jr., R. A. (2012). The evolution of fraud theory. *Issues in Accounting Education*, *27*(2), 555-579.

[7]AICPA Integrity and Objectivity Rule, from http://pub.aicpa.org/codeofconduct/Ethics.aspx#4293967589.

[8] Brubaker, H. (2009, December 30). A ROUGH TEST Hill Top School took a hard but survivable fiscal hit as the victim of a supposed friend: Crooked investment counselor Joseph S. Forte (at right). *Philadelphia Inquirer*. Retrieved November 16, 2014, from http://articles.philly.com/2009-12-30/business/25270778_1_investment-fraud-endowment-board-member.

[9] Securities and Exchange Commission v. Joseph S. Forte and Joseph Forte,L.P.; Commodity Futures Trading Commission v. Joseph S. Forte (2009, March 30). Order appointing a receiver.

[10] Securities and Exchange Commission v. Joseph S. Forte and Joseph Forte,L.P.; Commodity Futures Trading Commission v. Joseph S. Forte (2013, September 3). Ninth report of Marion A. Hecht, court-appointed receiver for Joseph S. Forte and Joseph Forte, L.P.

[11] Securities and Exchange Commission v. Joseph S. Forte and Joseph Forte,L.P.; Commodity Futures Trading Commission v. Joseph S. Forte (2012, May 16). Order setting a claims bar date, establishing claims resolution procedures, and approving distribution methodology.

[12] Securities and Exchange Commission v. Joseph S. Forte and Joseph Forte,L.P.; Commodity Futures Trading Commission v. Joseph S. Forte (2012, May 16). Memorandum.

[13]IRS Revenue Ruling 2009-9.

[14]IRS Revenue Procedure 2009-20.

[15]IRS "FAQs Related to Ponzi Scenarios for Clawback Treatment", printed 8/14/2013.

[16] Securities and Exchange Commission v. Joseph S. Forte and Joseph Forte,L.P.; Commodity Futures Trading Commission v. Joseph S. Forte (2010), Submission of the Securities and Exchange commission to the court pursuant to order dated March 16, 2010, p2-3.

A STUDY OF THE FAN MOTIVES FOR VARYING LEVELS OF TEAM IDENTITY AND TEAM LOYALTY OF COLLEGE FOOTBALL FANS

David Gargone, Misericordia University

ABSTRACT

Fan motives, factors that influence a person's decision to attend a sporting event, affect sport consumption at both the amateur and professional levels. This study identified the fan motives, selected from the Sport Interest Inventory (SII), most influential on college football fans and more specifically examined the effects on fan motive prevalence of seven variables: team identity, team loyalty, team affiliation, conference affiliation, household income, age, and level of education. All seven variables exhibited a statistically significant effect, at the $p < 0.001$ level, on a majority of the 17 fan motives considered, with team loyalty exhibiting a statistically significant effect ($p < 0.001$) on all 17 motives. In general, higher levels of team identity and team loyalty were associated with greater preference for fan motives. Across all participants, *excitement*, *drama*, *sport knowledge*, and *interest in team* were identified as the most common college football fan motives; *interest in players*, *bonding with family*, *interest in sport*, and *escape* were identified as the least common motives.

INTRODUCTION

The popularity of college football has increased in recent years, making it more important for college football marketers to understand the factors involved in building and maintaining a loyal fan base. Not only do loyal fans spend more money in support of their respective teams than non-loyal fans, they are also more likely to expend effort recruiting new fans. Expansion of a team's fan base can result in greater media coverage, larger corporate sponsors, and the negotiation of more lucrative broadcasting packages.

Fan Motives

Early work by Wann (1995) established the Sport Fan Motivation Scale (SFMS), comprised of eight fan motives that prompt sport consumption: *family needs*, *group affiliation*, *aesthetic qualities*, *escape*, *self-esteem*, *entertainment*, *economic factors*, and *eustress*. Shortly thereafter, Milne and McDonald (1999) developed the Motivations of the Sport Consumer (MSC) scale, which identified a total of 12 fan motives, three included in the SFMS and nine not previously identified.

Limitations of the SFMS and MSC scale led Trail and James (2001) to propose the Motivation Scale for Sport Consumption (MSSC), which offered a reduction, to nine, in the total number of fan motives. Concurrent work by Funk, Mahony, Nakazawa, and Hirawaka (2001) established the Sport Interest Inventory (SII), which originally contained 10 variables but underwent two major revisions (Funk, Mahony, & Ridinger, 2002; Funk, Ridinger, & Moorman, 2003), each resulting in the addition of four motives, for a total of 18 fan motives. Because *supporting women's participation* is among those 18 but is not relevant to a study of major college football, only the remaining 17 fan motives were considered in this study: *bonding with friends*, *socialization*, *customer service*, *vicarious achievement*, *wholesome entertainment*, *drama*, *interest in players*, *bonding*, *interest in sport*, *entertainment value*, *aesthetics*, *escape*, *community support*, *sport knowledge*, *excitement*, *interest in team*, and *role model*.

Team Identity and Team Loyalty

From purchasing more expensive tickets to buying more team merchandise, fans who identify with a team (i.e. acknowledge some level of emotional attachment to that team) have been associated with greater sport consumption than fans who do not (Wann, Drewer, & Royalty, 1999; Trail, Fink, & Anderson, 2000; Fink, Trail, & Anderson, 2002). The reliability of team identity as a predictor of sport consumption has sparked studies of the psychological factors associated with team identity (Fink et al., 2002) and the relationships between team identity and other types of social group identity (Heere & James, 2007a, 2007b; Pons, Laroche, Nyeck, & Perrault, 2001; Hickman, Lawrence, & Ward, 2005).

Several attempts have been made to model fan progression from team identity to team loyalty. Funk and James (2001) proposed, via the Psychological Continuum Model (PCM), a four-stage progression, later revising this model

(2006) to account for the specific inputs, processes, and outputs involved in each stage. Funk and James are additionally responsible for the development of the Fan Attitude Network (FAN) model (2004), which suggests that the progression from team identity to team loyalty largely depends on the evolution of a fan's attitude toward that team. Heere and James (2007b) later devised the Team*ID scale, a six-dimensional description of the processes involved in the development of both team identity and team loyalty.

Mahony, Madrigal, and Howard (2000) made the first attempt at systematically quantifying team loyalty by creating the Psychological Commitment to Team (PCT) scale, which, like the FAN model, accounted only for attitudinal indications of team loyalty, ignoring the role of behavioral signs. Additional research by Gladden and Funk (2001) was also limited to fan attitudes. Iwasaki and Havitz (2004) defined team loyalty in terms of five behavioral variables: duration, proportion, frequency, intensity, and probability of brand use. Scremin (2008) combined the attitudinal metrics of Gladden and Funk with the behavioral indicators of Iwasaki and Havitz and determined that the development of team identity may serve as a transitional stage between the fulfillment of fan motives and the engenderment of team loyalty.

METHODOLOGY

The purpose of this research was to study the fan motives at varying levels of team identity and team loyalty of fans of selected college football teams. Additionally, the researcher attempted to identify differences in fan motives based on selected demographic variables, different teams, and collegiate conferences.

Participants of this study were solicited via ten randomly selected college football team fan pages on the social networking Web site *Facebook*. All participants were 18 years of age or older and had attended a college football game during the five calendar years prior to the study. Participants completed a survey, built and hosted on the Web site *Survey Gizmo*, consisting of approximately 100 questions compiled from the Sport Interest Inventory (SII) (Funk et al., 2003), Team*ID scale (Heere & James, 2007b), attitudinal team loyalty scale (Gladden & Funk, 2001), and behavioral team loyalty scale (Iwasaki & Havitz, 2004). Respondents' gender, age, ethnicity, marital status, household income, education level, favorite college football team, and favorite college football conference were also solicited.

A variety of statistical methods were used to analyze the results of the survey data collected. These methods included descriptive statistics (mean, standard deviation, percentage, frequency) and multivariate inferential statistics (MANOVA). Bonferroni post-hoc tests were run following the MANOVAs to identify specific variances to support the initial findings.

RESULTS

Of the 345 participants in the study, 61.4% were males (n=212) and 38.6% were females (n=133). Over half of the participants, 51.3%, fell in the 18 to 25 years of age category (n=177), and 81.4% of the participants were under the age of 45 (n=281). The majority of participants, 87.8%, reported being Caucasian (n=303). Nearly 75% of the participants reported having a yearly household income lower than $49,000 ($n$=251). Over half of the participants, 58.6%, reported being single (n=202) and two-thirds held at least an undergraduate college degree (n=231).

Survey questions concerning the 17 fan motives were presented in a 1-to-7 Likert scale format. Concerning which motives were most attractive to college football fans, Drama (M = 5.87, SD = 1.28) and Excitement (M = 5.87, SD = 1.30) tied for the highest average. Sport Knowledge (M = 5.54, SD = 1.55), Interest in Team (M = 5.54, SD = 1.55), and Bonding with Friends (M = 5.40, SD = 1.44) also had high averages (see Table 3 in the appendix). In contrast, Interest in Players (M = 3.19, SD = 1.68), Bonding with Family (M = 4.44, SD = 1.77), Escape (M = 4.47, SD = 1.65), and Interest in Sport (M = 4.47, SD = 1.84) exhibited the lowest scores. Participants rated nine motives on average as at least somewhat important ($M \geq 5$).

Levels of Team Identity and Team Loyalty

Participants' responses to team identity and team loyalty items were used to identify which level of identity and loyalty an individual had towards a team. Table 1 illustrates the division of participants among the three levels of team identity, Not Identified, Moderately Identified, and Highly Identified. Each level of identity consisted of

exactly one third (n=115) of the sample population. Participants with a maximum identity rating of 4.00 are considered part of the Not Identified (M = 3.27, SD = .62) group. Participants with an identity rating between 4.00 and 4.99 are located in the Moderately Identified (M =4.45, SD = .30) group. Participants scoring above 5.00 in identity form the Highly Identified (M = 5.73, SD = .500) group.

Table 1
Three Levels of Team Identity

Level of Identity	***n***	**Mean**	**Standard Deviation**	**Minimum**	**Maximum**
Not Identified	115	3.2729	.62107	1.76	3.99
Moderately Identified	115	4.4523	.29825	4.08	4.97
Highly Identified	115	5.7325	.49969	5.00	6.61
Total	345	4.4859	1.11883	1.76	6.61

Table 2 illustrates the division of participants among the three levels of team loyalty, Not Loyal, Moderately Loyal, and Highly Loyal. The groupings for loyalty are not evenly divided. Participants with a maximum loyalty rating of 4.00 are located in the Not Loyal (n= 150, M = 3.17, SD = .63) group. Participants with a loyalty rating between 4.00 and 4.99 are in the Moderately Loyal (n= 90, M = 4.45, SD = .298) group. Participants scoring above 5.00 in loyalty form the Highly Loyal (n= 105, M = 5.73, SD = .500) group.

Table 2
Three Levels of Team Loyalty

Levels of Loyalty	***n***	**Mean**	**Standard Deviation**	**Minimum**	**Maximum**
Not Loyal	150	3.1717	.63404	1.35	3.98
Moderately Loyal	90	4.5181	.31809	4.05	4.97
Highly Loyal	105	5.6357	.46948	5.00	6.43
Total	345	4.2728	1.17403	1.35	6.43

Effects of Team Identity

Team identity exhibited a statistically significant effect on 15 of the 17 fan motives at the $p < 0.001$ level, and on all 17 fan motives at the $p < 0.005$ level (see Table 4 in the appendix). For 16 motives, "highly identified" fans' preference was greater than "moderately identified" fans' by a statistically significant amount at the $p < 0.001$ level; for 13 motives, "moderately identified" fans' preference was greater than "not identified" fans' by a statistically significant amount at the $p < 0.001$ level. There was no statistically significant difference in preference for the motive *interest in players* between the "highly identified" and "not identified" groups, but "not identified" fans' preference for this motive was greater at the $p < 0.001$ significance level than that of "moderately identified" fans. All other statistically significant differences in preference, across the remaining 16 motives, reflected the opposite trend: higher levels of identification resulted in higher motive preference.

Effects of Team Loyalty

The effects of team loyalty on the prevalence of fan motives were even stronger than those of team identity: level of team loyalty had a statistically significant effect on all 17 motives at the $p < 0.001$ level (see Table 5 in the appendix). "Highly loyal" fans reported a greater preference at the $p < 0.001$ significance level than "moderately loyal" fans for 14 motives; "moderately loyal" fans also reported a greater preference at the $p < 0.001$ significance level than "not loyal" fans for 14 motives. All statistically significant differences in motive preference indicated a correlation between higher loyalty and higher preference, again with the exception of *interest in players*: "not loyal" fans exhibited the highest preference for this motive, followed by "moderately loyal fans" and then "highly loyal" fans.

DISCUSSION

This study provides further empirical evidence that a fan's level of identification with a particular team, and her level of loyalty to that team, may have an effect on the fan motives that most strongly influence her purchases in support of that team. Fink, Trail, and Anderson (2003) found that level of identification had a significant effect on only the fan motives *aesthetics*, *drama*, *vicarious achievement*, and *socialization*. Scremin's 2008 study of professional soccer points to stronger effects of identification and loyalty, suggesting that only *drama* does not increase in prevalence as a motive for more "highly identified" and "highly loyal" fans.

This study of college football suggests that with the exception of *interest in players*, the preference for all fan motives increases to some degree for more highly identified and more highly loyal fans. Although the preferences of "moderately identified" or "moderately loyal" fans were not always statistically distinguishable from those of fans at the extremes of each spectrum, "highly identified" and "highly loyal" fans did exhibit a significantly greater preference for all fan motives (other than *interest in players*) than "not identified" and "not loyal" fans.

CONCLUSION

The true value of this study lies in its examination of the factors that motivate college football fans to support their respective teams. The results suggest that college football fans are most strongly motivated by *drama*, *excitement*, *interest in team*, and *sport knowledge*. Because it is likely that fans of different sports (e.g. college basketball) or different levels (e.g. professional football) are motivated differently, further work is needed to identify fan motive prevalence for other fan bases.

More specifically, however, this study provides useful information about the differences in fan motive preference among fans of different levels of identification and loyalty. An examination of the results for *drama* and *excitement* serves as an important example. The mean scores for these two motives, across all respondents, were identical. However, among "highly identified" fans, the mean score for *excitement* is significantly higher than the mean score for *drama*, while the opposite is true for "not identified" fans. The same comparison between *drama* and *excitement* holds for "highly loyal" and "not loyal" fans.

Results of this study also provide useful data for marketers of the specific college football teams and conferences included. Fans of Wake Forest University's football team, for example, reported a significantly higher preference for *drama* than did fans of Louisiana State University's football team, and fans of the Big Ten Conference displayed a significantly greater affinity for *vicarious achievement* than did fans of the Big 12 Conference.

Further refinement of the definitions and measurement techniques used to assess fan motives, team identity, and team loyalty will only enhance the validity and reliability of results obtained in future research of this nature. The continual evolution of the business of competitive sports will require frequent re-evaluation of the relevance of each of the fan motives considered in this study. The concepts of team identity and team loyalty will also need further revision as more accurate assessments of consumer psychology and behavior become available.

REFERENCES

Fink, J. S., Trail, G. T., & Anderson, D. F. (2002). An examination of team identification: Which motives are most salient to its existence? *International Sport Journal, 11*, 195-207.

Funk, D. C., & James, J. (2001). The psychological continuum model: A conceptual framework for understanding an individual's psychological connection to sport. *Sport Management Review, 4*, 119-150.

Funk, D. C., & James, J. D. (2004). The fan attitude network (FAN) model: Exploring attitude formation and change among sport consumers. *Sport Management Review, 7*, 1-26.

Funk, D. C., & James, J. (2006). Consumer loyalty: The meaning of attachment in the development of sport team allegiance. *Journal of Sport Management, 20*, 189-217.

Funk, D. C., Mahony, D. F., Nakazawa, M., & Hirakawa, S. (2001). Development of the sports interest inventory (SII): Implications for measuring unique consumer motives at sporting events. *International Journal of Sports Marketing & Sponsorship, 3*, 291-316.

Funk, D. C., Mahony, D. F., & Ridinger, L. (2002). Characterizing consumer motivation as individual difference factors: Augmenting the sport interest inventory (SII) to explain level of spectator support. *Sport Marketing Quarterly, 11*, 33-43.

Funk, D. C., Ridinger, L. L., & Moorman, A. M. (2003). Understanding consumer support: Extending the sports interest inventory to examine individual differences among women's professional sport consumers. *Sport Management Review, 6*, 1-32.

Gladden, J. M., & Funk, D. C. (2001). Understanding brand loyalty in professional sports: examining the link between brand associations and brand loyalty. *International Journal of Sports Marketing and Sponsorship, 3*, 67-89.

Heere, B., & James, J. D. (2007a). Sports teams and their communities: Examining the influence of external group identities on team identity. *Journal of Sport Management, 21*, 319-337.

Heere, B., & James, J. D. (2007b). Stepping outside the lines: Developing a multi-dimensional team identity scale based on social identity theory. *Sport Management Review, 10*, 65-91.

Hickman, T. M., Lawrence, K. E., & Ward, J. C. (2005). A social identities perspective on the effects of corporate sport sponsorship on employees. *Sport Marketing Quarterly, 14*, 148-157.

Iwasaki, Y., & Havitz, M. E. (2004). Examining relationships between leisure involvement, psychological commitment and loyalty to a recreation agency. *Journal of Leisure Research, 36*, 45-72.

Mahony, D. F., Madrigal, R., & Howard, D. (2000). Using the psychological commitment to team (PCT) scale to segment sport consumers based on loyalty. *Sport Marketing Quarterly, 9*(1), 15-25.

Milne, G. R., & McDonald, M. A. (1999). *Sport Marketing: Managing the exchange process*. Sudbury, MA: Jones & Barlett Publishers.

Pons, F., Laroche, M., Nyeck, S., & Perrault, S. (2001). Role of sporting events as ethnoculture's emblems: Impact of acculturation and ethnic identity on consumers' orientation toward sporting events. *Sport Marketing Quarterly, 10*, 231-240.

Scremin, G. (2008). *Selected antecedents and consequences of team identity: A study of the Milwaukee Wave and Philadelphia Kixx of the Major Indoor Soccer League.* Unpublished doctoral dissertation, United States Sports Academy, Daphne, AL.

Trail, G., Fink, J. S., & Anderson, D. F. (2000). A theoretical model of sport spectator consumption behavior. *International Journal of Sport Management, 1*, 154-180.

Trail, G. T., & James, J. D. (2001). The motivation scale for sport consumption: Assessment of scale's psychometric properties. *Journal of Sport Behavior, 24*(1), 108-127.

Wann, D. L. (1995). Preliminary motivation of the sport fan motivation scale. *Journal of Sport and Social Issues, 19*, 377-396.

Wann, D. L., Drewer, K. R., & Royalty, J. L. (1999). Sport fan motivation: Relationships with team identification and emotional reactions to sporting events. *International Sports Journal, 3*, 8-18.

Dr. David Gargone is an Assistant Professor of Business and the Director of the Sport Management Program at Misericordia University. His other research interests include the use of social media in sport marketing, curricular development and assessment in business and sport management, and internships in undergraduate curriculums.

Table 3
Descriptive Statistics for Fan Motives

Variable	Range	*M*	*SD*
Vicarious Achievement	1 to 7	5.16	1.51
Escape	1 to 7	4.47	1.65
Community Support	1 to 7	4.66	1.49
Sport Knowledge	1 to 7	5.54	1.55
Drama	1 to 7	5.87	1.28
Excitement	1 to 7	5.87	1.30
Interest in Players	1 to 7	3.19	1.68
Bonding with Friends	1 to 7	5.40	1.44
Role Model	1 to 7	4.75	1.38
Entertainment Value	1 to 7	5.22	1.34
Aesthetics	1 to 7	4.76	1.70
Socialization	1 to 7	5.00	1.36
Interest in Team	1 to 7	5.54	1.56
Bonding with Family	1 to 7	4.44	1.77
Customer Service	1 to 7	4.74	1.33
Interest in Sport	1 to 7	4.47	1.84
Wholesome Environment	1 to 7	5.26	1.35

TABLE 4
ANOVA Table for the Effect of Team Identity on Fan Motives

Independent Variable	Dependent Variable	Sum of Squares	*df*	Mean Square	*f*	Statistical Significance
Team Identity	Vicarious Achievement	341.45	2	170.73	216.87	<.001
	Escape	178.57	2	89.28	57.30	<.001
	Community Support	114.99	2	57.50	58.32	<.001
	Sport Knowledge	234.12	2	117.06	87.37	<.001
	Drama	13.48	2	6.74	6.01	.003
	Excitement	169.61	2	84.81	94.73	<.001
	Interest in Players	31.61	2	15.81	7.543	.001
	Bonding w/ Friends	147.36	2	73.68	62.66	<.001
	Role Model	168.57	2	84.28	79.17	<.001
	Entertainment Value	159.82	2	79.91	72.17	<.001
	Aesthetics	148.33	2	74.16	45.08	<.001
	Socialization	172.58	2	86.29	93.79	<.001
	Interest in Team	322.72	2	161.36	156.42	<.001
	Bonding w/ Family	207.75	2	103.87	48.40	<.001
	Customer Service	106.88	2	53.44	53.76	<.001
	Interest in Sport	340.93	2	170.47	144.04	<.001
	Wholesome Environment	125.72	2	62.86	67.31	<.001

TABLE 5

ANOVA Table for the Effect of Team Loyalty on Fan Motives

Independent Variable	Dependent Variable	Sum of Squares	*df*	Mean Square	*F*	Statistical Significance
Team Loyalty	Vicarious Achievement	305.77	2	152.89	171.49	<.001
	Escape	92.44	2	46.22	25.54	<.001
	Community Support	74.57	2	37.29	33.77	<.001
	Sport Knowledge	173.08	2	86.54	57.00	<.001
	Drama	33.70	2	16.85	15.87	<.001
	Excitement	206.20	2	103.10	130.79	<.001
	Interest in Players	46.34	2	23.17	11.29	<.001
	Bonding w/ Friends	165.24	2	82.62	73.53	<.001
	Role Model	191.11	2	95.55	95.68	<.001
	Entertainment Value	166.43	2	83.22	76.49	<.001
	Aesthetics	89.90	2	44.95	24.75	<.001
	Socialization	111.71	2	55.85	50.87	<.001
	Interest in Team	360.73	2	180.37	195.96	<.001
	Bonding w/ Family	107.00	2	53.50	21.92	<.001
	Customer Service	66.43	2	33.22	29.86	<.001
	Interest in Sport	150.22	2	75.11	43.14	<.001
	Wholesome Environment	125.98	2	62.99	67.51	<.001

WOMEN DIRECTORS ON PUBLIC COMPANY BOARDS: DOES A CRITICAL MASS AFFECT LEVERAGE?

Cindy K. Harris, Ursinus College

ABSTRACT

This study examines the relationship between corporate leverage (the ratio of total debt to total assets) and gender diversity on US public company boards, with particular focus on boards that have at least 25% women directors. Using this critical mass of women eliminates from consideration boards with lesser female representation, whose female directors may be marginalized in their contributions to board functioning and decision-making. I hypothesize that when boards have this minimum threshold of gender diversity, the influence of risk-averse female directors will impact board decisions related to financing, resulting in lower debt ratios when compared to boards with no female directors. Drawn from the listing of firms compiled annually by Catalyst, the sample is comprised of Fortune 500 firms with no women on their board and firms with at least 25% women directors on their board, respectively, for the two year period 2012 and 2013. Using a total sample of 78 firms, and controlling for determinants of capital structure and board governance variables, I find a significant negative relationship between boards with at least 25% women directors and corporate leverage. Further, the presence of at least 25% women on the board has a significant moderating effect on the association between both board size and board age, and corporate leverage, leading to an even stronger negative relationship. The evidence suggests that substantial board gender diversity is a corporate governance factor that can influence firm outcomes, and adds insight into the factors that can affect corporate financing choices of US public companies.

INTRODUCTION

The role of the board of directors is to protect shareholders' interests by insuring that management is accountable for their decisions and actions. Boards act to reduce or eliminate the principal-agent problem through a variety of mechanisms and processes collectively described as corporate governance – they add value through advising the executive officers and monitoring management's actions. Certainly, "the idea that experienced board members act as valuable monitors and advisors for CEOs and that firms seek directors who have particular backgrounds to maximize shareholder wealth" is a key component of corporate governance (Ahern & Dittmar, 2012).

Research on how boards function, make decisions and the effects of their monitoring role have long focused on board composition. As the number of women on corporate boards of directors has slowly grown, an emerging area of corporate governance research is examining how gender diversity of corporate boards influences board functioning and firm outcomes. Recent academic studies have chiefly focused on establishing the linkages between female representation on boards and aspects of corporate performance, including profitability, growth and shareholder value. The results have been inconsistent. Some have found no significant link between board diversity and firm performance, using two measures of profitability, Tobin's Q and return on assets (Adams & Ferreira, 2009) (Rose, 2007). Carter, D'Souza, Simkins, & Simpson (2010) observe a significant positive relationship between the number of women on all of the major board committees and return on assets ("ROA".)

In studies that examine the link between gender diversity of the board and firm performance, gender diversity is measured in a variety of ways. Researchers have used count data (number of female directors) (Carter, D'Souza, Simkins, & Simpson, 2010), at least one female on the board (Adams & Ferreira, 2009) as well as a continuous measure of the percentage of women on the board (Rose, 2007) to test the relationship between the presence of female directors and a variety of financial performance outcomes. However, the sample data used in these studies was comprised of relatively low representation of female directors on boards. In 1996, women held only 10.2% of Fortune 500 board seats while 10 years later in 2005 that figure grew to just 14.7% (Catalyst). Consequently, researchers have faced difficulty in isolating the impact of a single female director, or a very small group of female directors, on corporate performance (Bilimoria, 2006).

Internationally, there is increased movement toward boardroom gender quotas. Being the first, in 2003 Norway passed a quota mandating 40% female directors effective in 2008. Countries that followed include Spain, Iceland and France with a 40% quota, and Belgium, Italy, and the Netherlands with lower percentage quotas of 30-33% (Ahern & Dittmar, 2012). Malaysia has imposed a 30% quota for new appointments to boards (http://www.economist.com/blogs/economist-explains/2014/03/economist-explains-14, 2014), while Germany is

implementing a requirement of 30% of their non-executive board seats be held by women in 2016 (http://www.independent.co.uk/news/world/europe/germany-to-introduce-legal-quota-for-women-in-boardrooms-8947277.html, 2013). Further, the European Commission is considering imposing quotas. While no such groundbreaking policy exists in the United States, there is a national campaign by the organization *2020 Women on Boards* urging the goal to increase the percentage of women on U.S. company boards to 20% or greater by the year 2020. (http://www.2020wob.com/)

Further, although there are a growing number of research papers that examine gender diversity in relation to firm performance, there are few studies that examine the link between the presence of female board directors on corporate boards and the relative amount of debt financing, and these studies do not specifically focus on US firms. There is some research that considers the link between female directors and insolvency risk as well as the composition of debt. Wilson and Altanlar examine insolvency risk in their study of UK private companies using 2007-2008 data, and find that having a higher ratio of female directors is associated with lower insolvency risk (Wilson & Altanlar, 2009). In a study of firms across 33 countries (in which the US represented 22% of the sample) using 2006-2010 data, Alves examines the relationship between board of director composition and firm financing mix. Findings noted that when the board chair is not an executive, there is "some evidence that a more gender diverse board of directors is associated with more long term financing" (Alves, Couto, & Francisco, 2014).
In their study of mandated female representation on boards in Norway from 2001 to 2009, Ahern and Dittmar observed that the effect of the legislated 40% gender quota led firms to increase in size, undertake more acquisitions, increase leverage (defined as total liabilities divided by total assets), and decline in operating performance. Since "boards of directors are likely to be involved with acquisition decisions and major changes to financial policies, and because boards became younger and less experienced" after the quota took effect, they assert that the increased participation of female directors on boards weakened board monitoring and advising. In addition, Ahern and Dittmar suggest the observed financial effects may be the result of male directors changing their behavior in response to the presence of more female board members. (Ahern & Dittmar, 2012)

This research study addresses two research gaps in the literature. First, focusing on board gender diversity, it utilizes a critical threshold of female directors, expressed as 25% or more of the board, which may affect the dynamics of the board, thereby exerting a strong influence on corporate governance and in turn, firm outcomes. Rather than the mere presence of a female on the board, or a count of female directors, using this critical mass of women on the board "puts a higher standard of compositional diversity" on the board and avoids the likelihood of "gender-based token dynamics" (Bilimoria, 2006). Second, focusing only on US firms, the study considers the link between this critical percentage of female board directors (board diversity) and corporate leverage using Fortune 500 firms, providing new insight into a governance factor which may be an additional determinant of capital structure in the US.

This paper is organized as follows. In section 2, the literature related to the effect of board diversity on corporate governance and firm outcomes is discussed, including gender differences in behavior, decision making and risk taking. Literature addressing capital structure theory follows. In section 3 the main hypothesis is presented. The sample data and model are presented in section 4, and section 5 presents the empirical results, analysis and discussion. Section 6 and 7 outline the conclusions drawn from the study and its limitations, respectively.

LITERATURE REVIEW

Effect of Board Diversity on Corporate Governance and Firm Outcomes

Gender differences in behavior have been observed in aspects of corporate governance. In a study over the period 1996-2003, comparing S&P firms with at least one female director to those without, Adams & Ferreira observed that women appear to behave differently – they attend a higher percentage of committee and board meetings than their male counterparts, and the greater the fraction of women on the board, the better is attendance behavior of male directors (Adams & Ferreira, 2009). Not only may women impact the behavior of their male peers on the board, but also "female directors could more closely correspond to the concept of the independent director emphasized in theory" since "they do not belong to the 'old boys club'" (Adams & Ferreira, 2009).

Are women the new 'independent' directors? When a director is independent, the director has no material relationship with the company, as a partner, shareholder or officer of an entity that has a relationship with the company (i.e. its subsidiary). The importance of independence is that it ensures the director has no business interests that could otherwise interfere with exercising objective judgment in their oversight role. In research prior to the minimum requirements for independence, the degree to which boards were comprised of independent directors was a corporate governance variable included in studies to gauge board effectiveness and oversight. However, since 2002, US publicly traded firms are required to have a majority of independent directors on its board. Given the slow but steady growth of women on corporate boards, it may be that the presence of female directors now plays a comparable role influencing the quality of board monitoring and decision-making that independent board directors previously played, when independence was not a mandate. In short, "gender diverse boards may be a better monitor of managers because women directors are more independent" than male directors (Simpson, Carter, & D'Souza, 2010). Since other researchers conclude that more independent boards tend to hold more debt (Alves, Couto, & Francisco, 2014), if female directors are viewed as the new proxy for independence, then one might expect firms with more women on their boards to have higher debt ratios.

However, prior literature suggests that women are more conservative and risk averse than men, and exhibit less risky behavior in financial decisions. Psychological research demonstrates that, in areas such as finance, men are more overconfident than women. They tend to overestimate the precision of their knowledge regarding the value of a financial security and "hold unrealistic beliefs about how high their returns will be and how precisely these can be estimated" (Barber & Odean, 2001). In Barber and Odean's study conducted for the period 1991-1997, they observe that men traded stock investments 45% more frequently than women, and realized lower net returns from excessive trading than women, especially among single men. In a similar vein, empirical evidence from a study by Huang using executive data (CEO and CFO) from 1993-2005 reveals that male executives exhibit relative overconfidence in significant corporate decision making compared with women. In particular male executives undertake more acquisitions and issue debt more often than female executives. (Huang & Kisgen, 2013)

Relevant corporate governance research further supports the effects of gender differences on firm outcomes related to debt. Research by Palvia et al (2013) find that female CEOs and board chairs in US banks assess risk more conservatively and hold higher levels of equity capital and reduce default risk during periods of market stress. They observe that "female executives and directors are less overconfident in their risk assessments and may inherently promote more conservative business strategies that reduce bank default risk" (Palvia, Vahamaa, & Vahamaa). Wilson (2009) finds that the ratio of female directors on boards is associated with a lower risk of insolvency in private companies, "providing support to the concept that women are more risk-aware or risk-averse and can add value to the management and decision-making capability of the company."

Capital Structure Theories

Capital structure, or leverage, refers to the degree to which firms finance through borrowing or debt rather than through the issuance of stock to support operating and investing activity and increase profitability. Two fundamental theories exist in the corporate finance literature, which explain the factors influencing leverage. These are the trade-off theory and the pecking order theory. These theories can predict different management behaviors in relation to financing choices, particularly in relation to the effect of board of directors' composition on those choices (Alves, Couto, & Francisco, 2014)

The trade-off theory suggests that firm's evaluate the costs and benefits of each source of financing, debt versus equity, in deciding how much of each to utilize. In short, firms seek an optimal balance of debt while considering the positive effects of the debt tax shield (savings from deductibility of interest payments to debt holders) as well as its costs in the form of bankruptcy risk or financial distress (Alkhatib, 2012). However, debt holders are not able to exercise control on the use of funds they provide, since managers may act in their own interests or in the interests of stockholders, thereby potentially increasing the riskiness of the firm's asset investments. Thus, effective corporate governance is essential to insure that management acts as an agent for company shareholders when selecting and maintain an appropriate balance of financing.

Unlike the trade-off theory, the pecking order theory does not predict firms seek a target leverage ratio. Instead, the theory relates to the preferred order in which firms seek funding sources. Firms favor internal funding (retained earnings) to external sources; within external sources, firms seek debt financing before equity financing, due to the

relatively cheaper cost of financing through debt. Further, within debt, firms prefer short-term debt over long-term debt (Myers, 1984). The order of preference stems from information asymmetries between managers and outside investors (Alves, Couto, & Francisco, 2014). Use of internal financing allows managers to pursue new investment opportunities without the repercussions of external financing.

Under the pecking order theory, short-term debt and long-term debt financing are ranked second and third, respectively, while financing through internal and external equity sources are ranked first and last, respectively. This paper is examining the effect of board gender diversity on corporate leverage, defined as the sum of short-term and long-term debt divided by total assets. Since ranking is not relevant to the analysis, the paper relies on the trade-off theory of capital structure. Given the research findings of the observed differences between decision-making and risk preference of women versus men, female directors may influence how firms assess the optimal balance of debt and equity financing. Models of capital structure that focus on firm characteristics alone miss this important factor for explaining differences in firm behavior. (Huang & Kisgen, 2013)

HYPOTHESES

This research study considers the impact of gender diversity on US corporate board functioning through substantial female director representation, and examines its effect on the corporate leverage (the sum of short-term and long-term debt divided by total assets). In particular, I expect boards with a critical mass of female directors - at least 25% - to be associated with a lower amount of leverage than corporate boards with no female directors. Given females' differences in behavior as well as predilection to assume less risk, corporate boards with greater gender diversity will seek to avoid the potential bankruptcy costs and financial distress associated with debt financing and pursue alternative sources of funding. As such, relying on the trade-off theory of capital structure, companies with gender diverse boards are expected to have a lower optimal balance of debt financing relative to total assets. In addition, it is expected that the presence of this critical mass of women on the board will interact with other corporate governance variables, impacting their influence on corporate leverage. Specifically, the presence of at least 25% female directors on the board is expected to moderate the association between both average board age and average board size and corporate leverage, resulting in a lower debt ratio.

Hypothesis 1: The presence of a gender diverse corporate board of directors, measured as at least 25% female directors on the board, is negatively associated with the corporate leverage (the debt-to-asset ratio.)

Hypothesis 2: The presence of a gender diverse corporate board of directors, measured as at least 25% female directors on the board, decreases the association between both board age and board size on corporate leverage (the debt-to-asset ratio.)

SAMPLE DATA AND MODEL

Sample Data

This study builds on a sample of firms drawn from two census lists compiled annually by Catalyst: Fortune 500 companies with zero women directors and Fortune 500 companies with 25% or more women directors. (http://www.catalyst.org/knowledge/2012-catalyst-census-fortune-500-women-board-directors) (http://www.catalyst.org/knowledge/2013-catalyst-census-fortune-500-women-board-directors). The sample is comprised of firms that are on each Catalyst list in both 2012 and 2013 and for which financial and corporate governance data is available for both years. Industry SIC codes, financial statement data, and financial ratios were obtained from the Mergent Online database ("Mergent"). Corporate governance data was found in the firm's annual proxy filings and annual reports.

Financial firms (with SIC codes 6000-6999) are excluded from the sample because they are subject to specific capital requirement regulations that can potentially influence their financing choices (Alves, Couto, & Francisco, 2014). The initial sample of non-financial firms results in 110 companies. Other exclusions include firms whose corporate structure changed in 2013 (mergers, spinoffs), firms not subject to standard corporate reporting requirements (REIT, limited partnerships), firms with abnormal debt ratios (near or exceeding 100% and with negative stockholders' equity), and firms for which information was unavailable. **Table 1** summarizes the construction of the final sample of 78 Fortune 500 firms, which includes 23 companies with zero women directors

(“all- male” boards) in both years (2012 and 2013), and 55 companies with at least 25% women directors (“diverse” boards) in both years.

TABLE 1: CONSTRUCTION OF SAMPLE			
	Firms with ≥25% Women Directors “Diverse Boards”	Firms with Zero Women Directors “All Male Boards”	Total Sample
Firms listed on Catalyst Census in 2012 and 2013	68	42	110
Financial firms	9	4	13
Corporate change (spinoff, merger)	3	4	7
Non-corporate structure (partnership, REIT)	1	5	6
No Proxy filing	0	2	2
Long-term debt ratios near or exceeding 100%	0	2	2
Other	0	2	2
Sample total	55	23	78

Table 2 summarizes the industry breakdown by each subgroup and for the total sample. In both subgroups as well as the total sample, the majority of firms are in the manufacturing sector. While firms with diverse boards are least represented in mining and construction, their second largest concentration is in wholesale and retail trade. Firms with all-male boards also have their second largest concentrations are in wholesale and retail trade as well as transportation, communication and utilities, but in contrast, are least represented in the services category.

TABLE 2: INDUSTRY BREAKDOWN BY SUBGROUP AND SAMPLE						
SIC code (Industry)	Firms with ≥25% Women Directors “Diverse Boards”				al Sample	
	count	%	Count	%	Count	
1000-1999 (Mining, Construction)	2	4%	3	13%	5	
2000-3999 (Manufacturing)	28	51%	10	44%	38	
4000-4999 (Transportation, Communication, Utilities)	6	11%	4	17%	10	
5000-5999 (Wholesale, Retail Trade)	12	22%	4	17%	16	
7000-8999 (Services)	7	13%	2	9%	9	
Total	55	100%	23	100%	78	

Table 3 reports the average number of female directors in firms with diverse boards by industry sector for the two-year period 2012 and 2013. In both years, every industry has at least 3 women on their board and the highest average representation of women is in the manufacturing and transportation sector.

TABLE 3: AVERAGE NUMBER OF WOMEN DIRECTORS BY INDUSTRY IN “DIVERSE BOARDS” (FIRMS WITH ≥ 25% WOMEN DIRECTORS)		
SIC code (Industry)	2012	2013
1000-1999 (Mining, Construction)	3.00	3.00
2000-3999 (Manufacturing)	3.57	3.57
4000-4999 (Transportation, Communication, Utilities)	3.83	3.50
5000-5999 (Wholesale, Retail Trade)	3.25	3.33
7000-8999 (Services)	3.43	3.43

Model and Dependent Variable

The regression model used in this paper is as follows:

$DebtAsset13 = \quad B_0 + B_1 FemaleDir12 + B_2 Board\ characteristics\ (BDSize12,\ BDAge12,\ CDual12) +$

B_3Determinants of Debt Financing (Risk (LogRev12), Growth (TAGrowth), Profitability (ROA12), Asset Tangibility (PPEtoTA12), Non-debt Tax Shield (TaxShield12) +
*B_4 Industry + FemaleDir12*BDSize + FemaleDir12*BDAge12*

The debt to asset ratio (*DebtAsset13*) is measured as the book value of total debt divided by total assets as reported by Mergent for the fiscal year end 2013. Total debt is the sum of reported short-term and long-term debt, but does not include current liabilities, so as to account for only interest-bearing debt. The independent variables are measured for the fiscal year 2012. The one-year lag is used to reflect that the characteristics of the board and its composition influence decisions that may have an impact in a subsequent period. Likewise, financing decisions are made based on earlier measures of a firm's financial position.

Independent variable: Critical Mass of Female Directors

This paper hypothesizes that the gender diversity of a company's board of directors affects the board's selection of corporate financing as measured by the debt-to-asset ratio. Board diversity is measured using a dummy variable to capture a critical threshold of female directors (i.e. at least 25% female directors) in order to measure the effect of substantial female representation on the board.

In firms where there is only one woman on the board, she may be perceived as a token, having no substantive impact on financial outcomes (Terjesen, Sealy, & Singh, 2009). Findings from prior studies examining the impact of board gender diversity on board governance and firm financial outcomes were limited by the lower levels of female board representation, which led to mixed findings of the impact of female directors on the board. To improve investigating the impact of board gender diversity, Simpson, Carter, and D'Souza (2010) assert that "a threshold or critical mass of women on the board or a dummy variable may be preferable." Bilmoria used a dummy variable for women corporate officers, to examine the relationship between women corporate directors and women corporate officers noting that a "critical mass of women in the senior management team (25% or more) serves as a measure of whether women are considered real, not token, contributors to the operations of the top executive team" (Bilimoria, 2006) Further, Post, Rahman, and Rubow (2011) find that "three women on the board (versus a percentage) seems to be a critical threshold and at that level there are positive associations with corporate social responsibility" (Post, Rahman, & Rubow, 2011).

FemaleDir12 is a dummy variable where '1' signifies that female directors comprise at least 25% of the board of directors and '0' signifies a board with zero female directors. As noted in prior research, utilizing a dummy variable that captures a critical threshold of female board directors may provide a clearer measure of the impact of board gender diversity on firm financial outcomes. Using this binary measure of female board presence suggests that the female directors are not likely to be mere window dressing of the board; rather, using the critical level of at least 25% females on the board increases the likelihood that female directors can make true contributions to board functioning and influence the board decision making process.

The presence of a critical mass of female directors may enhance their influence on the board's decision making process related to financing. Given females' demonstrated differences in behavior as well as their risk-averse or risk-avoidance preference, corporate boards with substantial gender diversity will avoid the risks of debt financing and pursue alternative sources of funding, relying more heavily on internal sources of funds (retained earnings) or equity financing (issuance of stock). Consequently, a negative association is expected between *FemaleDir12* and corporate leverage.

Control Variables: Board Characteristics

The board characteristic variables used in this study are traditional measures found in the corporate governance literature. These characteristics can affect the quality of oversight and the nature of decision-making by board directors, impacting firm outcomes.

A. Board Size

Board size is a variable associated with the number of links the board has to its environment (Johnson, Schnatterly, & Hill, 2013). It has been argued that board size can affect the efficiency of board functioning in one of two ways.

One view is that larger firms have larger boards in order to meet the needs of more complex business transactions and decision making and consequently, board oversight is positively associated with its size (Alves, Couto, & Francisco, 2014). The alternate argument is larger boards may experience "poorer communication and increased decision making time associated with larger groups" resulting in a less effective monitoring role (Morales, Ballesta, & Meca). Underlying this latter assertion is the notion that directors who are more dissimilar could disagree, creating more board conflict and too much board monitoring, negatively impacting firm financial outcomes. One study noted that among "companies with a market capitalization of at least $10 billion, typically those with the smallest boards generated better shareholder returns" (Lublin, 2014).

BDSize12 represents the total number of directors on the board at the fiscal year end 2012. Given the competing arguments on the impact of board size on corporate governance, no prediction is made as to the relationship between board size and corporate leverage.

B. Average Board Age

BDAge12 is the average age of the board directors at the fiscal year end 2012, calculated by dividing the sum of all director ages by the number of directors on the board. This personal characteristic of a board member is a proxy for experience, reflecting the director's ability to effectively monitor and advise (Ahern & Dittmar, 2012). Further, age may also be correlated with risk aversion (Johnson, Schnatterly, & Hill, 2013). As observed by Ahern and Dittmar (2012), in Norway, younger boards that resulted from the addition of younger, less experienced female directors was associated with increased leverage. Given this observation, a negative association between average board age and corporate leverage is predicted.

C. CEO Duality

An important indicator of CEO power over a board is CEO duality (Baliga & Moyer, 1996), a term used to describe a combined leadership structure where the same individual holds both the position of board chair and CEO. CEO duality is typically included in studies examining the effects of corporate governance on firm outcomes, but its impact has been mixed. Advocates of CEO duality cite the value added as a result of a single, unified leadership position and note that adequate independent oversight of management can be achieved through other appropriate board mechanisms, measures and activities. Opponents of CEO duality argue it leads to CEO entrenchment, which "occurs when managers gain so much power that they are able to use the firm to further their own interests rather than the interests of shareholders" (Hermalin & Weisbach, 2003). With less board control over management, CEO duality can restrict the monitoring role of the board as directors may become more acquiescent.

CDual12 represents whether the CEO of the corporation is also the board chair for the fiscal year end 2012. *CDual12* is a dummy variable where '1' signifies that CEO duality exists and '0' signifies split leadership. With regard to capital structure, some studies find that firms are more leveraged when managers are more entrenched while others have found that firms with entrenched CEOs use less leverage and short term debt (Alves, Couto, & Francisco, 2014). Since prior research results are mixed regarding CEO duality impact on firm performance measures as well as levels of corporate debt, no prediction is made as to the relationship between CEO duality and corporate leverage.

Control Variables: Determinants of debt

Consistent with prior research on financing choices and cost of debt financing, the following control variables are included in the analysis as determinants of a firm's capital structure and its financing choices.

A. Risk

Firm size has been identified by capital structure literature as one of the determinants of financing mix (Frank & Goral, 2009). Given its size and tendency to be more diversified, a larger firm is less likely to default on its debt or be prone to bankruptcy, and thus has lower risk. Consequently, since a larger firm is more likely to rely more on debt financing than a smaller firm, a positive relationship is expected between firm size and leverage.

Firm size is measured using the log of total revenues for fiscal year end 2012 (*LogRev12*). Measuring firm size with the one year lag acknowledges "the spurious relation between size and the debt ratio that arises because of the relation between size and past profitability (profitable firms become larger) and the short-term relation between

profitability and leverage (profitable firms increase their net worth)." (Titman & Wessels, 1988).

B. Growth

Growth is measured by the percentage increase in total assets (*TAGrowth*) for the period from fiscal year end 2012 to fiscal year end 2013. Annual percentage growth in the firms' total assets is an indicator of a firm's financial strength and may increase its financing demands. Results are mixed in terms of the relationship between growth and leverage, with some studies revealing a positive outcome and others a negative association (Alkhatib, 2012). Consequently, no prediction is made regarding the association between growth and the debt ratio.

C. Profitability

Profitability is measured using Return on Assets for fiscal year end 2012 (*ROA12*) as reported by Mergent. Specifically, the ratio reflects the annual net income divided by average total assets for the period. Measuring profitability in the earlier year (2012) acknowledges the likelihood that profitability has more than just a short-term immediate effect on the observed leverage ratio (Titman & Wessels, 1988). While firms with higher profits generate higher retained earnings, reducing their need for debt financing, higher profits can also provide those firms with greater access to lower cost debt financing, motivating those firms to seek greater leverage. Consequently, no prediction is made regarding the association between profitability and the debt ratio.

D. Tangibility of assets

The ratio of total property, plant and equipment (net) to total assets at the fiscal year end 2012 (*PPEtoTA12*) is used to measure the tangibility of firm assets. Such assets are long-term, substantial investments by the firm, which generally require significant amounts of financing. Firms with a larger investment in property, plant and equipment have greater collateral, increasing their ability to issue debt secured by property. Findings by Alves and Ferreira (2011) suggest a strong, positive relationship is expected between asset tangibility and firm leverage.

E. Non-debt Tax Shield

TaxShield12 represents the ratio of depreciation expense to total property, plant and equipment (net) for the fiscal year end 2012, and is used to measure the non-debt tax shield. Tax deductions for depreciation are substitutes for the tax benefits of debt financing (i.e. interest expense deduction), and as such, "firms with large non-debt tax shields relative to their expected cash flow include less debt in their capital structure." (Titman & Wessels, 1988) Firms which have the tax savings benefit of larger tax deductions for depreciation have less motivation to borrow. Therefore, TaxShield12 is expected to be negatively associated with the debt-to-asset ratio.

F. Industry

Industry is the company's classification according to the Standard Industrial Classification (SIC), obtained from Mergent. The five industries referenced in this study are mining (mining and construction), manufacturing, communication (transportation, communication, and utilities), retail trade (wholesale and retail trade) and services. Each industry is represented by a dummy variable for that industry and the services industry is withheld from the model for comparison purposes. It is expected that industry will have a positive relationship with corporate leverage, since relative to the services industry the other sectors will have different levels of asset investment and will seek a different optimal balance of debt financing.

EMPIRICAL RESULTS, ANALYSIS AND DISCUSSION

Descriptive Statistics

Means of the dependent variable and independent variables discussed above are presented for each subgroup in **Tables 4A, 4B** and for the total sample in **Table 4C.**

In this sample, the average debt to asset ratio in 2013 reveals that firms with at least 25% female directors carry an average debt ratio that is more than 3% lower than firms with no female directors. The debt ratio of firms with diverse boards and all male boards is 25.01% and 28.24%, respectively. For both diverse and all-male boards, the

minimum debt ratio is zero. The maximum ratio for diverse boards is 61.91% in contrast to a maximum ratio of 81.99% for all male boards. While the average dollar amount of total debt in 2013 for firms with diverse boards is more than twice that for the all-male boards, in both years the average total assets for diverse boards is more than three times the average total assets of all-male boards. The percentage of female directors in diverse boards ranges from 25% to 46.7%, with an average of 31.18% in 2012.

The difference in the financial measures of asset growth and sales are important to note. The average annual growth rate of total assets for firms with diverse boards is 4.01% as compared to *TAGrowth* of 12.22% for all-male boards. Likewise, the average 2012 revenue for firms with diverse boards is more than three times the level for all-male boards.

Other financial measures are quite similar between the two subgroups in this sample. The average *ROA12* is 5.17% for firms with diverse boards and 5.45% for all-male boards. The average *PPEtoTA12* is nearly the same, with 27.70% for firms with diverse boards and 28.17% for all-male boards. Similarly, the average *TaxShield12* is nearly the same, with 3.09% for firms with diverse boards versus 3.18% for all-male boards.

With regard to corporate governance variables, the average *BDAge12* for all-male boards is 62.66 years, approximately one year older than the average age of 61.52 years for diverse boards. Within diverse boards, however, male directors on average are nearly three years older than female directors; female directors' average age is 59.58 versus male directors' average age of 62.48. Nearly half of all-male boards have CEO duality (11 out of 23 firms) whereas 65% of diverse boards have this leadership structure (36 out of 55). Further, the average board size of diverse boards is 11.18 members, while the all-male boards have an average of 9.30 directors.

TABLE 4A: ALL MALE BOARDS: DESCRIPTIVE STATISTICS

Variable	Mean	Std Dev	Minimum	Maximum
DebtAsset13%	28.24	21.18	-	81.99
FemaleDir12%	n/a	n/a	n/a	n/a
BdSize12	9.30	1.64	6.00	12.00
MAge12	62.66	5.54	49.40	71.10
CDual12%	48.00	51.08	n/a	n/a
Rev12 ('000)	$9,086,483	$4,582,280	$4,850,500	$20,090,724
TAGrowth%	12.22	21.03	(12.52)	79.10
ROA12%	5.45	6.01	(5.94)	19.26
PPEtoTA12%	28.17	22.31	3.63	85.37
TaxShield12%	3.18	2.73	0.55	11.60

TABLE 4B: DIVERSE BOARDS: DESCRIPTIVE STATISTICS

Variable	Mean	Std Dev	Minimum	Maximum
DebtAsset13%	25.01	13.77	-	61.91
FemaleDir12%	31.18	6.13	25.00	46.67
BdSize12	11.18	1.81	7.00	17.00
BDAge12	61.52	2.91	51.60	66.90
CDual12%	65.45	47.99	n/a	n/a
Rev12 ('000)	$30,314,024	$35,399,093	$83,680	$152,256,000
TAGrowth%	4.01	13.36	(36.12)	48.76
ROA12%	5.17	6.83	(21.11)	21.08
PPEtoTA12%	27.70	21.84	2.64	82.56

TaxShield12%	3.09	1.86	0.42	11.30

TABLE 4C: TOTAL SAMPLE: DESCRIPTIVE STATISTICS				
Variable	**Mean**	**Std Dev**	**Minimum**	**Maximum**
DebtAsset13%	25.96	16.23	-	81.99
NumFDir12	2.45	1.74	-	7.00
BdSize12	10.63	1.95	6.00	17.00
BDAge12	61.85	3.87	49.40	71.10
CDual12%	60.26	49.25	0%	100%
Rev12 ('000)	$24,054,621	$31,300,192	$83,680	$152,256,000
TAGrowth%	6.43	16.30	(36.12)	79.10
ROA12%	5.25	6.56	(21.11)	21.08
PPEtoTA12%	27.84	21.83	2.64	85.37
TaxShield12%	3.12	2.13	0.42	11.60

Additional sample statistics are provided in Table 5 and Table 7. **Table 5** provides the sample means for the independent and dependent variables by industry sector. **Table 7** provides the Pearson correlation matrix for the variables, revealing no significant correlations among the variables included in this study. See Table 7 in the appendix.

TABLE 5: SAMPLE MEANS BY INDUSTRY					
	Mining	**Manufacturing**	**Communication**	**Retail Trade**	**Service**
DebtAsset13 (%)	22.52%	24.94%	40.60%	24.65%	18.30%
FemaleDir12 (% of firms within industry)	40.00%	73.68%	60.00%	75.00%	77.78%
BDSize12 (count)	9.80	11.00	10.60	10.13	10.44
BDAge12 (years)	66.13	61.66	60.84	62.05	61.09
CDual12 (%)	60.00%	68.42%	50.00%	43.75%	66.67%
Rev12 (in thousands)	$10,356,003	$23,996,792	$18,205,589	$35,711,284	$17,685,094
TAGrowth (%)	16.54%	7.93%	4.02%	2.00%	5.06%
ROA12 (%)	3.73%	6.91%	1.26%	4.61%	4.67%
PPEtoTA12 (%)	58.34%	20.11%	51.24%	28.37%	16.62%
TaxShield12 (%)	4.31%	2.67%	3.82%	2.99%	2.95%

Regression Results, Analysis and Discussion

The empirical results are summarized in **Table 6**, providing the coefficients and p-values for the independent variables for the basic regression (with no interaction terms) and the regression with interaction terms (FemaleDir12*BDSize12 and FemaleDir12*BDAge). These empirical findings are corrected for heteroscedasticity. See Table 6 in the Appendix.

The result in the basic regression for the variable FemaleDir12 is consistent with the prediction, and supports Hypothesis 1. The variable FemaleDir12 reveals a negative and statistically significant coefficient (-6.01, p-value .08), meaning that boards with at least 25% women directors are associated with a debt to asset ratio that is 6%

lower than boards with no women directors. The corporate governance variables, board size (*BDSize12*) and board age (*BDAge12*) are highly statistically significant. Board size is positively associated with corporate leverage, although the coefficient (2.1, p-value .03) reflects a relatively small impact. The results estimate that an increase in the board size by one director is associated with an increase in the debt ratio of 2.1%. In short, larger boards are associated with slightly higher leverage. Similarly, the coefficient on board age is small, but statistically significant (-.64, p-value .05). This inverse relationship with corporate leverage suggests that an increase in average board age by one year is associated with a decrease of less than 1% in the debt to asset ratio. In short, older boards are associated with marginally lower leverage. The corporate governance variable CEO duality (*CDual12*) does not have a statistically significant association with corporate leverage.

TABLE 6: EMPIRICAL RESULTS[19]

	Basic Regression		**Regression with Interaction Terms**[20]	
	coefficient	**p-value**	**coefficient**	**p-value**
FemaleDir12	-6.01	.0808*	-98.17	.0224**
BDSize12	2.10	.0327**	3.17	.0681*
BDAge12	-.64	.0508**	-1.35	.0123***
CDual12	1.97	.5553	2.06	.5340
Log(Rev12)	-1.73	.0748*	-1.71	.0514**
TAGrowth	.19	.0082***	.20	.0084*
ROA12	-.75	.0004*	-.68	.0006***
PPEtoTA12	.13	.0816*	.15	.0638*
TaxShield12	1.91	.0048***	2.03	.0011***
Mining	-4.60	.2856	-3.27	.3506
Manufacturing	6.83	.0537**	6.90	.0549**
Communication	10.77	.0606*	7.85	.1277
RetailTrade	7.91	.0797*	7.48	.1000*
FemaleDir12*BDSize12			-2.04	.1542
FemaleDir12*BDAge12			1.82	.0035
Adjusted R^2	.2954		.3304	
Significance level	1%***, 5%**, 10%*			

While all of the financial control variables are statistically significant, the value of the coefficients suggests a relatively immaterial impact on corporate leverage. In addition, the signs on the coefficients for both *Log(Rev12)* and *TaxShield12* are the opposite of the predicted sign. While firm size as measured by *Log(Rev12)* was expected to be positively associated with the debt ratio, the results reflect a negative coefficient (-1.73, p-value .07). Thus, while larger firms that generally bear less risk of default are expected to have a higher debt ratio, these results reflect a negative association with the debt ratio. However, the small coefficient indicates a relatively immaterial impact on the relationship. While *TaxShield12* was expected to be negatively associated with the debt ratio, the results reflect a positive coefficient (1.91, p-value .005). Similarly, the small coefficient indicates a relatively immaterial impact on the debt ratio. Given the lower interest rates in 2012, it may be that firms with higher depreciation expense relative to total property, plant and equipment still pursued debt financing. The depreciation deduction is not a substitute for the interest expense deduction, when debt financing can be obtained at a low cost.

There is an observed statistically significant relationship between three industry sectors and the debt ratio. Relative to the service industry, manufacturing, communication and retail trade all reflect a positive relationship with corporate leverage. These results clearly indicate there are industry norms for financing that can influence a particular firm's leverage.

---

[19] Both regressions reflect correction for heteroscedasticity.

[20] Interaction terms were tested for joint significance with FemaleDir12; when tested together, both terms are statistically significant (F value=.064), but when tested one at a time with FemaleDir12, neither term is significant.

The regression with interaction terms expands the analysis to consider whether the presence of 25% or more female directors moderates the association between board size and board age, respectively, and corporate leverage. As with the basic regression, the result for the regression with interaction terms for the variable *FemaleDir12* is consistent with the prediction, and supports Hypothesis 1. The coefficient (-98.17, p-value .02) indicates that the presence of 25% or more women directors on the board is associated with a lower debt-to-asset ratio. Further, in this regression, the coefficients on the control variables for board age and board size and the financial determinants of debt reported the same signs as in the basic regression. With the exception of communication, the same industries maintained their statistical significance.

The coefficients on the interaction terms reflect opposite outcomes from each other. The negative coefficient on the interaction term *FemaleDir12*BDSize12* is not statistically significant (-2.04, p-value .15). Nonetheless, the direction of the coefficient suggests when boards are larger and there is greater gender diversity on the board, it may be associated with a lower debt ratio. In contrast, the positive coefficient on the interaction term *FemaleDir12*BDAge12* is statistically significant (1.82, p-value .003). This result reflects that given average board age, when there is greater gender diversity on the board, it is associated with a higher debt ratio.

Statistical tests were run to test the joint significance of each interaction term individually with the variable *FemaleDir12*, using sample mean values for each variable. In both instances, the results proved not to be statistically significant. However, when both interaction terms are included and tested for their joint significance with the variable *FemaleDir12*, using sample mean values for each variable, the results are statistically significant (F-value .06). Thus, given average board size of 10.63 directors and average board age of 61.85 years, the presence of at least 25% female directors on the board is associated with a debt ratio that is 7.29% lower than the debt ratio for all male boards. Thus, Hypothesis 2 is supported. The presence of this critical mass of female directors has a moderating effect on both board size and board age (at their respective means) and further reduces the debt ratio from the reported 6% in the basic regression.

These results indicate the opposite interaction effect of *FemaleDir12* with board size and board age, respectively. When a board is larger and comprised of at least 25% female directors, it is associated with lower corporate leverage. The substantial cohort of female directors appears to be influencing board decision making to select lower levels of debt relative to total assets. This result is consistent with the argument that female directors are bringing their risk-averse attitude to board discussions, influencing boards to seek a lower level of optimal debt financing. On the other hand, when a board is on average older in age and comprised of at least 25% female directors, it is associated with higher corporate leverage. In this circumstance, the substantial cohort of female directors appears to be impacting board decision making to select greater levels of debt relative to total assets. This outcome is consistent with the argument that female directors, who may have less experience than male directors, are influencing boards to seek higher debt financing. In this sample, female directors are on average 3 years younger than male directors. However, when the two interaction terms are considered together with *FemaleDir12*, the effect of risk-averse female directors more than offsets the effect of less experienced, younger female directors, resulting in an increased negative association between board gender diversity and corporate leverage.

SUMMARY AND CONCLUSION

"Boards around the world are under increasing pressure to choose female directors" (Adams & Ferreira, 2009). The rationale for inclusion of women on boards is that it can lead to positive outcomes in terms of corporate governance, which impacts firm performance as well as value to shareholders. Competent women are not substitutes for traditional corporate directors with identical abilities and talents; rather they have unique characteristics that create additional value (Carter, D'Souza, Simkins, & Simpson, 2010)

The results of this study reveal that when boards have a minimum threshold of gender diversity, defined as 25% or more female directors, the influence of risk-averse female directors will impact board decisions related to financing, resulting in lower debt ratios when compared to boards with no female directors. Using this critical mass of women eliminates from consideration boards with lesser female representation, whose female directors may be marginalized in their contributions to board functioning and decision-making. Further, the presence of at least 25% women on the board has a significant moderating effect on the association between both board size and board age, respectively, and corporate leverage. Overall, the presence of this critical mass of female directors interacts with these two board characteristics, resulting in an increased negative association, as indicated by the estimated lower debt ratio. The

evidence suggests that substantial board gender diversity is a corporate governance factor that can influence firm outcomes, and adds insight into the factors that can affect corporate financing choices of US public companies.

Although their numbers have steadily grown, women are an underrepresented group on boards of directors in the U.S. despite their decades of participation in the workforce. If women are given a greater voice and ability to contribute at the board level, companies can potentially realize the benefits of their leadership. In short, "gender diversity on boards may lead to freer expression of ideas, especially when women have power" thereby enhancing financial policy decision making (Triana, Miller, & Trzebiatowski, 2013).

LIMITATIONS AND FUTURE RESEARCH

This study highlights the empirical association between a critical mass of female directors on US public company boards and corporate leverage. However, it does not suggest a causal relationship. The endogenous nature of corporate boards limits the interpretation of the results of this research study. Endogeneity concerns arise because of omitted unobservable firm characteristics (Adams & Ferreira, 2009). It is difficult to determine if firms with lower leverage are generally larger, and simply attract more female directors (who self-select) to their larger boards or whether female board members contribute to board monitoring functions and decision making, which leads to lower levels of debt financing relative to total assets. Clearly, firm attributes are likely to affect both the incentives of women to join their boards and the incentives of firms to include female directors on their boards.
"Board composition is not exogenously determined but rather is affected by prior decisions and firm characteristics that in turn affect board decisions. Thus, any observed relationship between board composition and firm outcomes may in fact be caused by the factors that determined the board composition in the first place" (Johnson, Schnatterly, & Hill, 2013).

Nonetheless this research reflects the strong negative association that exists between corporate leverage in Fortune 500 companies and a critical mass of female directors on the board. One way in which this study can be enhanced is to expand the analysis to include firms whose board of directors has at least one female director or a percentage of female directors below the minimum threshold of 25% used in this paper. With the growing participation of women on corporate boards, a continuous measure or a step-function of the percentage of female board directors may now yield more relevant results that were not observed in earlier studies due to the relatively low number of female board directors. Another way to expand this research is to consider a longer lag period, as a one year lag may not be sufficient to infer a consistent connection between the critical mass of female directors on corporate boards and a firm's debt ratio. Last, given the significant association of industry with the debt ratio observed in this study, narrowing the focus to a larger sample drawn from a single, specific industry may also yield informative results about the impact of board gender diversity on corporate leverage.

REFERENCES

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, *94*, 291-309.

Ahern, K., & Dittmar, A. (2012). The changing of the boards: The impact on firm valuation of mandated female board representation. *The Quarterly Journal of Economics*, *127*, 137-197.

Alkhatib, K. (2012). The determinants of leverage of listed companies. *International Journal of Business and Social Science*, *3*(24), 78-83.

Alves, P., & Ferreira, M. (2011). Capital structure and law around the world. *Journal of Multinational Financial Management*, *21*, 119-150.

Alves, P., Couto, E. B., & Francisco, P. M. (2014, January 15). Board of directors' composition and financing choices. Retrieved February 14, 2014 from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2379743.

Anderson, R. C., Mansi, S. A., & Reeb, D. M. (2004). Board characteristics, accounting report integrity, and the cost of debt. *Journal of Accounting and Economics*, *37*, 315-342.

Baliga, B., & Moyer, C. (1996). CEO duality and firm performance: What's the fuss? *Strategic Management Journal, 17*(1), 41-43.

Barber, B. M., & Odean, T. (2001, February). Boys will be boys: Gender, overconfidence, and common stock investment. *The Quarterly Journal of Economics*, *116*, 261-292.

Bellar, S. L., Helms, M. M., & Arfken, D. E. (2012). The presence and absence of women in Tennessee's corporate board rooms. *Business Perspectives Outlook*, 51-57.

Berry, P., & Franks, T. J. (2010, February). Women in the world of corporate business: Looking at the glass ceiling. *Contemporary Issues In Education Research, 3*(2), 1-9.

Bilimoria, D. (2006, Spring). The relationship between women corporate directors and women corporate officers. *Journal of Managerial Issues*, *XVIII* (1), 47-61.

Carter, D. A., D'Souza, F., Simkins, B. J., & Simpson, W. G. (2010). The gender and ethnic diversity of US boards and board committees and firm financial performance. *Corporate Governance: An International Review*, *18*(5), 396-414.

Dalton, D. R.,Daily, C. M., Ellstrand, A. E. & Johnson, J. L. (1998). Composition, leadership structure and financial performance. *Strategic Management Journal*, *19*, 269-290.

Deutsch, Y. (2005). The impact of board composition on firms' critical decisions: A meta-analytic review. *Journal of Management*, *31*(3), 424-444.

Dickins, D. (2010, July/August). CEO and COB duality: Does it matter? *Internal Auditing*, *25*(4), 35.

Frank, M., & Goral, V. (2009). Capital structure decisions: Which factors are reliably important? *Financial Management*, *38*, 1-37.

Giove, S., Connolly, D. P., & Lilienfeld, D. E. (2011, October 11). Shearman & sterling's 9th annual corporate governance surveys released. Retrieved March 28, 2012 from http://www.shearman.com/shearman--sterlings-9th-annual-corporate-governance-surveys-released-10-11-2011/.

Hermalin, B., & Weisbach, M. S. (2003). Boards of directors as an endogenously determined institution: A survey of the economic literature. *Economic Policy Review*, 9, 7-26. Retrieved August 5, 2014 from http://www.2020wob.com/. (n.d.). 20% by 2020 Women on Boards .

Huang, J., & Kisgen, D. J. (2013). Gender and corporate finance: Are male executives overconfident relative to female executives? *Journal of Financial Economics*, *108*, 822-839.

Johnson, S. G., Schnatterly, K., & Hill, A. D. (2013). Board composition beyond independence: Social capital, human capital, and demographics. *Journal of Management*, *39*, 232-262.

Lublin, J. S. (2014, August 27). Are smaller boards better for investors? *The Wall Street Journal*, B7.

Morales, C. L., Ballesta, J. P., & Meca, E. G. (n.d.). Retrieved February 14, 2014, from http://www.viiaccountingworkshop.upct.es/papers/b8ed26ac43004eceb3b90c0c128b0d8e.pdf.

Myers, S. C. (1984). The Capital Structure Puzzle. *Journal of Finance*, *39*, 575-592.

Nielsen, S., & Huse, M. (2010). The contribution of women on boards of directors: Going beyond the surface. *Corporate Governance: An International Review*, *18*(2), 136-148.

Palvia, A. A., Vahamaa, E., & Vahamaa, S. (n.d.). Are female CEOs and chairwomen more conservative and risk averse? Evidence from the banking industry during the financial crisis. *25th Australasian Finance and Banking Conference* 2012.

Piot, C., & Missonier-Piera, F. (2014, May 16). http://www.researchgate.net/publication/228618891_Corporate_governance_audit_quality_and_the_cost_of_debt_financing_of_French_listed_companies. Retrieved June 20, 2014 from www.researchgate.net.

Post, C., Rahman, N., & Rubow, E. (2011). Green governance: Boards of directors' composition and environmental corporate social responsibility. *Business & Society*, *50*(1), 189-223.

Rose, C. (2007). Does female board representation influence firm performance? The Danish evidence. *Corporate Governance*, *15*(2), 404-413.

Schooley, D., Renner, C., & Allen, M. (2010). Shareholder proposals, board composition and leadership structure. Journal of Managerial Issues, *22*(2), 152-165.

Simpson, W., Carter, D. A., & D'Souza, F. (2010). What do we know about women on boards? *Journal of Applied Finance*, *2*, 27-39.

Stearns, L., & Mizruchi, M. S. (1993). Board composition and corporate financing: The impact of financial institution representation on borrowing. *Academy of Management Journal*, *36*(3), 603-618.

Talmud, I., & Izraeli, D. N. (1999). The relationship between gender and performance issues of concern to directors: correlates or institution? *Journal of Organizational Behavior*, *20*, 459-474.

Tanaka, T. (2014). Gender diversity in the boards and the pricing of publicly traded corporate debt: evidence from Japan. *Applied Financial Economics*, *24*(4), 247-258.

Terjesen, S., Sealy, R., & Singh, V. (2009). Women directors on corporate boards: A review and research agenda. corporate governance: *An International Review*, *17*(3), 320-337.

Titman, S., & Wessels, R. (1988, March). The determinants of capital structure choice. *The Journal of Finance, 43*(1), 1-19.

Triana, M. d., Miller, T. L., & Trzebiatowski, T. M. (2013). The double-edged nature of board gender diversity: Diversity, firm performance, and the power of women directors as predictors of strategic change. *Organization Science,* 2014, *5*(2), 609-632.

Wilson, N., & Altanlar, A. (2009, September 22). Director characteristics, gender balance & insolvency risk: An empirical study. Retrieved from http://ssrn.com/abstract=1932107 or http://dx.doi.org/10.2139/ssrn.193210.

Wilson, T. E. (2010). Females and financial experts: Board diversity in the era of the SEC's audit committee requirements. *Academy of Accounting and Financial Studies Journal*, *14*(4), 1-10.

Cindy K. Harris, CPA is an Associate Professor of Business and Economics at Ursinus College. She received her MBA from The Wharton School and her BA in History from the University of Pennsylvania. Her primary teaching area is accounting, and her research focus is on corporate governance.

APPENDIX

TABLE 7: PEARSON CORRELATION COEFFICIENTS (n=78)
Prob > |r| under H0: Rho=0

	Debt Asset 13	FemaleDir 12	BD Size 12	Cdual 12	BD Age 12	Log Rev 12	TA Growth	ROA12	PPE toTA 12	Tax Shield 12	Min-ing	Manu-factur-ing	Com muni-cation
Female Dir12	-0.091 0.428												
BDSize 12	0.094 0.412	**0.442** **<.0001**											
Cdual 12	-0.067 0.558	0.164 0.151	0.074 0.519										
BDAge 12	**-0.242** **0.033**	-0.136 0.237	-0.017 0.884	0.145 0.205									
LogRev 12	-0.135 0.238	**0.296** **0.009**	**0.250** **0.027**	0.124 0.281	0.108 0.348								
TA Growth	0.151 0.188	**-0.231** **0.042**	0.096 0.402	-0.127 0.268	0.068 0.557	-0.114 0.322							
ROA 12	**-0.306** **0.006**	-0.020 0.861	0.172 0.132	0.050 0.661	0.164 0.152	0.040 0.730	**0.219** **0.054**						
PPEto TA12	**0.289** **0.010**	-0.010 0.932	-0.151 0.187	-0.077 0.503	0.074 0.522	-0.051 0.660	-0.020 0.865	-0.145 0.205					
Tax Shield 12	**0.378** **0.001**	-0.020 0.859	-0.086 0.453	-0.044 0.702	-0.124 0.281	0.026 0.823	0.001 0.990	-0.148 0.196	**0.515** **<.0001**				
Mining	-0.056 0.627	-0.175 0.125	-0.112 0.329	-0.001 0.991	**0.291** **0.010**	-0.086 0.452	0.163 0.153	-0.061 0.596	**0.368** **0.001**	0.148 0.197			
Manu-Facturing	-0.062 0.588	0.068 0.555	**0.187** **0.101**	0.163 0.155	-0.050 0.664	-0.037 0.750	0.090 0.433	**0.248** **0.029**	**-0.347** **0.002**	**-0.204** **0.073**	**-0.255** **0.024**		
Commun-ication	**0.348** **0.002**	-0.088 0.442	-0.006 0.961	-0.080 0.484	-0.101 0.380	-0.130 0.258	-0.057 0.620	**-0.235** **0.039**	**0.414** **0.000**	**0.261** **0.021**	-0.100 0.382	**-0.374** **0.001**	
Retail Trade	-0.041 0.719	0.050 0.664	-0.132 0.249	-0.171 0.134	0.026 0.824	**0.229** **0.044**	-0.139 0.225	-0.050 0.664	0.012 0.915	-0.030 0.793	-0.133 0.246	**-0.495** **<.0001**	**-0.195** **0.087**

AN EMIRICAL STUDY ON MOBILE TECHNOLOGIES TO ENHANCE 21ST CENTURY LEARNING

Kathleen Houlihan, Wilkes University

ABSTRACT

The integration of technology into the curriculum has been studied for decades with very little consensus on a best approach. Opposing views about the most effective ways of integrating technology have delayed the mainstream adoption in the classroom. A study of business students in mobile enhanced classrooms were compared to business students taught without mobile enhancement and the findings informed educators regarding the perception of learning and perceived social presence in the classrooms. Student perceived learning and social presence are constructs in the Community of Inquiry (CoI) Model, which has been used by many disciplines to develop curriculum. This study supports CoI as a best practice for technology integration in the classroom. The remarkable finding of this research indicated an overall weakness in the student's perception of learning and a weakness in the student's sense of community in classrooms that were not mobile enhanced.

INTRODUCTION

As mobile technology becomes more pervasive in organizations, more advanced models of utilization and integration need to be developed that align with the methods of conducting business in the future (Weber, & Horn, 2012). Organizations are adopting mobile devices at a record pace. It is documented that almost ninety-four percent of Fortune 500 companies have a pilot program initiated with the iPad; a mobile technology device developed by Apple (Kaneshige, 2012). In the 1970s, computers were generally used in academic and research labs and prosperity associated with corporate computer utilization had to wait (Silver, 2013). Today it seems that mobile devices will face a similar fate, because even though many individuals have access to mobile devices, the increases in productivity have not yet been realized. It seems that even though technology is pervasive, the workforce is not able to effectively utilize these devices to enhance performance. This issue can be studied through the use of technology in a higher educational setting.

Higher education facilities and corporate labs are piloting mobile technologies hoping to find ways to effectively enhance the learning process and essentially improve the overall working experience. Park (2011) identifies one of the major benefits of the mobile device is that students can easily transition from individual to group activities allowing for a deeper understanding and connection with the course content. Peng, Su, Chou & Tsai (2009) posit that mobile devices are a fundamental component needed for consideration in driving curriculum design. Other researchers support the notion that mobile technology is the key to collaborative knowledge development and usage in the learning environment (Sharples, 2000; Cresente, & Lee, 2011). If ubiquitous mobile learning can be achieved, then learning can reach beyond the classroom where learning is embedded in the life of the student (Sharples, & Rochelle, 2010).

LITERATURE REVIEW

The universities that are testing mobile devices use different approaches in the classroom. The professor can choose to deliver the same content and then provide materials in a mobile format for students; which Murphy (2011) identified is prominent model used in higher education. However, universities can also offer ubiquitous options that allow access to the materials in the form of notes, podcasts, videos and tutorials. These new integrated methods allow for a deeper connection with the content and allow for collaboration, which expand leaning beyond the technical specifications. Using this approach, the professor can present content that will offer the student an advanced level of understanding of the material (Park, 2011).

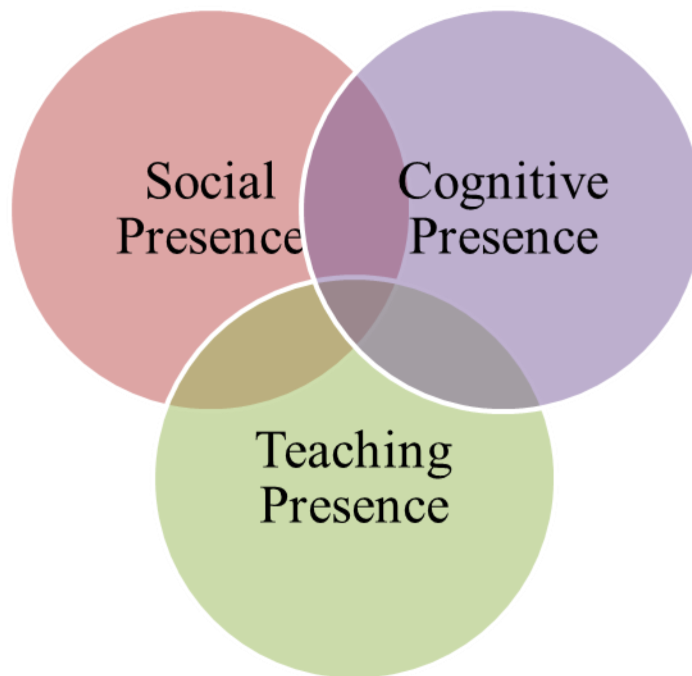
This study tested the effectiveness of the iPad device at creating a ubiquitous learning community for freshman business students. The effectiveness was measured based on responses from student's perceptions of learning and connectedness. Information was obtained regarding the effectiveness of the devices at aiding learning inside and outside of the classroom (Park, 2011). The study also investigated peer-to-peer and peer-to educator collaboration

relating to productivity and research, as well as other professional interactions that can be identified as they relate to the iPad device (Cabelle, Xhafe, & Barolli, 2010).

The purpose of this research is to understand the degree of ubiquity that iPads offer while promoting the perception of learning, and connectedness for students at the University in Northeastern Pennsylvania that was used for this study. At this stage in the research, the iPad served as the technological mobile learning tool provided as part of a pilot program to the freshman class in the business school, to aid the in-classroom and out of classroom instruction. The intention of this case study is to determine if other schools at the University should adopt the pilot. Furthermore, this study sought to understand the effectiveness of the iPad in developing a ubiquitous learning community.

In the sixty-year history, mobile technology has passed through three phases of development (Sharples, & Roschelle, 2010). The first phase included using mobile technology to share knowledge and included devices like graphing calculators and survey tools in the classroom. In the second phase of mobile technology focused more on the integration into lifestyle concentrating on the mobility of information sharing and allowing access to information at anytime. However, in the second phase, mobile devices were used by museums and workplaces and not typically used in the classroom. During the second phase more individuals had access to mobile devices and more applications were created (Sharples, & Roschelle, 2010). The third phase posed by Sharples, & Roschelle, (2010), this phase includes access to information that crosses contexts and is integrated at all levels of interaction and understanding. The third phase is the current phase of development and includes the community or social aspects of education and learning (Park, 2011).

Figure 1. Venn Diagram Community of Inquiry



Cognitive presence can be defined as the process of constructing meaning in the minds of the student through the reflection and the interchange of ideas (Garrison et al., 2000; Richardson et al., 2012). It is difficult to measure cognitive presence because it happens in the mind of the student. Therefore, the most effective way to measure this mental process is to survey the student's responses on perception of learning, with others in the classroom. The

Classroom Community Scale (CCS) was designed and validated to measure the perception of learning described in this study as cognitive presence.

Social presence can be defined as the positive feeling of connectedness that occurs, when individuals are comfortable expressing ideas to others. When students share common experiences relating the material being discussed then the participants grow emotionally and socially in the classroom (Garrison et al., 2000; Richardson et al., 2012). The CCS also measures the sense of community and connectedness in the classroom and these factors are described as social presence in this study.

Teaching presence is part of the Community of Inquiry model and it involves the level of instruction somewhat incorporating the cognitive process and the social processes to establish meaning or learning in the eyes of another individual (Garrison et al., 2000; Richardson et al., 2012). The assumption is that this factor is made up of traits that are covered in the other two areas and therefore it was not directly measured in this study.

The community of inquiry model, which this study was built upon, is not without its critics and if the inferences were found to be flawed, it will negate the value of this research. Furthermore, this study has limitations that can threaten the external validity, including assumptions regarding the use of iPads in industry. The limitations listed above explain how the conclusions presented in this paper could be incorrect. However, the researcher used the CoI as a framework, which identifies the educational experience and has been tested and presented in many peer reviewed works giving the researcher confidence that the results of the study should have validity.

Hussain and Ishak (2011) studied knowledge management as it relates to organizational performance. Their research revealed that the papers that utilize academic institutions to study technology enhance learning are the most transferable to knowledge management organizations. The studies conducted in academic institutions uncover the most prevailing issues and novel approaches for organizations (Hussain, & Ishak, 2011). For this reason a case study conducted in a university setting can support organizational management environments that effectively wish to prepare employees to be knowledge workers in the future (Hussain, & Ishak, 2011).

The most effective technological devices disappear from awareness and become part of everyday life, which is fully integrated as part of the process (Weiser, 1991). Understanding the contexts where mobile devices are effective at incorporating learning in and outside the classroom from the individual perspective to the group perspective are important in developing system wide ubiquity (Park, 2011; Passey, 2010). This case study will study the usage of mobile devices from design to implementation; testing to understand if mobile devices create system wide ubiquitous learning environment (Passey, 2010).

RESULTS

The Classroom Community Scale (Rovai, 2002) was distributed to a total of 106 students. There were 27 students who participated in the iPad pilot program and 79 students who took the course in the traditional non-technology enhanced format. Thirty percent of the participants were female. Other than the high number of male students in the sample, the students in this study represented a typical college class at a liberal arts university.

The results of this study were that the students who participated in the pilot said they used technology during the day less often than students who were not instructed using technology in the classroom. The groups that did not have access to technology in the classroom reported in 100 percent of the cases, that they used mobile technology constantly during the day. The iPad enhanced group resulted in only 55 percent of the students reporting constant mobile usage.

The more surprising results of this study indicated that both groups felt isolated and neither group felt a strong sense of community. The iPad enhanced group and the traditional classroom both reported difficulty with getting help from the instructor when it was requested. The CCS scale measures connectedness on levels from 0-40. The traditional groups course related average on connectedness was 22. The iPad enhanced class scored an average of 19 on its level of connectedness.

All students in the study felt little perception of learning and they reported a minimal desire to learn. The CCS case measures perceived learning from 0-40. In the traditional classroom the student's average score was 25 and the iPad pilot scored a lower average rating of 22 on the perception of learning constuct.

DISCUSSION, IMPLICATIONS, RECOMMENDATIONS

Research in the area supports the need for a drastic change in the delivery of education away from the traditional form of learning. Students seem to feel isolated in both instances. Therefore the students are not engaging with the content regardless of the technology usage. Before decisions are made regarding technology usage in the classroom, it might make sense to study more effective ways to improve the classroom environment.

One possible solution is to consider a model of teaching based on 21st Century learning that includes collaboration, digital literacy, critical thinking and problem solving as a basis of the course design. In this way, the technology used in the classroom can be integrated into the needs of the student for a richer understanding of the material. If students were encouraged to utilize the device to synthesize the information covered, instead of just using the devices for note taking and quizzes, the results of this study on perceived learning and connectedness may have been higher for the iPad pilot group. The professors chose to just use the iPads as another way to deliver content and therefore the class failed to benefit from the 21st Century learning method.

Furthermore, the devices could have been used to allow students to communicate in and out of the classroom about the course so that the issues and the learning could extend beyond the classroom. It is also recommended to use the technology to enhance the perception of learning and connectedness through social networking to solve actual case problems that are designed with the assistance of industry (Shim, Dekleva, Chengqi, & Mittleman, 2011). Real business problems give students the tools they will need to succeed in the business world.

Students tend to grasp the material better when the information is put into context. The activity becomes more engaging and it creates an active learning environment (Zapatero, Maheshwari, & Chen, 2012). This active learning process could help to enhance the communication between the students and the professor about the material. When students use the technology to engage and find solutions to real problems it feels less like an exercise and it tends to increase the effort and consequently, the learning for the student. More research is needed based on how the devices are used in the classroom to begin to understand how to create a ubiquitous learning environment. More research and understanding will lead to new more integrated ways to impact the student's perception of learning and connectedness in the classroom environment.

Professors also may also consider using social networks that are familiar to their students (Shim, Dekleva, Chengqi, & Mittleman, 2011). If professors learn to use these technologies, such as Facebook and twitter for information sharing, the students should feel a greater level of connectedness with the professor and with the course.

Park (2011) believes that we are in the third phase of creating a ubiquitous community environment that is social and collaborative. Further research in this area is very clearly needed with regards to the learning process. Without further study, productivity and a sense of community according to the CoI will never be realized. The integration of mobile technologies and the use of social networks are only the first steps in creating 21st Century learning environment.

REFERENCES

Bernstein Report (2012). iPad and Tablets: Unprecedented adoption to date, but where to from here? (2012). *Bernstein Black Book - Apple: Can it successfully migrate from hypergrowth?*, 45-56.

Caballe, S., Xhafe, F. & Barolli, L. (2010). Using mobile devices to support online collaborative learning. *Mobile Information Systems*, *6* (1), 27-47.

Chang, C.K. (2010). Acceptability of an asynchronous learning forum on mobile devices. *Behaviour & Information Technology*, *29*(1), 23-33.

Chu, K. W., Wang, M., & Yuen, A. H. K. (2011). Implementing knowledge management in school environment: Teachers' perception. *Knowledge Management & E-Learning: An International Journal*, *3*(2), 139-152.

Drew, J. (2011). The iPad Decision. *Journal Of Accountancy*, *212*(4), 26-31.

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *Journal of Computing in Higher Education, 21*, 19-30.

Garrison, D. R., Cleveland-Innes, M., & Fung, T.S. (2010). Exploring relationships among teaching, cognitive and social presence: Student perceptions of the community of inquiry framework. *Internet and Higher Education, 2, 87-105.*

Harrison, N. (2012). *Apple sells three million iPads in three days.* Retrieved on February 21, 2013 from http://www.apple.com/pr/library/2012/11/05Apple-Sells-Three-Million-iPads-in-Three-Days.html.

Hussain, W., & Ishak, W. (2011). A review note of KMICe 2010: Knowledge management initiatives to improve organizational performance. *American Journal of Economics and Business Administration*, 3(1), 219-223.

Kaneshige, T. (2012) Apple expert details how to keep iPad business migrations in check. *MacWorld,* Retreived on October 31, 2014 from http://www.macworld.com/article/2027755/apple-expert-details-how-to-keep-ipad-enterprise-migrations-in-check.html.

Murphy, G.D. (2011). Post-PC devices: A summary of early iPad technology adoption in tertiary environments. *e-Journal of Business Education & Scholarship of Teaching*, *5*(1), 18-32.

Moran, M., Hawkes, M., & Gayar, O.E., (2010). Tablet personal computer integration in higher education: Applying the unified theory of acceptance and use technology model to understand supporting factors. *Journal of Educational Computing Research*, *42* (1), 79-101.

Park, Y. (2011). A pedagogical framework for mobile learning: Categorizing educational applications of mobile technologies in four types. *International Review of Research in Open and Distance Learning, 12* (2), 78-102.

Passey, D. (2010). Mobile learning in school contexts: Can teachers alone make it happen?. *IEEE Transactions on Learning Technologies*, *3* (1), 68-81.

Richardson, J. C., Arbaugh, B., Cleveland-Innes, M., Ice, P. Swan, K.P., Garrison, R. (2012). Using the community of inquiry framework to inform effective instructional design. *The Next Generation of Distance Education, 97-125.*

Rovai, A. P. (2002). Building classroom community at a distance: a case study. *Educational Technology Research and Development Journal*, *49* (4), 35–50.

Sharples, M., & Roschelle, J. (2010). Guest Editoral: Special issue on mobile and ubiquitous technologies for learning. *IEEE Transactions of Learning Technologies*, *3* (1), 4-5.

Sheng, S., Zhou, K., & Li, J. (2011). The effects of business and political ties on firm performance: evidence from china. *Journal of Marketing*, *75* (1), 1-15.

Shim, J. P., Dekleva, S., Chengqi, G., & Mittleman, D. (2011). Twitter, google, iphone/ipad, and facebook (TGIF) and smart technology environments: How well do educators communicate with students via TGIF? *Communications Of AIS*, 29657-672.

Weber, R. M., & Horn, B. D. (2012). Technology: Mobile office-2012 edition*.* *Journal of Financial Service Professionals*, *66* (2), 36-38.

Weiser, M. (1991). The computer for the 21st century. *Scientific American*, *265*(3), 94-104.

Williams, C. (2002). Learning on-line: A review of recent literature in a rapidly expanding field. *Journal of Further & Higher Education*, *26*(3), 263-272.

Zapatero, E. G., Maheshwari, S. K., & Chen, J. (2012). Effectiveness of active learning environment: Should testing methods be modified?. *Academy of Educational Leadership Journal*, *16*(4), 101-114.

Dr. Kathleen Houlihan teaches courses in marketing, social media, and IT Management bringing more than 20 years of business experience to the classroom. Dr. Houlihan has worked in higher education administration at several universities, she has also worked for an international Internet company, and she has experience as an entrepreneur.

CONSUMER DIRECTED HEALTH PLANS AND THE ASSOCIATION BETWEEN MEDICAL SAVINGS ACCOUNTS & PLAN CHOICE

David W. Jordan, Slippery Rock University

ABSTRACT

This study examines the association between Consumer Directed Health Plan (CDHP) medical savings accounts and the prior funding of Flexible Savings Accounts (FSAs). Medical savings accounts are integral components of CDHPs. Consumer Directed Health Plans were designed to slow the growth of escalating insurance costs for employers through high initial cost-sharing and consumer engagement via the use of Health Reimbursement Accounts (HRAs) or Health Savings Accounts (HSAs). These medical spending accounts are intended to engage consumers by requiring them to plan for and coordinate the first several thousand dollars of their health care needs. HRAs and HSAs share some characteristics with FSAs, which pre-date CDHPs. Findings suggest consumers who previously funded an FSA may not seek CDHPs due to the continued ability to plan for and coordinate initial healthcare spending, but only to seek a method to reduce their financial burden of accessing healthcare through lower premiums.

PURPOSE

This study examines the association between medical savings accounts associated with Consumer Directed Health Plans (CDHPs) and enrollees' prior funding of a Flexible Savings Account (FSA). Medical savings accounts are tax-advantaged savings accounts funded by enrollees or their employers, and require some limited enrollee planning and coordination to offset out-of-pocket medical costs. FSAs were introduced more than three decades ago as an optional medical savings account, independent of Managed Care plans. CDHPs emerged in the early 2000s and incorporate two variations of medical savings accounts, Health Reimbursement Accounts (HRAs) or Health Savings Accounts (HSAs). Medical savings accounts associated with CDHPs allow for greater funding, accrual of unused funds from year to year, and represent a more robust vehicle to plan for and coordinate funds to cover out-of-pocket health care costs than do FSAs. An enrollee's prior funding of an FSA may suggest their propensity to plan for and coordinate financial resources used to offset out-of-pocket health care needs. Thus, when an enrollee is able to choose between a Managed Care plan, or CDHP with a more robust medical savings account, prior FSA funding may suggest a greater likelihood to choose a CDHP coupled with either an HRA or HSA.

BACKGROUND

Of the approximately 56 percent of Americans insured through Employer Sponsored Insurance (ESI), Consumer Directed Health Plan enrollment has increased from four percent in 2006 to nineteen percent in 2012 (Kaiser Family Foundation and Health Research And Educational Trust, 2012). Thirty-one percent of employers offer at least one CDHP plan, a number that is also expected to increase (Kaiser Family Foundation and Health Research And Educational Trust, 2012).

Health insurance cost to employers has nearly doubled since the late 1990s (Fronstin, 2012). CDHPs emerged approximately one and a half decades ago as an alternative to Managed Care Health Maintenance Organizations (HMOs) and Preferred Provider Organizations (PPOs) with the intent to slow the increasing cost of ESI. Economists argue that one cause of high healthcare insurance cost is attributed to moral hazard (Arrow, 2004). Moral hazard impacts health care costs when enrollees consume more healthcare services than they would if they were not partially insulated by a third party payer. CDHP designs are intended to compel health care consumers to "…steer clear of moral hazard, purchasing only the health care they need or, more precisely, only the health care that enhances their welfare more than alternative goods such as food, transportation, or movie tickets" (Kravitz, 2007). Based largely on findings from the Rand HIE study, cost sharing has become the primary control incorporated in plan designs to reduce moral hazard (Newhouse, 2004). To help offset the burden of high deductibles and engage consumers in health care purchasing decisions, CDHPs are designed to include either an HRA or HSA medical savings account. Medical savings accounts allow enrollees to coordinate pre-tax dollars to pay and plan for some health care use during the high deductible period. CDHPs also attempt to make provider cost and quality information accessible through online portals and/or telephonic member support for better health care purchasing decisions. Consumer engagement is intended to lower discretionary healthcare use, facilitate better healthcare choices, and reduce ESI costs (Greene, Hibbard, Dixon, & Tusler, 2006; Robinson, 2002).

FSAs are one of the earliest efforts intended to engage consumers in more efficient health care purchasing. The Internal Revenue Service sanctioned Flexible Spending Accounts in 1978, which were the first medical savings accounts exempted from FICA, federal, state, and local income taxes (Bureau of Labor and Statistics, 2002; Hamilton & Marton, 2007). These accounts, which pre-date CDHPs by approximately two decades, are optional, supplemental to, and independent of an enrollee's health plan. They were created for employees to set aside pre-tax earnings to pay for out-of-pocket medical expenses in an account created and managed by their employer. FSAs provide an opportunity for enrollees to save money for planned or predictable out-of-pocket medical expenses, albeit with annual contribution caps and use-it-or-lose-it provisions. Recent regulatory changes now allow FSA participants to carry over up to $500 each year beginning in 2015 (Laufer, 2013). According to a 2007 U.S. Department of Health and Human Services National Health Survey, 14.8 percent of non-elderly persons with private insurance funded an FSA (Cohen & Martinez, 2009).

Two primary health insurance models, referred to as Consumer Directed Health Plans (CDHPs), include either a Health Reimbursement Account (HRA) or Health Savings Account (HSA). HRAs and HSAs are the most recent forms of medical savings account. The term HRA became common to describe plans that emerged from the Health Insurance Portability and Accountability Act (HIPPA) of 1996. For Health Reimbursement Accounts, the employer funds the HRA with pre-tax dollars intended to offset out-of-pocket costs. HRAs are not required to be coupled with any particular type of plan, however are most commonly paired with a high deductible plan. HSAs were established as part of Medicare legislation passed in 2003 (*MEDICARE PRESCRIPTION DRUG, IMPROVEMENT, AND MODERNIZATION ACT OF 2003*, 2003). HSA eligible plans include employee ownership of the medical spending account, include account portability regardless of employer affiliation, contain investment characteristics, allow funding by the employer and/or the employee and allow greater employee control. HRAs are similar to HSAs but are not owned by employees, are only portable if approved by the employer (most employers do not allow portability), include different funding limitations and are not required to be paired with a High Deductible Health Plan (HDHP), whereas an HSA must be paired with a HDHP (Buntin et al., 2006).

HRAs and HSAs have some similarities with FSAs. All medical savings accounts provide the opportunity to set aside funds for future health care costs, but HRAs and HSAs offer longer term planning opportunities with greater funding levels than FSAs. Enrollee characteristics, which may have led them to have previously funded an FSA, may also be associated with a desire to choose a CDHP. They may desire the greater opportunity to plan for and coordinate out-of-pocket health care costs afforded by the more robust HRA and HAS medical savings accounts.

This study evaluates the association between previously funding an FSA and the selection between a Managed Care PPO and two CDHPs (HRA or HSA eligible plan). Enrollees were provided a new choice set of three plans in 2006, down from nine Managed Care and one high deductible plan in 2005. Of the three plans that comprise the new choice set in this study, the Managed Care PPO also requires the highest enrollee premium contributions, but has no deductible to influence initial health care cost. The Managed Care PPO does not include a medical savings account, however, as before, PPO enrollees can opt to add an optional FSA that is independent of the plan. For 2005, only 17.7% of the study population participated in an optional FSA (Appendix A: Variable Frequencies), with stricter funding limitations than HRAs and HSAs, and rollover preclusions (prior to 2015). It can be argued that PPOs require less coordination of health care funds and payment by enrollees than CDHPs. Of the two CDHPs, the plan that is eligible for enrollees to fund an HSA more closely resembles voluntary participation in an FSA, but with greater flexibility and fewer restrictions. HSA eligible plan enrollees are given the choice to fund or not fund an HSA. If enrollees choose to fund an HSA, they must fund it themselves. Those who choose an HRA plan are automatically provided an account that is not optional, is funded by the employer, yet still requires the coordination of funds for medical costs. The HRA plan in this study is coupled with a High Deductible Health Plan.

PRIOR RESEARCH

There is no research that examines prior FSA funding and CDHP choice. A study by Parente, Feldman, & Christianson, (2004) presents descriptive statistics relative to FSA funding in an analysis that incorporates prior FSA funding in a regression model while examining post CDHP choice medical expenditures (Parente, Feldman, & Christianson, 2004). Parente et al. (2004) examined a single large employer that added a CDHP to their choices of an HMO and PPO. The Consumer Directed Health Plan incorporated an HRA medical savings account. Data was collected from health insurance claims and benefits data and employs regression analyses to estimate a model that includes health care use, health status, demographics, FSA funding and plan choice. Descriptive statistics indicate greater prior FSA funding by those who chose the CDHP. The authors also find those who funded an FSA in the

prior year were more likely to have increased medical expenditures (Parente et al., 2004). The greater increased medical expenditures were associated with the CDHP. Parente et al. (2004) suggest the CDHP actually had the lowest cost sharing due to a generous HRA funding level by the employer for the plan examined in their study, and may have contributed to the greater expenditures (Parente et al., 2004). The authors however did not directly examine the association between FSA participation and CDHP choice. The dearth of research regarding the importance of medical savings accounts to the selection of a CDHP indicates the need for additional study.

DATA SOURCES

This study examines employee households of an employer that operates in the East North Central, South Atlantic, East South Central, and West South Central United States. They offered ten ESI plans including six HMOs, three PPOs, and one High Deductible Health Plan (HDHP) in 2005. Effective January 1, 2006, employees faced a new choice set comprised of a PPO, HRA, and HSA eligible HDHP. Table 1: Health Plan Cost Structures lists cost characteristics for each plan choice for 2006. Plans with more generous benefits generally require the greatest enrollee premium contributions, while the lowest cost plans have higher initial cost sharing, and thus considered least generous. The Managed Care PPO represents the most generous option for 2006 with no deductible (in-network), however requires the greatest enrollee premium contributions. Although the HSA eligible High Deductible Health Plan has the lowest enrollee premium contributions (no employee contributions are required toward premiums), it represents the least generous choice due to the largest deductible with no employer contributions to a medical savings account. The HRA represents a "middle" benefit generosity due to a High Deductible Health Plan that is coupled with an employer funded medical savings account.

Data are retrieved from the employer's human resources information system (HRIS) and claims system via a third party data management firm in de-identified form. Data was available for one year prior to the plan choice year of 2006. Data was available for those who were continuously enrolled from January 1, 2005 to December 31, 2009, and under the age of 60. The resulting sample is N = 9,617.

TABLE 1

HEALTH PLAN COST STRUCTURES

<table>
<tr><th colspan="4">Coverage Tier: (S) = Subscriber, (SS) = S & spouse, (SC) = S & Child, (F) = Family</th></tr>
<tr><th>Plan</th><th>PPO [a]</th><th>HRA</th><th>HSA Eligible Plan [b]</th></tr>
<tr><td>Employee
Premium
Contribution
(per month)</td><td>$77.77 S
$165.24 SS
$130.03 SC
$217.50 F</td><td>$63.07 S
$134.01 SS
$105.46 SC
$176.39 F</td><td>$0 S
$0 SS
$0 SC
$0 F</td></tr>
<tr><td>Deductible
In- Network</td><td>$0</td><td rowspan="2">After HRA Exhausted
$500 /S
$750 /SS
$750 /S Child(ren)
$1,000 /F
(In & Outside Network)</td><td>$2,100 /per enrollee[c] up to
$6,300 /F</td></tr>
<tr><td>Outside Network</td><td>$300 /S
$900 /F</td><td>$2,500 /S
$7,500 /F</td></tr>
<tr><td>Co-insurance c
Inside Network
Outside Network</td><td>
15%
30%</td><td>
15%
30%</td><td>
0%
20%</td></tr>
</table>

Out-of-Pocket Maximum In- Network Outside Network	$2,000 /per enrollee[d] up to $6000 /F	$3,000/S $4,500 /SS $4,500/S Child(ren) $6,000 /F	$2,100 / per enrollee[d] up to $6,300 /F
	$4,000 / SS $12,000 / F	$5,500 / S $8,250 / SS $8,250 / S Child(ren) $11,000 / F	$5,000 / SS $15,000 / F
Employer Contributions to medical savings account	$0	$1,000 / S $1,500 / SS $1,500 / S Child(ren) $2,000 / F *Used prior to deductible	$0

Notes.

a *The PPO plan also has co-pays for Primary Care Physician Visit = $20, Specialist Visit = $25, Emergency Department Visit = $50, Chiropractic Visit = $25.*

b *The HSA eligible Plan has a cost structure that does not change based on funding or not funding an HSA.*

c *Co-insurance percentages are applicable after deductibles are met.*

d *Up to the family level. The enrollee deductible is taken up to three enrollees.*

DESCRIPTIVE STATISTICS

The study population is largely male (82%), married (79%), white (86%), non-exempt (60%), non-union (71%,), and reside in the East North Central part of the United States (48%). Fifty eight percent of the 9,617 households chose the PPO, 37% the HRA, and 5% the HSA eligible plan (Appendix A: Variable Frequencies). Coverage tiers within each plan are unremarkable. PPO enrollment includes the fewest single coverage enrollees, and the HSA eligible plan includes the fewest households enrolled as employee plus children or family. Eighteen percent of the enrollees funded an FSA in 2005. The mean age for employees is nearly 50 years old and a median of 51 (Appendix B: All Enrollees' Descriptive Statistics). Mean enrollment months is 35 with a median of 36, thus the average household had approximately 3 persons enrolled for 2005. Mean employee earnings is $69,615 with a median of $66,181; average cost sharing for 2005 were $1,470 with a median of $995.

METHODS

This study is guided by an adaptation of the Andersen Behavioral Model, and includes the constructs of predisposing, enabling and choice factors. The Andersen Behavioral Model was developed to evaluate the access and use of health care. The model acknowledges the prominent role of third party insurance coverage in the access and use of healthcare, thus guides this study for Managed Care verses CDHP choice (Andersen, 1995). Predisposing factors are comprised of enrollee household size, marital status, ethnicity, exempt status, union status and region of residence. Enabling factors in the adapted model are employee earnings and the dependent variable of plan choice. Choice factors in the adapted model include perceived health care need and plan characteristics. Choice factors include out-of-pocket maximum, enrollee premium contributions, prior cost-sharing, enrollee health status and prior FSA participation. Health status is a ratio measure of relative health risk at the contract level. A weighted score is created using demographic categorization and Diagnostic Cost Grouping (DCG) captured from 2005 health care use. DCG is a proprietary algorithm based diagnosis cost grouping software developed by Verisk Health Inc. Flexible Spending Account (FSA) participation is operationalized as a dichotomous variable.

The dependent variable is a nominal categorical measure of choice among health plans (Managed Care PPO, and HRA or HSA eligible CDHPs). Plan choice is estimated for one of three health plan options based on model parameters. The Managed Care PPO represents the reference category. Outcomes for the non-reference plans within the choice set can be assessed for their relationship relative to the reference category.

Relative risk ratios are estimated relative to the reference category and represent the change in odds when there is a one-unit change associated with parameter coefficients. For alternatives *j1-3* in choice set *J,* the outcome of plan choice for each household at the contract level is represented by *h* (described by the set of attributes *Xh* comprised of

the covariates for *h*), and the model probability vectors are $\pi h1, \ldots, \pi h3$, where πhj is the probability that alternative *j* was chosen by *h* from choice set *J*. Estimates are generated for $J - 1$ outcomes, with the reference category odds ratio of one. The mutually exclusive and exhaustive choice set of alternatives (*j1, j2, j3*) for *h* is:

Choice Set *J* of Alternatives

$$j1, \ldots, j3 = \begin{cases} j1) \text{ PPO plan,} \\ j2) \text{ HRA plan,} \\ j3) \text{ HSA eligible plan,} \end{cases}$$

and the probability that a given single household *h* chose alternative *j*, from *J:*

$$\pi_j = \frac{\exp(\alpha j + \beta j x)}{\Sigma\, h \exp(\alpha h + \beta h x)}, \quad j = 1, \ldots, J - 1$$

where πj is the probability that household *h* selected alternative *j*, and covariates of *h* are represented by *x*. $\beta 1, \ldots, \beta h$ are regression vector parameters, and $\Sigma\, j\, \pi j = 1$.

RESULTS

Of the 17.7% who funded an FSA in 2005, prior to the new health plan choice set; seven hundred fourteen chose a CDHP (forty chose an HSA eligible CDHP and six hundred seventy four chose the HRA CDHP), while nine hundred sixty three chose the Managed Care PPO. Parameter estimates from the multinomial logistic analysis are listed in Table 2: Parameter Estimates. Prior FSA participation is not positively associated with CDHP choice. The regression coefficient (B) for not previously participating in an FSA and enrollment in the HSA eligible CDHP versus PPO Managed Care plan is .445 with an Exp(B) of 1.560. Thus, if an enrollee didn't previously participate in an FSA, the relative risk of choosing a HSA eligible CDHP versus the PPO Managed Care plan increased by 1.560. Therefore, if an enrollee didn't previously participate in an FSA, the relative risk of choosing a HSA eligible CDHP

versus the PPO Managed Care plan increased by 1.560. Otherwise stated, holding all else constant, if an enrollee household did not previously participate in an FSA they are approximately 1.6 times more likely to choose the HSA eligible CDHP over the PPO. Prior participation in an FSA is not statistically significant for enrollment in the HRA versus the PPO Managed Care plan (p = .863).

TABLE 2

PARAMETER ESTIMATES (N=9,617)

Plan Chosen 2006 (DV)	Independent Variable	B	Std. Error	Wald	Sig.	Exp(B)
	Intercept	-2.096	.302	48.044	.000	.

HSA eligible CDHPa	*FSA Participation: No*	*.445*	*.153*	*8.400*	*.004**	*1.560*
	FSA Participation: Yes	*0b*	.	.	.	.
	Employee Earnings	*.000*	*.000*	*2.994*	*.084*	*1.000*
	Out-of-Pocket Max	.000	.000	20.099	.000**	1.000
	Total Cost Sharing	*-.001*	*.000*	*263.774*	*.000***	*.999*
	Health Status (RRS)	*.002*	*.001*	*8.572*	*.003***	*1.002*

TABLE 2: ***PARAMETER ESTIMATES (N=9,617), CONTINUED…***

Plan Chosen 2006 (DV)	Independent Variable	B	Std. Error	Wald	Sig.	Exp(B)
	Intercept	-1.226	.145	71.800	.000**	.
HRAa	FSA Participation: No	.011	.062	.030	.863	1.011
	FSA Participation: Yes	0b	.	.	.	.
	Employee Earnings	*.000*	*.000*	*.082*	*.774*	*1.000*
	Out-of-Pocket Max	.000	.000	139.355	.000**	1.000
	Total Cost Sharing	*.000*	*.000*	*28.512*	*.000***	*1.000*
	Health Status (RRS)	*-.003*	*.000*	*70.305*	*.000***	*.997*

Notes:
aThe reference category is: PPO.
bThis parameter is set to zero because it is redundant.
*Parameter is significant at the 0.05 level (2-tailed).
**Parameter is significant at the 0.01 level (2-tailed).

Additional findings include positive associations between lower prior cost sharing and higher household health status for those who chose the CDHPs compared to the Managed Care PPO. This suggests favorable selection for the CDHPs, with the HSA eligible CDHP benefiting most. Employee earnings are not found to be significant in the plan choice regression model.

DISCUSSION

High deductibles associated with CDHPs translate to high initial health care utilization costs for which enrollees must plan for and coordinate funding and payment. Consumer Directed health Plans incorporate a medical savings account to ease the initial cost burden through either employer funds or pre-tax dollars to use toward the high deductible. The CDHP choices in this study (and generally in other programs) also represent lower enrollee premium contributions than Managed Care plans due to the lower initial benefit generosity. The characteristics of coordinating funds for out-of-pocket health care costs using an HRA or HSA medical savings account are similar to that of a FSA. These medical savings accounts provide the opportunity to set aside funds for future health care costs and offer longer term planning opportunities with greater funding levels than FSAs.

Although all medical savings accounts include planning and coordination of initial health care costs, the FSA and HSA appear more similar because they are both optional and are funded only by the insured. Thus, the finding that

there is a negative association between prior FSA participation and HSA eligible CDHP choice, in conjunction with no significant association between HRA plan choice and prior FSA participation, is of particular interest. These findings may suggest that enrollees who choose a CDHP are not driven to do so because of a desire to have greater planning or coordination over the financing of their health care needs. One possible explanation could be that those who choose the HSA eligible CDHP are less interested in a medical savings account due to prior experience with an FSA, and that HRA enrollees are ambivalent. Enrollees who participate in an FSA prior to having the option to enroll in a CDHP may do so with the primary purpose to save out-of-pocket health care costs through the use of pre-tax funds, and not the enhanced ability to plan for or coordinate those resources. Further, the experience of using an FSA could be an inconvenient process they prefer to discard if the premiums of an HSA eligible CDHP are low enough, as in this study for which the HSA eligible CDHP required no premium contributions by enrollees (Table 1).

Another possible explanation for these results could relate to CDHP favorable selection suggested by this study. The findings that CDHPs enjoy favorable selection relative to the referent Managed Care PPO plan may suggest that healthier enrollees who previously did not perceive a high need for health care gravitate toward the CDHPs, and thus the medical savings account represented little advantage. The lower enrollee premium contributions and lower perceived need for care may be the primary factor of plan choice, not the ability to plan or coordinate a medical savings account.

Limitations of this study include the inability to survey enrollees due to a reliance on convenience data. Although guided by a theoretical model, not all variables are available to limit error in a more robust approach. Additionally, causation is not possible due to the ex post facto non-experimental design, however valuable insights are still gained to the association between medical savings accounts and plan choice. More research is necessary due to the lack of generalizability to other employers and various benefit program configurations.

REFERENCES

Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior, 36*(1), 1-10.

Arrow, K. J. (2004). Uncertainty and the welfare economics of medical care. *Bulletin of the World Health Organization, 82*, 141-149.

Buntin, M. B., Damberg, C., Haviland, A., Kapur, K., Lurie, N., McDevitt, R., & Marquis, M. S. (2006). Consumer-directed health care: early evidence about effects on cost and quality. *Health Affairs, 25*(6), 516-530. doi: 10.1377/hlthaff.25.w516.

Bureau of Labor and Statistics. (2002). Definitions of health insurance terms. *Bureau of Labor and Statistics* retrieved from http://www.bls.gov/ncs/ebs/sp/healthterms.pdf.

Cohen, R. A., & Martinez, M. E. (2009). Consumer directed health care for persons under 65 years of age with Private health insurance*:* United States, 2007. *National Center for Health Statistics*. Washington D.C..

Fronstin, P. (2012). Findings from the EBRI/MGA consumer engagement in health care survey *Employee Benefit Research Institute* (Issue Brief No. 379 ed., Vol. No. 379). Washington, DC..

Greene, J., Hibbard, J., Dixon, A., & Tusler, M. (2006). Which consumers are ready for consumer directed health plans? *Journal of Consumer Policy, 29*, 247-262. doi: 10.1007/s10603-006-9008-z.

Hamilton, B., & Marton, J. (2007). Employee choice of flexible spending account participation and health plan. *Health Economics*. doi: 10.1002/hec.

Kaiser Family Foundation and Health Research And Educational Trust. (2012). National survey of employer-sponsored health plans. Retrieved March 1, 2013, 2013, from http://ehbs.kff.org/?page=list&id=1.

Kravitz, R. L. (2007). Health care at risk: A critique of the consumer driven movement. *JAMA, 298*(11), 1336-1337.

Laufer, J. A. (2013). Modification of "Use-or-Lose" Rule For Health Flexible Spending Arrangements (FSAs) and Clarification Regarding 2013-2014 Non-Calendar Year Salary Reduction Elections Under § 125 Cafeteria Plans. Revenue Notice 2013 -71. *Office of Division Counsel/Associate Chief Counsel, U.S. Department of the Treasury.*

Medicare prescription drug, improvement and modernization act of 2003. *U.S. Congressional Record, Vol. 149 (2003)*, Washington, DC..

Newhouse, J. P. (2004). Consumer directed health plans and the and health insurance experiment. *Health Aff, 23*(6), 107-113. doi: 10.1377/hlthaff.23.6.107.

Parente, S. T., Feldman, R., & Christianson, J. B. (2004). Evaluation of the effect of a consumer driven health plan on a medical care expenditures and utilization. *Health Services Research, 39*(No.4), 1189-1210.

Robinson, J. C. (2002). Renewed emphasis on consumer cost sharing in health insurance benefit design. *Health Aff*(March, 2002), 139-154.

David W. Jordan, PhD, MBA is an Associate Professor in the School of Business at Slippery Rock University. He also serves as Health Care Administration & Management Program Coordinator. His research includes health care benefit design, health care management and administrative processes, individual and population health behaviors and health care utilization decision factors.

APPENDIX A – VARIABLE FREQUENCIES

(N=9,617)

Variable	Percent %	Frequency # N=9,617
Employee Gender		
Male	82.5	7,933
Female	17.5	1,684
Ethnicity		
White	86.4	8,309
African American	5.6	537
Asian	0.9	84
American Indian/Alaska Native	1.1	101
Hispanic	5.7	547
Native Hawaiian/Other Pac. Isles	0.0	1
Two or more	0.3	31
Not Stated	0.1	7
Hourly/Salaried		
Hourly	60.1	5,783
Salaried	39.9	3,834
Union Status		
Union	29.1	2,797
Non-Union	70.9	6,820
Region		
Region 1 – New England	0.0	0
Region 2 – Mid Atlantic	0.1	10
Region 3 – East North Central	47.9	4,609
Region 4 – West North Central	0.5	46
Region 5 – South Atlantic	19.5	1,877
Region 6 – East South Central	4.3	414
Region 7 – West South Central	27.1	2,604
Region 8 – Mountain	0.0	0
Region 9 – Pacific	0.6	57
Plan Chosen 2006		
PPO	58	5,577
HRA	37.3	3,586
HSA Eligible CDHP	4.7	454
FSA Participation 2005		
Yes	17.7	1,701
No	82.3	7,916
Marital status		
Single	12.3	1,186
Married	79.0	7,597
Separated	.0	1
Divorced	8.3	793
Widowed	.4	40

APPENDIX A – VARIABLE FREQUENCIES, CONTINUED…

Coverage Tier All Plans 2006		
Self	17.4	1,669
+ Spouse	21	2,022
+ Children	11	1,057
+ Family	50.6	4,869
Coverage Tier PPO Only		
Self	15.3	854
+ Spouse	23.2	1,294
+ Children	10.8	603
+ Family	50.7	2,826
Coverage Tier **HRA Only**		
Self	19.2	688
+ Spouse	17.2	615
+ Children	12.1	433
+ Family	51.6	1,850
Coverage Tier **HSA Eligible CDHP Only**		
Self	28	127
+ Spouse	24.9	113
+ Children	4.6	21
+ Family	42.5	193

Notes:
a Regions based on the U.S. Census Bureau regional division
Appendix A continued…

APPENDIX B – ALL ENROLLEES' DESCRIPTIVE STATISTICS

Variable	Mean	Median	Std. Deviation	Range
Employee Age (as of 1/06)	50	51	7	42
Member Months 2005	35	36	17	143
Out-of-Pocket Maximum	$4,871	$6,000	$1,391	$4,300
Deductible	$524.30	$0	$1,056	$6,300
Employee Earnings 2005	$69,615	$66,181	$36,853	$1,026,421
Variable Cost Sharing 2005	$1,470	$995	$3,750	$332,031
Premium Fixed Cost 2005	$1,817	$2,120	$673	$4,524
Relative Risk Score 2005	78	46	101	978

DO BONDHOLDERS RECEIVE BENEFITS FROM BANK INTERVENTIONS?

Yili Lian, Pennsylvania State University

ABSTRACT

This study examines the effect of bank interventions over bond performance surrounding loan covenant violations. By studying abnormal bond returns of nonfinancial firms with covenant violations from 1996 through 2008, the results show that bondholders benefit from banks' influence over the governance of violators. Both short-term and long-term abnormal bond returns are significantly positive after covenant violations. Cross-sectional abnormal bond returns are positively related to the probability of bank interventions. Further, forced CEO turnover is positively associated with the probability of bank interventions. Firms with forced CEO turnover tend to have better bond performance. The study concludes that bank interventions have positive effects on the value of bondholders.

INTRODUCTION

This research study tests the effect of bank interventions on bond performance surrounding loan covenant violations. As argued by Nini, Smith, and Su (2012), banks actively are involved in the governance of corporations in technical default events and create value for shareholders. This paper demonstrates that bondholders also receive benefits from bank interventions. As shown in Datta, Iskandar-Datta, and Patel (1999), bank cross-monitoring diminishes duplicative monitoring of bondholders and reduces bond yield. In addition to bank monitoring, this study shows that bondholders free-ride on bank interventions on the governance of a firm.

Traditionally, corporate creditors are considered as passive bystanders until firms are in default. In fact, banks influence firms well before bankruptcy. Unlike public bonds, bank debt is tightly held, even for large syndicated loans. When a firm breaches a financial covenant, technical default triggers and control rights shift to the bank. That bank can use the threat of accelerating existing bank loans to choose a desired course of action. As Shleifer and Vishny (1997) argue, "significant creditors, such as banks, are also large and potentially active investors. ... Their power comes in part because of a variety of control rights they receive when firms default or violate debt covenants. ... As a result of having a whole range of controls, large creditors combine substantial cash flow rights with the ability to interfere in the major decisions of the firm." As defined in Nini et al. (2012), the "mixed region" of corporate governance is when firm performance deteriorates, but before payment defaults. In "mixed region", actions of both creditors and stockholders are important to firm corporate governance.

There are reasons to believe bank interventions create value for bondholders. Firstly, banks engage in firm investments, dividend policies, and capital structures to improve firm performance (e.g., Nini et al., 2009; Nini et al., 2012). Surrounding covenant violations, investments and dividends are cut, and leverage and operating costs are effectively controlled.

Secondly, banks also are involved in CEO hiring decisions. Both Ozelge and Saunders (2012) and Nini et al. (2012) show that banks exert influence over CEO turnover. An underperforming CEO is likely to leave a firm when a bank intervenes on the governance of that firm.

Alternatively, bank interventions could reduce the value of bondholders. As a large and active debtholder, a bank can renegotiate with the violator and get better terms of existing loans. For instance, a bank requires additional collateral for an outstanding loan, which dilutes the claims of current bondholders.

The above two hypotheses are tested via event studies of bond returns. If bondholders benefit from bank interventions, the abnormal bond returns, which are deducted by matched bond index returns, should be significantly positive around covenant violations. The results of event studies show that the value of bondholders increases after covenant violations. The average abnormal bond return is 2.31% surrounding loan covenant violations, and the average cumulative abnormal bond return is 9.1% at 12 months after a covenant violation and 16.26% at 24 months after a covenant violation.

Next, the relation between cross-section abnormal bond returns and the probability of bank interventions is examined. The more likely a bank intervenes, the more value bondholders will gain if bank interventions create value for bondholders, and vice versa. The amount of outstanding loans is used as a proxy of probability of bank interventions. Abnormal bond returns are found to be positively related to the probability of bank interventions.

Finally, the study shows that forced CEO turnover is a possible mechanism through which banks intervene to improve bond performance. The underperforming CEOs are likely to leave the violating firms, when the probability of bank interventions is high. Long-term bond returns also are positively correlated with the probability of CEO turnover. In addition, long-term bond returns are even higher for firms with forced CEO turnover than for firms without CEO turnover. These results are dissimilar results for firms with general CEO turnover.

To better understand the relation between bank interventions and bond performance, let us consider the case of Magellan Health Services, Inc. (see Figure 1 in the Appendix), once the nation's largest managed behavioral health company. On November 1, 2002, Magellan Health Services obtained from bank lenders an interim waiver of its financial covenants through December 31, 2002. Without the reprieve, bank lenders could have demanded an accelerated repayment schedule, potentially pushing the firm into bankruptcy. On the same day, Daniel S. Messina, CEO of the company, was forced to resign the position. According to the news from the Washington Post on November 2, 2002, Daniel S. Messina's decision to step down came as Magellan's banks granted a temporary reprieve, assuring that the company won't go into technical default on its $300 million in bank debt at least until December 31 (2002). From historical bond trading prices, the last average net trading price on September 12, 2002, before the news announcement, was 84.3% of face value, while the first average net trading price on December 31, 2002, after the news announcement, was 97.8%. The price increased about 16% around this event. Interestingly, Moody's bond rating dropped from B3 to Caa2 during the period.

RESTATED LITERATURE

This paper contributes to the fast growing literature on bank controls and the effects of covenant violations. Specifically, Chava and Roberts (2008) find that investment declines after a covenant violation. Investment reduction is concentrated on firms with agency and information problems. Roberts and Su (2009) show that bank interventions affect capital structures. New debt issuing declines sharply and persistently following covenant violations. The decline is more pronounced when borrowers have costly alternative sources of financing. Ozelge and Saunders (2012) find that banks exercise governance role through the replacement of underperforming CEOs in borrowing firms. The effect of lending banks in forcing CEO turnover is explained in large part by covenant violations. Nini et al. (2012) argue that covenant violations are followed by conservative investment and financing activities and forced CEO turnover. They also show that firm operating and stock performance is improved following loan covenant violation.

This paper shows that passive bondholders receive benefits from bank interventions. Bank interventions not only create value of shareholders, but also generate value for bondholders. The study demonstrates that cross-section bond returns are associated with the probability of bank intervention and that forced CEO turnover contributes to the positive effect of bank interventions on bond performance.

The paper also contributes to the literature on relation between bond price and corporate governance mechanisms. These mechanisms include managerial incentives, anti-takeover provisions and laws, shareholder control, and bank cross-monitoring. For managerial incentives, Ortiz-Molina (2006) show that bondholders require high bond yields by anticipating the future risk choices contained in managerial incentive structures. For corporate control markets, takeovers increase the leverage of target firms and expropriate the wealth of bond-holders of those firms. Therefore, empirical findings show that bond yields are low for firms with anti-takeover provisions, such as classified board (Chen, 2011), or for firms locating in anti-takeover hostile states (Qiu and Yu, 2009; Francis et al., 2010), or for firms locating in good creditor protection law states, such as payout restriction law (Mansi et al., 2009). For shareholder control, Cremers, Nair, and Wei (2007) show that the impact of shareholder control on bond price depends on the takeover vulnerability. Shareholder control is positively related to bond yields if a firm is exposed to takeovers, and vice versa. For bank cross-monitoring, Datta et al. (1999) argue that bank monitoring reduces agency cost between creditors and managers. Therefore, bank monitoring reduces bond yield spreads.

This paper shows that bank interventions affect bond prices via forced CEO turnover. Bank interventions are an important governance channel for creditors when covenants are violated. The study shows that forced CEO turnover is positively associated with the probability of bank interventions. Additionally, forced CEO turnover is positively related to long-term bond performance.

DATA, VARIABLES AND SUMMARY STATISTICS

Sample

The sample includes non-financial U.S. firms with covenant violation information from 1996 through 2008 in Amir Sufi's website.[21] Nini et al. (2012) collected the covenant violation information from 10-K or 10-Q SEC lings. The construction of the covenant violation data begins with data for all non-financial U.S. firms in Compustat with book assets greater than $10 million in 2000 dollars. Nini et al. (2012) use a text-search algorithm that first locates word “covenant" in firm EDGAR filings, then conditional on finding the word “covenant", they search five terms: “waiv", “viol", “in default", “modif" and “not in compliance". Detailed sample selection is described in the appendix of Nini et al. (2012).

Since the effect of bank interventions on bond performance was analyzed, a firm must have a least one bank loan and one bond outstanding. The bank loan data comes from the LPC Dealscan database. The loan balance is constructed by using the loan origination date, loan end date, loan type and loan size. Dealscan dataset is constructed by both firm lings and bank reports, and it has a reasonable coverage of historical bank loans. According to Carey and Nini (2007), Dealscan has information on 50-70% of all U.S. commercial loan volume into the early 1990s, with coverage increasing to 80-90% from 1992-2002.

The information is collected on bond characteristics from Mergent FISD data, and bond prices from Mergent NAIC Bond Transaction Database. NAIC bond data include all purchases and sales of public fixed income securities by insurance companies that are required to report all their bond trades to National Association of Insurance Commissioners (NAIC). These data cover only the insurance company’s bond transactions. However, insurance companies hold about one third of all public corporate bond issues and account for a quarter of all high yield bond transactions (Campbell & Taksler, 2003; Hong & Warga, 2000). Since the violation sample starts from 1996, the NAIC Dataset is a reasonable data source for bond trading prices before the implementation of TRACE. Barclays Bond Indices were collected with different maturities and ratings from DataStream database for calculating abnormal bond returns. To complement the results from bond trading prices, bond quote data was obtained from DataStream to get bond returns in a 3-day event window.

To calculate the control variables, firms' accounting information was collected from the Compustat database, the stock returns from the CRSP database, institutional ownership from the Thomson's CDA/Spectrum database, and the information of CEO and directors from SEC proxy lings. Since the information of covenant violation is collected from 10-Q or 10-K lings, it coincides with earnings announcements. According to Datta and Dhillion (1993) and Easton, Monahan, and Vasvari (2009), the bond market reacts to earnings announcements. Therefore, the earnings surprise was calculated from I/B/E/S database as a control variable. I matched Compustat and Dealscan using the Compustat-Dealscan link made publicly available by Michael Roberts and Wharton Research and Data Services (Chava and Roberts (2008)). To determine whether CEO turnover is voluntary, corporate news surrounding CEO turnover date was collected from Factiva database. Abnormal bond returns, while the overall CEO turnover, including voluntary CEO departure, is not significantly related to long-term abnormal bond returns. The evidence shows that bonds react positively to firms that discipline poor CEOs.

DISCUSSION AND ALTERNATIVE EXPLANATION

The event studies show that short-term abnormal bond return is positive, while existing evidence shows that short-term abnormal stock return is negative (Beneish & Press, 1995; Nini et al., 2012). Nini et al. (2012) argue that the negative abnormal stock return suggests that investors do not immediately incorporate the future performance improvements into stock price, which is due to limit of arbitrage or sell-side pressure.

An alternative explanation for the coexistence of negative stock returns and positive bond returns is explained as banks transfer wealth from shareholders to bondholders. If the wealth transfer story is true, more wealth will be transferred from shareholders to bondholders if the probability of bank interventions is higher. Therefore, cross-section stock returns are negatively associated with probability of bank influence. In Table 9, I show that cumulative

[21]Dataset is available at http://faculty.chicagobooth.edu/amir.su /data.htm.

abnormal stock returns is positively related to the probability of bank interventions, which contradicts the wealth transfer story. When the probability of bank interventions is high, the stock returns are high too.

ROBUSTNESS CHECK

The key variable used in the paper is the loan balance, which is calculated under specific assumptions of term loan interpolation and lines of credit utilization. In sensitivity analysis, different assumptions are used on how firms utilize revolver and term loans, e.g. 30% utilization of revolver, 70% utilization of revolver, and zero payment of term loan principal till maturity date. Different combinations of assumptions of utilizing term loans and lines of credit are used.

VARIABLE CONSTRUCTION

Measuring Abnormal Bond Return

Following Bessembinder et al. (2009), daily volume-weighted bond price and accrued interests were used to calculate bond return.

$$\text{Bond Return} = \frac{P_{t+1} \quad P_t + \text{Accrued Interests}}{P_t} \qquad (1)$$

For short-term bond return, the last trading price before a violation announcement and the rst trading price after a violation announcement are used to calculate the price changes. The last trading price before announcement must be within a three-month pre-announcement window, and the rst trading price after announcement is within three-month post-announcement window. Kedia and Zhou (2013) use a similar rule to calculate bond returns around acquisitions. Since bonds are traded less frequently than stocks, the average time lag between the two trading prices is 52 days. Also, bond returns are calculated from bond quote data, which is available daily. Three-day abnormal bond returns around violation dates complement the abnormal bond returns calculated by trading data. For long-term bond returns, last trading price close to 12-month end are used to calculate the 12-month bond return and the last trading price close to 24-month end to calculate the 24-month bond return. Figure 2 shows the timeline of constructing bond returns.

Next, I estimate abnormal bond returns by calculating the difference between bond returns and returns of matched portfolios, which are proxied by the Barclays Capital Bond Indices.[22] Default risk and time-to-maturity is controlled by matching credit ratings and maturities of bonds with covenant violations and Barclays Capital Bond Indices. Cai et al. (2007), Bessembinder et al. (2009), and Kedia and Zhou (2009) use this approach to calculate abnormal bond returns.

Proxy of Probability of Bank Interventions

The loan balance is constructed to proxy the probability of bank interventions, which measures the variation of bank interventions on violating firms. There are two reasons why loan balance is related to the probability of bank interventions. First, a higher outstanding loan balance of a firm leads to a higher effort a lender would like to spend to improve firm performance so as to avoid a bigger loss. Outstanding loan balance is a very natural variable to measure bank influence. Second, outstanding loan balance can successfully predict probability of future loan amendments, which is a way of bank interventions. Table 1 shows that outstanding loan balance is positively associated with future loan amendment six months after covenant violation, supporting the conjecture that the loan balance is a valid proxy of probability of bank interventions.

[22] Lehman Brothers Corporate Indices are renamed to Barclays Capital Bond Indices after Lehman Brothers bankrupted in 2008.

Loan balance is calculated via the loan information from the Dealscan Database. For term loans, linear interpolation is used to get the loan balance over time. For lines of credit, I assume 50% utilization of the credit line (Allen et al. , 2012). For example, a firm borrows $5 million 5-year term loan and $2 million 3-year lines of credit in 2000. The principle of the term loan reduces 20% every year. Thus, the term loan balance in 2002 is $3 million. Since I assume 50% utilization of lines of credit, the balance of lines of credit in 2002 is $1 million. The loan balance for the firm in 2002 is $4 million. The main results of the paper are robust to different assumptions on unitization of lines of credit and interpolation of term loan principle.

Forced CEO Turnover

The information of CEO age, CEO name and departure date from SEC proxy lings were collected. A departure is determined voluntary by searching corporate news surrounding the departure from Fativa database. Following Parrino (1997), turnover is classified into forced and voluntary by the following criteria. All departures for which the press reports CEO as red, forced out, or retires or resigns due to policy differences or pressure are classified as forced. All other departures for CEOs above and including age 60 are classified as voluntary. Departures for CEOs below age 60 are investigated further. If the press did not report their departures as death, poor health, or the acceptance of another position, or report CEO's retiring within six months before the succession, the turnover is classified as forced. All other turnovers are considered as voluntary.

Because each firm is traced every two years following a violation announcement, it is possible that some firms go bankrupt subsequently. For CEO turnover due to bankruptcy, Lehn and Zhao’s (2006) method was adopted. If the firm doesn't emerge from bankruptcy or a firm emerges from bankruptcy but the CEO is replaced, the CEO turnover is considered as forced. The sample has 22 firms bankrupt within two years following covenant violation.

Summary Statistics

The final sample contains 471 bonds and 297 firms in the event windows, which is about 1.6 bonds per firm. Table 2 shows the bond, firm and board characteristics. The event and 24-month abnormal bond returns are 1.71% and 17.36%, respectively. The average bond maturity is 100 months, which is about eight years. The average offering amount is 363 million.

The average leverage ratio is 50%, market to book is 1.26, and Return-on-Assets is 8.6%.[23] Firm characteristics of the sample are poorer than those of the whole Compustat dataset, since the sample focuses on covenant violations. Standardized earnings surprise is -1.3%, which shows the unexpected news are negative in general for violators. The average blockholder ownership is 24.84%, and there are 2.7 blockholders on average for a firm.

The average insider ownership is 12.8%, which is the aggregate ownership of executive directors on board from proxy filings. The average board size is 9.2. The directors are categorized into insiders, grey directors and outsiders. The number of outsiders on board is 6.3 on average. The percentage of outsiders is a measurement of board independence. On average, 15.5% of firms have at least one bank director on board. More than sixty-two percent (62.7%) of firms have CEOs with chairman title. The average age for CEO is 54 years old.

The overall CEO turnover two years following covenant violation is 45.5%, while the forced CEO turnover is 28.6%. The breakdown of CEO turnovers year by year is shown in the Appendix, Table 2. The forced CEO turnover is 11.4%, 9.8%, 7.4% for event year, first year and second year after announcement, respectively.

Table 3 reports bond ratings and bond provisions. The sample contains 125 investment grade bonds and 352 junk bonds. The number of bonds with callable provision is 417, with credit enhancement is 100, and with putable provision is 22. The number of bonds placed under rule 144a is 48. I control these bond characteristics in multivariate analysis.

[23]Quarterly ROAs are rolled into annual ROA

EMPIRICAL FINDINGS

Event Studies

Table 4 reports the abnormal bond returns in short-term and long-term event windows. A covenant violation by itself is negative news in the market, since firm performance deteriorates to hit the financial covenants. However, taking the positive effect of bank interventions into account, I show that reactions to covenant violations could be positive in the bond market. I illustrate the average abnormal bond returns from one year before covenant violation to two years after covenant violation in Figure 3. Abnormal bond returns are value-weighted across all bonds in the sample. Time zero in the figure represents the year of a covenant violation. The graph shows that abnormal bond returns increase dramatically after loan covenant violations.

In Table 4, the average abnormal bond return around the announcements of covenant violations is 1.71%, and 12-month and 24-month average abnormal bond returns following the announcements are 9.1% and 17.36%, respectively.[24] Both mean and median of abnormal bond returns are significantly different from zero. I also measure firm-level abnormal bond returns, which is weighted by the value of bonds of that firm. Firm-level abnormal bond returns are different from zero statistically as well. Because corporate bonds are not traded as frequently as stocks, the event window of bonds is 52 days on average which is longer than a typical stock event window. The bond cumulative abnormal returns (CAR) are calculated from daily bond quote data. The results show 96 bonds with covenant violations from the bond quote data. In Table 5, three-day bond CAR[0,2] is 0.376% and CAR[-1,1] is 0.596%. Both of them are significantly above zero.

Bank Interventions and Bond Performance

The cross-section variation of abnormal bond returns and its relation to probability of bank interventions is tested and measured by the loan balance. For a firm with multiple outstanding bonds, standard errors are clustered at the firm level. Since the announcement of covenant violations coincides with earnings announcements, standardized earnings surprise are used to control the unexpected surprise in the capital market. Table 6 reports the regression results of bank interventions on abnormal bond returns from short-term and long-term event windows. The number of bonds in cross-section regression is slightly smaller than the number in event studies, because observations with missing firm characteristics were omitted. Cross-sectionally, probability of bank interventions positively correlates with short-term and long-term abnormal bond returns.

In order to disentangle the effect of bank interventions from the effect of shareholder monitoring, I controlled for blockholder ownership and the number of blockholders of each firm in the sample. The coefficients of the loan balance are robust in both event and long-term analysis after controlling the monitoring effect of institutional investors. From specification (3) and specification (6), one standard deviation increase of the loan balance (1.3) corresponds to a 1.78% increase in short-term abnormal bond returns (1.3*1.37%) and to a 6.94% increase in long-term abnormal bond returns (1.3*5.34%). The results show that bonds react more positively for firms with higher probability of bank interventions.

Probability of Bank Interventions, Forced CEO Turnover and Long-term Bond Performance

This section shows the effect of bank interventions on CEO turnover and its implication on bond returns. Table 7 shows that forced CEO turnover is positively related to the probability of bank interventions. From specification (1), one percentage increase of an average loan balance is related to a 7.26% increase of the probability of forced CEO turnover. Besides controlling firm and board characteristics, the regression includes the variables of shareholder control, such as blockholder ownership and the number of blockholders, to separate the effect of bank interventions from the effect of shareholder control on CEO turnover. From specification (2) and (4), the probability of bank interventions is significantly related to forced CEO turnover, but not to overall CEO turnover, which includes voluntary departures. The results show that banks are influential to board decisions of forced CEO turnovers.

---

[24]Number of bonds in short-term event window is smaller than the one in 12-month window, because the first trading prices observed more than three months after a violation are discarded

Next, the long-term abnormal bond returns are positively related to forced CEO turnovers. The forced and overall CEO turnover dummies are included in the long-term abnormal bond return regression. As shown in Table 8, forced CEO turnover is positively related, and the main results are robust to different methods.

The effect of bank interventions is also tested on firm-level abnormal bond returns. For each firm, I calculate value-weighted abnormal bond return and run similar regressions in Table 6. Coefficients of probability of bank interventions in firm-level analysis are similar to the ones in bond-level analysis.

In CEO turnover regression, accounting-based measurements are used to control the firm's past performance. In the robustness test, I used the past 12-month stock returns as a new proxy for firm's past performance. The coefficient of bank interventions on CEO turnover is similar to the main results.

CONCLUSION

The paper shows that bondholders receive benefits from bank interventions. It provides evidence that both short-term and long-term abnormal bond returns increase significantly after covenant violations. The outstanding loan balance is used as a proxy of probability of bank interventions. I show that the cross-section abnormal bond returns are positively related to the probability of bank interventions. The higher the probability of bank intervention is, the larger benefits bondholders will gain. In addition, forced CEO turnover is associated with the probability of bank interventions, and the long-term bond returns are positively related to the probability of bank interventions and forced CEO turnovers. Finally, the relation between abnormal stock returns and the probability of bank interventions is analyzed from which the study concludes that bank intervention has a positive effect on the value of both shareholders and bondholders.

REFERENCES

Allen, L., Gottesman, A., Saunders, A., and Tang, Y. 2012. The role of banks in dividend policy. *Financial Management*, *41*(3), 591-613.

Beneish, M. D. and Press, E. 1995. The resolution of technical default. *Accounting Review*, *70*(2), 337-353.

Bessembinder, H., Kahle, K. M., Maxwell, W. M., and Xu, D. 2009. Measuring abnormal bond performance. *Review of Financial Studies*, *22*(10), 4219-4258.

Cai, N., Helwege, J., and Warga, A. 2007. Underpricing in the corporate bond market. *Review of Financial Studies*, *20*(5), 2021-2046.

Campbell, J. and Taksler, G. 2003. Equity volatility and corporate bond yields. *Journal of Finance*, *58*(6), 2321-2349.

Carey, M. and Nini, G. 2007. Is the corporate loan market globally integrated? A pricing puzzle. *Journal of Finance*, *62*(6), 2969-3007.

Chava, S. and Roberts, M. R. 2008. How does financing impact investment? The role of debt covenants. *Journal of Finance*, *63*(5), 2085-2121.

Chen, D. 2011. *Classified boards, the cost of debt, and firm performance*. SSRN eLibrary.

Cremers, K. M., Nair, V. B., and Wei, C. 2007. Governance mechanisms and bond prices. *Review of Financial Studies*, *20*(5), 1359-1388.

Datta, S. and Dhillion, U. S. 1993. Bond and stock market response to unexpected earnings announcements. *Journal of Financial and Quantitative Analysis*, *28*(4), 565-577.

Datta, S., Iskandar-Datta, M., and Patel, A. 1999. Bank monitoring and the pricing of corporate public debt. *Journal of Financial Economics*, *51*(3), 435-449.

Easton, P., Monahan, S., and Vasvari, F. 2009. Initial evidence on the role of accounting earnings in the bond market. *Journal of Accounting Research*, *47*(3), 721-766.

Fama, E. F. and French, K. R. 1993. Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics*, *33*(1), 3-56.

Francis, B. B., Hasan, I., John, K., and Waisman, M. 2010. The effect of state antitakeover laws on the firm's bondholders. *Journal of Financial Economics*, *96*(1), 127-154.

Hong, G. and Warga, A. 2000. An empirical study of corporate bond market transactions. *Financial Analysts Journal*, *56*(2), 32-46.

Kedia, S. and Zhou, X. 2009. *Informed trading around acquisitions: Evidence from corporate bonds*. SSRN eLibrary.

Kedia, S. and Zhou, X. 2013. Informed trading around acquisitions: Evidence from corporate bonds. *Journal of Financial Markets*.

Lehn, K. M. and Zhao, M. 2006. CEO turnover after acquisitions: are bad bidders red? *Journal of Finance*, *61*(4), 1759-1811.

Mansi, S. A., Maxwell, W. F., and Wald, J. K. 2009. Creditor protection laws and the cost of debt. *Journal of Law and Economics*, *52*(4), 701-726.

Nini, G., Smith, D. C., and Su , A. 2009. Creditor control rights and firm investment policy. *Journal of Financial Economics*, *92*(3), 400-420.

Nini, G., Smith, D. C., and Su , A. 2012. Creditor control rights, corporate governance, and firm value. *Review of Financial Studies*, *25*(6), 1713-1761.

Ortiz-Molina, H. 2006. Top management incentives and the pricing of corporate public debt. *Journal of Financial and Quantitative Analysis*, *41*(2), 317-340.

Ozelge, S. and Saunders, A. 2012. The role of lending banks in forced CEO turnovers. *Journal of Money, Credit and Banking*, *44*(4), 631-659.

Parrino, R. 1997. CEO turnover and outside succession: A cross-sectional analysis. *Journal of Financial Economics*, *46*(2), 165-197.

Qiu, J. and Yu, F. 2009. The market for corporate control and the cost of debt. *Journal of Financial Economics*, *93*(3), 505-524.

Roberts, M. R. and Su, A. 2009. Control rights and capital structure: An empirical investigation. *Journal of Finance*, *64*(4), 1657-1695.

Shleifer, A. and Vishny, R. 1997. A survey of corporate governance. *The Journal of Finance*, *52*(2), 737-783.

Dr. Yili Lian, assistant professor of business at Penn State Worthington Scranton. He teaches courses in Accounting and Finance. His research interests are in Finance and related issues of Law.

APPENDIX

Figure 1: Magellan Health Services, Inc.

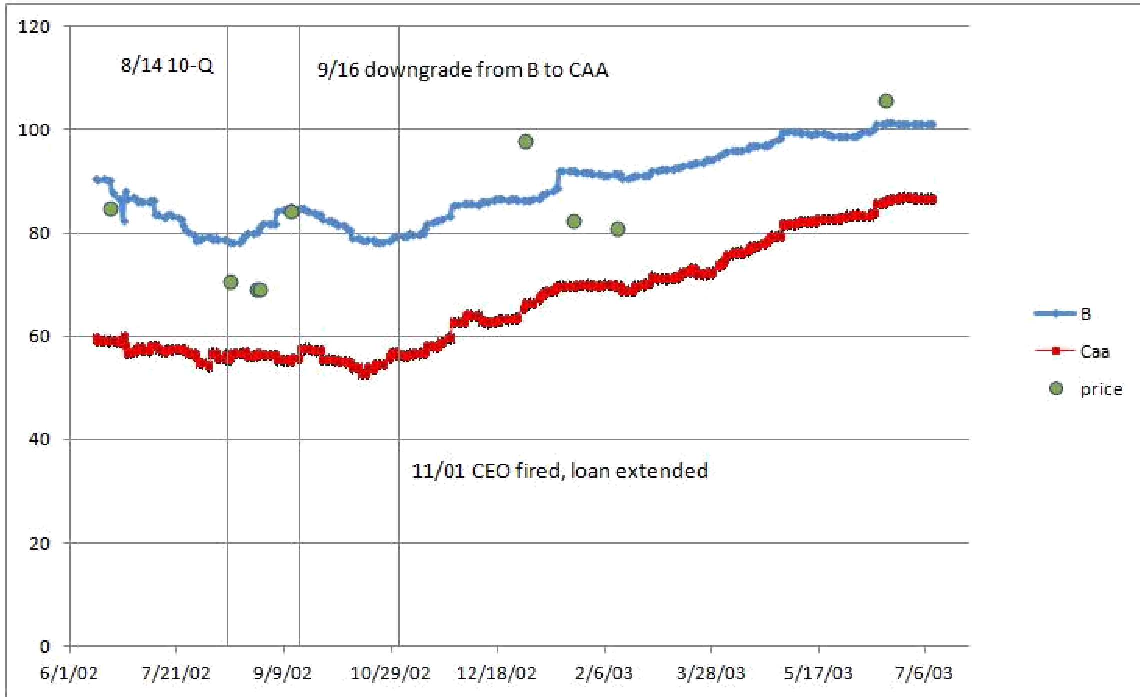


Figure 2: Time line for calculating bond returns

p_{t-1} is the last trading price before covenant violation, p_t is the first trading price after covenant violation, and p_{t+1} is the trading price closest to the second year end

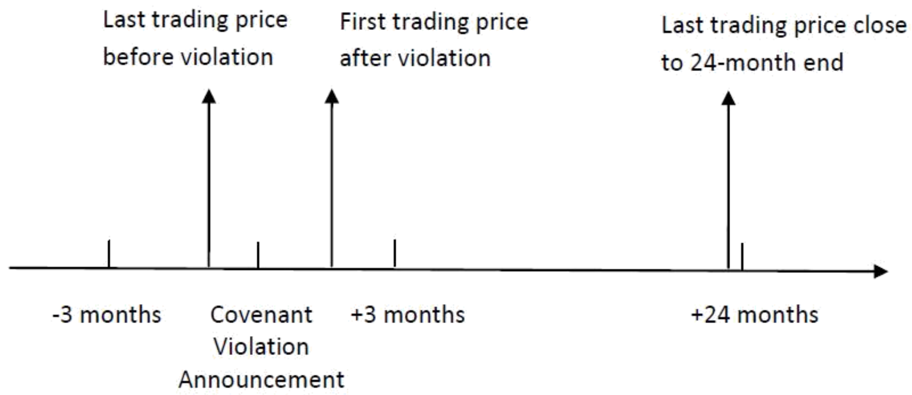


Figure 3: Cumulative abnormal bond returns

Cumulative bond returns start from one year before covenant violation to two years after covenant violation. Time 0 is covenant violation event time.

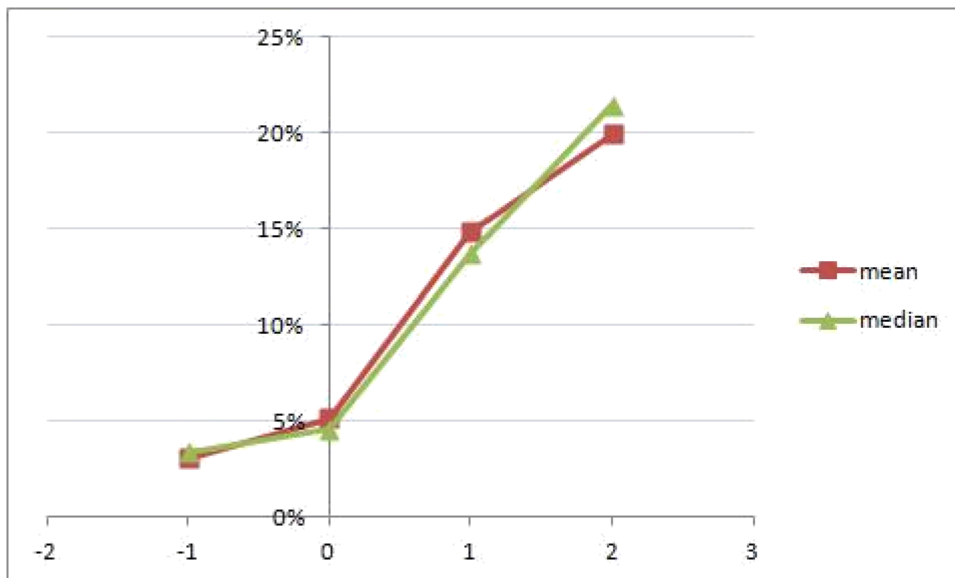


Table 1: Outstanding loan balance and the probability of loan amendments

The table presents the probit regression of the probability of loan amendments on outstanding loan balance. Loan amendment is identified when a loan is amended within 6 months of covenant violations. Loan variable is the natural logarithm of outstanding loan balance. Definitions of other variables are available in Appendix. Z-statistics are heteroskedasticity-robust. Significance at the 10%, 5%, and 1% level is indicated by *, **, and *** respectively.

	(1) amendment	(2) amendment
loan	0.316***	0.350***
	(2.79)	(2.83)
logat	-0.309***	-0.328***
	(-2.89)	(-2.66)
lev	-0.458	-0.569
	(-1.21)	(-1.52)
mb	0.167	0.219
	(0.90)	(1.16)
roa	-0.956	-1.257
	(-0.87)	(-1.11)
chairman		0.222
		(0.93)
insider ownership		0.191
		(1.52)
board size		0.366
		(-0.76)
outside		0.775
		(0.75)
CEO age		0.986
		(1.25)
d_bank		0.314
		(1.00)
_cons	-0.552	-4.810
	(-0.72)	(-1.48)
N	249	247
pseudo R-sq	0.041	0.069

Table 2: Summary Statistics

Panel A: Bond Characteristics

Variable	N	Mean	Median	Std Dev	p25	p75
Abnormal return(event)	471	0.0171	0.0122	0.127	-0.0176	0.0488
Abnormal return(24 months)	456	0.1736	0.1809	0.3551	0.0701	0.3267
Maturity (months)	471	102.03	79	86.33	52	111
offering amount(mm)	471	360.22	275	313.26	200	400

Panel B: Firm and board characteristics

Variable	N	Mean	Median	Std Dev	p25	p75
Firm characteristics:						
Leverage	282	0.499	0.479	0.225	0.343	0.619
Loan percentage	282	0.356	0.245	0.311	0.125	0.547
Outstanding loan balance (mm)	282	1015	458	1563	239	1083
Loan balance (log)	282	6.20	6.13	1.303	5.479	6.988
Assets (mm)	282	5481	1961	9217	832	5024
Return on assets	250	0.086	0.092	0.089	0.056	0.132
Market to book	281	1.26	1.12	0.59	0.95	1.36
Standardized earnings surprise	197	-0.0134	0	0.0569	-0.004	0.0031
Stock return (past 12 months)	258	0.063	-0.051	0.8856	-0.484	0.365
Blockholder	238	0.2484	0.206	0.302	0.125	0.308
Number of blockholder	238	2.71	2	1.71	1	3
Board characteristics:						
Board size	295	9.23	9	2.17	8	11
Outside	294	6.29	6	2.42	5	8
Banker on board	297	0.155	0	0.362	0	0
CEO/chairman	295	0.627	1	0.484	0	1
CEO age	295	54	54	7.49	49	59
Insider ownership	295	0.128	0.061	0.156	0.0282	0.1603

Panel C: CEO Turnover

Variable	N	Mean	Std Dev	Min	Max
turnover	297	0.455	0.499	0	1
year0	297	0.168	0.375	0	1
year1	297	0.162	0.369	0	1
year2	297	0.121	0.327	0	1
forced	297	0.286	0.453	0	1
year0	297	0.114	0.319	0	1
year1	297	0.098	0.297	0	1
year2	297	0.074	0.262	0	1

Table 3: Distribution of Bond Ratings and Bond Provisions

Panel A: Payment Hierarchy

Priority of claims	N
Secured	37
senior	333
Subordinate	1
Sub subordinate	97
Non	3
Total	471

Panel B: Credit Ratings

Rating	N
AAA	1
AA	4
A	40
BAA	83
BA	107
B	153
CAA	51
CA,C,D	21
NR	11
Total	471

Panel C: Bond Provisions

Bond provisions	N
Credit enhancement	91
Rule 144A	55
Putable provision	11
callable provision	405

Table 4: Event study

The table presents abnormal bond returns surrounding violation announcements, 12 months and 24 months following covenant violation. Event abnormal bond returns measure buy-and-hold abnormal bond returns around violation announcements, while long-term abnormal returns measure buy-and-hold abnormal bond returns 12-month and 24-month after violation announcements. Firm-level abnormal bond returns are bond value-weighted returns for each firm.

	Mean	Z-statistics	Wilcoxon z stat	positive	Obs
Abnormal return(event)	0.0171	2.92	4.92	60.50%	471
Abnormal return(event, firm)	0.0228	2.72	3.77	61.40%	254
Abnormal return (12 months)	0.0910	7.40	11.50	79.62%	530
Abnormal return (12 months, firm)	0.1190	1.92	6.58	75.10%	257
Abnormal return(24 months)	0.1736	10.44	13.532	86.40%	456
Abnormal return(24 months, firm)	0.1383	5.34	8.26	82.50%	223

Table 5: Three-day Bond Cumulative Abnormal Return

The table presents abnormal bond returns surrounding violation announcements using daily bond quote data. Abnormal bond returns are calculated in [-1,1] and [0,2] three-day windows.

	CAR	t stat	Obs.
[-1,1]	0.596%	2.26	96
[0,2]	0.376%	1.70	96

Table 6: Abnormal Bond Returns and Bank Interventions

The table represents the regression results on the effect of bank interventions on abnormal bond return. The dependent variable is event and 24-month abnormal bond returns. Loan variable represents the natural logarithm of outstanding loan balance, which measures the probability of bank interventions. The details of variable definitions and measurements of all other variables are reported at the end of the Appendix. Coefficients of the credit ratings should be interpreted as incremental effects with respect to the Ba bonds. T-statistics are heteroskedasticity-robust and cluster by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and *** respectively.

	(1) CAR(event)	(2) CAR(event)	(3) CAR(event)	(4) CAR(2 years)	(5) CAR(2 years)	(6) CAR(2 years)
loan	0.0110*	0.0144*	0.0137*	0.0511***	0.0393**	0.0534***
	(1.80)	(1.75)	(1.96)	(2.74)	(2.02)	(2.77)
SUE	-0.146		-0.0852	-0.123		-0.0670
	(-1.37)		(-1.43)	(-0.95)		(-0.50)
lev	-0.0452	-0.117*	-0.137***	-0.340	-0.449**	-0.324
	(-0.80)	(-1.95)	(-2.99)	(-1.19)	(-2.29)	(-1.56)
roa	-0.000544	-0.182*	-0.0579	-0.817**	-1.027***	-0.802*
	(-0.00)	(-1.84)	(-0.50)	(-2.05)	(-2.88)	(-1.79)
logat	-0.0184***	-0.0136	-0.0149*	-0.00563	-0.0490*	-0.0654**
	(-2.67)	(-1.60)	(-1.75)	(-0.42)	(-1.85)	(-2.19)
mb	-0.0285	-0.00174	-0.0282	0.0656	0.000878	0.0180
	(-1.34)	(-0.19)	(-1.64)	(1.19)	(0.01)	(0.32)
logm		-0.00717	-0.00486		0.0270	0.0273
		(-1.29)	(-0.86)		(1.28)	(1.55)
logs		-0.0157	0.000969		0.105**	0.128**
		(-0.92)	(0.07)		(2.07)	(2.52)
A and above		0.0306*	0.0238		-0.0614	-0.0505
		(1.71)	(1.29)		(-1.09)	(-0.96)
Baa		0.0120	0.0133		-0.0653	-0.0525
		(0.75)	(0.78)		(-1.42)	(-1.43)
B		0.0154	0.0159		-0.00328	-0.0836*
		(0.72)	(0.90)		(-0.06)	(-1.67)
Caa		0.0450	0.0375		0.111	0.00464
		(1.39)	(1.32)		(1.32)	(0.04)
C and below		0.186	0.256		0.185*	0.0322
		(1.08)	(1.15)		(1.81)	(0.49)
No rating		-0.0538	-0.0638*		-0.287**	-0.271*
		(-1.51)	(-1.72)		(-2.07)	(-1.68)
Secure or senior		-0.0273	-0.0591**		0.0944	0.0671
		(-0.99)	(-2.34)		(1.57)	(1.14)
enhancement		-0.0299	-0.0371**		-0.0865	-0.0521
		(-1.08)	(-2.08)		(-1.27)	(-0.84)
Rule144a		0.0140	0.00369		0.0232	0.0150
		(0.77)	(0.22)		(0.26)	(0.16)
callable		0.0249	-0.0106		-0.0564	-0.0672
		(1.10)	(-0.58)		(-0.82)	(-1.13)
putable		-0.0164	-0.0326		-0.183	-0.223*
		(-0.52)	(-0.87)		(-1.62)	(-1.95)
block			-0.00221			0.107
			(-0.03)			(0.32)
number of block			-0.00872			0.0761
			(-0.48)			(1.10)
cons	0.174**	0.253***	0.271***	0.112	0.0754	-0.176
	(2.22)	(3.42)	(3.44)	(0.48)	(0.24)	(-0.59)
N	294	343	294	289	343	288
adj. R-sq	0.056	0.054	0.152	0.119	0.176	0.218

Table 7: CEO Turnovers and Bank Interventions

The table shows the effect of bank interventions on forced CEO turnovers. Dependent variable for specification (1) and (3) is the forced CEO turnover. Dependent variable in specification (2) and (4) is the overall CEO turnover, including forced and voluntary CEO departures. Loan variable is the natural logarithm of outstanding loan balance, which measures the probability of bank interventions. The details of variable definitions and measurements of all other variables are reported at the end of the Appendix. Heteroskedasticity-robust z-statistics for probit regression are reported in parentheses. Significance at the 10%, 5% and 1% level is indicated by *, **, and *** respectively.

	(1) forced turnover	(2) all turnover	(3) forced turnover	(4) all turnover
loan	0.178*	0.0792	0.228*	0.119
	(1.80)	(0.86)	(1.95)	(1.47)
lev	0.601	0.808**	0.869**	0.746*
	(1.63)	(2.26)	(2.12)	(1.89)
roa	-2.935***	-2.762**	-2.941***	-2.493**
	(-2.59)	(-2.41)	(-2.67)	(-2.14)
logat	-0.177*	-0.173*	-0.302***	-0.220**
	(-1.76)	(-1.76)	(-2.76)	(-2.22)
mb	0.131	0.0367	0.0804	0.0230
	(0.73)	(0.22)	(0.49)	(0.15)
chairman	0.0915	0.172	-0.0411	0.118
	(0.47)	(0.93)	(-0.19)	(0.58)
outside	1.075	0.0175	1.037	0.161
	(1.47)	(0.03)	(1.25)	(0.22)
d bank	0.331	0.216	0.272	0.336
	(1.29)	(0.85)	(0.95)	(1.21)
CEO age	-1.527**	0.228	-1.624**	0.307
	(-2.23)	(0.37)	(-2.16)	(0.46)
Board size	0.0546	0.289	0.532	0.496
	(0.12)	(0.69)	(1.03)	(1.07)
Insider ownership	0.0886	-0.967	0.0574	-1.376*
	(0.13)	(-1.47)	(0.08)	(-1.89)
Block			-0.958	-2.488**
			(-0.79)	(-2.15)
Number of block			-0.0690	0.212
			(-0.25)	(0.82)
cons	4.325	-1.330	4.528	-1.587
	(1.58)	(-0.53)	(1.52)	(-0.59)
N	247	247	209	209
pseudo R-sq	0.099	0.065	0.133	0.082

Table 8: Bank Interventions, CEO Turnover and Long-term Bond Performance

The table represents the regression results on the effect of bank interventions and CEO turnover on long-term bond performance. The dependent variable is the 24-month abnormal bond return. Loan variable is the natural logarithm of outstanding loan balance, which measures the probability of bank interventions. The details of variable definitions and measurements of all other variables are reported at the end of the Appendix. Coefficients of the credit ratings should be interpreted as incremental effects with respect to the Ba bonds. T-statistics are heteroskedasticity-robust and cluster by firm. Significance at the 10%, 5%, and 1% level is indicated by *, **, and *** respectively.

	(1)	(2)	(3)	(4)
	CAR(2 years)	CAR(2 years)	CAR(2 years)	CAR(2 years)
loan	0.0493***	0.0436**	0.0554***	0.0493***
	(2.82)	(2.52)	(2.83)	(2.63)
forced turnover	0.217**	0.219***		
	(2.59)	(2.66)		
all turnover			0.103	0.110
			(1.39)	(1.60)
block		0.200		0.217
		(0.66)		(0.71)
number of block		0.0569		0.0546
		(0.93)		(0.85)
SUE	-0.00425	-0.00471	-0.0212	-0.0192
	(-0.03)	(-0.04)	(-0.15)	(-0.14)
lev	-0.372**	-0.319*	-0.397*	-0.345*
	(-2.05)	(-1.88)	(-1.89)	(-1.78)
ROA	-0.734*	-0.561	-0.933**	-0.759*
	(-1.98)	(-1.34)	(-2.37)	(-1.75)
logat	-0.0453*	-0.0433	-0.0653**	-0.0631**
	(-1.70)	(-1.59)	(-2.19)	(-2.09)
mb	-0.0195	-0.0108	-0.00209	0.00667
	(-0.37)	(-0.22)	(-0.04)	(0.13)
logm	0.0267	0.0266	0.0294*	0.0297*
	(1.61)	(1.58)	(1.76)	(1.75)
logs	0.111**	0.104**	0.120**	0.112**
	(2.59)	(2.46)	(2.56)	(2.41)
A and above	-0.124*	-0.122*	-0.129	-0.131
	(-1.79)	(-1.82)	(-1.33)	(-1.43)
Baa	-0.0352	-0.0428	-0.0354	-0.0437
	(-0.82)	(-1.13)	(-0.77)	(-1.09)
B	-0.0539	-0.0616	-0.0593	-0.0667
	(-0.97)	(-1.10)	(-1.07)	(-1.20)
Caa	0.0832	0.0106	0.0881	0.0149
	(0.84)	(0.11)	(0.89)	(0.15)
C and below	0.0316	-0.0115	0.0908	0.0477
	(0.41)	(-0.16)	(1.12)	(0.66)
No rating	-0.294**	-0.294**	-0.274*	-0.275*
	(-2.06)	(-2.08)	(-1.71)	(-1.72)
Secure or senior	0.0663	0.0733	0.0537	0.0601
	(1.16)	(1.27)	(0.89)	(0.99)
enhancement	-0.0126	-0.0220	-0.0444	-0.0546
	(-0.20)	(-0.36)	(-0.68)	(-0.86)
Rule144a	-0.0364	-0.0251	-0.0206	-0.0104
	(-0.49)	(-0.31)	(-0.26)	(-0.12)
callable	-0.0571	-0.0555	-0.0501	-0.0480
	(-1.14)	(-1.09)	(-0.99)	(-0.90)
putable	-0.182*	-0.207*	-0.217**	-0.244**
	(-1.74)	(-1.91)	(-2.05)	(-2.20)
_cons	-0.114	-0.203	-0.0173	-0.104
	(-0.41)	(-0.81)	(-0.05)	(-0.35)
N	288	288	288	288
adj. R-sq	0.260	0.276	0.217	0.233

Table 9: Bank Interventions and Abnormal Stock Returns

The table shows the relation between bank interventions and cross-section abnormal stock returns. Abnormal stock returns are estimated by the four-factor model, including three factors from Fama and French (1993) and momentum factor. Loan variable is the natural logarithm of outstanding loan balance, which measures the probability of bank interventions. The details of variable definitions and measurements of all other variables are reported at the end of the Appendix. Heteroskedasticity-robust z-statistics are reported in parentheses. Significance at the 10%, 5% and 1% level is indicated by *, **, and *** respectively.

	CAR0	CAR(0,1)	CAR(-1,1)
loan	0.00611***	0.00768***	0.00683**
	(2.82)	(3.00)	(2.11)
mb	-0.0108*	-0.0176	-0.0200*
	(-1.67)	(-1.61)	(-1.67)
Lev	-0.0394**	-0.0646**	-0.0404
	(-2.10)	(-2.30)	(-1.34)
logat	-0.0000478	-0.000733	-0.00124
	(-0.02)	(-0.20)	(-0.31)
ROA	0.0864*	0.145	0.201*
	(1.83)	(1.25)	(1.73)
SUE	-0.0282	-0.0689	-0.101*
	(-0.88)	(-1.50)	(-1.92)
Block	-0.0437	0.0186	0.0473
	(-0.73)	(0.25)	(0.52)
Num of block	0.0105	-0.00595	-0.00607
	(0.92)	(-0.43)	(-0.36)
_cons	-0.0822*	-0.0848	-0.0914
	(-1.97)	(-1.48)	(-1.39)
N	162	162	162
adj. R-sq	0.040	0.054	0.054

Table 10: Loan contract before and after a covenant violation

The table represents mean loan characteristics for the loans made before covenant violation and within 6 months after covenant violation. According to Nini et al. (2012), loans made within 6 months after covenant violation is considered as renegotiated loans. The loan characteristics come from Dealscan. Significance at the 10%, 5%, and 1% level is indicated by *, **, and *** respectively.

	Before	After	Difference	Obs
Major loan terms				
maturity(months)	57.5	43.9	-13.6***	79
loan size(millions)	457.46	398.58	-58.88	84
loan spread(bps)	185.08	250.02	64.94***	84
upfront fee(bps)	50.94	61.99	11.05	9
Incidence of non price terms				
secured	0.522	0.579	0.056	84
performance pricing	0.622	0.503	-0.119*	84
number of lenders	13.61	8.4	-5.21*	15
borrowing base	0.119	0.143	0.024	84
sweep	0.81	1	0.19*	26
dividend restriction	0.82	0.87	0.05	61
Incidence of covenants				
Debt-to-EBITDA	0.6429	0.4761	-0.1667**	84
Interest Coverage	0.536	0.357	-0.179**	84
Max CAPEX	0.274	0.214	-0.06	84
Min EBITDA	0.107	0.167	0.06	84
Level of covenants				
Debt-to-EBITDA	4.8	5.55	0.75**	33
Interest Coverage	2.35	2.19	-0.16	25
Max CAPEX	104.29	93.63	-10.67	8
Min EBITDA	81.43	22.18	-59.25	4

Definition of Variables

Bank Influence

Loan: natural logarithm of outstanding loan balance.

Firm characteristics
Logat: natural logarithm of total assets.
Lev: book leverage
MB: (market value of equity+book value of debt)/total assets.
ROA: past four quarters EBIT/total assets.
SUE: standardized earnings surprise.
Block: blockholder ownership.
Num of block: logarithm of number of blockholders.
Chairman: CEO is also the chairman on board.
Outside: percentage of outside directors on board.
CEO age: logarithm of CEO age.
Board size: logarithm of number of directors.
d_bank: a dummy equals 1 if bank directors on board.
Insider ownership: shareholding of executives and directors.
Bond characteristics
logm: logarithm of bond maturity, measured by month.
logs: logarithm of bond offering amount.
A and up: a dummy equals 1 if credit rating is equal or above A.
BAA: a dummy equals 1 if credit rating is BAA.
BA: a dummy equals 1 if credit rating is BA
B: a dummy equals 1 if credit rating is B.
CAA: a dummy equals 1 if credit rating is CAA.
CA and down: a dummy equals 1 if credit rating is equal or below CA.
No rating: a dummy equals 1 if no credit rating is available.
Senior or secured: a dummy equals 1 if a bond is senior or senior and secured.
Credit enhancement: a dummy equals 1 if a bond has credit enhancement characteristics.
Rule144A: a dummy equals 1 if a bond is issued under rule 144A.
Callable: a dummy equals 1 if a bond has callable provision.
Putable: a dummy equals 1 if a bond has change of control provision.

Loans before and after Violation

The table below shows the loan characteristics before and after loan violations. Nini et al. (2012) consider loans made within 6 months after covenant violation as renegotiated loans. Loan information is from DealScan. I find 84 loans renegotiated within 6 months after covenant violation. Generally, renegotiated loans have more restrictive covenants and worse price and non-price terms.

REAL LIFE IN THE CLASSROOM: GETTING OUR STUDENTS TO ENGAGE AND THINK CRITICALLY WITH EXPERIENTIAL LEARNING

Christine Lombardo-Zaun, Cedar Crest College

ABSTRACT

What does it mean to have a student truly be engaged in the class? How do we get students to think critically? Educators constantly struggle to keep students' attention in the classroom. The author presented her best practice of engaging students in the classroom and getting students to think critically via experiential learning and real life cases. This best practice works in all teaching formats and can be applied to both traditional and non-traditional students.

INTRODUCTION

Educators are constantly striving to get their students to become more engaged or to think more critically in the classroom. Educators – Instructors – Faculty – Teachers – are all trying to compete for the students' attention. They used to only have to compete with sleep deprivation or passing notes to friends in the past. In today's world, however, the instructor now has an additional barrier to the student: technology. It's everywhere. Almost every student has a mobile phone, a smartphone, a tablet, or a laptop. There is no debate that this new generation of students is very different from previous generations. When the author began teaching on a full-time basis, she initially thought that the typical college student was one who came from a two-parent family, would enroll in college full-time, and would take a full semester load of 15-18 credits. This student would get plenty of sleep and would treat their studies like it was their full-time job. Unfortunately, the author quickly learned these were not her students.

THIS NEW GENERATION

According to an article from the Washington Post, "Of the more than 20 million students enrolled at thousands of two and four-year colleges and universities across the nation, only about one-third fit [that] traditional description." (Johnson, 2013) The article described how the current college student population is much different than from years past. Johnson (2013) introduced three non-traditional students that comprised a significant population of our students. The first college student interviewed was a mother of four who was struggling to balance parenting, paying her tuition, and keeping up her grades. (Johnson, 2013) A second student was the veteran who served his time and had hopes of using his G.I. Bill federal funding. (Johnson, 2013) Finally the author introduced the young self-supporter, who supported herself since turning 17. (Johnson, 2013)

All of these students are a representation of the percentages of our current student population. They are juggling families. They are working full-time or part-time jobs. Some of these students are commuting great distances to get to class and some are taking the classes online so it will fit into their hectic schedules. As an instructor, the author quickly changed her perception of the college student and saw them as college students with baggage. It is important that instructors realize that these students are not coming to the classroom with a free and clear mind ready to learn. Instead, they are coming to class tired, overwhelmed, or with lists of things to that day or week on their mind.

This paper is an illustration of a journey the author took over the last two years while learning about this new generation of college students. Her goal was to break through that barrier of distraction and allow the student the opportunity to be engaged and to think critically despite carrying all of their baggage. The instructor was intrigued by the student's lack of engagement in the classroom. It was a challenge for her to get them to enjoy learning.

WHAT EMPLOYERS WANT

Before transitioning into the world of academia, this instructor worked full-time in corporate America. She happily played the roles of both employee and manager. She hired, fired, and trained many employees. She learned that it cost an employer over six figures to hire and train an employee, so for her, hiring the right person was extremely important. In order to hire the right people, she started researching what employers wanted in their new hires. She knew what her company wanted, and she knew what she wanted, but was this what other employers wanted? It turns out that it was what the other employers wanted and it is what employers have wanted for the last few decades.

According to the National Association of Colleges and Employers (NACE), employers are looking for graduates to have verbal communication skills in addition to being able to solve problems and make decisions (https://www.naceweb.org/press/faq.aspx). A *Money Watch* article written by Lynn O'Shaughnessy in April 2013, reviewed a survey of 318 employers was conducted by the Association of American Colleges. Of the employers interviewed, all companies had at least 25 employees and at least a quarter of new hires held either an associates or bachelors degree. (O'Shaughnessy, 2013) "[Ninety-three] percent of employers said that a demonstrated capacity to think critically, communicate clearly and solve complex problems is more important than a job candidate's undergraduate degree." (O'Shaughnessy, 2013)

This was no surprise to the author. All the years spent as a hiring manager, communication skills were at the top of her list. She would tell her employees, "I can teach you how to do the job, but I cannot give you a personality or a work ethic." She felt fortunate being a new academician that had the opportunity to work in corporate America and saw first hand what employers were looking for in our college graduates. When she started teaching, however, she found her college students were lacking in these skills: mainly the communication skills. She went on a mission to change that.

EXPERIENTIAL LEARNING

The author wanted to get her students engaged and talking more in the classroom. The author believed this would improve their communication skills, and problem solving skills necessary for finding employment after graduation. Unfortunately, it was not that easy and it required strategy. Being a junior faculty member, and being new, the students were eager to talk in class. The author attributed that to the fact that she was new, is a part-time practicing attorney, and always seemed to have an interesting case to discuss. However, as time progressed and as she evaluated her courses, she seriously questioned whether her students were truly learning. She questioned whether they were really engaged in the material.

The author performed a small literature review of experiential learning and found a blog that prompted her to question her teaching effectiveness. The main point of the blog was a challenge to the concept of student engagement. The author, David Price, (2014), listed three myths of student engagement. The first was that instructors can "see when students are engaged" (Price, 2014). He argued that those students are "complying but not engaging" in their behavior. (Price, 2014) The second myth regarded test scores. The myth, Price argued, was that students must be engaged because of their high performing test scores. Price argued that these students are "disengaged achievers" (2014). Finally, the third myth was that the students were having fun and thus must be engaged. (Price, 2014). The author found herself identifying with these myths in her second year of teaching and realized more must be done in the classroom to get the students truly engaged in learning.

A THEORY OF EXPERIENTIAL LEARNING

Early in her teaching, the author knew that bringing the corporate America life experiences into the classroom would benefit business students. She took them on field trips to the courthouse to watch trials and to learn about Pennsylvania's state court system that was taught in the Business Law course. The author would discuss cases that she was working on in her part-time law practice all without divulging confidential information. The class would have lively discussions on the cases. The author would then change the facts slightly to alter the discussion and to try to get the students to think critically about the case. However, she realized that she was still only reaching a portion of the class, and not every student.

BEST PRACTICE

A quote by Neale Donald Walsch states, "Life begins at the end of your comfort zone". The author saw this quote and realized that is what her students needed in the classroom. For some of the author's classes, this exercise was easy. She would have her class take a Zumba class or a yoga class to demonstrate how exercise and relaxation benefit learning and the mind. However, this was somewhat challenging for her survey courses, which were Business Law, Employment Law, and Business Ethics. These students would come to class, would memorize as much information as they could, and would test on the material. The author attempted to bring the dreaded technology into the classroom, fearing she would lose her students to it.

The author created a game from a free online template called Jeopardy Labs. (https://www.jeopardylabs.com). It was designed as a review for the exams in the Business Ethics course. The author took two chapters and created the game. The online template was easy to use and allows users to create a password and save the game for future use. The students were nervous yet excited to be doing something different in class.

To properly play the game, the instructor reserved a whole class session for this game. Teams of students were randomly selected. Students were placed in groups of either two or three for a reason. The course material was challenging and so the students could feel confident about playing the game and submitting answers by having a teammate. Having one or two teammates also allowed them to converse and collaborate in coming up with the correct answer. The students in this particular course did not know each other so the random team assignments worked well. The game was played almost the same as the television show. One team started by selecting a category and a point value that ranged from100 to 500 points. The board (or screen) looked similar to the television show. The instructor would read the answer to the category and point value the team selected and the students would then have to give the question when in reality it was the answer.

The students were given 15 seconds to generate a response. To make the game more fun and lifelike, the instructor would play the Jeopardy theme song for that time. If the students did not have the answer, another team was given the option to steal and secure the points. If no team was available to steal, and if the original team submitted an incorrect response, the original team would lose points. The online version allows points to be tracked and can be added with a green plus sign or subtracted with a red minus sign.

The instructor would also pause in between each response and elaborate on the topic to make sure the students understood. The instructor also included page references into the game boards for each question/answer so that if they wanted to refer back to the game after class, they could easily find the information in their textbook. The instructor simply uploaded the hyperlink to the website onto the course learning management system.

RESULTS

This game began in the Business Ethics course. The students loved it. This class consisted of traditional daytime students, all whom had very little work experience. The instructor received unsolicited positive feedback from the students as to how helpful Jeopardy was in having the material sink in. Over time, the instructor observed an increase in the level of communication between the students. They were not as timid and quiet as they were in the beginning of the class. Instead the instructor would enter the classroom full of students who were having conversation and not sitting there with their heads buried in their smartphones. Over time, and as the games continued throughout the course, the students became less inhibited when answering questions. They took more risks. The students' final projects demonstrated a deeper level of understanding of the concepts. The instructor decided to try this best practice in another survey class.

She added it to her Business Law class, which was structured similarly to the Business Ethics class. Again the students loved it and enjoyed coming to class to play Jeopardy. Participation and attendance were high on Jeopardy days as there was an incentive offered for playing: extra credit points. The feedback was so strong and positive that the instructor chose to add this to her online courses.

Online learning is very different from the traditional classroom. But as an educator, the instructor fought to keep the two formats as similar as possible. As of this writing the author has offered it in two of her accelerated online classes. Most students taking online classes are generally older and have some work experience. The author was apprehensive to offer a *game* to a non-traditional adult student. Surprisingly, the students welcomed it as a break from the large amounts of reading in accelerated classes.

CONCLUSION

Teaching is difficult. It is a constant challenge. Educators are constantly looking for ways to improve the classroom dynamic and keep the material interesting and engaging to the student. This is an area that the author would like to develop. The author plans to gather data from her business students from the last few years and compare the test scores between those that had Jeopardy versus those that did not, and see if there a significant effect from the use of a *game* such as Jeopardy in enhancing the learning in the classroom.

REFERENCES

Johnson, Jenna (2013). Today's typical college students often juggle work, children and bills with coursework, *The Washington Post*, November 30, 2013.

O'Shaughnessy, Lynn (2013). What employers what in college grads. CBS Moneywatch. April 16, 2013. Retrieved from http://www.cbsnews.com/news/what-employers-want-in-college-grads/.

Price, David (2014). Are your students engaged? Don't be so sure. Mindshift, January 21, 2014. Retrieved from http://blogs.kqed.org/mindshift/2014/01/are-your-students-engaged-dont-be-so-sure/.

Christine Lombardo-Zaun, Esq., MBA is an Assistant Professor of the Department of Business, Management & Economics at Cedar Crest College. Her research interests include student engagement and learning, plagiarism, and online learning perceptions and biases.

AN EXPERIENTIAL HYBRID MODEL OF BLENDED LEARNING IN A BUSINESS COURSE

Eric Malm, Cabrini College

ABSTRACT

Much has been written about the benefits and drawbacks of blended learning. This paper presents an Experiential Hybrid delivery model in which face-to-face field trip experiences are blended with complementary online instruction. As institutions seek to find alternate delivery modes that challenge both traditional class time structures and accommodate working students, the experiential hybrid approach helps actively engage online learners, build community, and build personal faculty/student relationships. This paper presents the case study of a Management Information Systems class that was translated into this new blended format, and provides insights on ways that the format could be applied to other business courses.

INTRODUCTION

Many colleges and universities struggle to find the appropriate role for online and blended learning within their institutions. This paper describes a new course format, called the Experiential Hybrid, which combines personal, interactive experiences in the community with online and blended learning experiences. The format allows institutions that pride themselves in small class sizes, personal teacher-student attention, and experiential learning to effectively leverage online learning while staying true to the core strengths of the institutions. This paper describes how an existing Management Information Systems class was restructured and rethought to fit within the experiential hybrid format. Online learning was combined with field trip experiences to bring the technology to life, build community, and provide a flexible and engaging class structure. The paper describes how the new format led the instructor to rethink existing assignments and modes of interaction, building scaffolded assignments around field experiences and creating a new course experience. The paper concludes with a discussion of how the format could be adopted in a variety of courses and disciplines, and also addressing some logistical challenges of the format.

LITERATURE REVIEW

Blended Learning

In the words of Garrison and Vaughn (2008), blended learning "is the thoughtful fusion of face-to-face and online learning experiences." Also referred to as Web Enhanced Instruction (WEI), Hybrid learning and Computer Supported Collaborative Learning (CSCL), blended learning ideally builds on the best attributes of the face-to-face, adding interactive elements that engage students and allow for enhanced learning. Multimedia learning theory suggests students process information separately through visual and auditory channels, and have limited capacity to take in information through each channel. Multimedia researchers have found that students can take in more information when multiple channels are used (Mayer 2006).

Many authors (Bates, 2003; Bersin, 2004; Garrison & Vaughn, 2008; Kim, 2009; Maddox, 2009; Woltering, 2009) have documented positive aspects of blended learning. Woltering (2009), for example, found that blended learning increased student motivation, satisfaction, and subjective learning among third-year medical students. Woltering's log-file analysis showed that web-based modules were frequently used and improved student cooperation (students communicating with one another) during the self-directed learning. While definitions vary, Smith and Kurhen (2007) define blending as having no more than 45% online activity. Garrison (2004) describes a continuum of e-learning going from a classroom to a fully online experience. In all cases, it is some combination of a face-to-face classroom and online activity.

The 'trend to blend' is strong and growing. Worldwide, K-12 schools have increased the online learning offerings in their curriculum, suggesting that incoming students will be increasingly accustomed to online elements (Pape & Barnes, 2010). A large Department of Education sponsored meta analysis found that blended learning resulted in higher levels of student learning than face-to-face or online learning alone (Means et al., 2009). This study identified over 1000 empirical studies of online learning, focusing on those studies that rigorously compared face-to-face and online modalities and effectively measured student learning outcomes. There is also evidence that "students achieve as well, or better, on exams and are satisfied with the (blended) approach" (Garrison, 2004). With the increase of technology use it is apparent that as the newer generations of students—whether referred to as the "The

V-Generation" (Proserpio & Gioia, 2007), "Digital Natives" (Bennett, 2008), or the "Net Generations" (Milliron, 2009)—move into higher education, they will expect the use of blended learning techniques.

Experiential Learning

Seemingly on the other end of the spectrum from online education, experiential learning takes education outside of the classroom. In the words of University of Denver's Experiential Learning Center (2014), "Experiential learning is a process through which students develop knowledge, skills, and values from direct experiences outside a traditional academic setting." According to the Center, experiential learning typically includes phases of preparation, action and reflection.

Experiential learning has become an important part of business curricula, with internships, service learning and real-world projects all contributing to student learning. DeSimone and Buzza (2013) describe how experiential learning can help undergraduate business students improve critical thinking and decision making skills. Student participation with real world businesses through projects like a "marketing incubator" provide students with the ability to apply skills in a real world context. Similarly, Baden and Parkes (2013) discuss how social entrepreneurship placements and workshops with real-world case studies inspire students and provide role models to teach students about business ethics through their exposure to business leaders (Kosnik, Tingle and Blanton, 2013).

THE EXPERIENTIAL HYBRID

The idea for the experiential hybrid course format came out of numerous conversations about the role of technology and online learning at a small liberal arts college. The college prides itself on small class sizes, personal relationships between students and faculty, high levels of feedback and support, and a culture of community engagement. To the degree that online classes have been offered at the institution, they tend to be offered to existing students during summer or winterim sessions; so in virtually all online courses, I am appalled at the inability of these authors to comply with the guidelines. The faculty and students have some knowledge of each other in the 'real' world. The college also has a culture of community engagement. It was one of the first colleges in the region to institute service learning courses, and that culture has resulted in campus-community collaboration in many courses across campus. The experiential hybrid format blends online and face-to-face instruction, including an initial face-to-face classroom experience and multiple off-campus group field trip experiences. The idea is to build community (and provide technological orientation) during the initial face-to-face meeting, then build learning experiences around field trips at appropriate points through the semester. Additional face-to-face sessions may be added for specific instruction or assessment.

Implementation in a Management Information Systems Course

A Management Information Systems class, required of all business majors, was chosen as a pilot course for the experiential hybrid format. The course focuses on how companies use technology to create and sustain competitive advantage in business, and thus focuses on making the connection between technology and strategic business decisions. Most students in the course are upper level business students who are interested in learning about how real businesses work, and are eager to get out of the classroom. As the course material deals with technology, it also represents a natural experiment in seeing how technology could transform a traditionally face-to-face course.

Reimaging the course in the experiential hybrid format was an exciting experience. While the professor had routinely incorporated blended learning into the course for years, he had never taught the course in an online format. Over the summer he participated in a faculty online learning community that worked with an outside expert to explore how to utilize the colleges tools (such as Blackboard) to transform a class from face-to-face to an online modality. While the teacher had significant experience planning community trips, and the college had a good infrastructure for planning trips, including the availability of vans, planning the field experiences was a challenging aspect of the course.

The face-to-face course focused heavily on applying technological concepts to specific businesses. Each student chose a company to study throughout the semester. A variety of weekly discussion assignments and a two-part, semester-long research paper provided each student with the ability to practice applying concepts to his/her own company. The company discussion assignments (which were completed online before class) also provided fodder for in-class discussions. Approximately one class period per week was used to discuss book content, with the second

being more focused on applying concepts and technical skills acquisition. Table 1 shows the primary course components of the face-to-face course.

Table 1: Face-to-face Course Components

Weekly discussion assignments:	Students completed online discussion prompts prior to class, and engaged in in-class discussion about the concepts.
Book content:	We discuss highlights from the book content in class.
Technology Skills:	Students acquired technological skills, such as business plan forecasting in Excel, Access database manipulation, and web page design.
Company research papers:	Students follow a company of their choice, completing many small assignments and a two part research paper.
Company presentations:	Students make a presentation about their company in class.
Exams, quizzes and other activities:	Online chapter quizzes

Transforming the course into the experiential hybrid format required two main steps including translating much of the course into an online format and planning the field trip experiences. In the first experience, students learned about a company that distributed wine and spirits to local restaurants and saw how technology was critical to their business- from ordering, to inventory management, logistics and billing. The students heard a VP speak, and could picture how technology played a role at each stage of the business. In the second trip, students toured the SAP North American Headquarters and learned about enterprise computing, and the role technology plays in unifying data from across a large organization. The final trip brought students to the data center and support facility that houses the colleges website and web-based tools; the college outsources its technology to Drexel University. The experiential components are listed in Table 2.

Table 2: Experiential Components

Destination	Learning Objective
Regional Wine & Spirits Distributor	Saw the technology ‘backbone’ of a distribution business.
SAP North American Headquarters	Learned about enterprise computing.
Drexel University	Saw the data center and operations that hosts the college’s outsourced teaching technologies.

The online components required the instructor to rethink and restructure course content. The sections below describe some of the key strategies and tools that were used to run the online course components.

Scaffolded Experiential Assignments

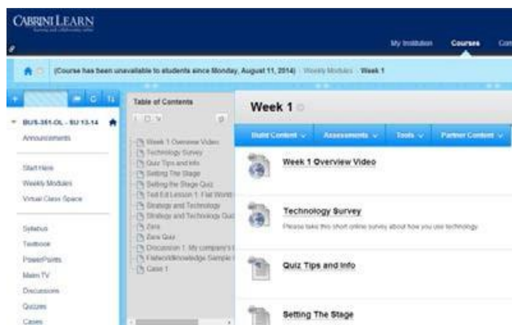
Each experiential assignment had three phases: preparation, experience and reflection. Prior to the trip, students were asked to research the company so that they would be prepared to speak knowledgably with employees about the business. While students were provided with videos and other online information sources to examine, they were challenged to assimilate the information and then write about the business prior to the trip. While on the trip, students engaged with company staff, learning about the skills and backgrounds of the employees as well as the overall function of the business. After the trip, students posted online reflections about the people they met. The

instructor believed that the prospect of going to a business and meeting people face-to-face provided a significant motivation to learn about the company. The post-trip reflections focused more on the people they met, and again seemed to motivate the students to engage more than they would likely have done if this were merely an in-class exercise.

Blackboard Modules

The online components required a highly structured format to ensure that students would know what to do, and when. The Blackboard modules allowed a variety of different content types (videos, web links, PowerPoints, quizzes, etc.) to be organized by week and sequenced start-to-finish. Students were given until the start of the next week to finish each weekly unit. A picture of a weekly module is shown in Figure 1, below.

Figure 1: Blackboard Course Modules



Instructor Videos

The instructor became adept at creating a wide variety of short (usually 5 minutes or less) instructional videos. These videos provided orientation to the week ahead, technical skills acquisition examples, tips on completing projects, and feedback on student work. While most videos were narrated PowerPoints, some videos also included screen capture segments, which allowed the instructor to walk through ‘how to’ assignment components. The instructor took a ‘quick and dirty’ approach (not worrying too much about production value), in part, because production fine-tuning can be time consuming, and in part, to model how technology can be used in a practical way. The instructor also hoped these conversational videos also maintained a personal feel, as if he were talking with students face-to-face in the class.

TedEd Lessons

The Ted Ed platform (www.ed.ted.com) was an easy-to-use way to create interactive online lessons. The platform allows the instructor to combine a Ted or YouTube video, with follow up quiz questions, additional readings and a discussion board. In most cases the online lessons mirrored what the instructor had previously done in class. To his pleasant surprise, the format allowed each student to contribute to the conversation—not just the people who raised their hands or were called upon. A screen shot is shown in Figure 2, below.

Figure 2: A Ted Ed Lesson

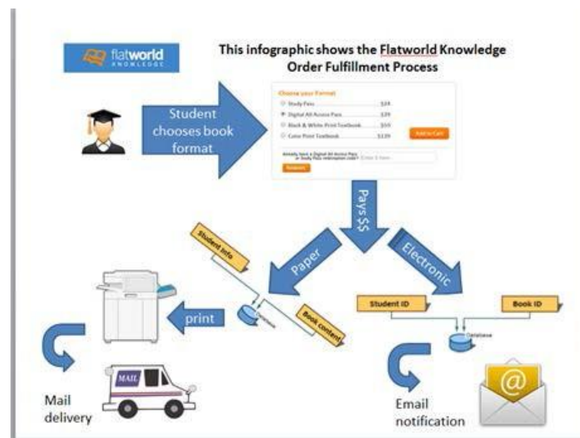
Student Video Presentations

In the face-to-face class, each student made a short in-class presentation on their company. Students were asked to create a short PowerPoint and then present it in class to their peers. The presentations were then followed by in class discussion, linking the company to the week's course material. In the online format, students were asked to make five-minute narrated PowerPoints, using a free online service called Jing (http://www.techsmith.com/jing.html). The instructor felt that the quality of student presentations was much higher, likely because students could see and hear themselves and knew that their classmates would be viewing the videos.

Infographic Assignment

In rethinking the course, the instructor decided to convert a written Discussion assignment, where students talk about a Business Process (first online, then with their classmates), into a graphic assignment. Students were asked to create a graphic representation of a business process. Students posted the infographic to Blackboard, and then commented on each other's infographics, suggesting ways in which the process could be expanded or connected to other aspects of the business. A sample Infographic is shown in Figure 3, below.

Figure 3: Example Infographic



Contact Hour Accounting

An interesting exercise in translating the face-to-face course into the hybrid format was to calculate credit-hour time for both instructional and homework time. An Excel grid was used to track the time and organize the flow of assignments throughout the course. An example is shown in Figure 3, below.

Figure 3: Instructional and Homework Hour Accounting

Instructional Time	Item	Homework Time
.25 hours	Watch chapter overview video created by instructor.	
	Read Chapter 1	1.5 hours
	Do homework practice problems	.5 hours
.75	Take Chapter 1 quiz	

RESULTS

By many metrics, the Experiential Hybrid course format was a success. The course was fully enrolled (cap of 15) at the start of the summer term (although three students dropped out when they saw the work involved). Student quotes illustrate student feedback to the format:

"My favorite part of this course was going on the field trips and having person-to-person interactions while still being able to do work online. I especially found it helpful to have the very first class in person so that the different sections of the course could be explained well and we could ask the teacher questions directly instead of through email."

"I liked watching the Ted Ed videos and doing the company research because they added a nice contrast to the textbook work. The Ted Ed videos were very interesting and enjoyable, especially the one about youtube. The company research was interesting because I could discover for myself how companies are using the principles I learned in the book to compete in the real world."

While it is difficult to compare assignment grades with such a small 'N', student grades on the major assignments were higher than in the face-to-face class the previous spring term.

DISCUSSION

Implementation Issues

The experiential hybrid format posed a variety of implementation challenges, including:

1. Class size: Field trips to local businesses require sensitivity to class size. Bringing a dozen students to most businesses is manageable, both in terms of transportation and accommodating the students at the business. However larger classes (say 2-30 students) would place a significant constraint on the types of businesses that could be visited, and potentially the student dynamics while in the field.

2. Scheduling: The field trip components must be established up front, and require a 3-4 hour window. This complicates course scheduling and communication for students, and may potentially limit the number of students who would be attracted to the format (especially compared to a completely online format).

3. Sustainability: Most businesses would not like to be visited every semester, or multiple times a semester, so a wide variety of business partners would need to be identified. Trips may be planned in coordination with companies that have a long-term relationship with the college through internship programs.

Applicability to Other Courses

The experiential hybrid format is applicable to other course formats. For example, the format is being considered for an Ecology (science) class, Environmental Economics, and Criminology. For a variety of disciplines exposure to practitioners in the field and interaction with firms and organizations can enhance many different types of courses. Establishing a common format would also help students better understand and be equipped to participate, if a variety of classes in different disciplines followed the format.

REFERENCES

Baden, Denise and Carole Parkes, (2013) Experiential learning: inspiring the business leaders of tomorrow. *Journal of Management Development*, *32* (3), 295 – 308.

Bates, A.W. and Gary Poole (2003). *Effective teaching with technology in higher education: Foundations for success.* San Francisco: Jossey-Bass.

Bennett, S.; Maton, K.; Kervin, L. (2008). The 'digital natives' debate: A critical review of the evidence. *British Journal of Educational Technology*, *39* (5), 775–786.

Bersin, Josh (2004). *The blended learning book: Best practices, proven methodologies, and lessons learned*. San Francisco: Pfeiffer.

Bevan, David and Claudia Kipka, David Bevan, Claudia Kipka, (2012), Experiential learning and management education. *Journal of Management Development*, *31* (3) 193-197.

DeSimone, Frank; Buzza, John (2013) Experiential learning: Improving the efficacy of an undergraduate business degree. *American Journal of Business Education* (Online), *6*(1), 7.

Garrison, D. Randy and Norman D. Vaughan (2008) *Blended learning in higher education: Framework, principles and guidelines*. San Francisco: Jossey-Bass.

Garrison, D. R., Kanuka, H., Blended learning: Uncovering its transformative potential in higher education. *Internet and Higher Education*, *7*, 2004, 94-105.

Kim, K., C. Bonk,. and Y. Teng. (2009). The present state and future trends of blended learning in workplace learning settings across five countries. *Asia Pacific Educational Review*, *10*, 299-308.

Kosnik, Rita D., Tingle, Jacob K.; Blanton, Edwin L.. (2013) Transformational learning in business education: The pivotal role of experiential learning projects. *American Journal of Business Education* (Online) *6.6*: 613.

Mayer, Richard (2006) *Ten research-based principles of multimedia learning, in web based learning: Theory, research and practice* (edited by Harold F. O'Neil and Ray S. Perez). Mahwah, NJ: Erlbaum Associates.

Means, Barbara et al (2009). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. Washington DC: US Department of Education.

Milliron, D., Plinske, K. (2009). Building for a new generation of learning: Catalytic conversations for the educational publisher. *Pub Res Q, 25*: 1-11.

Pape, L., Barnes, M.E. (2010). Online courses can enhance your curriculum. *Momentum*, *41* (1), Feb/Mar.

Proserpio, L., Gioia, D. (2007) Teaching the virtual generation. *Academy of Management, Learning, & Education*, *6* (1), 69-80.

University of Denver (2014) What is experiential learning? Retrieved from http://www.ucdenver.edu/life/services/ExperientialLearning/about/Pages/WhatisExperientialLearning.aspx.

Woltering, V., Herrier, A., Spitzer, K., Spreckelsen, C. (2009). Blended learning positively affects students' satisfaction and the role of the tutor in the problem-based learning process: Results of a mixed-method evaluation. *Advances in Health Science Education*, *14*: 725-738.

Dr. Eric Malm is an associate professor of economics and business at Cabrini College in Radnor, PA. His research interests include engagement scholarship and campus technology policy.

USING TECHNOLOGY TO EASE THE PAIN IN THE…ASSESSMENT

Dr. Cori Myers, Lock Haven University
Dr. Peter Huegler, Lock Haven University

ABSTRACT

While some colleges and universities may have embraced learning outcomes assessment and others may not, all institutions must collect, analyze, use, and communicate data results to demonstrate accountability to key stakeholders and comply with reporting/accrediting requirements. Although most institutions have established assessment plans and collect data, many fewer transparently present their assessment outcomes especially online; however, the Web provides an easy way to demonstrate accountability to all key stakeholders and show student achievement. This paper explains a simple and inexpensive way for institutions to use common technologies (e.g., Excel and the Web) to collect, maintain, and present easy-to-comprehend assessment results.

INTRODUCTION

Colleges and universities cannot deny it, ignore it, overlook it, or forget it; learning outcomes assessment has become an integral part of the backdrop of higher education. It is here to stay despite a tremendous lag by many institutions to accept this fact. Heavy resistance to assessment had evolved from perceptions of the increased workload it carried, of improper use of results to evaluate faculty, or of questioning the quality of faculty work and judgment, among other reasons. While many faculty and administrators may have and maybe still do detest assessment, it fills an increasingly important role. Assessment serves a dual purpose of enabling institutions to be accountable to external stakeholders and accountable to themselves by using results to improve aspects of the educational process and promote learning. In order to fulfill this dual purpose, institutions must collect, maintain, and present assessment results to various stakeholders. Using current technologies provides a way for the faculty and administrators to ease the pain in the ….assessment or at least, in the collection, calculation, and communication aspects of assessment.

BACKGROUND

The discourse surrounding learning outcomes assessment began more than 25 years ago. What may have been considered, perhaps hoped, to be one of higher education's passing management fads like those described by Birnbaum (2000) became a mainstay on college campuses and embedded in the continuous discussion of demonstrating institutional accountability and self-improvement (Ewell, 2009). Miller (2012), director of the Center for the Study of Higher Education at the Curry School of Education, University of Virginia, characterizes the assessment movement as a glacial-paced progression and states that "since the mid-1980s, then, at least in part and with a lot of backsliding, we have generally passed through the stages of grief into something like acceptance – acceptance of the need to examine our practices and communicate about and use the results" (p.8). Under the auspices of the National Institute of Learning Outcomes Assessment, Kuh, Jankowski, Ikenberry, and Kinzie (2014) conducted a study about current assessment structures and activities and found that "substantially more student learning outcomes assessment is underway now than a few years ago and the range of tools and measures to assess student learning has expanded" (p. 5). While some predicted greater progress at this point, today's tension about assessment centers more on determining what and how to assess, rather than whether or not to assess (Ewell, 2009). Most colleges and universities today established learning goals and integrated assessment activities on campus (Kuh et al., 2014); however, the quality of the assessment plan and communication of results varies widely.

Much to the dismay of early resisters, the assessment movement has gained traction and greater acceptance from internal constituencies stimulated by the demands of external stakeholders. A greater focus on learning and educational attainment stems from the weakened competitive position of the U.S. in the world market which places greater importance on higher education's return on investment; its end product. Employers, policy makers, and government officials agree that the nation needs more students from diverse backgrounds to succeed and achieve higher levels of education while making it more affordable (Kuh et al., 2014).

Ewell (2009) outlines four important domains of accountability including state governments, the federal government (more so as it relates to federally-funded financial aid), accrediting agencies (both regional and programmatic), and the public at large (including public opinion expressed in media like *U.S. News and World Report*). As state budgets tighten and calls for accountability continue, he notes that the clamors are coming more so from accrediting agencies

and less so from state governments. The study by Kuh et al. (2014) suggests that, of these domains, the expectations of regional and program/specialized accrediting agencies constitute the primary driver of demonstrating accountability through learning outcomes assessment. However, demonstrating accountability does not merely rest with the presence of ongoing assessments, but rather by showing student achievement.

Accreditors want to see a transparent system of accountability which emanates from involving a range of stakeholders in the process and by broadly communicating the results internally and externally (Millett, Payne, Dwyer, Stickler, & Alexiou, 2008). Especially at the undergraduate level, institutions will more likely report results internally than externally through presentations at faculty meetings, retreats, and assessment committees (Kuh et al., 2014). Very few institutions transparently present their assessment outcomes on the Web (Miller, 2012). However, using the Web provides an easy way to demonstrate accountability to all key stakeholders and show student achievement. This paper explains a simple and inexpensive way for institutions to use common technologies (e.g., Excel and the Web) to collect, maintain, and present easy-to-comprehend assessment results.

CONCEPTUAL FRAMEWORK

As a foundational step, institutions or programs should articulate the student learning outcomes that should be achieved by their graduates, but many other decisions remain for an effective assessment plan. The conceptual framework for this paper mirrors the best practices espoused in numerous publications that are distributed by such entities as accrediting bodies (e.g., Middles States Commission on Higher Education) and national organizations (e.g., National Institute for Learning Outcomes Assessment). These bodies summarize the best practices in assessment and give detailed guidance regarding what the assessment process should look like as follows:

1. Developing the learning goals and competencies that address a wide range of skills, knowledge, and attitudes
2. Aligning goals within the institutional/programmatic context and curriculum
3. Selecting means of assessment which should include a balanced portfolio of measures (e.g., direct v. indirect, internal v. external, and formative v. summative)
4. Gathering trend data which demonstrate not only self-improvement toward an internal performance benchmark, but comparisons between external and internal groups
5. Using the data for improvement of teaching and learning
6. Communicating results to demonstrate institutional effectiveness and accountability

While all of these steps are fundamental to developing and implementing an effective assessment process, this paper will highlight a few of those areas, but will focus more on step six, communicating the results to both internal and external stakeholders. Institutions should develop appropriate and meaningful ways in which to communicate results to faculty and administrators, as well as advisory boards, governmental agencies, accreditors, and the public at large. Using today's technologies can aid significantly in this effort. For those institutions with limited budgets, many of the tools already available can be leveraged to build communication tools that display tables and charts in an easy-to-comprehend format.

THE PROCESS

At a public, master's institution, the business program established its assessment plan as it embarked on a journey to seek and eventually acquire accreditation. The plan included three primary learning goals (KNOW, SOLVE, and IMPART) that covered a wide range of business knowledge, problem solving skills, and communication skills. Once the goals were chosen, the faculty further defined their expectations by articulating specific objectives, competencies, targets/benchmarks for performance, means of assessment (e.g., exam, project, or paper), assessment points (e.g., in what courses), and frequency of assessment (See Figure 1: Assessment Plan which includes an excerpt of the plan.)

Figure 1

Assessment Plan (Excerpt)

Business Administration, BS, Learning Objectives, Competencies, and Measures

LEARNING GOAL: KNOW

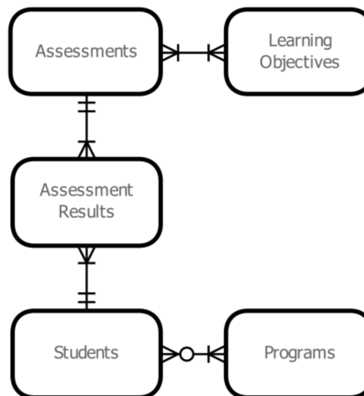
Learning Objective	Competencies	Performance Measure	Target	Assessment Points	Frequenc
Accounting	Demonstrate basic knowledge and application of financial and managerial accounting concepts.	Embedded exam questions, (F,S) ETS Major Field Test, (S)	75% of students earn a 60 or higher on competencies or at/above national average on MFT	ACCT110 (FA), ACCT115 (FA), MANG325 (SP), MANG475 (B)	Semester
Management	Demonstrate basic knowledge of the management environment, planning, organizing, leading, and controlling.	Embedded exam questions, (F,S) ETS Major Field Test, (S)	75% of students earn a 60 or higher on competencies or at/above national average on MFT	ACCT115 (FA), MANG315 (FA), MANG475 (B)	Semester
Marketing	Demonstrate basic knowledge of marketing, including segmentation, competitive analysis, promotional planning, and research.	Embedded exam questions, (F,S) ETS Major Field Test, (S)	75% of students earn a 60 or higher on competencies or at/above national average on MFT	MRKT200 (SP), MANG315 (FA), MANG475	Semester

To support the assessment process (and ease the pain), the program designated a data coordinator who designed and developed an information system. The information system consists of a standard spreadsheet template for the submission of assessment results, a relational database to store the assessment results, and a web site to communicate the results. The remainder of the section outlines the basic data collection process as well as the information system.

The most important decision for the assessment plan and information system is deciding what data to collect for each individual assessment. The program faculty decided that assessment results would be collected for each individual student using student ID as the primary code. Keeping results by student gives the greatest flexibility when analyzing the assessment results. Individual results are currently used for comparisons between programs (Business Administration vs. Accounting), concentrations (Marketing vs. Finance), and locations (main vs. branch campuses). Although not implemented, the information system can easily support analysis by student demographics and academic achievement (SAT and high school GPA). It is also possible to identify student cohorts and analyze their past and future results.

Figure 2 presents the basic Entity Relationship Diagram (ERD) for the assessment relational database. The database stores data on the Learning Objectives, Assessments, Assessment Results, Students and Programs.

Figure 2
Database ERD



The Learning Objective entity (relational database table) stores the basic data for each of the learning goals, objectives, and competencies. Each assessment must apply to at least one goal/objective/competency. Some assessments are used for several goals/objectives/competencies.

The Assessments entity stores data on each individual assessment. The data stored includes the semester, course, section, maximum assessment score, and the minimum score needed to meet the learning objective. (The program's learning objectives take this form: 75% of the students score at least a 60% or better.)

The Assessment Results entity stores each student's raw assessment score. The Students entity stores a unique identifier for each student. And finally, the Programs entity stores information on each program and concentration combination offered.

The faculty members take responsibility to implement the assessment plan and collect the data in the designated courses at the prescribed times. Each faculty member enters the assessment results into the standard spreadsheet template. For each assessment, the faculty members prepare a worksheet which includes the course name, semester, learning goal and objective, student ID, and scores for each competency assessed and submits it to the data administrator. This generally happens at the end of each semester.

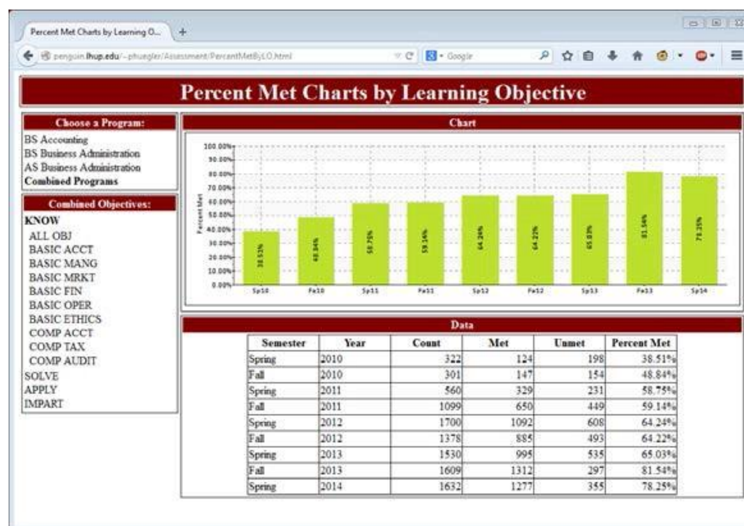
The data coordinator takes the completed spreadsheets and uses a partially manual and partially automated process to enter the data into the database. The data from each submitted worksheet is copied to another worksheet. A script (small program) is executed to insert the data into the database. This process could be completely automated, but having someone else review the submissions and cleanse the data helps identify potential errors, question outliers, and correct inaccuracies. This process maintains the integrity of the data. Once the data is cleansed, the data coordinator takes about a minute to update the database for each assessment. For the 2013-14 academic year, over 440 separate assessments were added to the assessment database.

Every year, a report of all students enrolled in the business and accounting programs is extracted by the data coordinator and used to update the database with current information and changes to students' majors and concentrations. A script is used to process the report and update the database.

Once the database is populated, the data are immediately available for any queries through the web site. The web site uses Asynchronous JavaScript and XML (AJAX) and server-side scripting to deliver dynamic web pages which display charts of these data. Figure 3 is an example of the web pages generated.

Figure 3

Web Page Example



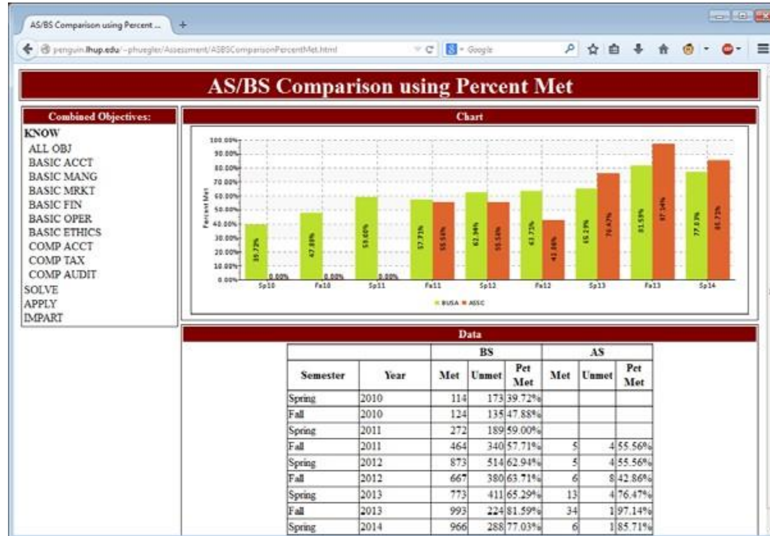
Semester	Year	Count	Met	Unmet	Percent Met
Spring	2010	322	124	198	38.51%
Fall	2010	301	147	154	48.84%
Spring	2011	560	329	231	58.75%
Fall	2011	1099	650	449	59.14%
Spring	2012	1700	1092	608	64.24%
Fall	2012	1378	885	493	64.22%
Spring	2013	1530	995	535	65.03%
Fall	2013	1609	1312	297	81.54%
Spring	2014	1632	1277	355	78.25%

On the left side of each web page, the user can select different options for the chart. In this example, the user can filter results for a single program or display results for all programs combined. Below the program options, the goals, objectives, and competencies are listed which allow the user to drill through the results at these various levels. On the right side, the page displays a chart of the learning outcomes. The data upon which the chart is based is included in Figure 3 at the bottom right. The chart and table are automatically updated as the user chooses different options on the left.

Figure 4 shows a comparison between the Bachelor's and Associate's programs.

Figure 4

Comparison Example



		BS			AS		
Semester	Year	Met	Unmet	Pct Met	Met	Unmet	Pct Met
Spring	2010	114	173	39.72%			
Fall	2010	124	135	47.88%			
Spring	2011	272	189	59.00%			
Fall	2011	464	340	57.71%	5	4	55.56%
Spring	2012	873	514	62.94%	5	4	55.56%
Fall	2012	667	380	63.71%	6	8	42.86%
Spring	2013	773	411	65.29%	13	4	76.47%
Fall	2013	993	224	81.59%	34	1	97.14%
Spring	2014	966	288	77.03%	6	1	85.71%

Using a database allows the user easily to track results by individual student, program, or site and generate comparative reports. The comparative chart and table in Figure 4 had been required for an accreditation report. With the database already established, the data coordinator developed the report in less than an hour.

In addition to the web pages, the data coordinator generates detailed spreadsheets of data for each learning goal, objective, and competency. The Program faculty members analyze these data at their annual retreat in order to make program improvements and comply with the institutional and accrediting body's reporting requirements. Figure 5 shows the output in a spreadsheet format which is generated using a script.

Figure 5

Spreadsheet Report

							Assessment			Results				
Goal	Objective	Competency	AY	SY	Sem	Course	Description	Max	Criteria	Count	Average	Met	UnMet	Pct Met
KNOW	BASIC OVERALL	KNOWLEDGE/APP	2009	2010	Spring	MANG475	MFT Total	200	152	46	146.98	16	30	34.78%
KNOW	BASIC OVERALL	KNOWLEDGE/APP	2010	2010	Fall	MANG475	MFT Total	200	153	43	150.53	15	28	34.88%
KNOW	BASIC OVERALL	KNOWLEDGE/APP	2010	2011	Spring	MANG475	MFT Total	200	153	45	152.62	21	24	46.67%
KNOW	BASIC OVERALL	KNOWLEDGE/APP	2011	2011	Fall	MANG475	MFT Total	200	153	41	153.59	20	21	48.78%
KNOW	BASIC OVERALL	KNOWLEDGE/APP	2011	2012	Spring	MANG475	MFT Total	200	153	50	151.30	21	29	42.00%
KNOW	BASIC OVERALL	KNOWLEDGE/APP	2012	2012	Fall	MANG475	MFT Total	200	153	34	152.91	17	17	50.00%
KNOW	BASIC OVERALL	KNOWLEDGE/APP	2012	2013	Spring	MANG475	MFT Total	200	153	39	151.31	18	21	46.15%
KNOW	BASIC OVERALL	KNOWLEDGE/APP	2013	2013	Fall	MANG475	MFT Total	200	152	29	156.21	17	12	58.62%
KNOW	BASIC OVERALL	KNOWLEDGE/APP	2013	2014	Spring	MANG475	MFT Total	200	152	40	151.88	21	19	52.50%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2011	2011	Fall	ACCT110	Embedded Test Questions	10	6	55	6.04	32	23	58.18%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2011	2012	Spring	ACCT110	Embedded Test Questions	10	6	20	6.65	16	4	80.00%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2012	2012	Fall	ACCT110	Embedded Test Questions	10	6	10	7.50	8	2	80.00%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2012	2013	Spring	ACCT110	Embedded Test Questions	10	6	72	6.28	45	27	62.50%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2013	2013	Fall	ACCT110	Embedded Test Questions	15	9	43	8.88	28	15	65.12%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2013	2014	Spring	ACCT110	Embedded Test Questions	10	6	95	6.05	62	33	65.26%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2011	2011	Fall	ACCT115	Embedded Test Questions	9	6	39	5.46	20	19	51.28%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2011	2012	Spring	ACCT115	Embedded Test Questions	9	6	86	5.95	51	35	59.30%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2012	2012	Fall	ACCT115	Embedded Test Questions	9	6	42	5.67	23	19	54.76%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2012	2013	Spring	ACCT115	Embedded Test Questions	9	6	45	5.98	26	19	57.78%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2013	2013	Fall	ACCT115	Embedded Test Questions	9	6	51	6.63	45	6	88.24%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2013	2014	Spring	ACCT115	Embedded Test Questions	9	6	46	7.00	38	8	82.61%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2011	2011	Fall	MANG325	Embedded Test Questions	10	6	59	6.15	36	23	61.02%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2011	2012	Spring	MANG325	Embedded Test Questions	10	6	28	4.67	15	13	53.57%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2012	2012	Fall	MANG325	Embedded Test Questions	7	5	55	5.42	42	13	76.36%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2012	2013	Spring	MANG325	Embedded Test Questions	7	5	35	4.80	22	13	62.86%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2013	2013	Fall	MANG325	Embedded Test Questions	7	5	64	5.16	42	22	65.63%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2013	2014	Spring	MANG325	Embedded Test Questions	7	5	36	4.94	22	14	61.11%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2009	2010	Spring	MANG475	MFT AI-1 Accounting	100	40	46	42.30	16	30	34.78%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2010	2010	Fall	MANG475	MFT AI-1 Accounting	100	45	43	40.49	14	29	32.56%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2010	2011	Spring	MANG475	MFT AI-1 Accounting	100	45	45	36.78	15	30	33.33%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2011	2011	Fall	MANG475	MFT AI-1 Accounting	100	45	41	43.00	16	25	39.02%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2011	2012	Spring	MANG475	MFT AI-1 Accounting	100	45	50	38.76	17	33	34.00%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2012	2012	Fall	MANG475	MFT AI-1 Accounting	100	45	34	42.41	12	22	35.29%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2012	2013	Spring	MANG475	MFT AI-1 Accounting	100	45	39	39.13	12	27	30.77%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2013	2013	Fall	MANG475	MFT AI-1 Accounting	100	43	29	46.72	19	10	65.52%
KNOW	BASIC ACCT	KNOWLEDGE/APP	2013	2014	Spring	MANG475	MFT AI-1 Accounting	100	43	40	41.23	18	22	45.00%
KNOW	BASIC MANG	KNOWLEDGE/APP	2009	2010	Spring	MANG475	MFT AI-3 Management	100	55	46	53.24	21	25	45.65%
KNOW	BASIC MANG	KNOWLEDGE/APP	2010	2010	Fall	MANG475	MFT AI-3 Management	100	58	43	65.58	29	14	67.44%
KNOW	BASIC MANG	KNOWLEDGE/APP	2010	2011	Spring	MANG475	MFT AI-3 Management	100	58	45	72.60	42	3	93.33%
KNOW	BASIC MANG	KNOWLEDGE/APP	2011	2011	Fall	MANG475	MFT AI-3 Management	100	58	41	69.24	35	6	85.37%
KNOW	BASIC MANG	KNOWLEDGE/APP	2011	2012	Spring	MANG475	MFT AI-3 Management	100	58	50	66.38	38	12	76.00%

TECHNOLOGIES USED

As an open source advocate, the data coordinator designed and developed the information system with open source tools. A similar system can be easily implemented using proprietary tools like Microsoft Office and SQL Server.

The spreadsheet template submitted by the faculty is an Excel spreadsheet. The university installs Microsoft Office on its computers making it expedient to use Excel. The data coordinator uses LibreOffice to manipulate the Excel spreadsheets. A script written in Python reads the data from the spreadsheets and inserts it into the database. LibreOffice and Python are used to create the spreadsheet reports in Excel format.

The data coordinator uses MySQL for the database and Apache for the web server software. MySQL and Apache reside on Linux servers maintained by the department. The scripting language, PHP, generates the dynamic web pages, and a tool called pChart ("pChart", 2014) creates the charts.

BENEFITS AND LIMITATIONS

Using these technologies provides an easy, manageable way for the programs to aggregate data and present to various stakeholders in a manner that is easily digestible. First and foremost, the spreadsheets, tables, and charts provide faculty with a wealth of information about student learning outcomes and clearly point to areas of strength and weakness. These tools make the Programs' Annual Retreat and other planning sessions extremely productive in facilitating conversations about where changes to curriculum should take place and on the back end, whether such changes have brought about positive results in student learning outcomes. In addition, these tools help the Programs communicate results to such key stakeholders as administration, students, parents, alumni, advisory council members, accrediting bodies and the public at large by allowing them to publish charts and tables in reports and on the web. Anyone can access the web site http://penguin.lhup.edu/~phuegler/Assessment/ and navigate it to explore program and comparative data in key knowledge and skill areas.

The information system is maintained by the department's faculty members – not the university's IT department. This provides both benefits and limitations. The benefits include quicker turn around on changes and decreased cost of development and maintenance. Limitations include slower response to problems (like the servers being down). The system is not critical so the benefits of developing and maintaining the system by the department outweigh the limitations. Using open source software may provide a cost benefit over proprietary software depending on an organization's existing software contracts.

CONCLUSION

Since assessment seems to be here to stay, at least for a now, it is paramount to find ways that can ease the pain in the assessment. While learning outcomes assessment does require effort on the part of faculty to assess and report data, presenting the data can be done easily and effectively with very basic technology tools. Using these tools not only can aid the faculty to fulfill their role in assessment and close the loop, but also to communicate with key stakeholders to demonstrate accountability and student achievement.

REFERENCES

AACSB International. (2013). *Eligibility procedures and accreditations standards for business accreditation.* Tampa, FL: AACSB International.

Accreditation Council for Business Schools and Programs. (2013). ACBSP *standards and criteria for demonstrating excellence in baccalaureate/graduate degree schools and programs*. Overland Park, KS: Accreditation Council for Business Schools and Programs.

Birnbaum, R. (2000). *Management fads in higher education: Where they come from, what they do, why they fail.* San Francisco, CA: Jossey-Bass.

Ewell, P.T. (2009). *Assessment, accountability, and improvement: Revisiting the tension*. Champaign, IL: National Institute for Learning Outcomes Assessment.

Kuh, G.D., Jankowski, N., Ikenberry, S.O., & Kinzie, J. (2014). *Knowing what students know and can do: The current state of student learning outcomes assessment in U.S. colleges and universities.* Champaign, IL: National Institute for Learning Outcomes Assessment.

Middle States Commission on Higher Education. (2003). *Student learning assessment: Options and resources.* Philadelphia, PA: Middle States Commission on Higher Education.

Miller, M.A. (2012). *From denial to acceptance: The stages of assessment.* Champaign, IL: National Institute for Learning Outcomes Assessment.

Millett, C.M., Payne, D.G., Dwyer, C.A., Stickler, L.M., & Alexiou, J.J. (2008). *A culture of evidence: An evidence-centered approach to accountability for student learning outcomes.* Princeton, NJ: ETS.

pChart 2.0 – a PHP charting library. (n.d.). *pChart 2.0 – a PHP charting library*. Retrieved June 29, 2014, from http://www.pchart.net.

Dr. Cori Myers serves as department chair and associate professor of business administration at Lock Haven University. She primarily teaches undergraduate students in such courses as human resource management and strategic management.

Dr. Peter Huegler is assistant professor of business administration at Lock Haven University. He teaches courses in operations management, management information systems and computer science.

CONTEMPORARY MANAGEMENT AUTHORS: DO THEY REALLY HAVE NEW IDEAS FOR SUCCESS?

Cori Myers, Lock Haven University
Marcia Kurzynski, Lock Haven University

ABSTRACT

How many managers run to the bookstore or log on to Amazon when the newest, hottest management book is published seeking ways to miraculously improve business performance? As companies continue to struggle, management theorists work to concoct the next remedy often by recycling and repackaging fundamental ideas. So, are the contemporary authors really on to something new or have the classical authors provided a viable foundation that requires a more concerted effort on the part of management and staff to implement? This paper seeks to examine selected contemporary works and compare them to selected classical works to determine if some common themes for success emerge.

INTRODUCTION

How many managers run to the bookstore or log on to Amazon when the newest, hottest management book is published seeking ways to miraculously improve business performance? It seems that each new release of books by Collins, Peters, Hamel, and other contemporary authors creates a flurried evolution of company retreats, workshops, conference themes, articles, and consultants giving directives on how to be a successful leader, manager, or company. For over half a century, management theorists have been researching and hypothesizing about what makes leaders and hence the organizations they lead excellent, great, and built to last. But, what is the true measure of standards of performance? Might it be superior profits? Is it overall performance and corporate citizenship? Does it require innovation? Databases archiving scores of management publications continue to accrue submissions that espouse, as does Hamel (2012), that they know what matters now in management. However, such ideas as embracing values, crafting measurable goals, exercising staunch discipline, sparking creative thinking, and engaging employees have been promulgated for quite some time and often without great success. By and large, those companies more likely to search and adopt the newest management fads have experienced frustration with unsuccessful adoption of the current management trend or with failed company performance (Gibson & Tesone, 2001). While leaders and companies may search for new solutions, the classical theories may still offer valuable guidance, but their success requires appropriate implementation and an understanding of the changing environment in which they must be implemented.

As companies continue to struggle, management theorists work to concoct the next remedy often by recycling and repackaging fundamental ideas. So, are the contemporary authors really on to something new or have the classical authors provided a viable foundation that requires a more concerted effort on the part of management and staff to implement? Do we need new ideas about what makes companies successful or do organizations need to review what theorists have been saying for quite some time and apply those ideas with vigor? This paper seeks to examine selected contemporary works and compare them to selected classical works to determine if some common themes for success emerge. These comparisons should answer the question of what ideas are fundamentally true for both the classical and contemporary writers upon which to build success.

BACKGROUND: REVIEW OF THE AUTHORS

Several sources list the most influential authors in management, and each one contains different names ranked differently in order. Our selection of authors did consider such lists, but included other factors as well. Since Hamel, Peters, and Collins have released fairly recent books, these authors were selected to represent the contemporaries. The classical authors of Drucker, Deming, Herzberg, Maslow, McGregor, and Covey not only have written seminal works in management, but discuss some similar themes regarding eliciting efforts that adhere to values and purpose, engaging employees, producing quality, engendering innovation, and remaining adaptable.

CLASSICAL AUTHORS

Peter Drucker

The late Peter F. Drucker (1909-2005) has long been considered one of the most prominent thinkers in the field of business and a major shaper of management thought. Drucker's 75-year career as an author, teacher, and consultant in the field of management resulted in more than just the production of theories and business models. Drucker's conception of the work of management produced modern ideas for a distinct way of being a manager based on communitarian ideals and deep-rooted moral principles. In *The Practice of Management* (1954) he introduced the fundamentals of how the contemporary corporation, which he viewed as a "social institution," could best be managed. He identified the role of management as a distinct function characterized by a degree of responsibility that must be taken seriously by the people who hold leadership positions as managers. Drucker advocated the idea that the profession and practice of management had moral significance based on two assumptions. First, the work of the manager has a far-reaching impact on the development and well-being of the people who work in the corporation. Second, a company's actions (through the actions and decisions of its leadership group) impact society (Drucker, 1954).

W. Edwards Deming

W. Edwards Deming (1986) agreed that purpose and goals must precede action, and organizations should foster collaboration toward purpose. Deming was heralded for his contribution to Japan's rise as an economic power during the post-war period. He took the principles applied to Japanese manufacturing and published, *Out of Crisis*, which outlined the need to overhaul U.S. management practices to improve overall productivity. This book was credited as the foundation for total quality management and outlined 14 key points called the Principles of Transformation. Quality came from such ideas as creating a constancy toward purpose, constantly improving the system of production, on-the-job training and self-improvement programs, breaking down functional silos, and removing barriers from allowing employees to take pride in their work. He emphasized that organizations should define their purpose about which all employees should know. His points clearly promoted workplace collaboration among all employees such that the organization can harness the talents of every worker toward its cause. His concept of continuous improvement extended far beyond the manufacturing process to the employees. He advocated and exemplified the attributes of hard work, sincerity, decency, and personal responsibility (http://www.skymark.com/resources/leaders/deming.asp), but overall hard work must be preceded by a clear identification of purpose.

Frederick Herzberg

In literature on job satisfaction, Herzberg (966) discussed what motivates people to work. In *Work and the Nature of Man*, he suggested that employees place varying degrees of importance on different job factors which fall into two tiers – factors in the lower tier that prevent dissatisfaction and factors in the higher tier that promote satisfaction. The lower tier addressed basic needs, tended to be extrinsic, and concerned elements of the job environment. He referred to these lower-tier factors as job hygiene and maintenance factors which include compensation, job security, and working conditions. Such attributes as achievement, recognition, attraction of work, responsibility, and advancement fostered job satisfaction and tended to be intrinsic. He referred to the higher-tier factors as motivator or growth factors. Employers could elicit greater job satisfaction by providing opportunities for employees to hold responsibility, grow and be recognized, become accountable for one's own work, and increase job freedom. Employees who have greater autonomy and opportunities to participate in decision-making tended to be satisfied and committed. Engaging employees by providing these kinds of work attributes should establish a premise for achieving such company goals as improving quality and thinking creatively.

Abraham Maslow

Psychologist Abraham Maslow was a pioneer in the school of humanistic psychology, a movement that focused on the inherent goodness of people, individual potential, personal growth and self-actualization. Maslow (1943) advanced a theory of human motivation based on the belief that people have a set of five innate needs (i.e., physiological, safety, love/belonging, esteem, and self-actualization) that they try to satisfy in a progressive order. Though written as pure psychology, managers quickly adopted, and still gravitate to, Maslow's theory as a motivational technique due to the straightforward insights it offers in helping them understand human nature and

shape the work environment. Maslow's work guided manager behavior by providing insight into the fact that as managers, they had the ability to shape the conditions that create people's aspirations, and in doing so, positively influenced performance.

Douglas McGregor

A major contribution to increasing management's understanding of how leaders should be, think, and act, so they can motivate others came from *Douglas McGregor's The Human Side of Enterprise. McGregor (1961) believed that people should come first, a perspective that greatly impacted the practice of management and how managers view and treat employees.* McGregor's Theory X and Theory Y were the foundation of this seminal work. His theory sought to align worker and organization along a common path of goal accomplishment and personal fulfillment. According to McGregor's philosophy, managers holding a Theory X set of assumptions about people believe workers exhibit an inherent dislike of work and will avoid it if possible; must be coerced, directed, and threatened with punishment before putting forth adequate effort toward the achievement of organizational objectives; and avoid responsibility. Conversely, managers holding a Theory Y set of assumptions believe the opposite of workers; they like work and find fulfillment in performing their duties; are self- directed and willingly put forth effort toward the achievement of organizational objectives; and seek and are comfortable with responsibility. McGregor asserted that these assumptions had an extraordinary influence in management actions across a wide spectrum of American industry (Cunningham, 2011). McGregor believes that Theory Y will create a more positive corporate culture and productive workforce.

Stephen R. Covey

Before individuals can contribute productively to an organization and collaborate with peers, they must first control their own (re)actions, have a clear understanding of self, and prioritize goals according to personal values. In his influential work, *The Seven Habits of Highly Effective People*, Covey (1989) laid out some basic principles and habits that embody these sentiments and pave a pathway to becoming effective individuals which of course drives effective organizations. The foundation included an inside-out approach where individuals examine themselves to determine whether they are principle-centered; do such principles as fairness, integrity, honesty, human dignity, service, quality, excellence, potential, patience, and encouragement guide individual conduct. Covey began by suggesting that if instead, such attributes as personality, public image, and ability to navigate the social scene govern action rather than timeless principles, that individuals may need a paradigm shift. He went on to articulate three habits that lead to private victory and independence. Individuals should focus on what they can control and choose their actions and reactions carefully to effect positive results. Individuals must understand what is truly important by clarifying their values and roles and then, prioritize the way they spend their time in those roles to accomplish their goals. After garnering a better ability to understand, control, and prioritize oneself, individuals can move on to higher levels of cooperation and interdependence. They must carry a mindset that cooperation with others will provide mutual benefit and that individuals must exercise empathy and listen first to the needs of others before moving to solution. Once partners understand each other, they can mobilize their creative energies to synergize and collaborate to develop alternatives (usually ones that are better than if each individual worked independently). Finally, Covey suggests that individuals must sharpen the saw and invest in self renewal to be truly effective.

CONTEMPORARY AUTHORS

Gary Hamel

Hamel (2012) in his most recent work, *What Matters Now*, suggested that organizations should exercise stewardship and be built upon foundation of timeless human values (e.g., prudence, self-discipline, sacrifice, thrift) that actually permeate the organization and guide action. While values set the foundation, the organization must embrace a willingness to foster innovation which is often shackled by lack of training, reward, freedom (too much bureaucracy), and accountability to goals. Organizations must be innovative, adaptable, flexible and willing to change. They must stave off entropy and abandon those strategies that are no longer successful which engenders the need to anticipate, be diverse, and be flexible in structure and strategy. Much of these attributes can be brought about by unleashing the passion of employees and ensuring they are engaged in organizational efforts.

Jim Collins

In his latest release, *Great by Choice*, Collins (2011) argued that great organizations and their leaders display different behaviors than their less successful counterparts. They establish values, goals, performance markers, and well-conceived timeframes and exercise fanatic discipline to assure that actions align or are consistent with these ideals. These organizations are innovative, but exercise their creativity amidst authentic support derived from observation, practical experiments, and/or direct evidence that supports the direction; a concept referred to as empirical creativity. As leaders continuously search for areas in which to be creative and examine trends and evidence, they anticipate, prepare, buffer, and contingency plan for those unpredictable circumstances. They exercise productive paranoia as they constantly survey their environment, assess threats, and make changes if warranted. They also research and establish a set of operating practices that are specific, methodical, and consistent (SMaC). Moreover, the leaders of these organizations exude ambition and passion for the cause of their organization.

Tom Peters

Widely known for spreading the gospel of American management excellence, Tom Peters co-authored several best-selling business books published in the late 20th-century. First and foremost was *In Search of Excellence* (1982), written with fellow McKinsey consultant Robert Waterman. The book captured the attention of U.S. managers at a time when Japanese manufacturing superiority was hitting and hurting American businesses hard, and Corporate America needed "reminding that there was still excellence to be found back home" (Hindle, 2008). In, *In Search of Excellence,* Peters and Waterman apply the 7-S model in an attempt to discover excellence in corporate America. They identified eight lessons from their research into successful American firms which focused on taking action, understanding the customer, being productive through people, being values-driven, pursuing core competencies, remaining lean, autonomous, and entrepreneurial.

Peters' 1987 book, *Thriving on Chaos***,** purported that there are no excellent companies. Grounded in the fact that many of the companies he earlier cited in *In Search of Excellence* had fallen short of expectation. Later books including *A Passion for Excellence* (1985) focused on leadership and stressed the people-centered implications of the 7–Ss. It spurred on what became known as the culture of empowerment. *Thriving on Chaos* (1987) encouraged managers to cast off old ways of thinking and to be prepared for a world of change and uncertainty. *Liberation Management* drew out strategies to help managers adapt to the world of change and uncertainty, by continuing to attack traditionalist scientific management and bureaucratic structures.

Peters continues to write promoting time-proven ideas in innovative ways that help business, small or large, succeed. Peters' latest book, *The Little Big Things: 163 Ways to Pursue Excellence* (2010), encourages managers to get "back to the basics" in running a successful enterprise. In 48 sections, he discusses such ideas as leading with passion; expressing kindness, civility, and thoughtfulness toward others; fostering change and innovation; and achieving success by doing (taking action).

DISCUSSION

After reviewing the work of the contemporary and classical authors, a couple of key themes emerged and included an emphasis on mission and values, passion and engagement, innovation, and adaptability. These concepts provide some fundamental ingredients for our success recipe.

Mission and Values: Mission and values as a common theme really took on two general prongs. First, organizations should establish mission and values to which they align actions; and second, those values should acknowledge that businesses exist to serve social needs and goals.

Several authors acknowledge how values provide a guide by which organizations should conduct themselves. Collins asserts that the great, enduring organizations generally were built upon the founders' strong personal core values and unyielding drive. Great organizations start by articulating timeless core values (with goals and performance measures to follow), recruiting individuals that subscribe to these ideals, and guiding behavior by the norms that evolve from the value statements (http://www.jimcollins.com/article_topics/articles/aligning-

action.html). Peters and Waterman agree that great organizations focus on a few core values. Although organizations are built upon strong values, Peters cautions that values be reviewed and updated regularly (http://tompeters.com/columns/when-values-become-blinders/). The perspectives of Covey and Deming align with the idea of starting with values and purpose. Covey prescribes self-examination and then participation that align individual and organizational values. Deming advocates that organizations should establish aim (purpose and values) which all members should share. Points 1 and 9 of his Principles of Transformation imply that shared values and purpose are fundamental to business success as does Peters's application of the 7-S model with respect to being hands-on value-driven.

Hamel (2012) suggests that to "repair the hole in the soul of business" we must approach values at three different levels: individual, strategy, and institutions (p.38) (http://www.forbes.com/sites/stevedenning/2012/04/06/gary-hamel-what-matters-now-values/). That is, we need individuals who see themselves as stewards, strategies that address society's problems, and institutions built around noble causes. Similarly, Drucker (1973) was duly quoted for advocating that businesses should serve a social purpose and stating that **"…**they do not exist for their own sake, but to fulfill a specific social purpose and to satisfy a specific need of a society, a community, or individuals" (p. *39).*

Passion and Engagement: Engaging employees in the organization allows them to pursue their passions in support of the mission and values. The literature points to the need for employees at all levels of the organization to be passionate about the cause (or their role in it) and engaged in the process of achieving it.

Collins (2011) is probably most explicit about leaders who have passion for the cause or purpose of their organization, and strive with deep ambition and dedication to achieve that purpose. Peters (2010) seconds that emotion that leaders inspire and sell passion. He agrees with Collins that the passion and ambition serve as motivating forces to push through difficulties and prevail. Collins further suggests that employee passion for the organizational mission and desire to align with company values can be cultivated when managers create an environment where employees feel part of the big picture or garner a sense of belongingness. As defined in Maslow's (1943) hierarchy, belongingness refers to a sense of acceptance within a group. Employees need to feel like they are part of something bigger and their contributions are valuable to the business. This feeling can only be achieved by instilling those beliefs from the top-down and creating a sense of connection between staff and management.

McGregor's Theory Y worker is an example of the sort of employee who seeks personal fulfillment through being productive at work, and thus helps the organization achieve its goals. While these leaders may be focused away from selfish goals toward a cause for the greater good, the satisfaction of achieving those goals might fall very well into Herzberg's higher tier motivating factors. These leaders certainly have a passion for the cause, but also have the freedom to act on that opportunity; they have autonomy, responsibility, and achievement. Like Herzberg, Deming advocates for employees to be engaged in the organization, a characteristic fundamental to Total Quality Management and its offshoots. Breaking down silos, fostering collaboration, training employees and engaging workers at all levels will bring about a more effective organization. Similarly, Hamel suggests that organizations should unleash employee talent and innovation by offering training, freedom, and rewards, and holding them accountable. Overall, employee engagement is fundamental.

Innovation: Historically, entrepreneurship and innovation are hallmarks of the United States' rise as an economic power and vital to business success.

Hamel, Collins, and Peters address the dire need for innovation. Collins suggests that companies need to be empirically creative basing their innovation on sound evidence and observation. Hamel acknowledges the importance of innovation though recognizes the difficulty in fostering it (http://www.forbes.com/sites/stevedenning/2012/12/04/gary-hamel-on-innovating-innovation/). He explains that for organizations to be innovative seems counter-cultural amidst a backdrop of organizational discipline, alignment, and control, and time-consuming to build innovative capability; it may take years, not months. In his book, *The New Economics*, Deming (2000) describes the need to innovate and anticipate what the customer needs, before they even ask or identify a need for a new product. Like Collins, Deming based his concepts of innovation on a level of measurement and empiricism, but also on a level of leadership that can deal with the unknown, intangible pieces of

making decisions http://www.forbes.com/sites/henrydoss/2013/03/12/innovation-w-edwards-deming-and-john-keats-got-it-right/).

Douglas McGregor, in *The Human Side of Enterprise*, also acknowledges the role of employee innovation in achieving success. He believes that most, not all, are self- directed, and willingly put forth effort toward the achievement of organizational objectives and do so in ways that stretch outdated thinking. McGregor (1960) writes that "the ingenuity of the average worker is sufficient to outwit any system of controls devised by management" (p. 12). Maslow suggests that opportunities for employees to build competence and confidence will enable organizations to accomplish goals, and employee involvement in the organization will engender creativity.

Adaptability: Whether they use the term flexible, malleable, or adaptable, authors past and present agree that change is inevitable and business must exercise these traits. Hericlitus of Ephesos, to whom the phrase "the only thing that is constant is change" is attributed (http://www.ancient.eu.com/Heraclitus_of__Ephesos/) expressed this fact around 500 b.c. Successful business must adapt to this constant change.

Both Hamel and Collins clearly state that not only must organizations be creative and innovative, but must be adaptable. In the late 1960s, Drucker foresaw the coming impact of changing social and technology forces on the U.S. economy. He counseled business on the need to adapt resources from an industrial- to a knowledge-based economy. In *The Age of Discontinuity* (1968), Drucker wrote about the forces he considered were changing society and suggested that for an organization to remain competitive, it must have vision to identify new opportunities, be able to initiate change, and adopt a new attitude to make the most of the changes it implements. Managing through the turbulent times was an important skill executives would have to develop. Among several books on managing change, Drucker (1980) wrote *Managing in Turbulent Times*, a guide for managers to transform rapid change into opportunity. "During periods of discontinuous, abrupt change, the essence of adaptation involves a keen sensitivity to what should be abandoned - not what should be changed or introduced. A willingness to depart from the familiar has distinct survival value" (p. 36)

Covey's Seven Habits serves as a change management model acknowledging that the only thing people can control is their reaction to the change around them. They may exert some influence on changes by being proactive and acting within their circle of influence. The Seven Habits helps individuals deal effectively with change.

Inherent in Deming's points 13 and 14 are directions regarding change and adaptability. Point 13 calls for implementing education and self-improvement, not only to upskill workers, but also to prepare them for future changes and build the capability to adapt to change. Point 14 assigns the job of transformation to all company employees and highlights the importance of using effective change management principles when change is evident. If you Google the Internet for, *It is not necessary to change. Survival is not mandatory*, over a million results appear and attribute this oft-quoted phrase with sarcastic undertones to W. Edwards Deming (although the citation for it eludes these web pages). Regardless, the point remains that Deming's work duly acknowledges constant change and the need for adaptability.

CONCLUSION

This paper examined selected contemporary works and compared them to selected classical works to determine if common themes for leader and organizational success would be identified. The comparisons, we hoped would answer the seemingly elusive question regarding what ideas are fundamentally true upon which to build enduring success as proposed by the learned perspectives of classical theorists Drucker, Deming, Herzberg, Maslow, McGregor, and Covey, and contemporary writers Collins, Peters, and Hamel. We found that over *time and across disciplines,* common themes for success were apparent in the works of these authors. An emphasis on mission and values, passion and engagement, innovation, and adaptability were consistently proposed as an assortment of fundamental ingredients for success.

These authors, in our opinion, have contributed much to the body of knowledge regarding the quest for success. Their ideas about what makes companies successful will hopefully become a reality instead of a misdirected pursuit of profit. The contributions of these authors provide business leaders the ingredients for success; they just need to apply them.

REFERENCES

Collins, J. (2001). *Good to great.* New York, NY: HarperCollins.

Collins, J., & Hansen, M.T. (2011). *Great by choice: Uncertainty, chaos, and luck – why some thrive despite them all.* New York, NY: HarperCollins.

Collins, J., & Porras, J. (1994). *Built to last: Successful habits of visionary companies.* New York, NY: HarperCollins; 10th ed., Random House Business Books, 2005.

Covey, S.R. (1989). *The seven habits of highly effective people: Powerful lessons in personal change.* New York, NY: Simon and Schuster.

Cunningham, R.A. (2011, October). "Douglas McGregor- A lasting impression" Ivey Business Journal Online, Retrieved from http://iveybusinessjournal.com/topics/the-organization/douglas-mcgregor-a-lasting-impression#.U_OdSfldU_l.

Deming, W.E. (1986). *Out of crisis.* Cambridge, MA: MIT Press.

Drucker, P.F. (1980). *Managing in turbulent times*. New York, NY: Harper & Row.

Drucker, P.F. (1973). *Management: Tasks, responsibilities, practices.* New York, NY: Harper & Row.

Drucker, P.F. (1968). *The age of discontinuity: Guidelines to our changing society.* New York, NY: Harper & Row.

Drucker, P.F. (1954). *The practice of management.* New York, NY: Harper & Row.

Gibson, J.W., & Tesone, D.V. (2001). The management fads: Emergence, evolution, and implications for managers. *The Academy of Management Executive (1993-2005). 15*(4), 122-133.

Hamel, G. (2012). *What matters now: How to win in a world of relentless change, ferocious competition, and unstoppable innovation.* San Francisco, CA: Jossey-Bass.

Hamel, G., & Prahalad, C.K. (1994). *Competing for the Future*. Boston, MA: Harvard Business School Press.

Herzberg, F. (1966). *Work and the nature of man.* Cleveland: World Publishing Co.

Hindle, T. (2008). *Guide to Management Ideas and Gurus.* London: Profile Books.

Lenzer, R., & S.S. Johnson. (1997, March 10). Seeing things as they really are. *Forbes*. Retrieved from http://www.forbes.com/forbes/1997/0310/5905122a.html.

Maslow, A. (1943). *A theory of human motivation*. New York, NY: McGraw-Hill. 2013 Reprint of 1943 Edition.

McGregor, D. (1960). *The human side of enterprise*. New York, NY: McGraw-Hill.

Peters, T. (1988). *Thriving on chaos: Handbook for a management revolution*. New York, NY: HarperCollins.

Peters, T., & Austin, N. (1985). *Passion for excellence.* New York, NY: Harper & Row.

Peters, T., & Waterman, R. (1982). *In search of excellence: Lessons from America's best-run companies.* New York, NY: Harper & Row.

Peters, T. (2007). *The pursuit of wow! Every person's guide to topsy-turvy times*. New York, NY: Random House.

Peters, T. (2010). *The little big things:163 ways to pursue excellence.* New York, NY: HarperCollins.

Dr. Cori Myers serves as department chair and associate professor of business administration at Lock Haven University. She primarily teaches undergraduate students in such courses as human resource management, international business, management concepts and strategies, and strategic management.

Dr. Marcia Kurzynski is assistant professor of business administration at Lock Haven University .She teaches management, human resources, entrepreneurship, and business and society. Her research interests include corporate citizenship, social issues in management, management education, and business ethics.

INTERMEDIATE ACCOUNTING MONOPOLY PROJECT VERSION 6.0

John Olsavsky, State University of New York at Fredonia

ABSTRACT

This paper will describe version 6.0 of a project incorporated in the junior year coursework of an accounting major (e.g., Intermediate Accounting I) to provide practice and reinforcement of their knowledge and skills related to the accounting process. The project utilizes the popular Monopoly® board game as a tool to generate accounting transactions data over three, one-year periods of twelve turns each year. This project provides students with progressively more difficult corporate accounting and financial reporting tasks including the preparation of journals (general and special), ledgers, workpapers (worksheet and account analysis), financial statements, notes to the financial statements and financial analysis. Students are responsible for preparing all entries that affect the elements of the financial statements including, transactions, adjustments resulting from analyzing all accrual and deferral accounts and the income tax or benefit from any net operating loss carry forward or back. The project is first prepared manually using Microsoft Excel worksheets followed by the use of QuickBooks software to confirm the results for the last two years.

INTRODUCTION

Introductory financial accounting courses have shifted over the last two decades from teaching students how to create and use accounting information to teaching students only how to use accounting information. Over this time in my intermediate-level financial and managerial accounting courses I have noted a deficiency by students in their ability to perform basic accounting tasks, such as transaction analysis, to understand the structure and articulation of the financial statements and to perceive the big picture of the steps in the accounting cycle. This project was developed to assure that student's obtain the knowledge and skills regarding the financial accounting and reporting process regardless of the style of financial accounting course they have taken. And, to make accounting fun! (Well, a little more fun.)

LITERATURE REVIEW

Since the idea of combining Monopoly® and accounting was first presented (Kneckel, 1989) and subsequently modified (Albrecht, 1995), there have been many an accounting instructor that have used this combination to teach the basics of accounting information systems. Since the summer of 2009 I have continuously reviewed online almost fifty resources for uses of Monopoly® in the accounting classroom from high schools to community colleges to upper level accounting courses (Table 1). The most complex of these being a financial accounting and investment simulation game entitled Real Money Lite, (Albrecht, 2008). Professor Albrecht states that "simulation games in college classrooms motivates many students to participate to a greater degree than in a traditional setting, enhances cognitive growth (recall of factual knowledge, improve problem-solving skills, apply concepts and principles), provides intensive practice in verbal and written communication, requires flexibility in thinking and an adaptive response to a dynamic environment, can be repeated with same participants and additional learning will take place due to the dynamic nature of the game and benefits students with varying skills and experience". Learning in a fun and meaningful manner is more conducive to learning (Allen, McCourt & Low, 2011). The Intermediate Accounting Monopoly Project (IAMP) is my version of those projects that I found - but on steroids!

PROJECT DESIGN

Overview

IAMP is a multi-stage, progressive project that provides practice and reinforcement of an accounting student's knowledge and skills related to the accounting cycle. In utilizing the Monopoly® board game as a tool to generate accounting transactions data over three, one-year periods, IAMP aids the student in acquiring knowledge and skills regarding more difficult corporate accounting issues and financial and tax reporting. IMAP takes the student from accounting for their transactions from using no journals to using the general journal and special journals. As students progress through the phases they obtain practice preparing an account analysis workpaper for four to six to nine accounts. The reporting portion of each phase takes them from a single-step to multi-step to comparative multi-step income statement, from a statement of retained earnings to a statement of changes in equity, from an unclassified to

classified to comparative classified balance sheet and from a direct only to direct & indirect to comparative direct & indirect statement of cash flows. A simplified Form 1120 Monopolyland Corporation Income Tax Return is required for each of the three years and a Corporation Application for Tentative Refund (if applicable) for the second and third years.

During the playing of the game students must complete two source documents, a Manager's Log and an End-of-Play Summary, that they rely on during the recording phase of each year.

Students prepare all entries that affect the elements of the financial statements for their corporation. All transactions are recorded on the Articulating Accounting Worksheet in year one, or in a general journal in year two or in the special journals for cash receipts and cash disbursements in year three. Adjusting entries are made for all three years. These adjustments are the result of analyzing all accrual and deferral accounts, the income tax expense or benefit from any net operating loss carry forward or back and the retained earnings and cash balances for the declaration of a dividend. Each year closing entries must be made to prepare a post-closing trial balance.

IAMP is first prepared manually using Microsoft Excel worksheets for Phase I - Year 20x1, Phase II - Year 20x2, Phase III - Year 20x3, Phase IV - Financial Disclosure, and Phase V – Financial Statement Analysis. Then QuickBooks software is used to confirm the results for the last two years in Phase VI – Creation, setup and population of a QuickBooks company.

IAMP is implemented in a separate course from the first Intermediate Accounting course, ACCT307 Accounting Information Systems I. This course is taken after students have completed CSIT104 Introduction to Microcomputer Software, ACCT201 Principles of Financial Accounting, ACCT202 Principles of Managerial Accounting and is a co-requisite with the Intermediate Accounting I course. It includes the Kieso, Weygandt, Warfield Intermediate Accounting chapters removed from the intermediate accounting course sequence, as follows: Chapter 3 The Accounting Information System, Chapter 4 Income Statement and Related Information, Chapter 5 Balance Sheet and Statement of Cash Flows, Chapter 23 Statement of Cash Flows, Chapter 24 Full Disclosure in Financial Reporting, Chapter 24A Basic Financial Statement Analysis and Chapter 6 Accounting and the Time Value of Money.

Structure

The project is required of all accounting majors and minors, in their third-year for both the four and five-year degree students. Students play different roles over the course of the project. Initially they must think of themselves as stockholders. During the play of the game they play the role of managers operating a business, They then become the staff accountants during the accounting and reporting steps. The instructor acts as their accounting supervisor.

Phases of the project are due throughout the semester. Phase I is due after covering Chapter 3 The Accounting Information System. Phase II is due after covering Chapter 4 Income Statement and Related Information and Chapter 5 Balance Sheet portion, Phase III is due after covering Chapter 5 Statement of Cash Flows portion and Chapter 23 Statement of Cash Flows, Phase IV is due after covering Chapter 24 Full Disclosure in Financial Reporting, Phase V is due after covering Chapter 24A Basic Financial Statement Analysis and Phase VI is due after introducing students to QuickBooks

The project requires some in-class time (11 of 29 classes) by both the instructor and students. The out-of-class time by students consists of game play time and time spent by completing the deliverables requirements (see Table 2) for each of the phases. Thirty-six hours of extra office hours by the instructor is made available for help with phases I to III.

All files required for the project including reference files and deliverables files are distributed via our learning management system (ANGEL). Students submit all assignments electronically via a dropbox in ANGEL.

Process and Sequence

The basic sequence of events for each phase is the instructor during class presents and reviews all files needed to complete each phase. Then out-of-class students play the game in teams of two and complete the accounting and

report portions on downloaded files that they store on a flash drive. During the available office hours students pop their flash drive into the instructor's PC, the instructor answer questions and edit their files (i.e., individual teaching). After files are submitted, the instructor I review files according to a distributed grading guide.

For the "Phase 0 - Introduction" presentation in class, the instructor reviews the contents of the Game Bag and Team Bags and reviews the files for the Modified Rules, the Chart of Accounts, the Common Transactions List, the Journal Entries Reference File (consisting of a ninety-eight page PDF file), the Board Spaces Handout, the Community Chest & Chance Cards Handouts, the Manager's Log, the End-of-Play Summary. The process of selecting the teams is begun.

The Modified Rules include the following changes and additions:

CORPORATE FINANCING: To provide additional capital to the corporations corporate financing is expanded to include the investment by owners in the form of the initial $1,500 received being treated as issuance of common stock and an additional required borrowing by rolling the dice to determine the amount of $300 times the dice roll. The borrowing cannot be paid back until January 1 of year two, thus requiring the accrual if interest at the end of year one.

OPERATING REVENUE: The $200 received for passing "Go" is considered consulting revenue, which of course has to be accrued at year-end for spaces travelled (revenue earned) beyond "Go" for which no cash will be received until the following year.

INVESTMENTS: The railroads and utilities are accounted for as long-term investments.

PROPERTIES: The color-coded properties are accounted for as purchases of land.

FREE PARKING: The Free Parking space becomes the Lottery Fund.

INCOME TAXES: Progressive income tax rates used to calculate the year-end accrual on the amount of income before income tax expense/benefit and dividend declared. The income tax liability must be paid on March 1 of the following year and is subject to penalties for underpayment of income taxes. The first infraction results in the payment of a fine only, while the second infraction results in a fine and jail time.

DEPRECIATION: At year end, depreciation on houses and hotels must be calculated using a given residual value percentage and useful life and recorded.

HOUSES: Two mandatory house building rules are in place. Rule number one requires a team to build at least one house on each property in a color group within three months of acquiring its first color group monopoly. Rule number two requires a team on turn one of year three to build one (and only one) house on a single color property if a team does not have a monopoly by the end of year two.

INTEREST EXPENSE: At year end, any unpaid interest on any loans or mortgages outstanding during the year must be accrued at an annual rate of 6.0% (or 0.5% per month) for the number of months that the mortgage was outstanding. Any interest owed at year-end must be paid on the first day of the following year.

BANKRUPTCY: A team cannot avoid recording transactions and participating in this project by going bankrupt as soon as possible. They must liquidate and borrow.

INTER-CORPORATION BORROWING: Teams may lend money to each other at an annual interest rate of 3.0% (or 0.25% per turn) paid on the first day of following year.

BAD DEBT EXPENSE: Any missed revenue from consulting (e.g., being sent to jail) or property rent (e.g., while in jail) must be accrued at year end and written off as a bad debt expense.

DECLARATION OF DIVIDEND: Each team must declare a dividend at year end based upon the lower of ten percent of Retained Earnings or fifty percent of the amount available in the Cash account. This dividend must be paid on February 1 of the following year.

Deliverables

For the "Phase 0 - Setup & Practice" presentation in class the instructor reviews what will happen when students play the game. First, students practice preparing the Manager's Log. Then, four students are selected to play a practice Monopoly® game. As the other students gather around, the beginning play of the game is reviewed. Procedures such as distributing the initial capital contribution of $1,500, the rolling of the dice to determine how much will be borrowed and bidding on properties is explained. This game is limited to six turns or 45 minutes. After the playing of the practice game ends, students are shown how to complete the End-of-Play Summary form.

For the "Phase I - 20x1" presentation the instructor reviews the out-of-class game play scheduling, schedules out-of-class game play times and reviews the game play process and the deliverables. Out-of-class students play the game for 20x1 (consisting of twelve turns), prepare the Manager's Log and End-of-Play Summary for their corporation on paper forms and complete the deliverables Excel file. The deliverables file for 20x1with thirteen worksheets includes a worksheet for Instructions, Deliverables Checklist, the Source Documents (Manager's Log, End-of-Play Summary), Workpapers (Articulating Accounting Worksheet, the Analysis of Accounts worksheets for Cash Count Reconciliation, Consulting Receivable, Prepaid Income Tax/Income Tax Payable, Dividends Payable, the Post-Closing Trial Balance and the Payments Due Schedule), Financial Statements (Income Statement - Single Step, Statement of Retained Earnings, Balance Sheet - Unclassified, Statement of Cash Flows - Direct Method) and Tax Forms (Form 1120 Monopolyland Corporation Income Tax Return).

The Articulating Accounting Worksheet (AAW) is a vertical approach to analyzing transactions in a worksheet showing the interrelationships of the three financial statements. It is an adaptation of Albrecht's Horizontal Model (Albrecht, 2008) and Ittelson's Structural Connections Model (Ittelson, 2009). The AAW stacks the activities of the Statement of Cash Flows on top of the Balance Sheet and the Income Statement. In addition to the accounts on the Balance Sheet and Income Statement (Table 3), operating, investing and financing activities unique to this project are provided (Table 4)

For "Phase II - 20x2", the progression is found in items added to the Deliverables, now with twenty worksheets. The books added includes the use of general journals for transactions (GJT), adjusting journal entries (GJA) and closing journal entries (GJC) and a general ledger. The workpapers added includes Analysis of Accounts worksheets of an Investments Schedule and a Depreciation Schedule. The financial statements progress from simple to a little more complex in the form of a Multi-step Income Statement, a Classified Balance Sheet and a Statement of Cash Flows using both the Direct & Indirect Method. An additional tax form, Form 1139 Corporation Application for Tentative Refund, is added for those corporations with net operating loss carrybacks.

For "Phase III - 20x3", the progression is also found in items added to the Deliverables, which has grown to twenty-five worksheets. The books added include the use of special journals of cash receipts (CRJ) and cash disbursements (CDJ). Workpapers added includes Analysis of Accounts worksheets for the Loans/Interest Receivable and Loans/Interest Payable accounts. The financial statements which continue to become more complex include Multi-Step and Comparative Income Statements, a Horizontal/Multi-Column Statement of Changes in Equity, Classified and Comparative Balance Sheets and Direct & Comparative Statements of Cash Flows.

For "Phase IV - Financial Disclosure", teams must prepare Notes to the Financial Statements for their corporation. Sample sets of notes from prior semesters are provided. Students must select the appropriate notes and customize them for their corporation's situation. In addition, teams are required to compose the Management's Report on Internal Control over Financial Reporting. The last requirement for this phase is the submission of the Independent Auditor's Report on the Financial Statements indicating Management's Responsibility for the Financial Statements, Auditor's Responsibility and the Auditor's Opinion

For "Phase V - Financial Statement Analysis", teams must enter financial statement data for years 20x2 and 20x3 into a worksheet that is provided. Financial Statement Analysis is automatically calculated for Horizontal Analysis, Vertical Analysis and Ratio Analysis.

For “Phase VI - QuickBooks”, students must complete three assignments using QuickBooks. These assignments include creating a new company for their team and entering the chart of accounts, entering transactions for 20x1 as journal entries and entering transactions for 20x2 and 20x3 as journal entries and modifying the favorite reports list. This is only the second semester using QuickBooks. It still needs refining.

CONCLUSIONS

Even though evidence is anecdotal, requiring students to complete three full accounting cycles of progressively more difficult tasks with the same company that provides them with additional practice with which to learn more about the creating of accounting information has been positive.

This project also provides concrete examples for numerous accounting problems for use by the instructor in subsequent courses.

REFERENCES

Albrecht, W. D. (1995). A financial accounting and investment simulation game, *Issues in Accounting Education, 10*(1), 127-141.

Albrecht, W. D. (2008, September 14). Real money lite: An accounting simulation game. Retrieved from https://profalbrecht.files.wordpress.com/2008/09/real-money-lite.pdf.

Ittleson, T. R. (2009). *Financial statements: A step-by-step guide to understanding and creating financial reports,* Revised and Expanded Edition. Franklin Lakes, NJ: The Career Press, Inc.

Kneckel, W. R. (1989). Using a business simulation game as a substitute for a practice set. *Issues in Accounting Education, 4*(2), 411-424.

McCourt, A. J. & Low, M. (2011). Playing the double entry monopoly game: Active learning in accounting principles and practices. In: Needles, Jr., Belvedere E. (ed.): *Accounting Instructors' Report: A Journal for Accounting Educators,* Fall 2011.

John Olsavsky is an Assistant Professor of Accounting at the State University of New York at Fredonia. His research interests include accounting information systems, cost accounting and accounting education.

Table 1: Accounting Monopoly Projects Reviewed

Albrecht, David W. - ACCT 355 Intermediate Accounting I, School of Business, Concordia College, Moorhead, MN, Fall 2009

Allen, McCourt and Low, Department of Accounting, Waikato Management School, University of Waikato, Hamilton 3240, New Zealand, Fall 2011

Baglia, David - ACCT 301 Intermediate Accounting I, Department of Accounting, Grove City College, Grove City, PA, Fall 2008

Bates, Robert E. - Accounting 101, Business Division , Glendale Community College, Glendale, CA, Fall 2007

Brumley, Debra - Independent School District of Boise City, Meridian, ID, 2009

Buckley, James - Intermediate Accounting, Colorado Mesa University, Grand Junction, CO, 2013

Carson, Leslie; Phillips, Louis and , Parrish, Rhonda - Business Department, Thomas Central High School, Thomasville, GA, 2010

Cole, Teresa R. - AC 231-01Principles of Accounting I, Lewis-Clark State College, Lewiston, ID, 2015

Gurka, Geoffrey - ACCT201 Financial Accounting, Colorado Mesa University, Grand Junction, CO, Spring 2015

DeBarthe, Linda - Sandage School of Business, Graceland University, Lamoni, IA, 2010

Hamm-Tate, Schmekia - Accounting, Morrow High School, Clayton County Public Schools, Morrow, GA, 2011

Heagney, Conor - Introducing Students to Financial Accounting , Accountancy & Finance, School of Business & Humanities, Dun Laoghaire Institute of Art, Design & Technology, Dun Laoghaire, Co. Dublin, Ireland, 2010

Hegner , Paula E. - Accounting 301 Financial Accounting, El Dorado Center , Folsom Lake College, Placerville, CA, Spring 2009

Holtzinger, Lavon - Autry Technology Center, Oklahoma CareerTech, Enid, OK 2010

Hurst-Euless-Bedford Independent School District, 2010

Itzkovitch, Sandra - BAF3M,Business Studies, King City Secondary School, King City, ON, 2011

Kellerman, Debra K. and Sworsky, Leslie - Minnesota Creative Teaching Ideas , Minnesota Business Educators Incorporated, 1995

Kidd, Sheldon - Principles of Financial Accounting, Department of Accounting, Brigham Young University-Idaho, Rexburg, ID, 2008

Kloezeman, Christine- Accounting 101, Business Division , Glendale Community College, Glendale, CA, Fall 2007

Lauer, Scott - Accounting II, Business Department, LaSalle-Peru Township High School, LaSalle, IL2008-2009

Table 1: Accounting Monopoly Projects Reviewed (continued)

Letourneau, T - Spaulding High School, Rochester Schools, Rochester, NH, 2010

Lucking, Cynthia B. - Intermediate Accounting, Presbyterian College, Clinton, SC, 2012

Lussier, Robbin - Business and Information Technology and Career Tech Department, Chicopee Comprehensive High School, Chicopee, MA 2010

Lyman, Carl - Accounting I, Millard County School District, Delta, UT, 2007

Martin, Travis R. - Accounting I, Indian Creek High School, Nineveh-Hensley-Jackson United School Corporation, Trafalgar, IN, 2010

Meglio, Chris - Accounting, Great Oak High School, Temecula, CA, 2011

Peterson, Judy - ACCT203 Financial Accounting, Center for Science & Business, Monmouth College, Monmouth, IL, 2013

Moore, Julie - Accounting I, Washington Township High School, East Porter County School Corporation, Valparaiso, IN, 2009

Murray, Kevin - Accounting II, Mount Vernon Business and Info Tech, Mt. Vernon, IA, 2015

Nadeau, Christine - Department of Accounting, Thomas College, Waterville, ME, 2011

National Academy Foundation - Principles of Accounting, National Academy Foundation, New York, NY, 2010

Lewis, Sharon - North Stokes High School, Danbury, NC, 2013

Patterson , Keith F. - Principles of Financial Accounting, Department of Accounting, Brigham Young University-Idaho, Rexburg, ID, 2009

Pleasant Valley Community Schools, Bettendorf, IA, 2011

Prosser, Laura - ACCT 210 Principles of Accounting I, Black Hills State University, Rapid City, SD, 2009

Ruston, J. - Business & Computer Science Department, Sandwich Secondary School, Lasalle, ONT, 2010

Sickafuse, Janine - ECON 160 Financial Accounting, Allegheny College, Meadville, PA, 2009

Smith, David C. - ACC201 Introductory Accounting, Department of Economics and Business, Westminster College, New Wilmington, PA, 2015

Stanny, Elizabeth - BUS 230A Financial Accounting, School of Business and Economics, Sonoma State University, Rohnert Park, CA, 2012

Stouffville Spartans - BAF3M, Introduction to Accounting, Stouffville District Secondary School, Stouffville, ONT, 2009

Submanium, Chandra - ACCT5311 Intermediate Accounting I, Department of Accounting , College of Business , University of Texas at Arlington, Arlington, TX, Fall 2010

Sutherland Secondary School - Applied Accounting 12, Business Education, Sutherland Secondary School, North Vancouver School District, North Vancouver, BC, 2011
Table 1: Accounting Monopoly Projects Reviewed (continued)

Taylor-Pendergrass, Jackie - The University of Tennessee, Knoxville. Knoxville, TN, 2009

Tomasek, Katherine - High School Accounting Resources, Connecticut Society of CPAs, Rocky Hill, CT, 2012

Ulstad, Ingrid - Department of Accounting and Finance, University of Wisconsin-Eau Claire, Eau Claire, WI, 2009

Valenski, Ed - Business Education and Social Studies , Massapequa High School, Massapequa, NY, 2009

Wegner, Jen - Business and Information Technology Lesson Plan, Interactive dialogue with educators across the state (WI) website, 2005

Wieners, S. - Accounting Monopoly, mswieners.wikispaces.com, 2012

Youth Opportunities Unlimited Alternative High School, Accounting A Lesson Plan, Los Angeles, CA, 2009

Table 2: Deliverables for fall semester of 2014

ACCT307 Accounting Information Systems I
Accounting Monopoly Project
Deliverables and Due Dates

PHASE	Code	Intro	Setup	I	II	III	IV	V	VI		
After covering Intermediate Accounting Textbook Chapter(s):				3 AIS	4IS & 5BS	5SCF & 23	24	24A	QB1	QB2	QB3
Transactions for Year:				20x1	20x2	20x3	All	All	All	All	All
In-class Work											
Class date		09/11	09/16	09/18	10/14	10/28	11/06	11/18	12/02	12/09	12/11
Review Game Bag and Team Bag		R									
Review Rules		R									
Review Chart of Accounts		R									
Review Common Transactions List		R									
Review Journal Entries Reference File		R									
Review Board Spaces Handout		R									
Review Community Chest & Chance Cards Handouts		R									
Review Manager's Log		R									
Review End-of-Play Summary		R									
Review Game Parts Inventory		R									
Select Teams		R									
Play Practice Monopoly™ Game (six turns or time limit)			X								
Prepare Manager's Log (handwritten)			X								
End-of-Play Summary			X								
Parts Inventory			X								
Review out-of-class game play scheduling		R									
Review Out-of-class Work and templates for Deliverables				R	R	R	R	R	R	R	R
Out-of-class Work											
Schedule out-of-class game play time for some time **after**…				09/18	10/14	10/28					
Play Monopoly™ Game (twelve turns)				X	X	X					
Prepare Manager's Log				X	X	X					
Complete End-of-Play Summary				X	X	X					
Complete Parts Inventory (store in game box)				X	X	X					
Deliverables											
Deliverables Due Dates…submit one Excel file per team				09/25	~~10/24~~ 10/27	11/07	11/13	11/19	12/03	12/10	12/12
Source Documents											
Manager's Log	ML			X	X	X					
End-of-Play Summary	EPS			X	X	X					
Books											
Articulating Accounting Model	AAW			X							
General Journal - Transactions	GJT				X						
Cash Receipts Journal	CRJ					X					
Cash Disbursements Journal	CDJ					X					
General Journal - Adjusting Journal Entries	GJA				X	X					
General Journal - Closing Journal Entries	GJC				X	X					
General Ledger	GL				X	X					
Workpapers											
Worksheet	WS				X	X					
Cash Count Reconciliation	AA-CC			X	X	X					
Consulting Receivable	AA-CR			X	X	X					
Loans/Interest Receivable	AA-LIR					X					
Investments Schedule	AA-INV					X					
Depreciation Schedule	AA-AD				X	X					
Loans/Interest Payable	AA-LIP					X					
Mortgage Payable	AA-MP					X					
Prepaid Income Tax/Income Tax Payable	AA-IT			X	X	X					
Dividends Payable	AA-DP				X	X					
Post-Closing Trial Balance	PCTB			X	X	X					
Financial Statements											
Income Statement - Single Step	IS-S			X							
Income Statement - Multi-Step	IS-M				X						
Income Statement - Multi-Step & Comparative	IS-MC					X					
Statement of Retained Earnings	SRE			X	X						
Statement of Changes in Equity - Horizontal/Multi-Column	SCE-C					X					
Balance Sheet - Unclassified	BS-U			X							
Balance Sheet - Classified	BS-C				X						
Balance Sheet - Classified & Comparative	BS-CC					X					
Statement of Cash Flows - Direct	SCF-D			X	X						
Statement of Cash Flows - Indirect	SCF-I				X						
Statement of Cash Flows - Direct & Comparative	SCF-DC					X					
Statement of Cash Flows - Indirect & Comparative	SCF-IC					X					
Tax Forms											
Form 1120 - Monopolyland Corporation Income Tax Return	1120			X	X	X					
Form 1139 - Corporation Application for Tentative Refund	1139				X	X					
Payments Due Schedule	PD			X	X	X					
Annual Report											
Notes to the Financial Statements							X				
Independent Auditor's Report - Financial Statements							X				
Independent Auditor's Report - Internal Control							X				
Financial Statement Analysis											
Ratio Analysis								X			
Comparative Analysis - Horizontal								X			
Comparative Analysis - Vertical								X			
QuickBooks Assignments											
New Company Setup & Chart of Accounts									X		
Data Entry										X	
Reports											X

Table 3: Chart of Accounts

ACCT307 Accounting Information Systems I
Accounting Monopoly Project
Chart of Accounts

ASSETS

Current Assets

101	Cash
111	Loans Receivable
121	Consulting Receivable
122	Rent Receivable
123	Interest Receivable
124	Income Tax Refund Receivable
131	Prepaid Income Tax

Long-term Investments

151	Investment - Railroads
153	Investment - Utilities

Plant Assets

171	Land
173	Houses
175	Accumulated Depreciation - Houses
177	Hotels
179	Accumulated Depreciation - Hotels

LIABILITIES AND STOCHOLDERS' EQUITY

Current Liabilities

211	Loans Payable
221	Interest Payable
226	Fines and Penalties Payable
231	Income Tax Payable
241	Dividends Payable

Long-term Liabilities

251	Mortgage Payable

Stockholders' Equity

301	Common Stock
303	Paid-in Capital in Excess of Par Value
351	Retained Earnings
353	Dividends Declared
355	Income Summary

Table 3: Chart of Accounts (continued)

ACCT307 Accounting Information Systems I
Accounting Monopoly Project
Chart of Accounts

INCOME STATEMENT

Operating Revenues
401 Consulting Revenue
403 Rent Revenue

Operating expenses
501 Depreciation Expense - Houses
502 Depreciation Expense - Hotels
503 Employee Benefits Expense
504 Fines and Penalties Expense
505 Miscellaneous Expense
506 Rent Expense
507 Repair Expense
508 Travel Expense
509 Utilities Expense
510 Bad Debt Expense

Non-operating Income
601 Interest Income
603 Investment Income
605 Other Income

Non-operating Expenses
651 Interest Expense
653 Investment Expense
655 Other Expense

Gains
701 Gain on Sale of Investment
703 Gain on Sale of Property
705 Gain on Exchange of Nonmonetary Assets

Losses
751 Loss on Sale of Investment
753 Loss on Sale of Property
755 Loss on Exchange of Nonmonetary Assets

801 Income Tax Benefit Due to Loss Carryback
802 Income Tax Expense

Table 4: Statement of Cash Flow Activities

Operating Activities:
- Cash received from consulting clients
- Cash received from tenants
- Cash paid for operating expenses
- Cash received for non-operating revenues
- Cash paid for non-operating expenses
- Cash received for income tax recovery
- Cash received for income tax overpayment
- Cash paid for income taxes

Investing Activities:
- Cash lent to competitor
- Cash collected from loan to competitor
- Cash used to purchase investments
- Cash received from sale of investments
- Cash used to purchase land
- Cash received from sale of land
- Cash paid to purchase houses
- Cash received from sale of houses
- Cash paid to purchase hotels
- Cash received from sale of hotels

Financing Activities:
- Cash received from borrowing from competitor
- Cash used to repay loan from competitor
- Cash received for loan from bank
- Cash used to repay loan to bank
- Cash received for mortgage from bank
- Cash used to repay mortgage from bank
- Cash received from sale of common stock
- Cash used to acquire common stock
- Cash paid for dividend to stockholders

AN EVALUATION OF INSPECTION AND VIOLATION RATES FOR NATURAL GAS DRILLING IN THE STATE FORESTS OF PENNSYLVANIA

John A. Pendley, Susquehanna University

ABSTRACT

The state of Pennsylvania is looking to sell more oil and gas leases that allow fracking in state forests and parks. However, little information is available for the oil and gas development that already exists on state lands. The purpose of this paper was to examine the inspection record for wells developed under three leasing events in 2008 and 2010. These data developed in the study showed that compliance statistics for hydraulically fractured wells on state forest tracts were generally similar to other wells in the state. This result means that the wells in the state forests were generally receiving the same inspection scrutiny that wells on private lands received. While the aggregate compliance rates for state forest versus non-state forest were comparable, these data did reveal certain anomalies for individual drillers. These anomalies were identified and described so that they may be analyzed in future research. The conclusions reached in this paper may give regulators and others in authority information useful in the administration of the current leases and new leases that have recently been approved.

INTRODUCTION

In preparation for the 2014-2015 budget debates, Governor Tom Corbett issued an executive order (Office of the Governor, 2014b) that allows the sale of new sub-surface leases on tracts in state forests and parks. The press release accompanying the executive order (Office of the Governor, 2014a) stated that the order supports the Governor's proposal for the generation of $75 million in signing bonuses and royalties from these new leases. The Governor's proposal was incorporated into the proposed budget presented to the legislature in July 2014 and was passed. The governor's executive order allowing additional leases on state forest and state park lands is now law. Currently, the Pennsylvania Department of Conservation and Natural Resources (PADCNR) is preparing guidelines for the sale of the new leases.

These will not be the first leases for oil and gas development on state lands. Conventional (i.e., shallow) drilling has been allowed for decades. Unconventional (i.e., hydraulically fractured) development has been more restricted. Only three leasing events for specific state forest tracts have been sold in the past that allowed full access (surface and sub-surface) to oil and gas companies. These events, occurring in September 2008, and January and May 2010, are the subject of this paper. These leasing events (PADCNR 2008, 2010a, 2010b), like the upcoming lease sale under the 2014-2015 budgetary provisions, were administered by the PADCNR.

Data on production and compliance activity for wells developed under the three leasing events in 2008 and 2010 were compiled and compared to similar data for non-state forest wells. The purpose of the analysis was to document differences, if any, in inspections and violations for fracked wells drilled on state forest land versus other parts of the state.

The data reveal mostly similar compliance activity for state forest wells compared to non-state forest wells. State forest wells are inspected at almost identical rates as other wells in the state. Concerning violations for the inspections that were performed -- the state forest wells were assessed fewer violations than other wells, but the difference in violations was in the "administrative" category [the category being defined by the Pennsylvania Department of Environmental Protection (PADEP)]. Rates of violations in the "environmental" category (again, defined by the PADEP) were very similar for state forest and non-state forest groups.

There were some noteworthy items in the data which were not specifically addressed in the study's design, but nonetheless, were revealed from the analysis of the large amount of data that were collected and processed. In particular, wide variation was noted in compliance rates for individual oil and gas firms (the lessees) of the state forest tracts. These results suggest the existence of some individual firm controls, mechanisms, or incentives that could, hypothetically, produce such differences. Individual firm characteristics that could explain differences in environmental performance are supported in the literature (Porter, 1991; Ilinitch, Soderstrom, & Thomas, 1998; Delmas & Toffel, 2004). These differences in compliance rates are described and suggestions are made for the future research.

The remainder of the paper is organized as follows. Relevant background for the study is given in the next section. Description of the data and the data collection process follows. Results are presented in section four. The paper concludes with an analysis and a discussion of future research, followed by a conclusion.

BACKGROUND AND JUSTIFICATION

Data for this study are collected for three leasing events conducted by the Pennsylvania Department of Conservation and Natural Resources in 2008 and 2010 (PADCNR 2008, 2010a, 2010b). It is important to study these leases because the state of Pennsylvania has shown a propensity to use revenues from oil and gas leases to plug budget deficits. The leases in 2008 and 2010 arose through the political process, gaining approval in order to generate millions in signing bonuses and royalties, very similar to the current budgetary approval to extend leasing in order to generate $75 million to help balance the 2014-2015 budget. It is very plausible that the Commonwealth will continue to look to oil and gas to bolster state coffers. Thus, an objective look at the compliance issues of wells already operating would be useful for the public interest and state regulators.

It is also important to study these leases because the processes allowed by them expose state forests to the full extent of environmental risk from hydrofractured oil and gas development. These leases allowed drilling pads on state forest land which result in significant surface disturbances in addition to other risks from sub-surface drilling.[25] These leases represent the only state forest leases that have allowed surface disturbances of this type. State forests have been leased for oil and gas many times in the past. However, conventional oil and gas wells are much shallower and the surface disturbance much smaller. Limited fracking has also occurred in the past on state forest land above and beyond the three events studied in this paper. However, the wells were drilled horizontally underneath state forest land, being initiated from well pads constructed on adjacent land. No surface disturbance exists for these wells.

Finally, these leases provide a discrete dataset to study well safety and compliance for hydrofractured oil and gas wells, generally, without regard to geographic location. Since these leases are issued by a governing authority, more data will be generally available (e.g., lease terms, tract location). Also, well inspections and violations are key metrics for environmental performance for drilling companies. Other well-known publicly available metrics measuring environmental performance do not apply to oil and gas drillers. Thus, a discrete dataset, homogeneous in nature, with large amounts of publicly available data on inspections, violations, fines, production, and well location would allow a study of the environmental performance of the oil and gas development industry. While this study only touches the surface with respect to this purpose, it does document the data and outline some possible venues for future research projects.

I make no specific hypotheses about whether compliance rates will be higher or lower for state forest tracts. Either higher or lower could be logically justified. It could be that the PADEP, being shorthanded and preferring to concentrate attention on wells closer to human activity, may lag in inspections for wells in remote regions, such as state forests. On the other hand, it could be plausible that, given the political sensitivity of the issue of state forest drilling, that the PADEP gives undue attention to these wells. There is no *a priori* reason to expect a particular scenario. Nonetheless, it is a matter for the public interest to evaluate how well natural gas drilling is being monitored by Commonwealth without regard to a particular preconception about what the result may be.

DATA AND DATA COLLECTION

The PADCNR administered the lease sale for the three target lease dates and information about the leases (the operator, forest tract number) were obtained from this agency. The oil and gas regulatory process is administered by another state agency, the PADEP. Data from these two state agencies were matched by wells drilled pursuant to leases sold on the target lease dates. The progression of the steps involved in extracting and matching the data is described in the following sections.

---

[25] Drilling Pads are the surface focal point of a gas production unit. Drilling pads are multi-acre industrial sites from which the network of hydrofractured well bores are constructed. All material to drill and frack the well must be shipped and stored at the well pad site. During fracking, wastewater must be collected and stored until it can be reused or shipped out. Once the wells are producing, the oil and gas is collected at the well pad site until it can be moved to its final destination.

Information on the PADCNR Leases

Three documents, one for each sale date, was used to identify the state forest tracts and operating partner for each lease (PADCNR 2008, 2010a, 2010b). To find wells that have been developed under each lease, a report was generated for the operating partner that listed the drilling pads that have been constructed. This drilling pad report (PADEP, 2013b) gives the location of the pad and all wells that have been drilled from the pad. The state forest tract numbers, from PADCNR (2008, 2010a, 2010b), were matched to pad location in PADEP (2013b). When a match was found, well numbers (well permit numbers from PADEP [2013b]) were recorded. This data identification process yielded a total of 436 wells at various stages of development (active, under development, or plugged).

Matching with Production and Compliance Records

The wells initially identified from lease records (section *3.1*) were then matched against compliance records of the PADEP. Compliance records (inspections, violations, and enforcements) were downloaded from the PADEP's website (PADEP 2013a) for the period January 1, 2006, through December 31, 2013. These raw data were formatted and tagged so that the data elements could be easily linked and manipulated, something that could not be done in the aggregate using the raw PADEP data. The state forest wells were then matched against the formatted PADEP compliance history. Thirty-eight (38) wells were eliminated at this stage because of no matching records. In the remainder of this paper, data about state forest leases were derived from the remaining 398 wells (436 identified in section *3.1*, less 38 eliminated because of insufficient data).

Table 1 (see Appendix) shows the well counts by operator for the 398 state forest wells drilled under the target leases. Four oil and gas operators (the lessees) were involved in drilling activity as shown in Table 1.

Comparison Data

For comparison purposes, the compliance activity for all other wells, not in the state forest dataset, were also tabulated. Two groups of comparison data were developed:

- Non-state forest wells developed by the lessee operators. These data included all other wells and associated compliance events for Anadarko, Pennsylvania General, Seneca, and Talisman. The inspection and violation rates for these data provide a baseline for the four companies involved in the target leasing events.

- All wells developed by operators other than the four lessees involved in the target leases. The inspection and violation rates for these wells provided an overall baseline for drilling activity within the state.

RESULTS

Inspection rates were developed from these data and are shown in table 2. Inspection rates are the number of inspections performed divided by total number of wells, and were calculated for three sets of oil and gas wells: (1) the four lessee companies' wells on state forest tracts, (2) all other wells developed by the four lessee companies, and (3) all other wells developed by other operators (other than the four lessee companies). See Table 2 in the Appendix.

The inspection rate for the wells drilled in Pennsylvania state forests was 4.8, meaning that across all four lessees, each well drilled on the state forest tracts was inspected, on average, 4.8 times. This inspection rate varied for the individual lessees – Talisman had the lowest rate at 2.6 inspections per well; Pennsylvania General had the highest at 6.2. The individual variations across the four lessees is discussed more fully in the next section of the paper. Do these specific state forests tracts get more or less attention than other areas of the state? The answer appeared to be "no." The average inspection rate of 4.8 compared closely to the rate for the four companies' non-state forest wells (inspection rate of 4.2) and the overall historical rate for all wells within the state (inspection rate of 4.8). Based on these data, it appeared that the PADEP gave approximately equal attention to both public and private gas wells in the performance of their regulatory inspections.

The analysis of Violations is shown in Table 3. Violation rates (ratio of violations to inspections) were the main unit of analysis in table 3. As with inspection rates, violation rates were calculated for the three data groups: the four

lessors' state forest wells, the four lessor other wells, and all other operators' wells. The PADEP coded every violation as either "administrative" or "environmental." The rates for these two designated violation types are shown separately in Table 3 in the Appendix.

Violation rates shown in Table 3 were calculated relative to the inspections counts (that is, as a percentage of inspections). Thus, for Anadarko's state forest wells: Four hundred and seven (407) inspections were performed that resulted in eight violations. The violation rate was calculated as 8/407 or 2.0. Like inspection rates in Table 2, violation rates also exhibited individual company variability, a characteristic that is discussed more fully in the next section. Unlike inspection rates which were very comparable for state forest compared to non-state forest, violation rates showed some differences, particularly for the aggregate measures for the four lessee companies. The total violation rate for the four companies on their state forest wells was 9.2, compared to 12.0 for their non-state forest wells. The driving factor in this difference appeared to be rates related to administrative violations (4.5 for the companies' state forest wells versus 7.5 for their non-state forest wells). Environmental violation rates were quite similar across the three groups: 4.7, 4.5, and 4.3 for lessee state forest, lessee non-state forest, and all other wells, respectively.

The substantive meaning of the differences in rates of violations (administrative versus environmental) between the groups was impossible to interpret because the definition (administrative versus environmental) was a creation of the PADEP, and the PADEP has not described how the distinction is made. This lack of transparency has caused some criticism of the agency by some who have considered certain 'administrative' violations to be issues that embody real impact on the environment (Kelso, 2013). Nonetheless, given the coding assigned by the PADEP, the state forest wells in this study were assessed fewer administrative violations than other wells drilled by the lessee firms.

DISCUSSION – THE IMPACT OF OPERATING CHARACTERISTICS ON COMPLIANCE RATES

The results of this study suggested that rates of inspection and violations can vary from firm to firm for the four lessee firms. For example, in Table 2, inspection rates on state forest wells ranged from 2.6 for Talisman to 6.2 for Pennsylvania General. A similar range existed for the four firms for their non-state forest wells. Likewise, in table 3, violation rates also varied considerably. For state forest wells, violation rates ranged from a low of 2.0 for Anadarko to a high of 18.2 for Talisman. Further, the mix of inspections and violations chosen by the PADEP also seemed to vary from firm to firm. Talisman, for example, underwent far fewer inspections (Table 2) but, seemingly to compensate, incurred many more violations per inspection (Table 3).

In this study, the focus was on geographic location – whether compliance rates in the aggregate differed between state forest tracts and non-state forest tracts. Firm differences were not, per se, the purpose of the paper. However, it is interesting to ask: Why did such differences arise? Prior literature offers some suggestions why this might happen.

There is evidence in the literature of a strong institutional effect that may help explain the individual differences in compliance rates. Porter (1991) suggests that enhanced environmental performance is not inconsistent with improved financial and operating characteristics and that individual firms may adopt strategic processes that incorporate superior environmental performance as a competitive response. Some firms, of course, may choose not to implement such processes. Burnett and Hansen (2008) find that some (but not all) electric utilities in their sample simultaneously reduced pollution output while improving efficiency, providing support for the Porter hypothesis.

Environmental management systems (EMSs) are also used to improve environmental performance and may help in identifying characteristics correlated with the Porter effect. Not surprisingly, research on EMSs also finds that incentives to implement EMSs can vary from firm to firm based on institutional dynamics such as internal pressure, customer and vendor dynamics, and community and industry group pressures (Delmas & Toffel, 2004). Institutional processes that are key to successful EMSs include governance and control systems (Ilinitch et al., 1998; Delmas & Toffel, 2004), environmental audits (Ilinitch et al., 1998), management accounting practices (Albelda, 2011), and engineering controls (Soeder et al., 2014). Finally, oil and gas drilling necessitates partnerships and collaboration. Technology transfer among business partners could also affect environmental performance.

If differential environmental performance applies and extends to oil and gas exploration and production, then some oil and gas development firms may choose to implement strategic processes and EMSs that enhance environmental performance while others do not. This would result in differential compliance records. Firms with strong EMSs

would receive fewer violations because of superior environmental practices and would incur fewer overall inspections because inspectors would perform only the legislative minimum number of inspections, choosing to direct inspection effort on firms with poorer environmental performance.

Findings from previous studies suggest the possibility that the differences in compliance rates among the four lessee companies are the result of operating differences. These aspects are not addressed in this current study. However, research designed to measure such effects could be a fruitful area for the future.

LIMITATIONS AND CONCLUSION

The Marcellus shale underlies some of the most remote and pristine areas in the state of Pennsylvania. Many of these areas are state-owned. It is not surprising then that some of the most contentious unconventional (i.e., fracked) leases are the ones that allow gas companies to drill in Pennsylvania state-owned forests. In this paper, the inspection and violation history of unconventional drilling in state forests was examined. I employed a data gathering process whereby wells were traced to three specific leases sold by the Pennsylvania Department of Conservation and Natural Resources in 2008 (PADCNR, 2008) and 2010 (PADCNR, 2010a; 2010b). These three leases were important – they generated a great deal of controversy because they allowed surface and sub-surface construction. They were also controversial because they were authorized by the legislature and supported by the (then) Governor in order to generate revenue to offset budget deficits. Large-scale fracking was allowed in state forests largely to produce significant, but one-time, signing bonuses. Many environmental groups felt that the horribly lopsided and ill-advised: Forests would be subjected to long-term environmental risks in exchange for short term, and perhaps illusory, political and fiscal effects. So, one purpose of the current research was to report on the compliance history of these controversial wells.

These data revealed mostly similar compliance activity for state forest wells compared to non-state forest wells. State forest wells were inspected at almost identical rates as other wells in the state. Concerning violations for the inspections that were performed -- The state forest wells incurred fewer violations than other wells, but the difference in violations was in the “administrative” category (the category being defined by the PADEP). Rates of violations in the “environmental” category (again, defined by the PADEP) were very similar for state forest and non-state forest groups. The sum total of these findings indicates that the PADEP was diligent in exercising regulatory authority over state forest wells – at least as diligent as it is for other wells in the state. State forest wells did not, by most measures developed in the study, get short shrift by the agency.

The study did identify several interesting and anomalous results for the *individual* oil and gas firms that have drilled wells under the three target leases events. The research design was not intended to explain individual firm differences. However, these differences were identified, described, and referred to future research.

The study is subject to a number of limitations. State regulatory data is the main measure of environmental performance for oil and gas exploration and production. Other measures of environmental performance that are available for other industrial activity (such as the Toxics Release Inventory) are not produced for oil and gas drilling. The limitation of compliance data is that it must be assumed that the quality of inspections performed by the PADEP is uniform across inspections – that inspections are conducted with a stable level of competence, diligence, etc. To assume otherwise would involve testing of different types of hypotheses and would require considerably more in depth knowledge about the inspectors, the process of scheduling the inspections, and the details of the inspection itself. A second limitation relates to the fact that the wells studied in this research are not the only oil and gas wells on state-owned land. Other agencies (particularly the Pennsylvania Game Commission and the Pennsylvania Fish and Boat Commission) also lease lands under their jurisdiction to oil and gas development. A limitation of this research is that the results of this study may not extend to other wells developed on public lands in other parts of the state.

REFERENCES

Albelda, E. (2011). The role of management accounting practices as facilitators of the environmental management: Evidence from EMAS organisations. *Sustainability Accounting, Management and Policy Journal, 2,* (1), 76-100.

Burnett, R. D., & Hansen, D. R. (2008). Ecoefficiency: Defining a role for environmental cost management. *Accounting, Organizations and Society*, *33*, 551-581.

Delmas, M., & Blass, V. (2010), Measuring corporate environmental performance: The trade-offs of sustainability ratings. *Business Strategy and the Environment*, *19*, 245-260.

Delmas, M., & Toffel, M. W. (2004). Stakeholders and environmental management practices: An institutional framework. *Business Strategy and the Environment*, *13*, 209-222.

Ilinitch, A. Y., Soderstrom, N. S., & Thomas, T. E. (1998). Measuring corporate environmental performance. *Journal of Accounting and Public Policy*, *17*, 383-408.

Kelsey, T. W., Metcalf, A, & Salcedo, R. (2012). *Marcellus shale: Land ownership, local voice, and the distribution of lease and royalty dollars* (Penn State Center for Economic and Community Development Research Paper Series). The Pennsylvania State University, University Park, PA. Available at http://aese.psu.edu/research/centers/cecd.

Kelso, Matt. (2013, January 9). 2012 violations per well in Pennsylvania. Retrieved from: http://www.fractracker.org/2013/01/2012-violations-per-well-in-pennsylvania.

Office of the Governor, Commonwealth of Pennsylvania. (2014a). *Governor Corbett Issues Executive Order Protecting State Forests, Parts from Gas Leasing that Involves Surface Disturbance* (Press Release, May 23, 2014). Harrisburg, PA: Governor's Press Office.

Office of the Governor, Commonwealth of Pennsylvania. (2014b). *Leasing of State Forest and State Park Land for Oil and Gas Development* (Executive Order 2014-03). Harrisburg, PA: Office of Administration, Commonwealth of Pennsylvania (www.oa.state.pa.us).

Pennsylvania Department of Conservation and Natural Resources (PADCNR). (2008). *September 3, 2008 Oil and Gas Lease Sale Final Results.* [pdf document]*:* Retrieved from: http://www.dcnr.state.pa.us/forestry/NaturalGas/policyandguidelines/supportingdocuments/index.htm.

PADCNR. (2010a). *January 12, 2010 Oil and Gas Lease Sale Final Results.* [pdf document]*:* Retrieved from: http://www.dcnr.state.pa.us/forestry/NaturalGas/policyandguidelines/supportingdocuments/index.htm.

PADCNR. (2010b). *May 10, 2010 Oil and Gas Lease Sale Final Results.* [pdf document]*:* Retrieved from: http://www.dcnr.state.pa.us/forestry/NaturalGas/policyandguidelines/supportingdocuments/index.htm.

PADCNR. (2014). *Index to Existing Oil and Gas Leases on Pennsylvania State Forest Land.* [pdf document]*:* Retrieved from http://www.dcnr.state.pa.us/forestry/index.aspx.

Pennsylvania Department of Environmental Protection (PADEP). (2013a), *Oil and gas: Oil and Gas Compliance Reports* [parameter driven screen to access state regulatory data], available at http://depweb.state.pa.us.

PADEP. (2013b), *Oil and Gas: Oil and Gas Well Pad Report* [Parameter driven screen to access state regulatory data], available at http://depweb.state.pa.us.

Porter, M. (1991). America's green strategy. *Scientific American*, April, 168.

Soeder, D. J., Sharma, S, Pekney, N., Hopkinson, L, Dilmore, R., Kutchko, B., Capo, R. (2014). An approach for assessing engineering risk from shale gas wells in the United States. *International Journal of Coal Geology, 126*, 4-19.

John Pendley is an associate professor of accounting at Susquehanna University. He teaches courses in Financial Statement Analysis, Auditing and the Senior Seminar in Accounting Topics. His research interests are in social and environmental accounting.

APPENDIX

Table 1: State Forest Tracts, Location, and Oil and Gas Operators for the Target Leasing Events

Company (lessees)	Tract	Lease date	County	Well count[1]
Anadarko	356	9/3/2008	Lycoming	26
	357	9/3/2008	Lycoming	7
	685	9/3/2008	Lycoming	18
	728	9/3/2008	Lycoming	29
	731	9/3/2008	Lycoming	15
				95
Pennsylvania General[2]	293	9/3/2008	Lycoming	55
	322	9/3/2008	Lycoming	18
	596	9/3/2008	Tioga	1
	724	9/3/2008	Lycoming	1
	729	9/3/2008	Lycoming	38
				113
Seneca	001	9/3/2008	Tioga	3
	007	1/12/2010	Tioga	2
	100	9/3/2008	Lycoming	61
	595	9/3/2008	Tioga	43
				109
Talisman	587	9/3/2008	Tioga	80
	594	9/3/2008	Tioga	1
				81
Total				398

1 Well count includes all actively producing wells and all non-producing wells that have had inspections performed. Data is for the period January 1, 2006 through December 31, 2013.

2 These tracts are leased to ExxonMobile who is a 50% non-operating partner in these wells. The operating partner is Pennsylvania General.

Table 2: Number and Rates of Inspections, State Forest wells versus Non-state Forest Wells

	State Forest Wells					Non-state Forest Wells				
		Number of Inspections					Number of Inspections			
Company	State Forest Well Count	With violations	Without violations	Total	Inspection Rate	Non-state Forest Well Count	With Violations	Without Violations	Total	Inspection Rate
State Forest Lessees										
Anadarko	95	3	404	407	4.3	380	92	2,311	2,403	6.3
Pennsylvania General	113	26	680	706	6.2	76	50	395	445	5.9
Seneca	109	33	565	598	5.5	176	52	828	880	5.0
Talisman	81	19	195	214	2.6	671	149	1,614	1,763	2.6
State Forest Lessees	398	81	1,844	1,925	4.8	1,303	343	5,148	5,491	4.2
All Other Operators	--	--	--	--	--	7,473	2,004	34,002	36,006	4.8

Well Count is the number of individual wells that were inspected during the period January 1, 2006 through December 31, 2013.
Inspection Rate is the total number of inspections per well (total number of inspections divided by well count).

State Forest Lessees are the four Oil and Gas Operators, listed above, who have active wells on the state forest tracts subject to the three target DCNR lease-sale dates.
All Other Operators are Oil and Gas operators other than the four involved in the target state forest leases.

Data obtained from compliance data maintained by the PADEP (2013a) for the period January 1, 2006 through December 31, 2013.

Table 3: Number and Rates of Inspection Violations, State Forest Wells versus Non-state Forest Wells

	State Forest Wells							Non-state Forest Wells						
		Number of Violations			Violation Rates				Number of Violations			Violation Rates		
Company	Total Inspections	Admin-istrative	Environ-mental	All Violations	Admin-istrative	Environ-mental	Total	Total Inspections	Admin-istrative	Environ-mental	All Violations	Admin-istrative	Environ-mental	Total
State Forest Lessees														
Anadarko	407	2	6	8	0.5	1.5	2.0	2,403	87	88	175	3.6	3.7	7.3
Pennsylvania General	706	27	32	59	3.8	4.5	8.4	445	47	42	89	10.6	9.4	20.0
Seneca	598	36	36	72	6.0	6.0	12.0	880	65	25	90	7.4	2.8	10.2
Talisman	214	22	17	39	10.3	7.9	18.2	1,763	214	91	305	12.1	5.2	17.3
State Forest Lessees	1,925	87	91	178	4.5	4.7	9.2	5,491	413	246	659	7.5	4.5	12.0
All Other Operators	--	--	--	--	--	--	--	36,006	1,907	1,560	3,467	5.3	4.3	9.6

Violation Rates are stated as a percentage of inspections (number of violations divided by total inspections). **Administrative** and **Environmental** is a mutually exclusive designation made by the PADEP and attached to every violation. **Number of Violations, Administrative** and **Number of Violations, Environmental** are counts of the number of violations that received the respective PADEP designation.

State Forest Lessees are the four Oil and Gas Operators, listed above, who have active wells on the state forest tracts subject to the three target DCNR lease-sale dates.
All Other Operators are Oil and Gas operators other than the four involved in the target state forest leases.

Data obtained from compliance data maintained by the PADEP (2013a) for the period January 1, 2006 through December 31, 2013.

AN EVALUATION OF MBA STUDENT SUCCESS AND STREAMLINING THE ADMISSIONS PROCESS

William R. Pratt, Clarion University of Pennsylvania

ABSTRACT

Within this study, we examine factors commonly employed as MBA applicant evaluation criteria to see if these criteria are important in determining an applicant's potential for success. After a review of our initial findings, a subsequent research question emerged: "is the GMAT a necessity in the admissions process or can other factors be employed to confidently determine if a student is likely to be successful in a graduate business program?" The findings indicate that the GMAT is not a significant predictor of student success when considering factors such as undergraduate grade point average and work experience. Furthermore, the results suggest that prior findings in support of the GMAT maybe the result of missing variables in the model specification. Our results show that undergraduate GPA alone can be employed as an admission criterion of potential success in lieu of the GMAT and in doing so streamline the admission process while minimizing student expenses. Within the discussion section, we offer suggestions for reducing the need of GMAT score information in the admissions process.

INTRODUCTION

Traditionally, the approach employed to assess a business graduate school applicant involves an official GMAT score(s), undergraduate transcript, resume, letters of recommendation, and a personal essay(s). The GMAT or Graduate Management Admissions Test is a standardized exam that is widely used by more than 6,000 management programs worldwide (GMAC, 2014). The purpose of the GMAT is to provide business schools with a standardized metric of comparison that other metrics do not possess. However, over the past 25+ years the GMAT has received much criticism and contention such as: claims of incorrect score reporting over a 10-month period, wide-scale cheating, low explanation of student outcomes, and that the GMAT disadvantages minority students (Dowling, 2009; Fairtest, 2001, 2008; Gropper, 2007; Hechinger, 2008; Tanguma, Serviere–Munoz, & Gonzalez, 2012). Given such reports, it is important to ask if the GMAT is a necessary admissions criterion? Within this study, we explore this question to identify possible alternatives for the admissions process.

The prior research employs explanatory variables such as the GMAT scores and undergraduate GPA, from herein UGPA, in investigation of which measures are linked to student success. The results from these studies are mixed in findings of significance, the covariates employed, and the response variable(s) used to measure success. In addition, since the majority of studies does not identify or recommend criteria in lieu of the GMAT, this study seeks an alternative.

The empirical findings indicate that the GMAT is not a consistent significant predictor of student graduation, whereas, UGPA and work experience offer information on the probability of student outcomes. We find that years of work experience will tend to result in a lower probability of graduation, consistent with the prior report of Gropper (2007) who notes a negative relationship between work experience and overall MBA performance. Specifically, we note a non-linear relationship between work experience and student graduation.

LITERATURE REVIEW

Admissions Criteria

Researchers and most graduate schools employ admissions criteria such as the GMAT, undergraduate GPA, work experience, and age as predictors of performance in MBA programs. Other studies have suggested explanatory factors such as gender, undergraduate field of study, and time since graduation drive outcome, whereas others have attempted to link outcomes to the type of program enrollment (traditional, EMBA, online, 11-month).

Studies employing the GMAT can be categorized as either tests of significance where the GMAT is a predictor of student outcome or in an analysis of variance explained. In review of studies examining the GMAT, the results are widely mixed. The literature appears to be equally divided on the GMAT as a significant predictor of student success, with various definitions for success. For instance, Gropper (2007) finds that the GMAT can explain first year MBA student GPA; however, with respect to overall program performance, the GMAT lacks statistical significance. Supporting Gropper's findings, a number of studies report significance with first year performance

(Kuncel, Credé, & Thomas, 2005; 2007). A common finding of predictor studies identifies the GMAT as being statistically important, but less important than factors such as UGPA (Borde, 2007; Fairfield-Sonn, Kolluri, Singamsetti, & Wahab, 2010; Sulaiman & Mohezar, 2006; Yang & Lu, 2001). Related in finding, Ahmadi, Raiszadeh, and Helms (1997) examine the variance explained by multiple predictors, noting that UGPA explains 27% of outcome variance while GMAT accounts for 18% – comparable findings are observed in other studies (Paolillo, 1982; Truell, Zhao, Alexander, & Hill, 2006). Amongst other, Arnold et al. (1996) and Seigert (2008) suggest that both the GMAT and UGPA should be employed when assessing graduate applicants.

Contrary to the prior, a number of studies report that other factors are more important than UGPA or GMAT and often note that one or both lack statistical significance (Christensen, Nance, & White, 2011; Fish & Wilson, 2009). Adams and Hancock (2000) report that amount of work experience is most related to student success relative to other predictors. Researchers have suggested that work experience also acts as a proxy for age or time since undergraduate degree. A study funded by the Graduate Management Admission Council (GMAC) suggests that time has a decay effect on the ability of UGPA to explain MBA success, such that the GMAT becomes valuable indicator for assessing those who have been away from school for a number of years (Talento-Miller & Guo, 2009) – similar findings are reported by Peiperl and Trevelyan (1997). Braunstein (2006) noted that work experience is a better predictor for students whose undergraduate degree is non-business related. From the reports, we can expect to find either or both a positive and negative relationship associated with work experience, as well as an undergraduate discipline dependent relationship.

Like Braunstien (2006) a sizeable amount of research identifies the type of undergraduate degree as a potential predictor of success in an MBA program. Sulaiman and Mohezar (2006) find that undergraduate discipline is a predictor of MBA success. Moses (1987) also finds that accounting majors are more likely to be successful in certain coursework due to their exposure to frequent reading of business publications and accounting knowledge. Similarly, Christensen et al. (2011) find support for accounting as a significant determinant, though only at the 10 percent level; however, they do identify performance in undergraduate economics and statistics as statistically significant determinants of success. Gropper (2007) offers similar evidence of undergraduate degree type lending to success in a MBA program.

MBA Programs

With advances in technology and an increasing demand for management training, business schools now commonly offer multiple methods of instruction to meet the needs of students as working professionals. Differing from the traditional two-year, face-to-face MBA, students can choose to pursue a MBA in a part-time approach, in an online setting, or as an executive track. What is important to note is students choose their specific program track, such that a type of student will likely prefer one method of instruction over another. Hobbs and Gropper (2013) identified that the characteristics of students entering into an executive MBA, from here in EMBA, differ from students entering into the traditional face-to-face program – typically EMBA requires a minimum of five years of work experience. Guy and Lownes-Jackson (2013) report that face-to-face students typically have better pre- and post-instruction test results in assessment of a single MBA course. Davis (2014) notes a similar difference in student performance in online versus traditional. Edward (2006) suggests the difference is a result of condensing the traditional two-year program to into intensive formats with new methods of content delivery and structure. As the program types vary, it is not surprising that predictors are noted as varying by program type (Carver & King, 1994; Fisher and Scott, 2009; Siegert, 2008). However, Taher et al. (2011) suggest that differences in success are the result individual personality type and learning approaches. Their report suggests that it is necessary to allow for heterogeneity by program type.

RESEARCH QUESTIONS

The functional role of the admissions process is to assess applicants' potential for success and fit. Understandably the result of the admissions process will have a significant impact on an applicant's future and incorporating poor criterion could have a negative impact on the applicant's future. Considering the significant impact the admissions process will have on an applicant's future, it is necessary to ensure that the admission criterion correctly serve as an information source on the likelihood of success. A summary of our hypotheses are presented in the Appendix in Table 1.

The first hypothesis (H1) addresses our question: is the GMAT a significant predictor of MBA student success? Within the extant literature the reports are widely mixed. In Kuncel et al. (2005; 2007) and Siegert (2008) we find information that leads us to expect that the GMAT is a significant and important predictor of a student's potential, whereas Adams and Hancock (2000) and Christensen (2011) do not find such a relationship. We expect to find a positive relationship between GMAT and graduation, such that the probability of graduating will increase with an increase in GMAT score.

Hypothesis two (H2) assesses the quality of the information conveyed in undergraduate GPA. Similar to H1, the literature is mixed in findings that either identify undergraduate GPA as a significant and positively related predictor (Borde, 2007), Seigert (2008) and other studies fail to find statistical significance – no studies that we are aware of report a negative relationship between undergraduate GPA and the likelihood of graduating (Christensen, et al., 2011; Fish & Wilson, 2009). From the prior reports we expect to find a positive relationship between undergraduate GPA and graduation, such that the probability of graduating will increase with an increase in undergraduate GPA.

Hypothesis three (H3) states that work experience is a positively related and significant predictor of MBA success. As in the report of Adams and Hancock (2000), we expect to find that work experience is a significant predictor of MBA success, such that an increase in work experience will lend to a greater probability of success.

We also examine the ability of students having an undergraduate degree in business versus students that do not in hypothesis four (H4). Consistent with the prior reports of Braunstien (2006), Sulaiman and Mohezar (2006), and Christensen et al. (2011), we expect to find that students with an undergraduate degree in business are more likely to be successful relative to students with non-business undergraduate degrees.

DATA

The analysis employs data on 271 business graduate students that attended an AACSB accredited MBA program. The data employed include information on the students undergraduate major, undergraduate GPA, graduate GPA, years of professional work experience, the program track the student applied for (traditional, 11-month program, executive MBA, or online), indication if the student was suspended from the program, and GMAT score if available. The program employs a requirement of "foundation coursework" that is designed to ensure students have a foundation knowledge before attempting coursework from the MBA core classes. The foundation coursework is usually fulfilled by an undergraduate degree in business; therefore, foundation coursework is usually typically only required of students who do not have an undergraduate degree in business.

During the data collection period, the program employed a policy of case-by-case GMAT waiver, so the sample includes GMAT scores for 170 students. Hence 101 students were admitted without GMAT scores. Within the analysis, we use the sample of 170 students who have GMAT scores to attain the regression estimates, and later employ the larger sample of 271 students to predict the probability of graduating using only undergraduate GPA.

Descriptive Statistics

Table 2 (see Appendix) provides the descriptive statistics of the data sample where N=170 – the sample of students having GMAT scores and N=271 – the initial sample of 170 students augmented with data on students admitted under the waiver policy. The sample GMAT scores range from 320 to 740 with a mean of 483.[26] In terms of percentiles of all GMAT test-takers, the sample ranges from the 5th percentile to the 97th, and the mean of the GMAT score is approximately the 27th percentile of all test takers. Undergraduate GPAs range from a low of 2.08 to 4.00, the average undergraduate GPA entering into the program is 3.33. Work experience ranges from zero to 29 years – 98 of the 271 individuals reported they had no professional work experience. The second quartile includes 38 observations that have one or two years of work experience. The third quartile spans from three to seven years, and the fourth quartile spans from eight to 29 years of work experience. Thirteen percent of all students (N=271) entering into the graduate program report having double majored in their undergraduate studies.

26 Twelve of the GMAT scores are converted GRE scores – the analysis was assessed with and without the converted GRE scores and there was not a significant change in the data or results. None of the students having converted scores were unsuccessful in the program.

The response variable graduate indicates if a student successfully completed the MBA program. The value of .96 indicates that four percent of the sample was unsuccessful in the MBA program. The statistic MBA GPA indicates the performance in the 10 core courses of the program - the sample of students who took the GMAT have a mean MBA GPA of 3.50 and the mean GPA increases slightly to 3.52 when the pool receiving waivers is added to the main sample.

METHODOLGY

Prior findings indicate that the type of MBA program may affect the student's likelihood of success. To account for this effect, we employ a multilevel model with a random intercept for program type (traditional, EMBA, online, 11-month). The response variable y_{ij} [Graduate = 1] uses logit as the linking function. With student level covariates χ_i and zeta j accounting for the type of MBA program.

$$\text{Logit}[Prob(y_{ij} = 1 \mid x_{ij}, \zeta_j^{(2)})] = x_{ij}'\beta + \zeta_j^{(2)}$$

Assuming independence across programs

$$\zeta_j^{(2)} \mid x_{ij} \sim N(0, \psi^{(2)})$$

Using Stata 13, we employ the GLLAMM command which maximizes the log-likehood via Newton's method to attain the estimates presented in section VI - the reader may want to refer to Rabe-Hesketh and Scrondal (2003, 2008) for a more in-depth discussion.

The Linking Function

Prior research has identified potential bias in logistic regression when examining "rare" events, typically when response variables have events of interest that occur infrequently, less than one percent of the time. The predicted probabilities of the sample are consistent with the values reported in the descriptive statistics in Table 2, such that at the predicted probability of success associated with the mean undergraduate GPA differs from the actual sample by only .3 percent (.96 vs. .963) - when employing the probit link the probability of success is 86 percent, ten percent lower than observed in the sample. One hundred thousand simulations were performed using the Stata command GLLASIM, with mean estimates of .9631(σ = .0005) for the intercept only model and .9631 (σ = .0171) when undergraduate GPA is employed to predict success. Additionally, probit estimates were found to have the same coefficient sign and like levels of significance, such that the information is consistent – as expected the logit and probit differ in the fitted tail values as a result of the respective CDF. We identify logit as the linking function that better represents the data.

RESULTS

The results of our analysis are presented in Tables 3 and 4. In Tables 3 and 4, columns one through four examine predictors without employing GMAT scores. Columns five through nine examine predictor with the use of GMAT scores. Table 3 reports the estimates for the sample of students who have GMAT scores (N=170). The total sample of students consists of students that either have a GMAT waiver (N=101) or those that having GMAT scores (N=170), thus a total sample size of 271 students. Table 4 estimates differ from the prior table in that columns one through four have a N=271, as GMAT scores are not employed and columns five through nine have an N=170, as GMAT scores are utilized – note that the reported values in columns five through eight are identical in Tables 3 and 4.

Column one of Tables 3 and 4 employs no covariates; therefore, the intercept value is the mean or average expected probability of graduating for the sample once the coefficient is exponentiated and converted into a probability. In columns two through seven, undergraduate GPA (UGPA) is a statistically significant predictor of student success at the 95 percent level or better in support of H_2 – therefore we reject the null hypothesis of H_2.

The covariates work experience and work experience squared are reported in columns three through six. Each predictor is statistically significant at the 99th percent level or better, allowing us to reject the null hypothesis of H_3. Differing from prior reports, we observe that, in general, work experience has a negative influence on a student's probability of success, though the impact of the negative effect decreases with time as seen in the predictor work experience squared. These findings potentially counter Talento-Miller and Guo's (2009) report of a "decay effect" in the application of undergraduate grades as a predictor of student success. If we consider time as a proxy of work

experience, then we can identify why a negative sign was observed. Furthermore, we tested for variable interaction and did not find a significant relationship or a change in other covariates sign or level of significance. It is also worthy to note that squaring the work experience covariate is statistically important, and we did not observe this approach in prior studies. However, it is likely that a prior study has applied this approach. We will discuss the significance of work experience in column seven when addressing the results of the predictor GMAT score.

The indicator variables business major (students having an undergraduate business degree =1) and double major (double majored in undergraduate studies =1) are reported in columns four and five. Having an undergraduate business degree does not appear to convey any useful information at the standard level, hence we fail to reject the null hypothesis of H_4. Double major is significant at the 90th percentile in column four and at the 95th percentile in column five. The only notable difference between Tables 3 and 4 is observed in the variable double major where significance is greater in column four of Table 4. Unexpectedly, students that double majored have a lower probability of success, we also tested for interactions with other covariates, though no significance was observed.

Columns five through nine report the estimates for when GMAT scores are incorporated. In columns seven through nine, we find that GMAT scores are statistically significant; however, in columns five and six GMAT scores are no longer statistically significant. The results appear to indicate that GMAT scores is a significant predictor only when a model is misspecified due to missing variable bias. The results only partially support H_1; therefore, we are unable to confidently reject the null hypothesis of H_1. We inspected the work experience coefficients in columns five and six and found that negative probability of work experience decreases relative to the increase in the squared coefficient after five years of work experience, such that the probability of success begins to trend upward. This observation coincides with the commonplace policy of a GMAT waiver with five years of work experience and additional requirements.[27]

DISCUSSION OF STUDY LIMITATIONS

The study is chiefly limited by a sample that includes graduate students from a single university; therefore, these findings may only be representative of this sample and may not apply to other institutions. This limitation provides an opportunity for further research. Researchers may be interested in applying the analysis of this study to a data set of multiple universities. Additionally, other topics of interests could include: variation across university characteristics such as accreditation, population, and system affiliation.

CONCLUSION

The findings of this study expand upon the extant literature by providing empirical evidence that the GMAT is not a consistent statistically significant predictor of student success in an MBA program. The results suggest that prior support for the GMAT may be attributable to an under specified model. Furthermore, this finding reveals that the GMAT is not a dependable predictor of student success; hence, it is not a necessary requirement for evaluating MBA program applicants. Instead the results show that undergraduate GPA and work experience are more appropriate measures for evaluation. We fail to find evidence that having an undergraduate degree in a business or business-based discipline lends to statistically significant improved probability of success. As well, we do not find evidence that predictors of success differ by the type of MBA program (traditional, 11-month program, executive MBA, or online) an applicant pursues.

Again, as these findings indicate that GMAT scores may not be an appropriate source of information for evaluating applicants; therefore, admissions committees may want to reduce student financial expense and streamline their admissions process/criteria by identifying methods for reducing their need for the GMAT requirement. Streamlining the admissions process/criteria maybe achieved by multiple methods, for example: 1) Estimating the historic probability(ies) of success in a program and then establishing criteria such as a minimum undergraduate GPA that predicts the desired probable level of success, or 2) If a program is targeting a minimum GMAT score, then a committee may want to identify the probability of success associated with the targeted GMAT score and then identify an equivalent probability of success based on other criteria (e.g., UGPA, work experience, etc.). To be specific, method one identifies an ideal probability of student success, say 95 percent. After identifying the target level of success, then ascertain the undergraduate GPA that results in a 95 percent probability of success. If we

27 A Google Scholar search was conducted with the search phrase "GMAT waiver years work experience", we observed a notable quantity of MBA programs from well known universities employing such a policy.

assume that candidates with 3.25 undergraduate GPA have a 95 percent probability of success, we can then say the target level of .95 is comparable to the UGPA of 3.25. With respect to method two, let's assume there is University X that wants to target a minimum GMAT score of 620. Under method two, X would identify the probability of success given the 620 GMAT score and then identify criteria that are able to provide an equivalent probability of success.

REFERENCES

Adams, A. J., & Hancock, T. (2000). Work Experience as a Predictor of MBA Performance. *College Student Journal, 34*(2).

Ahmadi, R., and Helms. (1997). An Examination of the Admission Criteria for the MBA Programs: A Case Study. *Education, 117*, 540-546.

Arnold, L. R., Chakravarty, A. K., & Balakrishnan, N. (1996). Applicant evaluation in an executive MBA program. *Journal of Education for Business, 71*(5), 277-283.

Borde, S. F. (2007). A Better Predictor of Graduate Student Performance in Finance: Is it GPA or GMAT? *Financial Decisions, 19*(1), 1-9.

Braunstein, A. W. (2006). MBA Academic Performance and Type of Undergraduate Degree Possessed. *College Student Journal, 40*(3), 685-690.

Christensen, D. G., Nance, W. R., & White, D. W. (2011). Academic Performance in MBA Programs: Do Prerequisites Really Matter? *Journal of Education for Business, 87*(1), 42-47. doi: 10.1080/08832323.2011.555790

Davis, C. V. (2014). *A comparative study of factors related to student performance in online and traditional face-to-face MBA courses that are quantitative and qualitative in nature.* CAPELLA UNIVERSITY.

Fairfield-Sonn, J. W., Kolluri, B., Singamsetti, R., & Wahab, M. (2010). GMAT and other Determinants of GPA in an MBA Program. *American Journal of Business Education, 3*(12), 77-86.

Fish, L. A., & Wilson, F. S. (2009). Predicting Performance of MBA Students: Comparing the Part-Time MBA Program and the One-Year Program. *College Student Journal, 43*(1).

GMAC. (2014). The GMAT Exam Turns 60 Retrieved 02/04/2014, 2014, from http://newscenter.gmac.com/news-center/gmat-60

Gropper, D. M. (2007). Does the GMAT Matter for Executive MBA Students? Some Empirical Evidence. *Academy of Management Learning & Education, 6*(2), 206-216. doi: 10.5465/amle.2007.25223459

Guy, R., & Lownes-Jackson, M. (2013). Web-based Tutorials and Traditional Face-to-Face Lectures: A Comparative Analysis of Student Performance. *Issues in Informing Science & Information Technology, 10*.

Hobbs, B. K., & Gropper, D. M. (2013). Human Capital Indicators and Academic Success in Executive MBA Programs: A multi-program study. *Journal of Executive Education, 4*(1), 3.

Kuncel, N. R., Credé, M., & Thomas, L. L. (2005). The validity of self-reported grade point averages, class ranks, and test scores: A meta-analysis and review of the literature. *Review of educational research, 75*(1), 63-82.

Kuncel, N. R., Credé, M., & Thomas, L. L. (2007). A Meta-Analysis of the Predictive Validity of the Graduate Management Admission Test (GMAT) and Undergraduate Grade Point Average (UGPA) for Graduate Student Academic Performance. *Academy of Management Learning & Education, 6*(1), 51-68. doi: 10.5465/amle.2007.24401702

Moses, O. (1987). Factors explaining performance in graduate-level accounting. *Issues in Accounting Education, 2*(2), 281-291.

Paolillo, J. G. (1982). The predictive validity of selected admissions variables relative to grade point average earned in a master of business administration program. *Educational and Psychological Measurement, 42*(4), 1163-1167.

Peiperl, M. A., & Trevelyan, R. (1997). Predictors of performance at business school and beyond: Demographic factors and the contrast between individual and group outcomes. *Journal of Management Development, 16*(5), 354-367.

Rabe-Hesketh, S., & Skrondal, A. (2003). Some applications of generalized linear latent and mixed models in epidemiology: repeated measures, measurement error and multilevel modeling. *Norsk epidemiologi, 13*(2).

Rabe-Hesketh, S., & Skrondal, A. (2008). *Multilevel and longitudinal modeling using Stata*: Stata Corp.

Siegert, K. O. (2008). Executive Education: Predicting Student Success in Executive MBA Programs. *Journal of Education for Business, 83*(4), 221-226. doi: 10.3200/joeb.83.4.221-226

Sulaiman, A., & Mohezar, S. (2006). Student Success Factors: Identifying Key Predictors. *Journal of Education for Business, 81*(6), 328-333. doi: 10.3200/joeb.81.6.328-333

Taher, A. M. M. H., Chen, J., & Yao, W. (2011). Key predictors of creative MBA students' performancePersonality type and learning approaches. *Journal of Technology Management in China, 6*(1), 43.

Talento-Miller, E., & Guo, F. (2009). When Are Grades No Longer Valid? A Look at the Effect of Time on the Usefulness of Previous Grades *GMAC Research Reports* (pp. 9): GMAC.

Truell, A. D., Zhao, J. J., Alexander, M. W., & Hill, I. B. (2006). Predicting Final Student Performance in a Graduate Business Program: The MBA. [Article]. *Delta Pi Epsilon Journal, 48*(3), 144-152.

Yang, B., & Lu, D. R. (2001). Predicting Academic Performance in Management Education: An Empirical Investigation of MBA Success. [Article]. *Journal of Education for Business, 77*(1), 15.

William Pratt is an associate professor of Finance at Clarion University of Pennsylvania. He teaches courses in Intermediate Finance, Financial Modeling, Financial Problems and Fundamentals of Insurance. His research interests are in Capital Structures and Healthcare Finance.

APPENDIX

Table 1: Summary of Hypotheses

H1: The GMAT is significant predictor of MBA student success.
H2: Undergraduate GPA is a positively related significant predictor of MBA student success.
H3: Work experience is significant predictor of MBA student success.
H4: An undergraduate degree in business provides information of a student's potential for success.

Table 2: Descriptive Statistics

	N = 170				N = 271			
	Mean	StDev	Min	Max	Mean	StDev	Min	Max
GMAT Score	483	73	320	740	------	------	------	------
Undergraduate GPA	3.33	0.39	2.08	4.00	3.31	0.38	2.08	4.00
Years of Work Exp.	1.63	3.14	0	17	5.14	6.52	0	29
Double Major (1=yes)	0.18				0.13			
Busines Major (1=yes)	0.69				0.64			
Graduate (1=yes)	0.96				0.96			

Table 3: Regression Estimates of Students with GMAT Scores

Table 3. Regression estimates - response variable is graduate (1 = yes, 0 = no)

	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)	
	Coef.	OR	Coef.	OR	Coef.	OR	Coef.	OR	Coef.	OR	Coef.	OR	Coef.	OR	Coef.	OR	Coef.	OR
Constant	3.496		-1.504		-1.335		-1.956		-8.130		-7.585		-4.028		-4.326		-1.496	
	(.158)***		(1.347)		(2.591)		(4.029)		(2.052)***		(1.651)***		(1.907)*		(2.529)		(1.190)	
UGPA			1.557	4.745	1.755	5.783	1.992	7.330	2.119	8.326	1.932	6.905	1.115	3.050	1.200	3.320		
			(.389)**		(.610)**		(.870)*		(.153)***		(.185)***		(.427)**		(.472)*			
Work Exp.					-0.842	0.431	-0.953	0.386	-1.062	0.346	-0.952	0.386	-0.019	0.981				
					(.079)***		(.082)***		(.237)***		(.268)***		(.081)					
Work Exp.^2					0.086	1.090	0.099	1.104	0.106	1.112	0.094	1.099						
					(.029)**		(.025)***		(.008)***		(.007)***							
Bus. Major							0.293	1.340	0.180	1.197								
							(1.303)		(1.113)									
Double Major							-1.067	0.344	-0.949	0.387								
							(.551)		(.423)*									
GMAT Score									0.013	1.013	0.013	1.013	0.009	1.009	0.009	1.009	0.011	1.011
									(.009)		(.007)		(.003)**		(.003)**		(.002)***	
Enroll	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	
	(.000)		(.000)		(.000)		(.000)		(.000)		(.000)		(.000)		(.000)		(.000)	
N	170		170		170		170		170		170		170		170		170	
LL	-22.558		-21.598		-19.588		-19.238		-18.010		-18.275		-20.797		-20.808		-21.307	

P values denoted with *≥0.05,**≥0.01,***≥0.001; robust standard errors - Huber/White

† Columns 1 through 4 report coefficient estimates that do not employ GMAT scores. Columns 5 through 9 report coefficient estimates that do employ GMAT scores.

Table 4: Regression Estimates of Full Sample

Table 4. Regression estimates with full sample (N = 271) - response variable is graduate (1 = yes, 0 = no)

	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)	
	Coef.	OR	Coef.	OR	Coef.	OR	Coef.	OR	Coef.	OR	Coef.	OR	Coef.	OR	Coef.	OR	Coef.	OR
Constant	3.262		-0.663		0.6123		0.6224		-8.130		-7.585		-4.028		-4.326		-1.496	
	(.224)***		(1.161)		(2.121)		(2.363)		(2.052)***		(1.651)***		(1.907)*		(2.529)		(1.190)	
UGPA			1.218	3.379	1.091	2.978	1.072	2.922	2.119	8.326	1.932	6.905	1.115	3.050	1.200	3.320		
			(.385)**		(.445)*		(.403)**		(.153)***		(.185)***		(.427)**		(.472)*			
Work Exp.					-0.465	0.628	-0.476	0.621	-1.062	0.346	-0.952	0.386	-0.019	0.981				
					(157)**		(.163)**		(.237)***		(.268)***		(.081)					
Work Exp.^2					0.031	1.031	0.031	1.032	0.106	1.112	0.094	1.099						
					(.006)***		(.005)***		(.008)***		(.007)***							
Bus. Major							0.380	1.462	0.180	1.197								
							(.646)		(1.113)									
Double Major							-0.872	0.418	-0.949	0.387								
							(.082)***		(.423)*									
GMAT Score									0.013	1.013	0.013	1.013	0.009	1.009	0.009	1.009	0.011	1.011
									(.009)		(.007)		(.003)**		(.003)**		(.002)***	
Enroll	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	
	(.000)		(.000)		(.000)		(.000)		(.000)		(.000)		(.000)		(.000)		(.000)	
N	271		271		271		271		170		170		170		170		170	
LL	-42.809		-41.767		-38.679		-38.093		-18.010		-18.275		-20.797		-20.808		-21.307	

P values denoted with *≥0.05,**≥0.01,***≥0.001; robust standard errors - Huber/White

† Columns 1 through 4 report coefficient estimates that do not employ GMAT scores - these values are attained using the larger data set of N = 271. Columns 5 through 9 report coefficient estimates that do employ GMAT scores, hence the sample size is limited to N = 170.

I'VE GOT A DEGREE, BUT AM I MARKETABLE?!

Darrell Steckler, York College of Pennsylvania

ABSTRACT

This paper discusses and attempts to answer some basic questions as we, representing the professional technology training possible at a variety of institutions, come to grips with remaining a viable source for the needs of this ever-evolving landscape! Is there a gap between what we are offering and what our Information Technology students need to prepare them for their entry into the professional arena? This paper evaluates whether or not graduates are prepared for the technology environment they will be facing as they head out into the 'real world' and the beginning of their professional careers. It reviews what skills Information Technology groups look for in new hires today and what skill sets they will find valuable for the next five years. There is a discussion on how recent graduates feel about the education they received, from a systems technology perspective. Did they feel prepared to enter the workforce? From the perspective of technology courses to the emphasis on professionalism and business, we will take a look at how trends have affected the hiring process. Over 30 school curriculums are evaluated to develop a course gap analysis on where our schools are today and where we need to be heading for the future.

INTRODUCTION

Our institutions of higher learning are struggling to keep up with the pace of technology. It seems that we are constantly in catchup mode when it comes to offering our students classes that will attract their interest and keep them engaged in learning necessary skills for their future growth. Is this working? We took a look at what is needed by our business community, what is being offered by our colleges and universities, and most importantly if the needs of our students were being met. This involved discussions with IT professionals, research from various sources, talks with recent graduates working in the IT field and taking a look at over 30 colleges and universities to see what was being offered in the disciplines of Information Technologies.

THE FUTURE NEEDS OF IT

We start off with a statement that may be a surprise to some of us, IT is everything, right?! But it has been stated in numerous writings that our graduates still need the soft skills to be successful in their careers. Raj Sobhlok, in a Forbes article (Sobhlok, 2013), talks about the five job skills that will get you employed: Writing, Web Marketing, Search Engine Marketing, Social Media, and Programming. David Gianatasio (2013) talks about 5 skills to keep you vital for the next five years. The number one skill listed is Collaboration. Also discussed are Customer Service, Negotiation, Adaptability, and Initiative. Gartner analyst David Cappuccio (2012) talks about the "nexus" of cloud, big data, social, and mobile. Kazim Ladimeji (2012) presented a world view of the most in demand skills for the next 10 years. As seen in Figure 1, Emerging Technologies ranks high at 26.1% for Western Europe, and 38.3% for North America. The pure technology skillset necessary to move into the future consists of some very obvious choices, along with some not so obvious. Languages needed will be the newer standards of .NET, particularly Visual Basic and C#. Also included in the skills list should be Java and PHP. PHP is a bit of a surprise, but not if you consider the economics of choosing that platform. It is inexpensive, and for the smaller entities out there, not everyone can afford huge enterprise solutions. Web development is still a top priority. HTML, CSS, and JavaScript are very strong contenders to have in your tool bag. Web services go hand-in-hand with all of the above. If you can write the code that makes all of the devices talk and share information, knowing tools like SOAP (Simple Object Access protocol), JSON (JavaScript Object Notation), REST (Representational State Transfer), and XML (Extensible Markup Language) will all be very valuable. What is the bottom line for what skills will be necessary for the future? There are enough specialized skills for anyone to find an area they are interested in and gravitate towards that particular technology. Cloud computing, virtualization of both systems and networks, Networks, domain knowledge, Device Management, Security Governance, Business Intelligence represent some of the many opportunities coming up in the world of technology that it almost boggles the mind. Think of our young students, trying to focus on a career and decide where to direct their energy and abilities, from all of the choices available to them, as they plan their educational careers.

WERE THEY PREPARED?

Did we institutions of higher learning prepare the students for the world they face today, for the world as it will be in five years? Most of the recent graduates that were polled said they felt ill-prepared for the realities of the job search in today's job market. That being said, our recent graduates are not facing the usual competition one might expect when graduating from school. Today, they not only face a cadre of their peers, but also applicants who have been 'downsized' from a variety of jobs who have now flooded the job market. There are middle-aged and older folks who are trying to pick up new job skills and increase their market worth as they hit the streets looking for their own new futures. What they lack in current skills they may make up for by having the experience in the soft skills that were discussed earlier. Research completed by Lee Pender (2011) found most people are aware of the necessity of the soft skills needed in business, as shown in the Appendix, Table V. When asked about the future skills they hope to acquire, respondents followed expectations of the marketplace very well, citing virtualization, cloud computing, and mobile technologies, as shown in Appendix, TableVII. Management who responded to a questionnaire circulated for this paper were in agreement as to what was needed, but those skills are needed now, not a year from now. Currently they are not finding the skillsets they need in recent graduates. To be honest and maybe throw in a qualifier for our survey within the local economy, South Central PA is not paying the salaries that will attract the best talent. We might imagine that the larger metropolitan areas of Philadelphia, Baltimore, New York, and D.C, are attracting better candidates for the jobs that are being filled. For the straight IT shops, most of our responders see a lack of skills in the Java and .NET areas. Mobile technology skills are lacking in those they have recently interviewed. Large enterprise companies can take on new people and throw them at a project where they will pick up the necessary skills, but not all companies have the luxury or the time to dedicate for training someone on the job. It certainly adds to the scope creep of an IT project. To address the conundrum of acquiring skills from higher education sources and matching those to the job market, one of our responders stated that there are far too many technologies being used in the modern world to only focus an entire college education on one. He was referring to his university having mainly focused on one language for all of their main Computer Science courses. Another responder stated that her institution focused too much on hardware courses, two were required as well as a low-level assembler course, but the program did not allow the time to take a web programming course, which she feels would have been much more valuable for her job search. An often repeated feeling was that their universities were entrenched in the technologies of the now, and not so much those of the future.

HIGHER EDUCATION SCORECARD

How do we measure up? Are we offering what our students need from us so they can get ahead and feel confident as they venture forth into the world? For the most part, the answer is a resounding, mostly. From what could be determined by previous years' NABET conference proceedings, most of the colleges and universities represented were evaluated. This was a loose survey consisting of first determining what technology majors were offered at those schools, then drilling down into the course descriptions to determine what languages were being taught in those courses. One of the presumptions was that if Java was being mentioned, that is a good thing, the school was forward-thinking. Yet, our first responder told us that his education was based entirely on Java, and he then felt behind the curve when he tried to find a job, having only acquired that one skill. Table XIII in the Appendix shows the schools that were evaluated and what was found at those schools. This was strictly a 'what could be determined by looking at the schools web site' survey. No phone calls were made, no one contacted to clear up ambiguity or questions from a course description, so there are bound to be inaccuracies. Apologies to those who may feel their institution was misrepresented. That was certainly not the intent of the author. There was a two-fold reason to this approach. The first reason was time obviously. The second being that how this was researched would be exactly how a high school senior would look at her options, by going to the school's online resources and looking at what was available. That being said, we stack up very well in general. The good news, all of the schools offer some form of technology major. Some of the schools had a challenging navigation to get to course descriptions. When they could not be found, a "?" was placed in the future column. This is not a bad thing, it just reflects that we couldn't determine what languages were being offered. Carnegie Mellon was a glaring example. An excellent technology school, yet it was hard to determine what was being offered in the skill set areas that were being surveyed. Conversely, Juniata College actually had a CIO major offered, and they mentioned the dynamic language Ruby in one of the course descriptions - very forward thinking. Villanova would be a good school for someone to apply to, and yet only the C language was mentioned in any of the course descriptions. A high school or transfer student looking at their web site might think twice about applying there, possibly thinking they weren't keeping up with the needs of the future.

OUR CHALLENGE

In their report, Future Work Skills 2020, the Institute for the Future has this to say to educational institutions as described in the Appendix, Table III. There are five key areas where we need to change to remain viable.

- Developing skills such as critical thinking, insight, and analysis capabilities.
- Integrating new-media literacy into education programs.
- Include experiential learning, giving prominence to the soft skills.
- Broaden the learning constituency beyond teens and young adults.
- Integrating interdisciplinary training.

In addition to the above list, we also have to continue to add to our courses those skills that are deemed valuable. We need to take a strong look at what can be dropped so that we can pick up more important topics. We have to fight the danger of complacency and challenge not only our students, but ourselves as we build our curriculums of the future. We need to involve local companies, large and small, in the process of change and bring them on board to help us plan for our futures together. If we can do these things and execute them well, we stand a chance of remaining a respected and needed resource for the workforce of the future.

REFERENCES

Brandel, M., (2013). 8 Hot I.T. Skills for 2014. Retrieved August 23, 2014 from http://www.computerworld.com/article/2484858/it-management/8-hot-it-skills-for-2014.html.

Cappuccio, D., (2012). 10 Critical tech trends for the next five years. Retrieved August 23, 2014 from http://www.forbes.com/sites/ericsavitz/2012/10/22/gartner-10-critical-tech-trends-for-the-next-five-years/.

Casserly, M., (2012). The 10 skills that will get you hired in 2013. Retrieved October 21, 2014 from http://www.forbes.com/sites/meghancasserly/2012/12/10/the-10-skills-that-will-get-you-a-job-in-2013/.

Davies, A. Fidler, & D. Gorbis, M., (2011). Future work skills 2020. Retrieved August 23, 2014 from http://www.iftf.org/futureworkskills/.

Dignan, L., (2009). 10 Skills developers will need in the next five years. Retrieved August 23, 2014 from http://www.zdnet.com/blog/btl/10-skills-developers-will-need-in-the-next-five-years/16052.

Gianatasio, D., (2013). 5 skills we'll all need in 5 years: How to remain sought-after for years to come. Retrieved August 23, 2014 from http://workreimagined.aarp.org/manage-your-career/5-skills-well-all-need-in-5-years/.

Ladimeji, K., (2012). World's most in demand skills for the next 10 years. Retrieved August 23, 2014 from http://thecareercafe.co.uk/blog/?p=3717#sthash.ivAxWTZ0.dpuf.

Pender, L., (2011). The future of IT skills: What you need to keep your IT career alive. Retrieved August 23,, 2014 from http://redmondmag.com/Articles/2011/08/01/Do-This-Not-That.aspx?Page=1.

Sabhlok, R., (2013). 5 job skills to get you (and keep you) employed. Retrieved August 23, 2014 from http://www.forbes.com/sites/rajsabhlok/2013/03/21/5-job-skills-to-get-you-and-keep-you-employed/.

Stenger, M., (2014). Ten skills working professionals need to upgrade in the next five years. Retrieved August 23, 2014 from http://www.evolllution.com/opinions/ten-skills-working-professionals-upgrade-years/.

Darrell Steckler is an Adjunct Professor at York College of Pennsylvania, and full-time Systems Business Analyst at Rite Aid Corporation where he has worked as a programmer and in the data warehouse area, IS marketing group, and web team. He began his career in the Air Force and further honed his computer knowledge at Honeywell Federal Systems in DC, picking up PL/1 programming with Multics (the Father of Unix).

APPENDIX

Table I: Needed Skills

Needed Skills	Current
Programming	
HTML, CSS, Javascript	Y
Mobile Development	Y
Secure Applications	Y
Object-Oriented Development	Y
Help Desk/Tech Support	Y
Networking	Y
Device Management	Y
Database Administration	Y
Security Governance	Y
Business Intelligence/Analytics	Y
.NET (VB.NET, C#), Java, PHP	Y
Rich Internet Applications (RIA) (Flash, Flex, AIR, JavaFX, Silverlight)	
Web services (SOAP, JSON, XML)	Y
Dynamic/Functional Languages (Ruby, Python, F#, Groovy, LINQ, Rails)	Y
Agile methodologies	Y
Domain knowledge	Y
Development "hygiene"	Y
Computers and Electronics	Y
Operations and Systems Analysis	Y
Software Defined Networks	
Bigger Data and Storage	Y
Hybrid Cloud Services	
Client and Server Architectures	Y
Internet of Things	
IT Appliance Madness	
Operational Complexity	Y
Virtual Data Centers	
IT Demand	
Writing	Y
Web Marketing	Y
Search Engine Markeing	Y
Social Media	Y
Organizational Entrenchment	
Collaboration	Y
Customer Service	Y
Negotiation	Y
Adaptability	Y
Initiative	Y

Needed Skills	Current
Project Management	Y
Critical Thinking	Y
Complex Problem Solving	
Judgment and Decision Making	Y
Active Listening	
Mathematics	Y
Monitoring	Y
Microsoft Office	Y
Bilingual or Multilingual	Y

Table II: Drivers of Change

6 Drivers of Change
Human Longevity
Rise of Smart Machines/Systems
Computational World
New Media Ecology
Superstructed Organizations
Globally Connected World

Table III: Educational Institutional Challenge

Educational Institutions
Critical thinking, insight, analysis
Integrating new-media literacy
Experiential Learning (collaborate, work in groups, read social cues, respond adaptively)
Broadening the learning constituency
Integrating interdisciplinary training

Table IV

How confident are you that the IT skills you have now (certifications, etc.) will continue to be relevant over the next five years?	
Answer Options	**Response Percent**
Very confident	28.0%
Somewhat confident	48.0%
Not at all confident	21.1%
Not sure	2.9%

Table V

How important do you consider business-oriented, non-IT skills (such as contract negotiation) to be in your job?	
Answer Options	**Response Percent**
Very important	50.6%
Somewhat important	39.8%
Not important at all	8.1%
Not sure	1.4%

Table VI

Which one of the following areas of expertise do you consider most important for your career in the long term (say, over the next five years)?	
Answer Options	**Response Percent**
Virtualization	20.7%
Cloud computing	14.8%
Database administration	7.1%
Help desk	3.0%
Software engineering	8.7%
Hardware engineering	1.2%
Business skills (such as an MBA)	13.6%
Specific programming languages	2.8%
Systems management	16.4%
Mobile technologies	11.7%

Table VII

In which of the following areas are you currently acquiring or planning to acquire skills (choose all that apply)?	
Answer Options	**Response Percent**
Virtualization	56.4%
Cloud computing	54.3%
Database administration	25.2%
Help desk	6.8%
Software engineering	20.0%
Hardware engineering	7.4%
Business skills (such as an MBA)	25.4%
Specific programming languages	20.4%
Systems management	37.5%
Mobile technologies	47.7%

Table VIII

Having skills in which of the following areas do you think will be most important for increasing your salary over the next five years?	
Answer Options	**Response Percent**
Virtualization	47.8%
Cloud computing	48.0%
Database administration	20.3%
Help desk	4.4%
Software engineering	16.0%
Hardware engineering	4.2%
Business skills (such as an MBA)	34.1%
Specific programming languages	9.5%
Systems management	29.1%
Mobile technologies	35.5%

Table IX

How do you perceive the evolution of the IT hiring landscape over the last two years?	
Answer Options	**Response Percent**
Getting much better	10.9%
Getting somewhat better	47.0%
Unchanged	22.7%
Getting somewhat worse	13.7%
Getting worse	3.0%
Not sure	2.8%

Table X

How many years of experience do you have as an IT professional?	
Answer Options	**Response Percent**
0-5 years	6.5%
6-15 years	37.5%
16-30 years	45.8%
31+ years	10.2%

Table XI

If you were graduating college in 2011, would you pursue a career in IT?	
Answer Options	**Response Percent**
Yes	58.6%
No	17.3%
Not sure	24.1%

Table XII

Do you have an MBA?	
Answer Options	**Response Percent**
Yes	11.5%
No	82.5%
I am currently pursuing one	5.9%

Table XIII

NABET Institutions	Location	# students	IT Majors	Future
Bloomsburg U	Bloomsburg, PA	9,416	Computer Science Computer and Information Science Computer Forensics	Java
California U	California, PA	6,450	Computer and Information Sciences Computer Engineering	Java
Carnegie Mellon U	Pittsburgh, PA	6,306	Information Resources Management Management Information Systems Computer Science Computer and Informations Systems Security Information Science Information Technology Information Technology Project Management System Administration Computer Engineering Computer Software Engineering	?
Clarion U	Clarion, PA	5,199	Computer and Information Sciences Information Science	Java

NABET Institutions	Location	# students	IT Majors	Future
Defiance College	Defiance, OH	892	Management Information Systems Computer Forensics	no Java
DeSales U	Center Valley, PA	2,482	E-Commerce Management Information Systems Computer and Information Sciences Information Science Information Technology	no Java
Drexel U	Philadelphia, PA	16,616	Customer Service Management Management Information Systems Computer Science Compuetr and Informations Systems Security Information Science Web Page, Digital/Multimedia and Information Resources Design Computer Engineering Computer Software Engineering	Java
Duquesne U	Pittsburgh, PA	5,970	Management Information Systems Computer Science Web Page, Digital/Multimedia and Information Resources Design Mathematics and Computer Science	no Java
Indiana U	Indiana, PA	12,471	Management Information Systems Computer and Information Sciences	?
Juniata College	Huntingdon, PA	1,625	Information Resources Management, CIO Training Computer and Information Sciences Information Technology Web Page, Digital/Multimedia and Information Resources Design	Ruby
Kutztown U	Kutztown, PA	8,815	Computer Science Computer and Information Sciences	Java
Lock Haven U	Lock Haven, PA	4,855	Computer and Information Sciences	lang?
Luzerne County College	Nanticoke, PA	6,411	Management Information Systems Computer Graphics Computer Programming, Specific Applications Computer and Information Sciences Computer and Information Systems Security Web Page, Digital/Multimedia and Information Resources Design Computer Technology/Computer Systems Technology	Java
Maryland U	College Park, MD	26,658	Computer and Information Sciences Information Science Computer Engineering Human Computer Interaction	Java
Millersville U	Millersville, PA		Computer and Information Sciences	Java

NABET Institutions	Location	# students	IT Majors	Future
		7,388		
Misericordia University	Dallas, PA	2,417	Management Information Systems Computer and Information Sciences Information Technology	?
Muhlenberg College	Allentown, PA	2,448	Management Information Systems Computer and Information Sciences	Java
Point Park U	Pittsburg, PA	3,226	Animation, Interactive Technology, Video Graphics and Special Effects Information Technology	?
Quinnipiac U of Connecticut	Hamden, CT	6,542	Management Information Systems Computer Graphics Computer Programming, Specific Applications Computer Science Computer and Information Sciences Computer Software Engineering Mathematics and Computer Science Game Design/Development	?
Regent U	Virginia Beach, VA	2,461	Animation, Interactive Technology, Video Graphics and Special Effects Information Technology	?
Rowan U	Glassboro, NJ	10,951	Management Information Systems Computer Science	Java
Shippensburg U	Shippensburg, PA	6,550	Computer Systems Analysis/Analyst Computer and Information Sciences Computer Software Engineering	?
Slippery Rock U	Slippery Rock, PA	7,595	Computer Science Information Science Information Technology	?
Strayer U	Washington, DC	2,100	Computer Support Specialist Information Science Information Technology	?
the Richard Stockton College of NJ	Galloway, NJ	7,539	Information Science Computational Science	?
Temple University	Philadelphia, PA	28,068	Computer and Information Sciences Computer and Information Systems Security Information Technology Mathematics and Computer Science	Java
Towson U	Towson, MD	18,779	Computer and Information Sciences Information Science Information Technology	Ruby

NABET Institutions	Location	# students	IT Majors	Future
Univ of North Texas	Denton, TX	29,481	Management Information Systems Computer and Information Sciences Information Science Information Technology Computer Engineering	?
University of Pittsburgh	Pittsburg, PA	18,615	Management Information Systems Artificial Intelligence and Robotics Computer Science Computer Systems Networking and Telecommunications Information Science Computer Engineering	Java
Ursinus College	Collegeville, PA	1,596	Computer Science	?
Villanova U	Villanova, PA	7,042	Management Information Systems Computer Science Computer Engineering	C
West Chester U	West Chester, PA	13,711	Computer and Information Sciences Information Technology Systems Science and Theory	Java
Wilkes U	Wilkes-Barre, PA	2,388	Digital Communication and Media/Multimedia Computer and Information Sciences Information Science	?
York College	York, PA	5,008	Management Information Systems Computer Science Computer Engineering	Java

Gartner Research, 2012

http://www.gartner.com/technology/home.jsp

In the last minute, there were 204 million emails sent, 61,000 hours of music listened to on Pandora, 20 million photo views and 3 million uploads to Flickr, 100,000 tweets, 6 million view and 277,000 Facebook logins and 2 million plus Google searches.

IT Demand: By 2017, 40% of enterprise contact information will have leaked on to Facebook via employee mobile devices. Server workloads growth 10% a year. Network bandwidth demand growing 35%. Storage capacity, 50%. Power costs growth, 20%. Throwing more capacity at demand is not the solution; you need to optimize capacity in new ways: virtualization, data deduplication, etc. Over 1.5 billion Web pages are accessible, 450,000 iPhone apps, over 200,000 Android apps, 10,500 radio stations, 5,500 magazine. All drives demand for IT.

Operational complexity: By 2014, employee devices will be compromised by malware at 2x the rate of corporate-owned devices. For every 25% increase in functionality of a system, there is 100% increase in complexity. Cisco 6500 Switch has 2,390 pages of installation and reference information. Oracle 10g database has 1,677 parameters. With Exchange on VMware there are 115 performance/capacity settings.

Figure 1: The Future Demand for Talent

How will the landscape for talent change over the next five to 10 years?

	Western Europe	North America	Developed Asia	Eastern Europe	MENA	Latin America	Emerging Asia
Total (% change)	3.5%	6.1%	10.0%	10.0%	12.7%	13.0%	22.2%
Industrial	-0.5%	-2.4%	11.4%	2.4%	28.7%	17.1%	37.7%
Emerging	26.1%	38.3%	8.4%	19.8%	6.3%	10.2%	13.3%
Heavy manufact.	24.6%	1.7%	1.7%	33.2%	10.3%	17.8%	60.3%
Business services	-4.4%	0.3%	51.4%	6.8%	30.1%	-0.6%	40.0%
Financial services	13.2%	-8.1%	4.9%	-9.9%	31.6%	48.6%	20.9%
Energy	-11.3%	22.7%	8.0%	8.7%	12.2%	-11.9%	33.0%
Travel and transport	-9.3%	-1.4%	36.5%	5.0%	14.1%	32.9%	32.6%
Life sciences	-4.1%	4.2%	8.2%	19.7%	8.6%	20.4%	16.6%

Source: Oxford Economics

WHO OWNS WHAT LIES BENEATH? THE STATUS OF DORMANT OIL AND GAS RIGHTS IN PENNSYLVANIA, AND A CALL FOR REVISION OF THE LAW

Donna Steslow, Kutztown University of Pennsylvania

ABSTRACT

With the growth of Marcellus shale natural gas drilling over the past decade, laws pertaining to mineral and oil and gas rights have been revisited. When subsurface oil and gas rights have been severed from surface ownership years ago, it is difficult to determine who owns the rights and who should benefit financially from the natural gas extraction. This paper proposes that Pennsylvania should consider revision of its current dormant oil and gas law to ensure that surface owners can make a claim for ownership of abandoned oil and gas rights below their land.

INTRODUCTION

The growth of natural gas extraction through hydraulic fracturing/fracking, in the Marcellus shale geologic formation has created an interesting application of laws relating to subsurface ownership rights. These laws, some of which have been in existence for hundreds of years, have caused courts and lawmakers to reconsider who owns the subsurface rights and who should profit from extraction of natural gas as a result of this growing industry. Property laws relating to subsurface rights are being revisited because it may not be possible to locate owners of subsurface rights which have been severed generations ago as the result of traditional oil drilling or coal mining.

Pennsylvania and its neighbors, Ohio and West Virginia, have taken slightly different approaches to who should own or make claim to subsurface rights severed in the past. Pennsylvania in particular has some peculiarities which create complexities for land owners and gas companies. Pennsylvania's Dormant Oil and Gas Act, revised in 2006, details the procedures for preservation of royalties when owners of oil and gas rights cannot be located. The statute does not protect the owners of the surface rights and unlike Ohio and West Virginia, provide no opportunity to make a claim for long dormant oil and gas rights.

This article explains subsurface ownership rights, describes what happens when these rights have been severed from surface ownership and not exercised for long periods of time, compares dormant mineral subsurface rights law in states lying within the Marcellus shale formation and proposes additional revision to Pennsylvania's Dormant Oil and Gas Act in order to economically benefit surface owners.

HYDRAULIC FRACTURING: A BOOMING INDUSTRY

The Marcellus shale geologic formation stretches across West Virginia, Ohio, Pennsylvania, New York, and a small portion of northwestern Virginia. The shale is normally located at a depth of 5000 to 9000 feet. The Utica Shale formation is located a few thousand feet below the Marcellus, overlaps the Marcellus Region, but is larger in area. Utica shale drilling has only recently begun to be explored, and has taken place in Eastern Ohio (King). Newer technologies such as hydraulic fracturing and horizontal drilling have accelerated natural gas extraction from the Marcellus and Utica shale over the past decade. An additional factor contributing to the rapid growth of natural gas extraction is the increasing demand for clean domestic energy. As a result, landowners may benefit financially by leasing oil and gas rights on their real estate. (Weidner, p. 3)

In 2005, in Pennsylvania, a total of six new natural gas wells were drilled in the Marcellus Shale formation. Compare this to 2009, 2010 and 2011, when 818, 1637, and 2044 new wells were drilled, respectively (Centre County Natural Gas Update 2012). One producer alone, Chesapeake Energy, LLC, reported 666 active wells throughout Pennsylvania during the first six months of 2013 according to data collected by the Pennsylvania Department of Environmental Protection's Bureau of Oil and Gas Management (PA DEP Oil and Gas Reporting 2013).

The economic implications of Marcellus Shale drilling to gas companies, businesses and landowners are considerable. In Pennsylvania alone it is estimated that $1.46 trillion in gross value is possible as a result of gas extraction. Landowners' estimated royalties as a result of gas extraction could reach $200 billion. The estimated value or royalty value per well over the lifetime of the well is approximately $2.5 million. By Pennsylvania law, landowners are guaranteed a royalty of at least one-eighth, or 12.5 percent

(Kelsey& Murphy, Federal Reserve, p. 2, 2011). By Pennsylvania law, landowners are guaranteed a royalty of at least one-eighth, or 12.5 percent of natural gas extracted from the real estate. Additionally, owners of oil and gas rights may negotiate a signing bonus and rental payments. (Weidner, p. 7-9.) It is because of this new wave natural gas extraction and its financial implications that the well-settled property law relating to oil and gas rights is again being revisited in the courts and legislatures of states in the Marcellus and Utica Shale regions.

SEVERANCE OF SUBSURFACE RIGHTS AND PROPERTY LAW

Generally, English and United States common law include subsurface ownership in the bundle of property ownership (The term "subsurface" used in this paper refers to oil, gas *and* mineral rights, because as discussed below, Pennsylvania makes a distinction between *mineral rights* and *oil and gas rights*). Ownership of real property normally includes airspace and subsurface rights (Clarkson et al., p. 975, 2012). However, the owner of the fee simple estate (owner of the entire bundle of rights associated with real estate ownership) may grant, devise (leave to heirs) or reserve subsurface rights (sell the surface but keep the subsurface rights). This is how severance of the surface estate from the mineral estate occurs. Historically, subsurface rights began to be severed from surface ownership after the discovery of oil in western Pennsylvania in 1859 by Colonel Drake (Russell and Fromme, p. 289, 2012). "Landowners hoping to quickly realize the value of their minerals will sell portions of their mineral estates to willing buyers. Investors will hedge the risks of ownership by acquiring a fractional share. After each generation, those interests become further and further fractionalized as the estate is divided among each interest-holder's respective heirs" (Russell and Fromme, p. 289, 2012). These severed subsurface rights have become dormant because they are no longer exercised.

Thus, heirs may never know that they have a fraction of subsurface ownership created long ago when oil drilling was booming in eastern states. The subsurface ownership rights are then said to be dormant if unexercised for many years. Present-day surface owners may be unaware of the severance of subsurface ownership, or if they are, may be unable to locate those heirs who may have a claim to ownership. Gas drilling companies may need to expend significant resources in order to locate the owner[s] of subsurface rights, and even then may be unable to do so. Who should profit when the owner of these rights is impossible to trace? This may not have been an issue once traditional oil drilling ceased in the eastern states; however, technological improvements making hydraulic fracturing a cost-effective method to extract natural gas deep below the surface has resurrected these dormant mineral rights and the issue of their ownership.

PENNSYLVANIA'S UNIQUE "DUNHAM RULE": STILL THE LAW

While many jurisdictions include oil and gas rights as part of mineral rights, Pennsylvania does not. In 2013, in the case of *Butler v. Powers Estate*, the Pennsylvania Supreme Court upheld the 1882 case of *Dunham & Short v. Kirkpatrick,* which held that a reservation in a conveyance of minerals without the specification of oil and/or gas *does not* include oil and gas rights, unless clear and convincing evidence is presented to the contrary. The decision of the Supreme Court was unanimous. The court recognized that today, oil and gas would be recognized scientifically as minerals, but at the time of the Dunham decision, they were not, because they were not of a metallic nature. Interestingly, Appellees raised the argument that Marcellus shale gas is different from other natural gas because it comes from a mineral, shale, and ought to be included in the mineral reservation. The Supreme Court rejected this argument: "While we recognize the hydrofracturing methods are employed to obtain both coalbed gas and Marcellus shale natural gas, the basis of the Dunham Rule lies in the common understanding of the substance itself, not the means used to bring those substances to the surface" (Butler v. Powers Estate, p. 39).

Since gas companies were relying upon the Dunham rule in tracing ownership of oil and gas rights, it settled the question and did not cause great upheaval to the current practice. In other words, if mineral rights had been transferred years ago, it is presumed that the surface owner retains the oil and gas rights, unless they were specifically conveyed. This allows the gas drilling companies to negotiate a lease with the surface owner. If the Pennsylvania Supreme Court had overturned the Dunham Rule and concluded oil and gas rights were included in the general descriptor mineral rights, the legality of these leases could be questioned. The question remains, however: what happens when owners of oils and gas rights cannot be located? What happens if the owners, even if traceable, have not exercised these rights for many years? States in the Marcellus shale region have developed three different approaches to dormant rights.

THREE DIFFERENT APPROACHES TO DORMANT MINERAL RIGHTS

Mineral rights legal experts have categorized dormant mineral legislation into three categories: 1) the trusteeship approach, currently in effect in Pennsylvania; 2) the mineral lapse statutes utilized in Ohio, Michigan, Tennessee, and Indiana; and 3) the hybrid approach, utilized in Kentucky and West Virginia (Russell & Fromme, p. 293-4, 2012).

Pennsylvania's Dormant Oil and Gas Act, 58 P.S. § 701.1 *et.seq* (2006), does not transfer dormant oil and gas rights to the surface owner. Rather, the Act allows any person (or entity) owning an interest in oil or gas underlying a tract of land to petition the Court of Common Pleas in the county in which the tract is located to declare a trust for unknown owners of oil and gas rights. The trust is to be administered by a "financial institution authorized to do business in the Commonwealth" (§701.4). All rental and royalty payments are paid to the trustee. The trust is to remain in force "until the unknown owners of the oil and gas interests in question have been identified." What happens next is interesting: If property goes unclaimed in Pennsylvania for a period of five years, the holder must turn the proceeds over to the Pennsylvania Treasury's Bureau of Unclaimed Property. As of August 2013, approximately $3.3 million in unclaimed oil and gas royalties were held in the Pennsylvania Treasury (Spencer). The Treasury then attempts to find the property owner. Eventually most unclaimed funds are deposited by the State Treasurer in the General Fund of the Commonwealth, with an amount reserved for any claims made (Pennsylvania Unclaimed Property Law, § 1301.18). As a result, the surface owner currently has no mechanism in Pennsylvania to claim royalties for profitable drilling beneath their real estate.

In comparison, the mineral lapse statute approach does provide the opportunity for a surface owner to make a possible claim for ownership of dormant subsurface rights. States using this approach generally delineate a procedure for a surface owner to follow in order to establish that the mineral interests have been abandoned for the statutorily required period of time, and then establish ownership. Ohio's Dormant Mineral Act, for example, provides a procedure for the surface owner to notify the subsurface owner of his or her intent to declare the mineral interest abandoned for the required 20-year period. If the owner of the mineral interest cannot be located, the noticed may be published in a newspaper. After this notice, the owner of the mineral rights has 60 days to respond. If there is no response, the surface owner can memorialize the abandonment with the county and the mineral interest will vest with the surface owner (Ohio Rev. Code Ann., § 5301.56; Russell and Fromme, p. 303, 2012). Other states, such as Michigan and Indiana, have implemented so-called self-executing mineral lapse statutes, in which the surface owner is not required to locate or notify the mineral rights owner. (Russell and Fromme, p. 299-300). The constitutionality of Indiana's self-executing mineral lapse statute was upheld by the United States Supreme Court in the case of *Texaco, Inc. V. Short*, 454 U.S. 516, (1982). The case provides guidelines for legislation which would not constitute an unconstitutional taking of property under the Fifth Amendment. Since Indiana's statute was drafted strongly in favor of the surface owner, and provided for automatic reversion to the surface owner without notice, states are generally free to provide legislative mechanisms to address dormant subsurface rights.

The third approach for lapsed mineral rights is a hybrid of the first two. In West Virginia, for example, a trust is established for unclaimed mineral extraction royalties similar to the procedure in Pennsylvania, and after seven years, the circuit court is required to notify the surface owners, and order conveyance of the mineral interest to the owner of the surface estate (Russell & Fromme, p. 309-312, 2012, citing W. Va. Code Ann. § 55-12A-1 *et seq.*).

Pennsylvania, therefore, stands alone in the region of Marcellus shale activity as lacking a statutory mechanism for surface owners to make a claim for dormant oil and gas rights. Commentators have pointed out that traditional legal remedies such as adverse possession and quiet title actions are also unavailable to surface owners since the former requires exercising the subsurface rights (drilling) for a required period of time, and the latter requires establishing title by a preponderance of the evidence, which cannot be proven in the case of severed estates (McManus 2010).

PROPOSED AMENDMENTS TO PENNSYLVANIA'S DORMANT OIL AND GAS ACT

Three bills have been recently introduced in the Pennsylvania Legislature, two in the House and one in the Senate. According to Kenneth Navitsky, legislative aide to State Representative Ryan MacKenzie, "None have moved beyond committee at this time," and there is no expectation that the bills will move forward this Legislative Session (Navitsky email dated July 20, 2014).

The first proposed amendment, House Bill 97, provides "for the return of oil and gas rights to a surface owner if an interest in the oil or gas owned by a person other than the owner of the surface property is deemed abandoned following 20 years of dormancy" (Godshall 2012). This proposal is similar to Ohio's dormant mineral rights law discussed above. The bill further allows the protection of oil and gas interests from abandonment if the owner of the interests files a notice in the county Recorder of Deeds office. If this notice is filed, the rights need not be exercised to protect them.

The second proposed amendment, House Bill 1444, "would provide surface property owners the ability to claim title to the subsurface mineral rights after a period of ten years nonuse by the subsurface mineral rights owner" by filing with the county Recorder of Deeds and would also create a cause of action for the settlement of mineral rights (White 2013). Interestingly, the term *mineral* is used by the sponsor of this bill instead of *oil and gas*.

The third proposed bill, sponsored by Senator Gene Yaw, allows the surface owner to file an action to quiet title, and when mineral or oil and gas rights have been abandoned for a period of 50 years, creates a "rebuttable presumption" of abandonment. The surface owner would still need to prove abandonment in the action (Yaw 2013).

Of these three proposed amendments to Pennsylvania's Dormant Oil and Gas Law, the first may be the best alternative. The second alternative, with a period of abandonment of ten years could be perceived as not sufficiently protecting potential subsurface owners. A period of abandonment for 20 years mirrors the Ohio statute and would balance the interests of the surface and potential holders of subsurface interests. The simple procedure of filing a notice in the Recorder of Deeds would eliminate the expenses of a court action as proposed in Yaw's Senate bill. The first alternative above also further protects the interests of any subsurface owners who are not actively exercising their right to allow extraction, but who do not wish to abandon these rights. Unfortunately, there are many other pieces of legislation and budgetary issues occupying the Legislature and at this time, it appears unlikely these bills will leave committee in the near future.

An additional potential hurdle to amendment to allow for surface owners to claim oil and gas rights in Pennsylvania would be opposition from the gas industry. Drillers would have to renegotiate leases with surface owners, who may be unwilling to allow fracking to take place, or alternatively, may demand a higher price. This opposition should not prevent passage of amendment, however, since all neighboring states where drilling for natural gas is occurring provide some type of protection for surface owners.

CONCLUSION

Because property law varies from state to state, approaches to dormant oil and gas rights differ. It seems more equitable to allow surface owners to profit when Marcellus shale hydraulic fracturing is occurring under their feet, especially when the true owner of the oil and gas rights is unknown. Simplification of the process through legislation provides a procedure for surface owners to reunite their surface estate with the mineral estate and obtain a share of the potentially large profit from the Marcellus shale gas reserves.

Amendment to Pennsylvania's Dormant Oil and Gas Act should be considered in order to give surface owners this opportunity as in neighboring states.

REFERENCES

Butler v. Charles Powers Estate 3d, *65*, (885) *Atlantic Reporter* (2013).

Clarkson, K. W., Miller, R. L., & Cross, F. B. (2012). *Business law: text and cases: legal, ethical, global, and corporate environment* (12th ed.). Mason, OH: South-Western Cengage Learning.

Godshall, R. (2012, December 21). Session Information - The official website for the Pennsylvania General Assembly. *The official website for the Pennsylvania General Assembly.* Retrieved October 6, 2014, from http://www.legis.state.pa.us//cfdocs/Legis/CSM/showMemoPublic.cfm?chamber =H&SPick=20130&cospocos=10323.

Kelsey, T., & Murphy, T. Economic implications of natural gas drilling in the Marcellus shale region. – *Cascade: No. 77, Spring/Summer 2011*. Retrieved October 5, 2014, from http://www.philadelphiafed.org/community-development/publications/cascade/77/01_economic-implications-of-gas-drilling-in-marcellus-shale.cfm.

King, H. Utica Shale - the natural gas giant below the Marcellus. *Geology.com: News and Information for Geology & Earth Science*. Retrieved October 3, 2014, from http://geology.com/utica-shale.

Marcellus Wells Drilled in Centre County by Year. (2012, February 1). *Centre County Natural Gas Update*. Retrieved October 6, 2014, from http://www.centrecountypa.gov/ DocumentCenter/View/303.

McManus, L. (2010, January 24). Pennsylvania Dormant Oil and Gas Act. Retrieved October 6, 2014, from http://www.lexisnexis.com/legalnewsroom/energy/b/oil-gas-energy/archive/2010/01/24/pennsylvania-dormant-oil-and-gas-act.aspx.

Pennsylvania Department of Oil & Gas Reporting Website - Statewide Data Downloads By Reporting Period. *Jan - Dec 2013(Conventional wells)*. Retrieved October 6, 2014, from http://www.paoilandgasreporting.state.pa,us/publicreports.

Pennsylvania Dormant Oil and Gas Act (2006). *Lexis-Nexis Academic*, *58*(701.1). Retrieved October 6, 2014 from lexisnexis.com/legal.

Pennsylvania Unclaimed Property Law (2002). Retrieved October 6, 2014 from *Lexis-Nexis Academic*, *72*, 1301.18.

Russell, G., & Fromme, L. (2012). Dormant mineral acts: addressing severed mineral interests in a fractional world. *Energy & Mineral Law Institute*, *33*(8), 288. Retrieved October 6, 2014, from http://www.philadelphiafed.org/community-development/publications/cascade/77/01_economic-implications-of-gas-drilling-in-marcellus-shale.cfm.

Spencer, M. (2013, August 13). More than $3M in dormant oil and gas royalties held by Pa. Treasury – Pittsburgh Business Times. *Pittsburgh Business Times*. Retrieved October 6, 2014, from http://www.bizjournals.com/pittsburgh/blog/energy/2013/08/more-than-3m-in-dormant-oil-and-gas.html.

Weidner, K. Natural gas exploration: a landowner's guide to leasing land in Pennsylvania. *College of Agricultural Sciences -Publication search*. Retrieved October 6, 2014, from http://pubs.cas.psu.edu/FreePubs/pdfs/ua448.pdf.

White, J. (2013, January 3). Bill Information - The official website for the Pennsylvania General Assembly. *The official website for the Pennsylvania General Assembly.* Retrieved October 6, 2014, from http://www.legis.state.pa.us/cfdocs/billInfo/billInfo.cfm?sYear=2013&sInd=0&body=H&type=B&bn=1444.

Yaw, G. (2013, January 15). Session Information - The official website for the Pennsylvania General Assembly. *The official website for the Pennsylvania General Assembly.* Retrieved October 6, 2014, from http://www.legis.state.pa.us//cfdocs/Legis/CSM/showMemoPublic.cfm?chamber=S&SPick=20130&cosponId=11036.

Donna Steslow, J.D. is Associate Professor of Business Law, in the Department of Business Administration, Kutztown University of Pennsylvania. Her research interests are in the areas of pedagogy related to business law, and real estate law.

SENSEMAKING APPROACH TO MAKING CORPORATE SOCIAL RESPONSIBILITY DECISIONS UNDER UNCERTAINTY

Zinaida Taran, Penn State Harrisburg
Stephen C. Betts, William Paterson University

ABSTRACT

Corporate Social Responsibility (CSR) is an area of increasing importance to corporate policy makers, consumers and the media as the public at-large become increasingly concerned with issues such as climate change, and as competitors increase their levels of commitment to making the planet a better place. However, choosing particular CSR activities can be difficult. The alternatives are numerous and complicated. The potential consequences and benefits of the available choices are uncertain on many levels, and conflicting stakeholder interests add an extra layer of complexity. Questions need to be answered regarding the possible choices of action including: Will our action do more harm than good?; Will it harm some stakeholders while benefiting others?; Will our reputation suffer with some or all of our stakeholders? In an effort to effectively deal with such issues, we suggest a *sensemaking* approach to the process model of making CSR decisions in the presence of multiple stakeholder interests. We will show that this approach is particularly suited to processes characterized by uncertainty, ambiguity and equivocality.

INTRODUCTION

Corporate Social Responsibility (CSR) is comprised of actions and initiatives that go beyond the company's economic and legal obligations (Betts & Taran, 2011). CSR has become an important, societally salient idea (Cramer, Jonker, & van der Heijden, 2004). These importance and salience for general public, policy makers, practitioners, and academics display themselves in many ways. For example, problems such as climate change preoccupy policy makers on the highest level. Companies rush to launch CSR initiatives. A great number of publications (Cramer et. al., 2004) and even journals, for example Social Responsibility Journal, are dedicated to the topic of CSR.

Choosing CSR activities can be very difficult. First of all, there are a great number of possible activities to undertake and causes and charities to support (National Center for Charitable Statistics at the Urban Institute, 2014). Moreover, true causes of problems and the best course of actions to address them might not be clear or even known in general, and managers specifically might not have adequate resources, background and training regarding these problems and their solutions. Additionally, the intended beneficiaries of the company's CSR activities, the stakeholders, may not have a very accurate, consistent or clear knowledge and understanding of their own problems and desired ways to fix them. Thus a manager making a CSR decision essentially faces every facet of potential problems with the available information and its interpretation (Zach, 1999): both complexity and uncertainty of the situation, and both equivocality and ambiguity regarding its interpretation.

Given the informational problems and difficulties involved in choosing CSR activities, it may prove beneficial and help generate useful insight to view process of choosing CSR activities as a process of sensemaking (Weick, 1969; 1979; 2009). The sensemaking framework has been developed to explain organizational processes under conditions of equivocality and informational ignorance (Weick, 1969). Sensemaking looks at organizational functioning as "removing equivocality from information and structuring processes so that this removal is possible." (Weick, 1969, p. 29). This paper explains CSR decision making through the sensemaking framework and outlines a sensemaking process model for making CSR decisions under situations of problematic information, equivocality and ambiguity (Zack, 1999). Additionally, it addresses the necessity to account for and direct stakeholder sensemaking integrated with the efforts to direct sensemaking within the organization.

CSR AND COMPLEXITY

CSR can be defined as "actions that appear to further some social good, beyond the interests of the firm and that which is required by law" (McWilliams, Siegel & Wright, 2011). These actions can be directed at anything whatsoever that somehow makes the life of a group of people or some environmental issue better, from helping local theater, to supporting a homeless shelter, to planting trees.

Typically, CSR is discussed in relation to the organizations' stakeholders, all groups of people who have some interest in the company (Maignan, Ferrell, & Ferrell, 2005). Typically, stakeholders are classified into functional groups based on the role they are playing vis-a-vis the company: employees, customers, suppliers, activist groups, local community, etc. (Clarkson, 1995). Such groups can be not only heterogeneous with regards to their CSR concerns and aspirations, they can have downright conflicting expectations and demands (Betts & Taran, 2011).

Each such group and subgroup of stakeholders is facing a very complicated set of inter-related circumstances, problems and solutions that would make them better off in some way. For example, middle school students and their parents in a Central PA town would benefit if a sponsor helped with providing the school with some extra equipment or supplies. The same people and their children might benefit from having a nice park to walk and play; special after-school programs; variety of healthcare initiatives, entertainment options and much, much more. Some interests and problems/solutions overlap and, to an extent, benefit all the groups. An example of an action that benefits many groups is cleaning the air of toxic fumes. Some can be competing for the same resources, thus helping one group will deprive another: a patch of land can either host a nature preserve or a school for children with learning disabilities; it can either be a garden or a parking lot, but it cannot be both. Some can be in direct conflict, for example, when Christians want to see a Christmas tree on display in their town and an activist Atheist group finds such displays offensive.

Problems and circumstances are highly interrelated and attempts at solutions may lead to chain reaction of consequences, some desired and some damaging. For example, attempts by the government of India to alleviate the problem of hunger by using subsidies to control the price of urea, the fertilizer that increases crop productivity, initially helped produce more food more efficiently. However, as more urea was plowed into the ground, it was getting oversaturated to the point that by 2009 this land was barely able to produce anything, and so the poor farmers had to plough more and more fertilizer into the soil. Counterintuitive to the eye of a non-Chemistry major observer, this fertilization could not be stopped because then the poor would really starve and start rioting, so the government was forced to continue subsidizing urea and by 2009 was paying more than $20 billion for it (Anand, 2010).

From the above, it is obvious that anybody who wishes to help humanity and the environment in some way is presented with an incredibly complex array of choices that may make life better for some people in some aspect but may also bring about worsening of the situation for these people or some other people, now or in the future.

This problem is further complicated by the fact that these stakeholder groups and subgroups do not necessarily have a clear, informed and accurate picture of what will make their lives better in various aspects. Furthermore, availability heuristic (Tversky & Kahneman, 1973) leads these groups to over exaggerate the importance of some problems, real or even imaginary while completely neglecting some others, possibly more important, critical and real. Lack of clarity in business literature and media over CSR contribute to the process of confusion by the stakeholders (Guthey & Morsing, 2014).

Essentially, the manager making CSR decisions may encounter all the different permutations of problematic information (Zach, 1999): there may be too much data to make sense of it impossible, and not enough information on some of the critical aspects and consequences; there are may be too many possible ways to interpret some of the information and precious little understanding and interpretation for some of it. The available information is rife with complexity, uncertainty, equivocality and ambiguity.

If an organization that wishes to do CSR is to reap some benefits for itself in the form of reputational equity, higher customer preference, and resulting financial gains, they will be well advised to choose the directions of CSR based on the expressed interests of their stakeholders. In situations where the expressed interests conflict and/or are internally inconsistent, the manager needs to choose directions depending on their own convictions, importance of particular stakeholders, and the degree of their entrenchment in their views (Betts & Taran, 2011).

The role of manager's own and the organization's own stands with regards to CSR depends on the strength of their convictions and their motivation to engage in CSR. Throughout this essay, most attention is given to those who engage in CSR at least partially for the benefit to society, environment, or particular groups. Decision making is much simpler for those who are either dedicated to a particular cause (For example, the management of a wine store in Upstate New York really cared about the local school for children with learning disabilities. All the top managers

served on the Board of that school, and put considerable effort toward the cause, including large personal donations) or are doing CSR strictly as some sort of neutralizing maneuver. In the former case, the manager is likely to continue what they are doing anyway, and in the latter it becomes simply a part of the marketing and communications tasks.

The question of the managerial motivation to engage in CSR is largely outside the scope of this essay. Interestingly, if the stakeholder's knowledge and understanding of what's best for them were accurate, the manager acting based on the most vocal stakeholder concerns without regard to anything else and no particular convictions as might be the case when the manager is only doing it for show, it might be the absolutely best optimal way to approach CSR. However, due to the fact that the stakeholders are largely ignorant of the actual problems and worse yet, solutions for them, such an approach will yield at best suboptimal solutions.

It is clear that choosing CSR directions with care is very complicated. Luckily, there exists an approach to handling such complicated systems saddled with complexity, ambiguity, equivocality, and uncertainty. We find it in the theory organizational sensemaking (Weick, 1979).

SENSEMAKING

Sensemaking model elaborates on the ideas introduced by Simon (1947) of an organization as a cognitively driven process. It treats organizing as essentially flows of information, flows of organizational sensemaking. Organizational sensemaking is defined as "the process by which people enact equivocal environments and interact in ways that seek to reduce that equivocality" (Eisenberg, 2006, p. 1696; Weick, 1969). The process of organizing thus becomes a process of sensemaking by the people within the firm. The ideas of organizational sensemaking are rooted in the works of Karl Weick (1969; 1979; 2009). An important aspect of Weick's ideas was that of embracing the imperfect information instead of treating it as model noise and allowing the manager in the model to act not based on accurate information but some imperfect mental representation, *sensemaking* created in the manager's mind (Eisenberg, 2006). "[Actors] create and constitute the environment to which they react; the environment is put there by the actors within the organization and by no one else" (Weick, 1969, p. 28).

Sensemaking views managers making decisions as having limited cognitive capacity. These managers view incoming information through the lens of their personal experiences and schemas, constructing their own meaning and interpretation to the information that reaches past their perceptual filters (Higgings et. al., 1977; Weick, 2009)

It is important to underscore that sense-making is not a one-way street, but rather an iterative process (Chen & Zhang, 2009), and the more complex and equivocal the situation, the more iterations the actors go through until they construct plausible stories that are consistent with the organizational identity (its culture, its processes, its spirit). Such stories are at the core of sensemaking: "Stories tend to seem plausible when they tap into ongoing sense of current climate, are consistent with other data, facilitate ongoing projects, reduce equivocality, provide an aura of accuracy and offer a potentially exciting future" (Wieck, 1969).

Sensemaking process, the process of creation of plausible stories, is facilitated and directed by the change agents, champions who help the organization to make sense of the meaning of CSR through their words and actions (Cramer, et. al., 2004). In particular, with regard to CSR, the importance of the individual translator's interpretation of institutional CSR pressure is what oftentimes leads to the choice of actions and then subsequently becomes the corporate CSR approach (Ditlev-Simonsen, 2010).

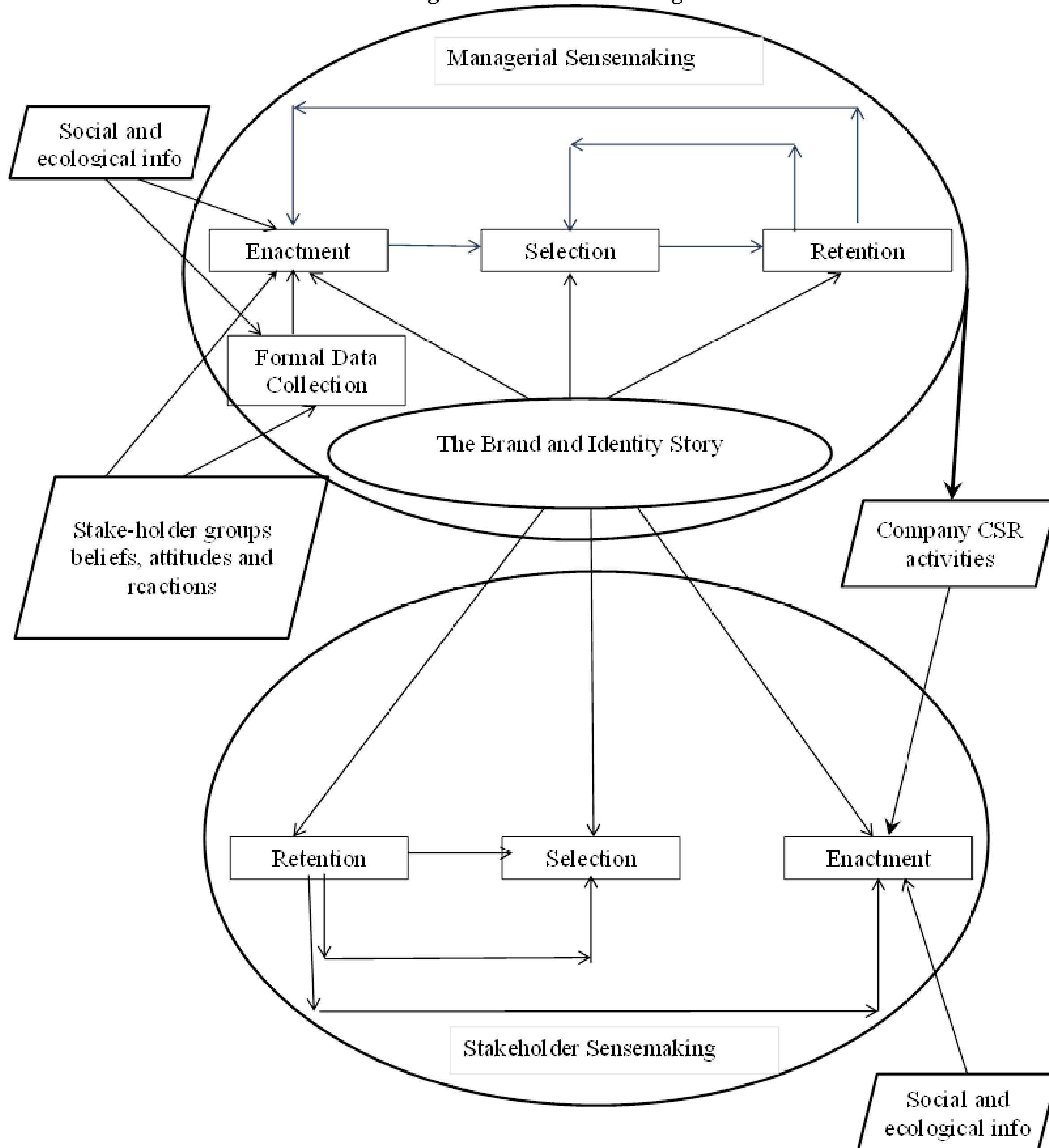
Sensemaking ideas have been applied to various managerial decision making processes (Barr, 1998; Calori et al., 1992; Isabella & Waddock, 1994). Some efforts to view CSR through the sensemaking lens were conducted (Basu & Palazzo, 2006; Cramer et. al., 2006; Ditlev-Simonsen, 2010; Hanke & Stark, 2009).

CSR SENSEMAKING

Sensemaking regarding a company's CSR involves noticing, bracketing, selecting and retaining information regarding social and ecological concerns in general and information about stakeholders' concerns regarding social and environmental issues. This sensemaking process involves cognitive, linguistic and conative elements (how we think, what words we use to frame the issues, what we are going to do about them) (Basu & Palazzo, 2006).

The process of CSR sensemaking has essentially two kinds of inputs that differ in their consequences for the organization as well as how the data about each might be collected: a) general information about social and ecological issues and solutions: Examples, a) the news that a certain chemical agent is killing some local bird species, or that the President announced a priority program for the education of underprivileged children, and b) information about important stakeholder groups, their problems, concerns and expectations with regards to CSR. It is imperative that a formal mechanism is set in place to gather both kinds of information. The stakeholder information can be handled by the marketing research group and needs to be budgeted for appropriately. Such purposefully collected information minimizes the chances that an important emerging trend will not be noticed until too late. Additionally, information on stakeholder sensemaking and reactions to prior actions need to be included as feedback information to managerial sensemaking.

Figure 1. CSR sensemaking



This process of sensemaking is presented in Figure 1. Noticed information is bracketed –again, introducing the formal information gathering process would help classifying the information correctly and help guide the sensemaking. This noticed and bracketed information will often be selected and retained in the process of creation of a plausible story that fits with organizational identity such as, "How can we NOT help these poor children?" These plausible stories will then guide the choice of CSR actions, as a large part of what's going on in this process is significant reduction of possibilities until only few are left as the best (Weick, 2009).

It is important that a mechanism exists to ensure that such sensemaking is explicitly considering the brand image and corporate image that the business is trying to portray. When the manager is selecting the most important plausible stories to react to, they must do so in light of the branding tasks. If no formal mechanism for providing such lens is offered and no purposeful effort is made the CSR story may not match the branding story. This formal mechanism, the "Branding Lens" serves a dual purpose, as will be shown later.

Once the manager makes sense and constructs a plausible story about the CSR needs of their stakeholders, they need to find plausibly adequate solutions to the problem. Hypothetically, in many cases both the problem and the solution arrive together ("please help our team travel to another state for the competition"). If that's not the case, then a separate loop of sensemaking is needed to identify solutions.

If in the process of making sense of stakeholder information it transpires that some stakeholder interests' conflict, another round of sensemaking will be needed to view the conflict through the lens of both, the branding objectives and the firms' own stand. Then a story will emerge where choices can be made as CSR matching and advocacy strategies (Betts & Taran, 2011).

In a next step, the story of CSR activities undertaken based on the above process will get absorbed into the organizational identity. However, more sensemaking is required to create a story of the impact of the activities to guide the choices in the future.

In their turn, stakeholders enact, select and retain stories of company's CSR. In the process of sensemaking they can completely ignore the CSR efforts or create a plausible story that fits with their own schemas. In the stakeholders' story, the business will either be a hero, a caring entity, or a devious scheming money-maker only doing it for some gain, or even in the worst-case scenario stemming from a stakeholder conflict a devious evil entity. It seems that stakeholder sensemaking loops could usefully be thought of as an integral part of the CSR sensemaking process, since stakeholder stories of CSR on previous rounds serve as important input information for managerial sensemaking in the next rounds, and the same communication elements, 'the Branding Lens" that help the manager form a plausible story should be used to help the stakeholder form a positive and plausible story. This Branding Lens should be a large part of the organization's integrated communications.

Integrating both, stakeholder and managerial sensemaking processes into one model allows to ensure that the external image the company is trying to portray is close to its identity as a company.

DISCUSSION AND CONCLUSIONS

Choosing CSR directions and activities is a very complicated task. Different groups of stakeholders have different interests and concerns, a very incomplete and inaccurate picture of concerns and solutions driven by ignorance, availability heuristic and other mental biases. Sometimes, CSR interests of stakeholders come into direct conflict with one another. Issues are complicated, hopelessly intertwined, replete with unforeseen consequences and unknown long-term effects. True causes and optimal solutions are at times not known even to experts, let alone to the manager.

This is exactly the kind of a process for which sensemaking framework (Basu & Palazzo, 2006; Wieck, 1969) has been developed. Sensemaking process views the process of organizing as the process of managers creating plausible stories, making sense of the information they notice. Adapting the process for CSR, we are talking about managers noticing and bracketing information about the stakeholders concerns, selecting and retaining the important concerns that fit with the branding objectives and the managers/firm's stands on issues and choosing matching or advocacy approaches if there is conflict among stakeholders.

The process above includes two kinds of inputs. It seems that societal and environmental objectives could be facilitated better if an external body helped reducing the uncertainty of such information by providing adequate amounts of information, helped reducing its complexity by offering meaningful categorizations and explanations, and helped reduce its equivocality by offering meaningful interpretations of it. One way to achieve that would be some sort of an expert knowledge repository which businesses could access.

Such expert knowledge repository might also help with the problem of evaluating the impact of CSR activities, an important step to properly incorporate the story of any particular activities into the joint corporate memory and storytelling.

Additionally, the model needs to account for the stakeholder sensemaking. Its outcomes need to be incorporated into feedback to managerial sensemaking process. Integrated communications should be used to help both, the manager and the stakeholders in their sensemaking.

Directions for further research involve empirical testing of the model. Additionally, of interest are various moderating and mediating factors influencing which CSR stories will be more likely to get enacted, selected and retained and how different ways of making sense of CSR information affects organizational outputs. A separate direction of research would be to investigate different motivations of the businesses and managers and how they relate to the process.

The contribution of this research is in providing an outline of a process model complete with important mechanisms for making better stories in the context of the brand objectives and in the presence of possible stakeholder conflict regarding CSR.

REFERENCES

Anand, G. (2010, Feb 23). Green Revolution in India Wilts As Subsidies Backfire. *Wall Street Journal*, A1.

Angus-leppan, T., Metcalf, L., & Benn, S. (2010). Leadership Styles And CSR Practice: An Examination Of Sensemaking, Institutional Drivers And CSR Leadership. *Journal of Business Ethics, 93*(2), 189-213.

Barr, P. S. (1998). Adapting to Unfamiliar Environmental Events: A Look at the Evolution of Interpretation and Its Role in Strategic Change. *Organization Science*, *9*(6), 644–669.

Basu, K. and G. Pallazzo, (2008). Corporate Social Responsibility: A Process Model of Sensemaking. *Academy of Management Journal*, *33*(1), 122–136.

Betts, S.C. & Taran, Z. (2011). Conflicting Issues and Corporate Social Responsibility: Aligning Organizational Efforts With Stakeholder Interests, *Journal of International Management Studies*, *11*(3), pp. 39-46.

Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, *4*, 497-505.

Calori, R., G. Johnson & Sarnin, P. (1992). French And British Top Managers' Understanding Of The Structure And Dynamics Of Their Industries: A Cognitive Analysis And Comparison, *British Journal of Management*, *3*(1), 61–78.

Chen, H., & Zhang, H. (2009). Two-Way Communication Strategy On CSR Information In China. Social Responsibility Journal, *5*(4), 440-449.

Clarkson, M. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, *20*(1), 92–117.

Cramer, J., Jonker, J., & van der Heijden, A. (2004). Making Sense Of Corporate Social Responsibility. *Journal of Business Ethics, 55*(2), 215-222.

Cramer, J., A. van der Heijden, & Jonker, J. (2006). Corporate Social Responsibility: Making Sense Through Thinking and Acting. *Business Ethics A European Review. 15*(4), 380–389.

Ditlev-Simonsen, C. D. (2010). From Corporate Social Responsibility Awareness To Action? *Social Responsibility Journal*, *6*(3), 452-468.

Eisenberg, E. M. (2006). Karl Wieck And The Aesthetics Of Contingency. *Organization Studies, 27*(11), 1693-1707.

Guthey, E., & Morsing, M. (2014). CSR And The Mediated Emergence Of Strategic Ambiguity. *Journal of Business Ethics, 120*(4), 555-569.

Hanke, T., & Stark, W. (2009). Strategy Development: Conceptual Framework On Corporate Social Responsibility. *Journal of Business Ethics, 85*, 507-516.

Higgins, T. E., W. S. Rholes, & Jones, C.R. (1977). Category Accessibility and Impression Formation. *Journal of Experimental Social Psychology*, *13*(2), 141–154.

Isabella, L. A. & Waddock, S. A. (1994). Top Management Team Certainty: Environmental Assessments, Teamwork, and Performance Implications. *Journal of Management*, *20*(4), 835–859.

Maignan, I., Ferrell, O. C. & Ferrell, L. (2005). A Stakeholder Model for Implementing Social Responsibility in Marketing. *European Journal of Marketing, 39*(9), 956-977, 1217, 1219.

McWilliams, A., Siegel, D. and Wright, P.M. (2011). Corporate Social Responsibility: a Theory of the Firm Perspective. *Academy of Management Review*, *26*(1), 117-27.

National Center for Charitable Statistics at the Urban Institute (2014). Quick Facts About Nonprofitshttp://nccs.urban.org/statistics/quickfacts.cfm , last accessed on November 23, 2014.

Parisi, C., & Hockerts, K. N. (2008). Managerial Mindsets And Performance Measurement Systems Of CSR-Related Intangibles. *Measuring Business Excellence, 12*(2), 51-67.

Simon, H. (1947). *Administrative Behaviour: A Study of Decision-Making Processes in Administrative Organizations*. McMillan, New York, NY.

Tversky, A. & Kahneman, D. (1973). Availability: a Heuristic for Judging Frequency and Probability. *Cognitive Psychology*, *5*, 207-232.

Weick, K. (1969). *The Social Psychology of Organizing*. Addison-Wesley, Reading, MA.

Weick, K. (1979) *The Social Psychology of Organizing*, 2 ed. Addison-Wesley, Reading, MA.

Weick, K. (2009). *Making Sense of Organization.* Wiley, Chichester, GB.

Zack, M.H. (1999). Managing Organizational Ignorance. *Knowledge Directions*, *1*(1), 36-49.

Dr. Zinaida Taran earned her PhD at Rutgers, the State University of New Jersey. She is currently an Assistant Professor of Marketing at Penn State University –Harrisburg. Her research interests revolve around consumer perceptions especially with regards to branding issues and CSR.

Dr. Stephen Betts earned his PhD at Rutgers, the State University of New Jersey. He is currently a professor of Management at William Paterson University. His research interests involve how differences between individuals and situational elements interact and influence behavior and decision making in organizational settings.

DOES A PUBLIC TRUST HAVE STANDING IN A FORECLOSURE ACTION?

Anthony P. Vigna, Ramapo College of New Jersey

ABSTRACT

Foreclosure in today's economic environment is a common occurrence. The plaintiff in a foreclosure action must be the beneficial owner of the note and mortgage. In many cases the plaintiff is a Trust because the loan has been securitized. Securitization is a process where a Trust Fund is created and filled with loans which provide a steady stream of income to Wall Street investors. The Trust sells to investors' certificates of the Trust that represent the income stream of those loans.

The Trust is a pass thru entity and is set up to be tax exempt and bankrupt remote, that is, the Trust is not taxable and the last to sell has no legal liability. It is organized under U.S.C. Title 26 Subtitle A, Chapter 1, Subchapter M, Part 2 Section 850-862. The organizer of the Trust must file a pooling and service agreement (PSA) with the Security Exchange Commission (SEC). The pooling and servicing agreement contains the rules which organized the Trust and which the Trust must adhere to in order to maintain their tax exempt status. This paper entertains the question: Does a Public Trust have standing to commence and maintain a foreclosure action?

HYPOTHESIS

Trusts do not have standing because the Trust fails to own the Note and Mortgage at the time of commencement of the action. This study analyzed five loans in foreclosure. Each loan had at least one defect that would prohibit an action in foreclosure. A company called Certified Forensic Loan Auditors LLC from Texas tracked five different loans thru the Bloomberg system. Each loan, it was discovered had at least one or more defects that would prohibit a Trust from brining a foreclosure action. In all cases that the loan was securitized, the Trust sold strips to investors that provided a steady cash stream. It was discovered that each Trust that had a defaulting loan, payments to the investors went uninterrupted. An analysis of the PSA discovered that each Trust had a credit default swap. That if a loan went into default, payments were still made to the investors.

INTRODUCTION

In order for a Trust to maintain an action in a foreclosure matter the Trust must prove the following: 1. the loan was completed prior to the Cutoff date, 2. the loan package was transferred in three separate sales before the Closing date, 3. the Trust did not violate the pooling and servicing agreement organized under USC Title 26 Subtitle A chapter 1, subchapter M, part 2 section 850-862, 4. the Trust has possession and is the owner of the Note and Mortgage or have authority to commence a foreclosure action 5. That notice have been given to the borrower in accordance with 15 U.S. Code 1641 (g) at each transfer or sale of the Note. 6. There must be an injury redressable under the law.

BACKROUND

A public Trust organized under USC Title 26 Subtitle A chapter 1, subchapter M, part 2 section 850-862 is not permitted to hold assets in their own right. Under the rules of organization, in order to be tax exempt and bankruptcy remote, three separate sales must occur before the loan reaches its final resting place. To achieve a true sale and an unbroken chain of title the following three assignments of mortgages should be recorded with the County and there should be three alonges of the Note attached to the original Note along with notification to the original borrower that the Note was sold under 15 U.S. Code 1641 (g).

The necessary steps which must be followed during the three separate sales are as follows:

Step one: Original lender sells and delivers loan to the sponsor. An assignment of mortgage is required under common law along with an alonge and notification to the original borrower under 15 U.S. Code 1641 (g) that the loan was sold.

Step two: Sponsor sells and delivers the loan to the Depositor. An assignment of mortgage is required under common law along with an alonge and notification to the original borrower under 15 U.S. Code 1641 (g) that the loan was sold.

Step Three: Depositor sells and delivers the loan to the Trustee of the Trust. An assignment is required under common law along with an alonge and notification to the original borrower under 15 U.S. Code 1641 (g) that the loan was sold.

Many times the Note is transferred into the Mortgage Electronic Registration System, Inc. (MERS) from the Trust or from the original lender or sponsor directly. MERS does not own the Notes or pay value. MERS is merely a private tracking system. When Notes are transferred into MERS the Notes are endorsed in blank converting the Note to Bearer paper from Order paper.

There are two types of paper, Order paper and Bearer paper. A Note is an Order instrument. Order paper is paid to a particular person either natural or artificial. Bearer paper is payable to the holder of the Note. A Note is a two party instrument, that is, it involves two individuals, the maker and payee.

Negotiation is the process of transferring ownership. With regards to Order paper, negotiation is accomplished by signing or endorsing the Note and delivery of the paper to the next party. Only the party that the Note is payable to, can negotiate the paper. With regards to bearer paper, it is negotiated by mere delivery. A signature or endorsement is not required. A very simple example of bearer paper is currency.

Order paper can be converted into bearer paper by endorsement of the Note in blank (payable to bearer). If a document is converted into bearer paper, then the chain of ownership cannot be tracked in the public records.
It should be noted that the original Note, when it is delivered into MERS or to a Trust, is intentionally destroyed. An interesting fact is that the intentional destruction of the Note is evidence that the obligation no longer exist. However an electronic image of the Note is maintained by the Trust or by MERS. Interesting that when the Note is paid off, the Note is never returned to the borrower. However a satisfaction of mortgage is recorded in the County records and in some cases the mortgage is returned to the borrower marked paid.

Negotiation of bearer paper is never accomplished in MERS as there is no physical delivery of the Note. The transfer appears only as a journal entry on the MERS system. There are two very important dates that must be adhered to during the three transfers. The Cutoff date and the Closing date which are stated in the PSA and incorporated in the formation of the Trust. The Trust is authorized to accept only loans made and placed into the Trust as per the PSA cutoff and closing dates. The Cutoff date is the date that a loan package must close with the original borrower. The Closing date is the last date the loan package can be placed into the Trust. If the loan package misses either the Cut-off date or the Closing date the loan cannot be a part of the Trust.

Once the Notes are in the Trust, Certificates are sold to investors representing a cash stream of the notes that generate interest revenue. These Certificates represent a debt security to the public. There are two conflicting theories with regards to the Notes/certificates that are sold to investors. The Note is either converted into a security and is governed under Article 8 of the Uniform Commercial Code or the Note is governed under Article 3 of the UCC and has been fractionalized.

Under the security theory of the sale of a certificate, the transfer of the Note to the Trust and the subsequent sale of Certificates could trigger Article 8. REMIC USC TITLE 26, SUBTITLE A, CHAPTER 1, SUBCHAPTER M, PART II SECTION – 850-862 law must be followed. A CREDITOR cannot be a CREDITOR if they do not hold the asset in question, i.e.: the NOTE and/or the property; and Mortgage Pass-through Trusts (i.e. R.E.M.I.C., as defined in TITLE 26, Subtitle A, CHAPTER 1, Subchapter M, PART II, §§ 850-862) cannot hold assets; if they do, the Trust's tax exempt status is violated and the Trust itself is void ab initio.

Additionally a plaintiff cannot commence an action of foreclosure if the certificate is deemed a security. The Note could be deemed a security because it has a life of more than nine months by true definition. See 15 U.S.C. 78c 10. Under the security theory, if the Note is a security, than its Deed of Trust/Mortgage is violated and it can no longer be part of the obligation of the contract.

An argument that the Certificate is not a security and cannot represent a share of the assets, as does a stock certificate in a corporation is because the Trust would still hold the asset (Note). Holding assets would violate the PSA. Effectively the Trust would be acting Ultra Vires in contravention of the PSA, which would either collapse the Trust or void the Trust's tax exempt status.

Under the fractionalization of the Note theory, if the Certificates represent a partial interest in the Note, then the Note was fractionalized. The Trust no longer owns the Note and the Trust must have the authorization of each fractional owner of the Note in order to stand in the shoes of the owner and commence the action. The foreclosure complaint in the sample size never allege they are authorized to commence the action.

Financial Accounting Standards Board Number (FASB) 140 indicates that when a Note is securitized the process includes a de-recognition of the Note. De-recognition of the Note is the process of bringing the Note to a zero balance on a previous holder's books. De-recognition prevents the Note from being carried as an asset by the current holder and previous holder simultaneously.

For example, the seller/Depositor de-recognizes the Note, in a transfer from depositor to Trust, while the Trust is carrying the Note as an asset. Or the Trust de-recognizes the Note while the certificate holder holds the strip. In the previous examples, the Trust who claims to be the beneficial holder of the Note is holding a Note with a dollar amount of 0.00.

When the Trust sells Certificates, the Note is de-recognized as the asset is sold to Certificate holders who are the beneficial owners of the pooled notes. Recall, the Trust cannot hold assets as they are a pass thru entity and the Note is governed under Article 3 as a Note under the UCC. If the Trust does not own the Note because it was fractionalized than the Trust cannot commence a foreclosure action.

The Note cannot exist under both Article 3 and 8 of the Uniform Commercial Code (UCC). The Note cannot be a Note and a security at the same time. If the Note existed under both Article 3 and 8, a form of security fraud called double-dipping would be committed.

A Note is a promise to pay. The Mortgage, governed under Article 9, is the teeth behind the Note. If the mortgagor does not keep their promise to pay, the mortgagee can take the property in foreclosure, sell the property and use the proceeds to satisfy the mortgagor's obligation. The balance of proceeds in excess of the obligation amount due would go to the mortgagor.

An action may be commenced on either the Note or the Note and Mortgage. If suing <u>only</u> on the Note, the plaintiff can obtain <u>only</u> a money Judgment. A money judgment does not entitle the judgment holder to utilize the alternative payment process, namely, to foreclose on the property, sell it at auction and use the proceeds to pay the Note obligation.

Alternatively, the Plaintiff can commence an action on the Note and Mortgage. If a judgment is obtained on the Note and Mortgage the Plaintiff can sell the property to satisfy the obligation with any remaining proceeds in excess of the obligation to the Mortgagor.

An action can never be commenced based solely on the Mortgage because it is collateral for the obligation represented by the Note. If the Note is destroyed, or is unenforceable, the mortgage becomes a nullity on the property.

The Trust must be injured. This last requirement appears to be obvious as a foreclosure action does not take place unless there is a failure to pay. However, it is interesting that each pooling and servicing agreement has credit default swaps. Apparently the drafters of these Trusts had the 1933 and 1934 SEC Acts in mind. That is, if a Note is defaulted, the Trust insures the Note with an insurance company. For instance AIG would insure that the Note be paid. The insurance company is required under credit default swaps to make payments to the Trust, who have defaulting borrowers and subsequently the Trust makes payments to investors of certificates. Thus the real party in interest with a Trust with a defaulted loan is the insurance company. A possible cause of why AIG nearly went bankrupt shortly after the mortgage crises in 2007/08. The insurance company "stands in the shoes" of the defaulted borrower and makes payments on their behalf to the Trust and the ultimate receiver of the income, the Certificate

holder. It is the insurance company that is injured and not the Trust or certificate holders. It would appear that the insurance company is the only party that can maintain a foreclosure action.

RESULTS and DISCUSSION

An analysis of the Trust revealed that the Trust modified loans in default and foreclosed on other loans not in the sample size. It appears as an incentive to the Trust to modify was the issue of standing. The sample size included modified loans. When the issue of standing was raised, litigation counsel was retained. The standing defense included a security theory and a fractionalization of the Note theory.

A security cannot be the instrument to commence a foreclosure action. Ownership of the Note by the Trust would violate the PSA and the organizational statutes. Under the fractionalization of Note theory, the Trust only appears to own the Note when in fact strip owners are the true owners.

The Appellate Division of the Appellant Court of Connecticut held that a bank that sued for foreclosure did not have "standing" to sue because the bank was not in possession of the Mortgage Note when it filed the complaint. Destsche Bank National Trust Company Trustee v. Paul Bialobrzeski (AC 29884), Fleet National Bank v. Vijay J. Nazareth et. el.75 Conn. App. 791 (2003)(AC 22610). Courts in various jurisdictions have held that a bank does not have standing to foreclose on a home because it did not possess an assignment in its favor of the Mortgage Note. Fleet National Bank v. Vijay J. Nazareth et. el.75 Conn. App. 791 (2003)Wells Fargo Bank v. Ford, 2011 WL 250561 (N.J. Super. 2011). Appellate Division of the Superior Court of New Jersey held that the bank could not establish that they were assigned the Mortgage Note because it could not produce authentic or certified copies of either the Mortgage Note or the assignment.

"Standing to sue is critical to the proper functioning of the judicial system. It is a threshold issue. If standing is blocked, the pathway to the Courthouse is blocked. …Standing to sue requires an interest in the claim at issue in the lawsuit that the law will recognize as a sufficient predicate for determining the issue at the litigant's request….If a plaintiff lacks standing to sue, the plaintiff may not proceed in the action." IndyMac Bank v. Bethley, 2009 NY Slip Op 50186(U) (N.Y. Sup. Ct. 2/6/2009), citing Saratoga County Chamber of Commerce, Inc. v. Pataki, 100 NY2d 801, 812 [2003], cert denied 540 US 1017 [2003]; Caprer v. Nussbaum, 36 AD3d 176, 181 [2d Dept. 2006]; Stark v. Goldberg, 297 A2d 203 [1st Dept. 2002].

The Note can be split between the principle and the income or the cash stream of the Note. The principle of the Note is evidenced by the tangible Note itself. The cash stream of the Note is an intangible. The intangible cash stream is evidenced through the sale of a Certificate of the Trust funded by the payment stream of the Note. It should be noted that the cash stream that is bought via certificates is allowable under UCC article 9. Transfer of ownership through certificates is an actual transfer of a partial ownership of a beneficial interest in the intangible payment stream of the Note. The transaction of dividing the intangible payment stream of the Note transfers partial ownership of the Note and Deed of Trust (Mortgage) to the owners of the Certificates. Transfer of the Note would require that partial interest in the Note and Mortgage instruments be transferred to all and each multiple owner of the certificate to comply with local laws of the jurisdiction.

The Trustee of the Trust only appears to be the owner of the Note. In fact the Trust either violates its PSA by holding the note and issuing a security (that represents a partial ownership of the Note) or Certificates are sold that represent a partial interest in the Note and the Trust is no longer the owner. An owner of a Certificate strips the cash stream from the Note's debt obligation and therefore there are multiple beneficial owners of the Note. In Commercial Money Ctr., Inc. 350 B.R. 465, 473-79 (B.A.P. 9th Cir. 2006 rev'g 56 U.C.C rep Serv. (West) 54 Bank S.D. Jan 27, 2005 the Court held: "This language on its face defines chattel paper to mean the records that evidence certain things, including monetary obligations. Payment streams stripped from the underlying leases are not records that evidence obligations, they are monetary obligations."

There are three transferrable parts to a Note and Deed of Trust. Two parts are tangible and the remaining part is intangible. The Note can be split into two parts. The tangible portion is evidenced by the Note itself. The Note represents evidence of the obligation to pay the principle. The Note also has an intangible aspect that is represented by the cash stream that is generated from the Note. The Deed of Trust (mortgage) is a tangible document and is the collateral for the Note. The Deed of Trust is a contract alternative for collecting on the promise to pay the obligation.

Additionally the security interest (the Deed of Trust - a tangible asset), under common law, must be transferred simultaneously to each owner of the Note. Both the owner of the obligation and the owner of the cash stream must have an assignment of the mortgage in order to maintain the Notes secured status. Carpenter v. Logan 271, 83 US 271, 274, 21 L. Ed. 313 (1872) the US Supreme Court stated "The note and mortgage are inseparable; the former as essential, the later as an incident. An assignment of the note carries the mortgage with it, while assignment of the latter is a nullity." Failing to transfer the Deed of Trust simultaneously renders the secured Note to become an unsecured Note. Ownership of an unsecured Note (no longer secured by a real property Deed of Trust), separates by the obligation from the conditions to enforce the Power of Sale. It should be recognized that under UCC law, assignments of mortgages are not required. The mortgage is assumed to move with the transfer of the note.

Common law has no means to re-establish an unsecured negotiable instrument back into a secured negotiable instrument. To be a secured Holder in due course with rights of power of sale, the holder must demonstrate an unbroken chain of properly recorded assignments of the Deed of Trust and a parallel unbroken chain of completed Note endorsements. Where such alternative collection methods have failed to follow law, and such holder has pledged a Note and Deed of Trust knowing that such was not a secured party, the pledger would have unclean hands and by his actions dissolve the method of alternative collection means.

CONCLUSION

There are approximately 196 countries in the world depending upon which country is counting and if the country counted is recognized. Most of those countries are dependent upon the US economy in one manner or another. Many of those countries invest in US Trusts that are backed by real estate mortgages. The United States National Economic Security dictates that the foreclosure process maintain its' integrity. That when a loan defaults the maker of the loan is required to repay the unpaid original loan proceeds. The alternative payment method, namely foreclosure, cannot be derailed by mere technicalities. Congress and the President are powerless to change statues affecting the past. The Courts are the last line of defense to maintain the United States economic security. While it appears that a Trust does not have standing to commence a foreclosure action, the Trusts are modifying loans with estoppel agreements to condone the past errors. Where Trusts have no alternative, they are foreclosing on properties where they are not the rightful party bringing the action. The parties foreclosed upon usually have financial difficulties and do not have the financial means to defend the action and the property is foreclosed.

Out of the sample size all the loans are still in litigation. The oldest loan in litigation is 8 years. Loan modifications have been offered on two loans at extremely attractive rates and terms. A loan modification has an estoppel clause that in essence states that any wrong doing will not be pursued by the borrower. Along with a loan modification, a new note and mortgage are executed.

REFERENCES

Caprer v. Nussbaum, 36 AD3d 176, 181 [2d Dept. 2006].

Carpenter v. Logan 271, 83 US 271, 274, 21 L. Ed. 313 (1872).

Commercial Money Ctr., Inc. (Debtor), FDIC (Appellant) v. Kipperman (Appellee) 350 B.R. 465, 473-79 B.A.P. 9th Cir. 2006 rev'g 56 U.C.C rep Serv. (West) 54 Bank S.D. Jan 27, 2005.

Destsche Bank National Trust Company Trustee v. Paul Bialobrzeski (AC 29884).

Fleet National Bank v. Vijay J. Nazareth et. el.75 Conn. App. 791 (2003)(AC 22610).

IndyMac Bank v. Bethley, 2009 NY Slip Op 50186(U) (N.Y. Sup. Ct. 2/6/2009).

Saratoga County Chamber of Commerce, Inc. v. Pataki, 100 NY2d 801, 812 [2003], cert denied 540 US 1017 [2003].

Stark v. Goldberg, 297 A2d 203 [1st Dept. 2002].

U.S.C. Title 26 Subtitle A, Chapter 1, Subchapter M, Part 2 Section 850-862
15 U.S. Code 1641 (g).

Wells Fargo Bank v. Ford, 2011 WL 250561 (N.J. Super. 2011).

Anthony J. Vigna, JD, CPA joined the faculty of Ramapo College of New Jersey in 2013. He teaches courses in Accounting and Taxation. He is a member of the Bar in New York and Connecticut. His research interests are in Taxation and the Law.

Table of Vocabulary

Alonge – a document attached to the original Note that indicates the succession of ownership.

Bearer paper is payable to the holder of the Note.

Closing date – the last date which a loan can be placed in the Trust as per the pooling and service agreement.

Credit default swap – An agreement in the pooling and servicing agreement with an insurance company that will make payment on behalf of a defaulting loan.

Cutoff date - date on which a loan must be closed as per the Pooling and service agreement.

Defendant – The party that defends the action.

Foreclosure – alternative collection method involving taking of property for sale at auction and satisfying an obligation.

Mortgage Electronic Registration System, Inc. (MERS) – A private tracking system on Notes.

Negotiation is the process of transferring ownership of commercial paper. For order paper, a signature and delivery is required. For bearer paper only delivery is required.

Order paper is paid to a particular person either natural or artificial.

Plaintiff – the party to commence an action.

Pooling and Servicing agreement contains the rules which organized the Trust and which the Trust must adhere to in order to maintain their tax exempt status.

Securitization is a process where a Trust Fund is created and filled with loans which provide a steady stream of income to Wall Street investors.

Standing- To sue requires an interest in the claim at issue in the lawsuit that the law will recognize as a sufficient predicate for determining the issue at the litigant's request. If a plaintiff lacks standing to sue, the plaintiff may not proceed in the action.

Ultra Vires - actions taken by a corporation that exceed the scope of power given to them by laws or charter.

CRITICAL SUCCESS FACTORS FOR HYBRIDSOFTWARE DEVELOPMENT METHODOLOGY: A QUANTITATIVE ANALYSIS

Gerald P. Wright, Husson University

ABSTRACT

Worldwide Information Technology expenditures are expected to exceed $3 trillion in 2014. Unfortunately, research demonstrates that only slightly more than one third of all Information Technology projects are successful. The purpose of this research is to investigate the impact of hybrid software development methodologies on ten critical success factors. Seventy one responses were gathered from United States Project Managers using a web-based survey. Software development projects were classified as using an agile, structured, or hybrid software development methodology. The results of the study indicate that there does not appear to be a statically significant difference between projects utilizing either a hybrid or agile software development methodology for any of the ten critical success factors. There does appear to be a statistically significant difference between projects utilizing a hybrid versus structured methodology for five of the ten critical success factors. Four of these factors are components of the success of the project outcome or result, with the remaining factor being the project specific success factor.

INTRODUCTION

Information Technology (IT) expenditures are forecast to exceed $3.8 trillion dollars worldwide in 2014 (Gartner, 2014). Given the present difficult business environment, it is unfortunate that research shows that only 39% of all IT projects are successful (Standish Group, 2013). Thus, organizations should seek out those activities that contribute to project success in an effort to maximize the utility derived from the projects undertaken.

While there are many ways to classify software development methodologies, one alternative breaks the methodology into three categories: structured, agile, or hybrid. Structured methodologies, such as the Software Development Life Cycle (SDLC) and Waterfall, are rooted in the earliest practices of software engineering, and tend to be very formal, highly structured using a finite number of phased process steps (Mugridge, 2008). Agile methodologies, such as Scrum, are characterized by a multi-iteration process of design, develop, test, implement, and repeat along with a tight coupling of the team and customer typically through an embedded client (Barlow et al., 2011; Highsmith, 2004). Hybrid methodologies combine various aspects of these two approaches.

Despite the significant quantity of research regarding various aspects of Project Management (PM), project success rates have only improved from 16% to 39% over the last two decades (Standish Group, 1995; Standish Group, 2013). Many studies have identified that the overall strategy of the organization, the specific characteristics of the project, and the software development methodology all must be properly aligned (Benediktsson, Dalcher, & Thorbergsson, 2006; Guntamukkala et al., 2006; Slaughter, Levine, Ramesh, Pries-Heje, & Baskerville, 2006; Stanisevic, Obradovic, & Jankovic, 2011). However, Rob (2006) cautions against the use of hybrid methodologies as the resulting misalignment outweighs any potential benefits. In reality, little is known about the overall impact of hybrid software development methodologies on project success rates.

The purpose of this research was to examine the relationship, if any, between hybrid software development methodology and project success rates.

HYPOTHESES

Turner and Muller (2006) identified ten critical success factors that map to two distinct areas: PM, and project success. The former is a measurement of the PM process, and the latter is a measurement of the results or outcomes of the project. Of the ten critical success factors, three factors make up PM success: (a) project performance as measured by the triple constraint, (b) meeting user requirements, and (c) project team satisfaction (Turner & Muller, 2006). An additional six factors make up project success: (a) achieving project purpose, (b) reoccurring business, and satisfaction of the (c) client, (d) end-user, (e) supplier, and (f) other stakeholders. The tenth and final critical success factor is a project specific success factor defined by the user. Thus, it could be either a process of outcome success factor depending on how it is defined.

These ten critical success factors form the dependent variables for this study. The software development methodology, either agile, structured, or hybrid, was the dependent variable for this study. Thus, there were ten hypotheses, one for each of the critical success factors mentioned above, for this study.

Ho1: There is no statistically significant relationship between the software development methodology utilized and success as measured by the triple constraint.

Ha1: There is a statistically significant relationship between the software development methodology utilized and success as measured by the triple constraint.

Ho2: There is no statistically significant relationship between the software development methodology utilized and success as measured by the user requirements.

Ha2: There is a statistically significant relationship between the software development methodology utilized and success as measured by the user requirements.

Ho3: There is no statistically significant relationship between the software development methodology utilized and success as measured by the project team.

Ha3: There is a statistically significant relationship between the software development methodology utilized and success as measured by the project team.

Ho4: There is no statistically significant relationship between the software development methodology utilized and success as measured by reoccurring business for the client.

Ha4: There is a statistically significant relationship between the software development methodology utilized and success as measured by reoccurring business for the client.

Ho5: There is no statistically significant relationship between the software development methodology utilized and success as measured by the purpose of the project.

Ha5: There is a statistically significant relationship between the software development methodology utilized and success as measured by the purpose of the project.

Ho6: There is no statistically significant relationship between the software development methodology utilized and success as measured by client satisfaction with the project.

Ha6: There is a statistically significant relationship between the software development methodology utilized and success as measured by client satisfaction with the project.

Ho7: There is no statistically significant relationship between the software development methodology utilized and success as measured by end user satisfaction with the project.

Ha7: There is a statistically significant relationship between the software development methodology utilized and success as measured by end user satisfaction with the project.

Ho8: There is no statistically significant relationship between the software development methodology utilized and success as measured by supplier satisfaction with the project.

Ha8: There is a statistically significant relationship between the software development methodology utilized and success as measured by supplier satisfaction with the project.

Ho9: There is no statistically significant relationship between the software development methodology utilized and success as measured by other stakeholder satisfaction with the project.

Ha9: There is a statistically significant relationship between the software development methodology utilized and success as measured by other stakeholder satisfaction with the project.

Ho10: There is no statistically significant relationship between the software development methodology utilized and success as measured by user defined success factor.

Ha10: There is a statistically significant relationship between the software development methodology utilized and success as measured by user defined success factor.

REVIEW OF LITERATURE

Project Management

Projects are naturally complex endeavors. If they were not, then all the processes of PM would not be required to manage them effectively. Early research efforts in PM over a period of approximately fifty years focused on managing the triple constraint of cost, time, and scope (Barnes, 2006; Fondahl, 1961; Gantt, 1919; Malcolm, Roseboom, Clark, & Fazar, 1959). This research resulted in a significant number of important management tools such as Earned Value Management (EVM), and Cost Benefit Analysis (CBA) to manage cost, Gantt charts, Program Evaluation and Review Techniques (PERT), Activity on Arrow (AoA) and Activity on Node (AoN) diagrams, and Critical Path Method (CPM) to manage time, and Work Breakdown Structure (WBS) to manage scope (Eckstein, 1958; Gantt, 1919; Kelly & Walker, 1959; Malcolm et al., 1959). This research followed the traditions of the Taylor or Scientific School of Management by breaking down a large objective measure into subcomponents that could be managed effectively (Braverman, 2007).

One of the most significant studies in PM sought to establish a set of best practices and guidelines for PM (Wideman, 1986). The resulting guide is known as the Project Management Body of Knowledge (PMBOK), and the most recent version divided PM into ten district functional areas (Project Management Institute, 2013). The first four correspond to the three objective measures of the triple constraint, and quality. The remaining seven functional areas: integration, communication, procurement, human resource, risk, and stakeholder management follow principles of organizational structure and administration as found in the Administrative School of Management established by Fayol (Scott & Davis, 2007).

Project Management Success

Since Gantt (1919) first established the importance of time management, there have been a significant number of studies examining various aspects of PM success. However, despite the number of studies and their diversity, the overall project success rate, at only 39%, remains too low (Standish Group, 2013). Eman and Koru (2008) found that while project success rates did appear to be rising; there were two significant issues. First, many studies utilized questionable research methods. Second, a lack of a common definition of project success across the PM discipline or even between two studies made comparisons almost impossible.

Collins and Baccarini (2004) proposed that there were actually two project success measures: Project Management success, and project success. The former was a measurement of success of the overall Project Management process. The latter was a measurement of the success of the outcome or results of the project. Turner and Muller (2006) identified ten critical success factors: (a) project performance relative to the triple constraint, (b) meeting user requirements, (c) project team satisfaction, (d) achieving project purpose, (e) reoccurring business, and satisfaction of the (f) client, (g) end-user, (h) supplier, (i) other stakeholders, and (j) a project specific factor. Mapping the ten critical success factors from Turner and Muller (2006) to the two overall measures proposed by Collins an Baccarini (2004) one finds that the first three (a-c) are measures of PM success, the next six (d-i) are measures of process success, and the final one (j) could be either depending on how it is defined for the project.

Software Development Methodology

Debates between supporters of structured and agile methodologies regarding the merits of their chosen methodology can often be intense. Software developers on each side emphasize the benefits of their choice and the weaknesses of any alternatives. However, research has shown that a software development methodology should be selected based upon its alignment with the strategic goals of the organization as well as the specific needs of the project (Benediktsson, Dalcher, & Thorbergsson, 2006; Guntamukkala et al., 2006; Slaughter, Levine, Ramesh, Pries-Heje, & Baskerville, 2006; Stanisevic, Obradovic, & Jankovic, 2011).

Agile software development methodologies were formulated in the 1990's when developers felt that traditional structured methodologies were unable to meet the needs of their projects due to their rigidity and focus on documentation instead of the customer (Beck, 1999). The resulting Agile Manifesto posited that the people and journey are equally important parts of the development process (Beck et al., 2001). Agile software development can be summarized in four points: (a) people are important and not just a means to an end, (b) working software is a must, (c) customer involvement is far more essential than a signed contract, and (d) the rate of change in business is increasing (Fruhling & de Vreede, 2006).

Agile software development methodologies appear to have several proposed benefits over traditional methodologies including (a) higher programmer productivity, (b) fewer software bugs, (c) greater fluidity, and (d) greater flexibility (C3 Team, 1998; Greene & Fry, 2008; Poole & Huisman, 2001). However, it is difficult to validate these claims as direct comparison research is impractical (Erickson, Lyytinen & Siau, 2005). In addition, it does not appear that research has been conducted to determine if these benefits actually impact project success rates.

METHODS

This study was a non-experimental, survey-based, design utilizing an existing instrument.

The sampling frame for this study was a *Survey Monkey* survey of 71 United States Project Managers. A qualifying question was utilized to verify that only software development Project Managers participated in the research. The resulting data was downloaded onto a secure hard drive and analyzed using Microsoft Excel.

For this study, an existing instrument was used, with permission. Turner and Muller (2006) developed the instrument while conducting mixed-methods research studying the relationship between leadership and project success. It was validated via through triangulation validation of 400 responses from PMI Project Managers and semi-structured interviews of fourteen Project Mangers. Cronbach's alpha was utilized to test the reliability of their instrument and a high reliability ($\alpha = 0.87$) was found among the critical success factor responses.

The statistical method used for this research was a t-Test: Two-Sample Assuming Unequal Variances. For each hypothesis, the hybrid software development methodology was compared once to the structured methodology and once to the agile methodology for the critical success factor associated with the hypothesis. In each case an actual t-value was compared to the critical t-value at the level of statistical significance alpha of 0.05. If the actual t-value was greater than the critical t-value than the null hypothesis was rejected; otherwise we will fail to reject the null hypothesis.

RESULTS

Hybrid and Agile Software Development Methodologies

The first series of calculations compared hybrid software development methodologies with agile methodologies utilizing a t-Test: Two-Sample Assuming Unequal Variances.

For H1: success as measured by the triple constraint, software development projects utilizing a hybrid methodology ($M = 4.12$, $SD = 0.71$) did not differ from those utilizing an agile methodology ($M = 4.24$, $SD = 1.09$). Thus, we fail to reject the null hypothesis as the results were not statistically significant, $t(36) = -0.45$, $p = 0.659$.

For H2: success as measured by meeting the user requirements, software development projects utilizing a hybrid methodology ($M = 4.23$, $SD = 0.79$) did not differ from those utilizing an agile methodology ($M = 4.19$, $SD = 0.96$). Thus, we fail to reject the null hypothesis as the results were not statistically significant, $t(39) = 0.17$, $p = 0.865$.

For H3: success as measured by meeting the needs of the project team, software development projects utilizing a hybrid methodology ($M = 4.36$, $SD = 0.49$) did not differ from those utilizing an agile methodology ($M = 4.38$, $SD = 0.75$). Thus, we fail to reject the null hypothesis as the results were not statistically significant, $t(36) = -0.08$, $p = 0.939$.

For H4: success as measured by reoccurring business with the client, software development projects utilizing a hybrid methodology ($M = 4.41$, $SD = 0.61$) did not differ from those utilizing an agile methodology ($M = 4.24$, SD

= 0.69). Thus, we fail to reject the null hypothesis as the results were not statistically significant, t(41) = 0.77, p = 0.446.

For H5: success as measured by the project meeting the stated purpose, software development projects utilizing a hybrid methodology (M = 4.44, SD = 0.74) did not differ from those utilizing an agile methodology (M = 4.33, SD = 0.33). Thus, we fail to reject the null hypothesis as the results were not statistically significant, t(53) = 0.56, p = 0.580.

For H6: success as measured by the project satisfying the client, software development projects utilizing a hybrid methodology (M = 4.38, SD = 0.79) did not differ from those utilizing an agile methodology (M = 4.62, SD = 0.35). Thus, we fail to reject the null hypothesis as the results were not statistically significant, t(53) = -1.19, p = 0.240.

For H7: success as measured by the project satisfying the end user, software development projects utilizing a hybrid methodology (M = 4.32, SD = 0.65) did not differ from those utilizing an agile methodology (M = 4.38, SD = 0.45). Thus, we fail to reject the null hypothesis as the results were not statistically significant, t(48) = -0.29, p = 0.776.

For H8: success as measured by the project satisfying the supplier, software development projects utilizing a hybrid methodology (M = 4.47, SD = 0.62) did not differ from those utilizing an agile methodology (M = 4.29, SD = 0.71). Thus, we fail to reject the null hypothesis as the results were not statistically significant, t(40) = 0.81, p = 0.423.

For H9: success as measured by the project satisfying the other stakeholders, software development projects utilizing a hybrid methodology (M = 4.41, SD = 0.43) did not differ from those utilizing an agile methodology (M = 4.05, SD = 0.85). Thus, we fail to reject the null hypothesis as the results were not statistically significant, t(33) = 1.58, p = 0.123.

For H10: success as measured by the user defined project specific factor, software development projects utilizing a hybrid methodology (M = 4.38, SD = 0.49) did not differ from those utilizing an agile methodology (M = 3.86, SD = 1.23). Thus, we fail to reject the null hypothesis as the results were not statistically significant, t(30) = 1.95, p = 0.061.

In summary, the results of using a t-Test: Two-Sample Assuming Unequal Variances found that for the ten critical success factors there were no statistically significant differences in success rates for software development projects utilizing a hybrid methodology versus those utilizing an agile methodology. Table 1 summarizes these findings.

Table 1

t-Test: Two-Sample Assuming Unequal Variances Test Summary: Examining Hybrid and Agile Software Development Methodologies.

Hypothesis	Hybrid Mean	Hybrid Variance	Agile Mean	Agile Variance	df	t-stat	p-value
H1: triple constraint	4.12	0.71	4.24	1.09	36	-0.45	0.659
H2: user requirements	4.23	0.79	4.19	0.96	39	0.17	0.865
H3: measured by the project team	4.36	0.49	4.38	0.75	36	-0.08	0.939
H4: reoccurring business for the client	4.41	0.61	4.24	0.69	41	0.77	0.446
H5: purpose of the project	4.44	0.74	4.33	0.33	53	0.56	0.580
H6: client satisfaction	4.38	0.79	4.62	0.35	53	-1.19	0.240
H7: end user satisfaction	4.32	0.65	4.38	0.45	48	-0.29	0.776
H8: supplier satisfaction	4.47	0.62	4.29	0.71	40	0.81	0.423
H9: stakeholder satisfaction	4.41	0.43	4.05	0.85	33	1.58	0.123
H10: user defined success factor	4.38	0.49	3.86	1.23	30	1.95	0.061

Hybrid and Structured Software Development Methodologies

The second series of calculations compared hybrid software development methodologies with structured methodologies utilizing a t-Test: Two-Sample Assuming Unequal Variances.

For H1: success as measured by the triple constraint, software development projects utilizing a hybrid methodology (M = 4.12, SD = 0.71) did not differ from those utilizing a structured methodology (M = 4.13, SD = 1.45). Thus, we fail to reject the null hypothesis as the results were not statistically significant, t(22) = -0.02, p = 0.983.

For H2: success as measured by meeting the user requirements, software development projects utilizing a hybrid methodology (M = 4.23, SD = 0.79) did not differ from those utilizing a structured methodology (M = 4.56, SD = 0.66). Thus, we fail to reject the null hypothesis as the results were not statistically significant, t(32) = -1.29, p = 0.207.

For H3: success as measured by meeting the needs of the project team, software development projects utilizing a hybrid methodology (M = 4.36, SD = 0.49) did not differ from those utilizing a structured methodology (M = 4.44, SD = 0.40). Thus, we fail to reject the null hypothesis as the results were not statistically significant, t(33) = -0.37, p = 0.713.

For H4: success as measured by reoccurring business with the client, software development projects utilizing a hybrid methodology (M = 4.41, SD = 0.61) did not differ from those utilizing a structured methodology (M = 4.13, SD = 0.84). Thus, we fail to reject the null hypothesis as the results were not statistically significant, t(23) = 1.02, p = 0.316.

For H5: success as measured by the project meeting the stated purpose, software development projects utilizing a hybrid methodology (M = 4.44, SD = 0.74) did differ from those utilizing a structured methodology (M = 3.56, SD = 2.40). This difference is statistically significant at $p < 0.05$, resulting in the reject of the null hypothesis, t(19) = 2.12, p = 0.047.

For H6: success as measured by the project satisfying the client, software development projects utilizing a hybrid methodology (M = 4.38, SD = 0.79) did not differ from those utilizing a structured methodology (M = 4.56, SD = 0..40). Thus, we fail to reject the null hypothesis as the results were not statistically significant, t(40) = -0.82, p = 0.416.

For H7: success as measured by the project satisfying the end user, software development projects utilizing a hybrid methodology (M = 4.32, SD = 0.65) did differ from those utilizing a structured methodology (M = 3.44, SD = 2.53). This difference is statistically significant at $p < 0.05$, resulting in the reject of the null hypothesis, t(19) = 2.10, p = 0.049.

For H8: success as measured by the project satisfying the supplier, software development projects utilizing a hybrid methodology (M = 4.47, SD = 0.62) did differ from those utilizing a structured methodology (M = 3.13, SD = 1.45). This difference is statistically significant at $p < 0.05$, resulting in the reject of the null hypothesis, t(21) = 4.08, p = 0.001.

For H9: success as measured by the project satisfying the other stakeholders, software development projects utilizing a hybrid methodology (M = 4.41, SD = 0.43) did differ from those utilizing a structured methodology (M = 3.81, SD = 1.10). This difference is statistically significant at $p < 0.05$, resulting in the reject of the null hypothesis, t(21) = 2.10, p = 0.048.

For H10: success as measured by the user defined project specific factor, software development projects utilizing a hybrid methodology (M = 4.38, SD = 0.49) did differ from those utilizing a structured methodology (M = 3.56, SD = 1.60). This difference is statistically significant at $p < 0.05$, resulting in the reject of the null hypothesis, t(19) = 2.43, p = 0.025.

This section examined the difference between projects utilizing a hybrid software development methodology and projects utilizing a structured methodology using a t-Test: Two-Sample Assuming Unequal Variances at the $p < 0.05$ level. It was observed that for the three critical success factors related to PM success, H1 through H3, there was no statistically significant difference between success rates. However, there was a statistically significant difference for four of the six critical success factors related to project success: (H5) meeting the project purpose, (H7) end user satisfaction, (H8) supplier satisfaction, and (H9) other stakeholder satisfaction. In each case, the project utilizing the hybrid methodology exhibiting greater success. In addition, the user defined project specific success factor (H10)

was also found to have a statistically significant difference; once again with hybrid methodology projects exhibiting greater success. Table 2 summarizes these findings.

Table 2

t-Test: Two-Sample Assuming Unequal Variances Test Summary: Examining Hybrid and Structured Software Development Methodologies.

Hypothesis	Hybrid Mean	Hybrid Variance	Structure Mean	Structured Variance	df	t-stat	p-value
H1: triple constraint	4.12	0.71	4.13	1.45	22	-0.02	0.983
H2: user requirements	4.23	0.79	4.56	0.66	32	-1.29	0.207
H3: measured by the project team	4.36	0.49	4.44	0.40	33	-0.37	0.713
H4: reoccurring business for client	4.41	0.61	4.13	0.84	23	1.02	0.316
H5: purpose of the project	4.44	0.74	3.56	2.40	19	2.12	0.047*
H6: client satisfaction	4.38	0.79	4.56	0.40	40	-0.82	0.416
H7: end user satisfaction	4.32	0.65	3.44	2.53	19	2.10	0.049*
H8: supplier satisfaction	4.47	0.62	3.13	1.45	21	4.08	0.001*
H9: stakeholder satisfaction	4.41	0.43	3.81	1.10	21	2.10	0.048*
H10: user defined success factor	4.38	0.49	3.56	1.60	19	2.43	0.025*

* t-Test is significant at the 0.05 level (two-tailed)

DISCUSSION

While Rob (2006) cautions against the use of hybrid software development methodologies due to alignment issues, 34 out of 71 (almost 50%) respondents classified their project methodology as a hybrid methodology. So, despite the warnings, Project Managers must feel there are benefits to using a hybrid methodology. The purpose of this research was to establish if projects using a hybrid software development methodology were more successful, as measured by the ten critical success factors put forth by Turner and Muller (2006), than their agile and structured counterparts.

At first glance, it might be surprising that there were no statistically significance differences in the three critical success factors related to PM success (H1 through H3). The agile software development movement was born largely as a response to the perceived rigidity and misplaced focus on documentation of the traditional software development methodologies (Beck, 1999; Beck et al., 2001). One of principles of this movement was to shift the focus of the development process from the PM process to the project results. However, the results of this research supports the position that project teams appear to have successfully adapted the PM process to manage and control the triple constraint, meet user requirements, and satisfy the needs of the project team regardless of the software development methodology deployed.

Fruhling and de Vreede (2006) summarize agile software development as a methodology focused on the customer and project outcomes. So, it not unexpected that projects employing a hybrid methodology exhibited statistically significant higher success rates for four out of the six critical success factors related to project success when compared to projects employing a structured methodology. These four critical success factors were (H5) meeting the overall project purpose, and satisfaction of the (H7) end user, (H8) supplier, and (H9) other stakeholders. One notable absence from this list is (H6) satisfaction of the client, especially when considering the importance of client focus established in the Agile Manifesto (Beck et al., 2001). Thus, given the results, one may deduce that all methodologies adequately satisfy the needs of the customer. Likewise, reoccurring business with the client (H4) is not a focus of any of the software development methodologies listed, and in turn, displayed no statistically significant differences when tested.

Overall, given the results, it appears that projects applying a hybrid software development methodology are more successful, with regards to the project success, than projects applying a structured methodology. This may be attributable to aspects of agile methodologies focusing on the project outcomes.

RECOMMENDATION

For the practitioner, the results of this research may seem to suggest that projects should use hybrid software development methodologies. However, a significant body of research stresses the importance of alignment between three items: the strategic goals of the organization, the specific needs of the project, and the capabilities of the software development methodology deployed (Benediktsson, Dalcher, & Thorbergsson, 2006; Guntamukkala et al., 2006; Slaughter, Levine, Ramesh, Pries-Heje, & Baskerville, 2006; Stanisevic, Obradovic, & Jankovic, 2011).

Thus, a better alternative for practitioner is to heed the research regarding alignment, and incorporate aspects of agile software development methodology into projects using a structured methodology in order to increase the success with regards to the project outcomes as demonstrated in the above test results. Of course, care should be taken that any integration does not compromise said alignment.

LIMITATIONS

One limitation of this research study was that it used a statistical treatment to measure the differences in success rates between agile, structured and hybrid software development methodologies. Given that statistically significant differences were found, subsequent research should examine what specific aspects of a hybrid methodology can be attributed to the increase in success rates in order to provide a richer and deeper understanding of the subject.

CONCLUSION

Overall, the results of this study compelling demonstrate that software development projects utilizing a hybrid methodology have higher success rates, as measured by the project outcomes, than projects utilizing a structured methodology. Project Managers implementing these hybrid approaches have demonstrated the ability to integrate agile aspects associated with success into their structured methodologies; thereby, rising above the intense debates concerning the superior software development methodology.

REFERENCES

Barlow, J. B., Giboney, J. S., Keith, M. J., Wilson, D. W., Schuetzler, R. M., Lowry, P. B. & Vance, A. (2011). Overview and guidance on agile development in large organizations. *Communications of the Association for Information Systems, 29*(2), 25-44.

Barnes, M. (2006, August). Some origins of modern project management - a personal history. *Project Management World Today Viewpoints.* Retrieved February 24, 2008 from http://www.pmforum.org/viewpoints/2006/08_4.htm .

Beck, K. (1999). *Extreme programming explained: Embrace change*. San Francisco, CA: Addison-Wesley.

Beck, K., Beedle, M., Cockburn, A., Cunningham, W., Fowler, M., Grenning, J., Highsmith, J., Hunt, A., Jeffries, R., Kern, J., Marick, B., Martin, R. C., Mellor, S., Schwaber, K., Sutherland, J., Thomas, D. & van Bennekum, A. (2001). *The agile manifesto.* Retrieved from http://agilemanifesto.org/.

Benediktsson, O., Dalcher, D., & Thorbergsson, H. (2006). Comparison of software development life cycles: A multiproject experiment. *IEE Proceedings Software, 153*(3), 87-101. doi:10.1049/ip-sen:20050061.

Braverman, H. (2007). *OM8010 principles of organization theory and practice.* Acton, MA: XanEdu Custom Publishing.

C3 Team. (1998, October). Chrysler goes extreme. *Distributed Computing*. Retrieved May 23, 2007 from http://www.xprogramming.com/publications/dc9810cs.pdf.

Collins, A. & Baccarini, D. (2004). Project success - a survey. *Journal of Construction Research, 5*(2*),* 211-231. Retrieved from Business Source Complete-Publications database.

Eckstein, O. (1958). *Water resource development: The economics of project evaluation*. Cambridge, MA: Harvard University Press.

Eman, K. & Koru, A. (2008). A replicated survey of IT software project failures. *IEEE Software, 25*(5), 84-90. doi:10.1109/MS.2008.107.

Erickson, J., Kyytinen, K., & Siau, K. (2005). Agile modeling, agile software development, and extreme programming: The state of research. *Journal of Database Management, 16*(4), 88. Retrieved from ABI/INFORM Global database.

Fondahl, J. (1961). *A non-computer approach to the critical path method for the construction industry.* Stanford, CA: Department of Civil Engineering, Stanford University.

Fruhling, A. & de Vreede, G. (2006). Field experiences with extreme programming: Developing an emergency response system. *Journal of Management Information Systems, 22*(4), 39-68. doi:10.2753/MIS0742-1222220403.

Gantt, H. (1919). *Organizing for work*. Cambridge, MA: Harcourt, Brace, and Howe.

Gartner, Inc. (2014). *Gartner perspectives: IT spending, worldwide, 1Q14 update.*

Greene, S. & Fry, C. (2008). Year of living dangerously: How salesforce.com delivered extraordinary results through a "big bang" enterprise agile revolution. *Scrum Gathering, Stockholm, Sweden.*

Guntamukkala, V., Wen, H. J., & Tarn, J. M. (2006). An empirical study of selecting software development life cycle models. *Human Systems Management, 25*(4), 265-278. doi:10.1109/52.965799.

Highsmith, J. (2004). *Agile project management: Creating innovative products.* New York, NY: Addison-Wesley.

Kelly, J. & Walker, M. (1959). Critical-path planning and scheduling. *IRE-AIEE-ACM'59 Proceedings of the eastern joint IRE-AIEE-ACM computer conference,* 160-173. doi:10.1145/1460299.1460318.

Malcolm, D. G., Roseboom, J. H., Clark, C. E., & Fazar, W. (1959). Application of a technique for research and development program evaluation. *Operations Research*, *11*(5), 646-669. doi:10.1287/opre.7.5.646.

Mugridge, R. (2008). Managing agile project requirements with storytest-driven development. *Software, IEEE*, *25*(1), 68-75.

Poole, A. & Huisman, J. (2001). Using extreme programming in a maintenance environment. *IEEE Software, 18*(6), 42-50. doi:10.1109/52.965801.

Project Management Institute. (2013). *A Guide to the Project Management Body of Knowledge*, (5th ed.). Newtown Square, PA: Project Management Institute in Books.

Rob, M. (2006). Dilemma between the structured and object-oriented approaches to systems analysis and design. *The Journal of Computer Information Systems, 46*(3), 32. Retrieved from Business Source Complete-Publications database.

Scott, W. R. & Davis, G. F. (2007). *Organizations and organizing: Rational, natural, and open system perspectives.* Upper Saddle River, NJ: Pearson Prentice Hall.

Slaughter, S., Levine, L., Ramesh, B., Pries-Heje, J., & Baskerville, R. (2006). Aligning software process with strategy. *MIS Quarterly,* 30(4), 891-918. Retrieved from http://www.misq.org.

Standish Group. (1995). *The chaos report*. Standish Group. Retrieved Jul 10, 2004 from http://www.standishgroup.com/chaos_resources/index.php.

Standish Group. (2013). *Chaos Manifesto 2013.* Standish Group. Retrieved from http://www.versionone.com/assets/img/files/CHAOSManifesto2013.pdf.

Stanisevic, I., Obradovic, S., & Jankovic, M. (2011). Selecting software development life cycle models. *Telecommunications Forum (TELFOR*), 2011 19th (pp. 1336-1339). IEEE.

Turner, J.R., & Muller, R. (2006). *Choosing appropriate project managers: Matching their leadership style to the type of project.* Newtown Square, PA: Project Management Institute, Inc.

Wideman, R. (1986). The PMBOK report: PMI body of knowledge standards. *Project Management Journal, 17*(3), 15-24.

Dr. Gerald Wright is an Assistant Professor and the Program Manager of Information Technology at Husson University. His research interests include software development efficiency, models and simulations, and data science.

Northeastern Association of Business, Economics and Technology

Official Program
37th Annual Meeting

October 23rd and 24th, 2014

Days Inn
State College, Pennsylvania

Thursday, October 23, 2014

Session 1: Sylvan Room 8:15 am – 9:30 am

Accounting, Finance

Session Chair: Norman Sigmond

Is Free Cash Flow Value Relevant? The Case of the U.S. Industrial Sector

Mostafa M. Maksy Kutztown University of Pennsylvania

The objective of this study is to empirically determine whether free cash flow (FCF) is value relevant for the industrial sector of the U.S. and, if so, which FCF is the most value relevant. The study aims to provide two contributions to the literature: First, if FCF is value relevant this would help investors make better decisions as they would use FCF in making their investment decisions. If it is not, then investors may not need to waste their time to include FCF in their decision making process. Second, if there is a specific FCF that is the most value relevant, this may encourage the Financial Accounting Standards Board (FASB) to require the industrial companies to use that specific definition if they voluntarily disclose FCF in their annual reports. Using correlations and multiple regression analysis on a sample of 24,103 observations covering the 25-year period from 1988 to 2012, the author empirically shows that FCF is not value relevant for the industrial sector. This result is in agreement with some prior research as discussed in the literature review.

Do Bondholders Receive Benefits from Bank Interventions

Yili Lian Pennsylvania State University

I studied the effect of bank interventions over bond performance surrounding loan covenant violations. By studying abnormal bond returns of nonfinancial firms with covenant violations from 1996 through 2008, I show that bondholders benefit from bank's influence over the governance of violators. Both short-term and long-term abnormal bond returns are significantly positive after covenant violations. I find that cross-sectional abnormal bond returns are positively related to the probability of bank interventions. Further, I show that forced CEO turnover is positively associated with the probability of bank interventions. Firms with forced CEO turnover tend to have better bond performance. I conclude that bank interventions have positive effects on the value of bondholders.

Budget Analysis at Case Study University

Michael Joseph Gallagher DeSales University

This case study is designed to provide the student with a real life example of an analysis to determine various methods of billing students for study abroad programs. The example was based on a university that operated over twenty five various programs using four different models including programs operated by the university in London, England, Innsbruck, Austria, Angers, France, Washington, D.C. (this was part of the international studies budget), Rome, Italy, Santiago, Chile, and Fremantle, Australia. Direct enrollment in universities in Ireland, England, Mexico, Australia, and Spain. The last two groups of programs included locations provided by other colleges or consortiums. The study was started because the university started providing study abroad opportunities but did not track the effect of the various programs on the budget and the spending was volatile with a lack of internal control.

Session 2: Sylvan Room 9:30 am – 10:30 am

General

Session Chair: Yili Lian

Customer Loyalty in Women's Specialty Clothing Retailers

Robert John O'Connell York College of Pennsylvania

Understanding which customer attributes, if any, distinguish "brand-loyal" from "transient" customers is likely to enable businesses to tailor marketing communications to each group, and allow retailers to manipulate such variables. Researchers in the 1990s identified various types of customer loyalty, including monopolistic, incentivized, and emotional. This present research concentrates on emotional loyalty, as retailers may not have the market position necessary to attain monopolistic or incentivized loyalty. The purpose of this research is to determine if brand loyal customers display emotional loyalty and if any demographic or sociographic variables differ between brand-loyal and transient customers. The population considered in this quantitative study consisted of customers shopping at greater-Philadelphia-area brick-and-mortar stores of three women's specialty clothing brands, each segmented into brand-loyal and transient based on customer prior purchase activity. Customers were contacted via e-mail and asked to complete a Likert scale survey including some questions intended to measure their degree of emotional loyalty. Survey responses were then matched back to the customers' historical purchase activity and appended demographic and sociographic attributes. Of the variables considered, customer age appears significantly related to loyalty, but the directions of the relationships vary depending on the retailers' target customer age ranges.

The Financial Fitness of Pennsylvania Rural Volunteer Fire Companies

Melanie O Anderson Slippery Rock University of Pennsylvania

Volunteer fire companies are vital to protecting millions of citizens in rural and urban areas in Pennsylvania. However, there are many challenges as the number of volunteer firefighters has declined from over 300,000 in the 1970's to approximately 50,000 today, serving in over 2,400 fire companies across 67 counties (University of Pittsburgh, 2012). Over 60 percent of volunteer fire companies operate on budgets of less than $100,000 (Center for Rural Pennsylvania, 2012). Many fire companies are struggling to survive with this level of funding to support operating costs and the enormous capital costs of obtaining new fire equipment.

Previous research has indicated that volunteer fire company budget funds come from a variety of sources including fundraising. Previous studies have also reported that the fundraising requirements on rural volunteer fire companies have put an enormous strain on volunteers already overwhelmed by an average of 551 calls per year (Center for Rural Pennsylvania, 2012). The presentation will review the progress of a quantitative and qualitative research study of the financial fitness of volunteer fire companies.

Does a Trust have Standing in a Foreclosure Action?

Anthony Peter Vigna Ramapo College of New Jersey

Foreclosure in today's economic environment is a common occurrence. The plaintiff in a foreclosure action must be the beneficial owner of the note and mortgage. In many cases the plaintiff is a Trust because the loan has been securitized. Securitization is a process where a Trust Fund is created and filled with loans which provide a steady stream of income to Wall Street investors. The Trust sells to investors'

certificates of the Trust that represent the income stream of those loans. This paper will explore these and related issues.

Session 3: Willow Room 9:30 am – 10:30 am

Management, Ethics

Session Chair: Mostafa M.Maksy

The Effect of Type and Direction of Influence Tactic on Managers' Willingness to Add Budgetary Slack

Sean Andre York College of Pennsylvania
Mark O'Donnell York College of Pennsylvania

Prior research in accounting has shown managers may be more likely to make inappropriate decisions when under pressure from their superiors. However, studies from the leadership field show that decision makers may experience alternative forms of influence (such as rational persuasion) and from individuals other than their superiors (such as peers). This study explores the effect of alternative forms and direction of indulgences on the likelihood that a decision-maker will violate company policy by adding budgetary slack. The authors found that a high number of decision-makers chose to against policy and add budgetary slack. Furthermore, those who violate company policy once were more likely to do so a second time. However, neither form nor direction of the influence attempt predicted compliance with requests to violate company policy. These findings suggest a need for increased attention to training that more heavily emphasizes reasoning behind company policies, as well as training that heightens manager's awareness of the influence tactics others may use to encourage the violation of such policies. Such training may help encourage adherence to company policies.

Raising Ethical Awareness beyond the Classroom

Dawn Parasolick Point Park University
James M. Haley Point Park University

Recognizing the need for students to become ethical leaders, a new course: Ethical Leadership and Sustainable Organizations, was introduced into the MBA program at Point Park University five years ago. In this paper, we discuss the work we are carrying out to raise ethical awareness among our MBA students. We provide real-life examples of the different ways we connect with students online and offline, as well as the specific techniques used. We demonstrate the various methods used to engage and teach students such as social media pages, website news features, events, outreach, media and public relations. For example, Point Park has started a speaker series with business leaders who share a vision of sustainable organizations. The topic of our fifth speaker series is "How Learning Organizations Forecast Well – and Prudently – to Create a Sustainable Vision". Finally, this paper will teach others to use similar methods and techniques in their programs and courses to expand their influence beyond the classroom.

Women Directors on Public Company Boards: Does a Critical Mass Affect Leverage?

Cindy K. Harris Ursinus College

This study examines the relationship between corporate leverage (the ratio of total debt to total assets) and gender diversity on US public company boards, with particular focus on boards that have at least 25% women directors. Using this critical mass of women eliminates from consideration boards with lesser female representation, whose female directors may be marginalized in their contributions to board functioning and decision-making. I hypothesize that when boards have this minimum threshold of gender diversity, the influence of risk-averse female directors will impact board decisions related to financing, resulting in lower debt ratios when compared to boards with no female directors. Drawn from the listing

of firms compiled annually by Catalyst, the sample is comprised of Fortune 500 firms with no women on their board and firms with at least 25% women directors on their board, respectively, for the two year period 2012 and 2013. Using a total sample of 78 firms, and controlling for determinants of capital structure and board governance variables, I find a significant negative relationship between boards with at least 25% women directors and corporate leverage. Further, the presence of at least 25% women on the board has a significant moderating effect on the association between both board size and board age, and corporate leverage, leading to an even stronger negative relationship. The evidence suggests that substantial board gender diversity is a corporate governance factor that can influence firm outcomes, and adds insight into the factors that can affect corporate financing choices of US public companies.

Session 4: Logan/Harris Room 9:30 am – 10:30 am

Panel Discussions – Business Education

Session Chair: Michael Joseph Gallagher

Real Life in the Classroom

Christine Marie Lombardo-Zaun Cedar Crest College

Educators constantly struggle to keep students' attention in the classroom. What does it mean to have a student truly engaged in the class? How do we get students to think critically? Does the inclusion of experiential learning have an impact on how the student learns?

First, the presenter will explore what experiential learning is and what it means to the instructor. Literature reviews show that experiential learning encompasses many kinds of learning such as internships, hands-on laboratory experiences, field trips and even cooperative education placements. (www.eric.ed.gov) There are many other methods of experiential learning and the presenter hopes to generate a discussion sharing these other methods.

Employers want the student to have some "real world" experience before starting their post-graduate position. Employers also want graduates to have some basic skills that colleges are attempting to teach. According the National Association of Colleges and Employers (NACE), employers are looking for graduates to have verbal communication skills in addition to be able solve problems and make decisions. (https://www.naceweb.org/press/faq.aspx)

A *MoneyWatch* article written by Lynn O'Shaughnessy in April 2013, reviewed a survey of 318 employers was conducted by the Association of American Colleges. Of the employers interviewed, all companies had at least 25 employees and at least a quarter of new hires held either an associates or bachelor's degree. (O'Shaughnessy, 2013) (http://www.cbsnews.com/news/what-employers-want-in-college-grads/) "[Ninety-three] percent of employers said that a demonstrated capacity to think critically, communicate clearly and solve complex problems is more important than a job candidate's undergraduate degree." (http://www.cbsnews.com/news/what-employers-want-in-college-grads/)

This presentation identifies best practices of engaging students in the classroom and getting students to think critically in the classroom through the use of experiential learning. These best practices are also applicable in all kinds of teaching formats.

The presenter has over 14 years of sales and sales management experience. Presenter changed careers and entered academia a few years ago as a full time professor. In addition, the presenter is a part-time practicing attorney. The presenter's teaching philosophy is to keep students engaged in learning, but more importantly, to teach them how to think critically through the use of experiential learning. The presenter's best practice of achieving this objective is shared from samples taken from presenter's

classroom experiences. The presenter also has taught a variety of courses such as Business Law, Employment Law, Business Ethics, Writing for Management, Human Resources Management, Compensation Management, Power, Influence and Negotiation, and a First Year Seminar. The presenter has received excellent student reviews with regard to the use of experiential learning.

The information in this session is applicable and valuable to any other institution or professor who wishes to learn new methods of engaging students and teaching them to think critically; a skill necessary for a successful post-graduate experience.

Partnership for Success: Student Projects Focus on Local Business
Nicole Lytle — LaGuardia Community College

When students are challenged to apply concepts learned in the classroom to strengthen local businesses, they excel at execution of theory. This is precisely what happened for marketing students at LaGuardia Community College over the course of two semesters. Organized into small groups, thus mirroring the current team-building landscape of marketing agencies, students were tasked with developing and executing practical marketing plans for the college's Performing Arts Center and local businesses. Over the course of the semester, student groups organized their recommendations into presentations that were shared with the interested entities. The result of this engagement included both a successful understanding of marketing on the part of the student and relationship building within the college and community.

On average, experiential projects of this kind call for students to engage written and oral communication skills, knowledge of popular software (such as PowerPoint or Prezi), research skills, and several soft skills sought by employers. This workshop, adaptable across disciplines and/or as a collaborative interdisciplinary effort, will consider the executed marketing projects to focus on further project building that provides the most holistic learning experience.

Session 5: Holmes/Foster Room 9:30 am – 10:30 am

Business Education

Session Chair: Loreen Powell

The Supply and Demand of 21st Century Workforce Skills in Online and Blended Learning Environments
Daniel Powell — North Pocono School District
Barbara Brock — Creighton University
Peggy Hawkins — Creighton University
Tracy Chapman — Creighton University
Loreen M. Powell — Bloomsburg University of Pennsylvania

The case for developing 21st Century competencies through online and blended learning supports changes in the workforce within a global economy. Diverse work teams located around the globe and connected by technology are becoming the norm for 21st Century work. Technology is ubiquitous in society and has transformed every major industry and almost every aspect of life, yet the education field lags behind in harnessing its power. This paper examines the status of fully online and blended learning environments in Northeastern Pennsylvania K-12 public schools. This paper poses a relationship between the status of online and blended learning in K-12 public schools and 21st Century work force skills.

Sustainability Leadership at a Mission-Driven Institution

Eric Malm Cabrini College

While some colleges have signed the President's Climate Commitment, dedicated resources to hire staff and put specific metrics and goals in place to assess institutional progress, most colleges have not placed such a prominent role on sustainability. Yet most colleges view sustainability positively, whether for financial, mission, curricular, or other reasons. This paper focuses on the role that grass-roots leadership can play in achieving sustainability gains at a resource-constrained mission-driven campus. Specifically, we present the story of a small college that has made significant advances in sustainability working within existing budgets and utilizing existing faculty and staff. Using a highly collaborative leadership process, people from many different departments across campus have been able to work together to simultaneously promote sustainability while accomplishing core job requirements. While the campus has limited financial resources to dedicate to sustainability, soft resources like the creation of a Green Team and the signing of the St. Francis Pledge provided ways to integrate sustainability efforts across the campus. Key themes include a collaborative approach in conjunction with a campus climate that empowered individual employees and promoted community goals.

An Examination of Tuition Reduction Strategies in Private Higher Education

Dominick F. Peruso Juniata College

Increasing public scrutiny on the high cost of college tuition, growing competitive pressures, and large discount rates have led some private colleges to implement tuition reduction strategies. Such strategies are designed to increase access and affordability for middle-class families and increase enrollment to stabilize the institution's financial condition. This study considers the effectiveness of a tuition reduction strategy at several private colleges and universities. Using data from the Integrated Postsecondary Education Data System (IPEDS), institutional press releases, news articles, and other publicly available sources, this research examines the factors preceding and following the decision to reduce tuition. Data include both quantitative and qualitative variables such as enrollment trends, tuition, total revenue, institutional prestige, student demographic profile, and leadership changes. The results of this work will aid leaders of colleges and universities and higher education researchers, and may complement the research on higher education pricing theory.

Session 6: Sylvan Room 10:45 am – 11:45 am

Accounting, Finance

Session Chair: Dominick F. Peruso

New Revenue Recognition Model: Impact on Management & Accounting Information Systems

Warren Kleinsmith Richard Stockton College of New Jersey
Robert L. Kachur Richard Stockton College of New Jersey

Accounting standards concerning proper Revenue Recognition guidelines promulgated by the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB), generated deliberation for a number of years. Recently, FASB issued Accounting Standards update (ASU) 2014-09 on May 28, 2014: Revenue from Contracts with Customers (Topic 606) addressing this issue.

Significantly, this update represents noteworthy modifications to the current guidelines on revenue recognition for financial reporting purposes. This paper will discuss how these new standards will influence management and accounting information systems.

How Much Credit (Blame) Should Management Receive When a Firm's P/E Ratio Increases (Decreases)?

John Walker Kutztown University of Pennsylvania
Jonathan Kramer Kutztown University of Pennsylvania

John C. “Jack” Bogle (1991) demonstrated how total return can be divided into two meaningful components: “fundamental return” and “speculative return.” In this paper, we explore how speculative return can be further split into industry-specific and firm-specific components. Dissecting speculative return in such a manner may be useful for assessing managerial performance in a prior period. Specifically, it can help distinguish management’s contributions to total return from that of exogenous factors.

An Experiential Hybrid Model of Blended Learning in Business Courses

Eric Malm Cabrini College

Much has been written about the benefits and drawbacks of blended learning. This paper presents an 'Experiential Hybrid' delivery model in which face-to-face field trip experiences are blended with complementary online instruction. As institutions seek to find alternate delivery modes that challenge both traditional class time structures and accommodate working students, the experiential hybrid approach helps actively engage online learners, build community, and build personal faculty/student relationships. This paper presents the case study of a Management Information Systems class that was translated into this new blended format, and provides insights on ways that the format could be applied to other business courses.

Session 7: Willow Room 10:45 am – 11:45 am

Entrepreneurship, Marketing

Session Chair: Bradley C. Barnhorst

The Role of Entrepreneurs in the Knowledge Creation and Application and Commercialization Process for Development

Mengsteab Tesfayohannes Susquehanna University

The importance of research and development (R&D) Eco-System for socio-economic, scientific and technological developmental continuum is apparent. The R&D and technology transfer Eco-System itself is made-up of knowledge creation and innovation and knowledge application, and commercialization dynamics. This process is vital for enhancing sustainable economic development at mega, macro, mezzo and micro levels of the national software and hardware economic power structures. The relevance of basic research at both developed and emerging nations can be made clearer if one considers how the created knowledge complements the application, commercialization of knowledge for productive use and successful value creating innovation. If the created knowledge is not applied, commercialized and transferred to the needy producers and value conscious consumers, the socioeconomic returns cannot be achieved as desired. Furthermore, the developmental continuum can be negatively impacted (Kumpe & Bolwijn,1994).

Aspired achievements can be expressed in terms of means and practical initiatives that are vital for the alleviation of poverty, higher wealth creation and the advancement of knowledge based society in all developmental stages. In sum, the acquisition and diffusion of knowledge has a mandate of creating suitable conditions for practical achievements in building solid foundations of broadly outreached innovation and entrepreneurial led economic development (Kumpe, 1994; Schumpeter, J. A. (2000)). The

end result is ostensible: nations can develop faster and achieve competitive advantage in the vital developmental dimensions.

The Commonwealth of Pennsylvania (PENN) is highly endowed State with the abundance of physical/natural, human, scientific and technological, financial, informational and entrepreneurial resources and capabilities. This is true at all levels of the social strata including at the grassroots and all the way up to the intellectual and scientific community. This immense potential should be realized with the entrepreneurial spirit, innovation and dedication of the population at large. Towards these endeavors, entrepreneurs in the State have a noble role in placing themselves at a center stage. They can do this by actively involved in the process of converting created knowledge and innovation into developmental driving forces for the further advancement of the state economy and through that for contributing to the national economic development.

This paper therefore aims to engage in an inquiry research focused on: what should be done to enhance the role of PENN entrepreneurs in the knowledge creation and application process for enhancing developmental continuum? The paper will also focus on providing helpful recommendations and strategies that are centered on establishing a framework expressing how PENN entrepreneurs can coordinate their contributions with the activities of other major stakeholders in the scene. The paper is conceptual and mainly deals with the following: (a) conceptual discussion on the KNOW-HOW and KNOW-WHAT of the knowledge creation, application, commercialization and transfer process; (b) critical discourse on the raised issues focused on: how the knowledge creation and application process can be reviewed in multidimensional attributes and from the objective reality on the ground; (c) formulation of a framework intended for helping how to successfully engage with this important knowledge creation and application complementarity process for fostering economic development of Pennsylvania and of the nation in general; (d) to provide helpful recommendations and conclusion

Examining the Market Intelligence Process Model

Audrey Guskey — Duquesne University

The purpose of this study was to obtain information which can be used as input to the process of organizing and staffing a Market Intelligence function. This paper proposes how a firm takes a Market Intelligence process model and organizes it into a living, breathing function. Information on the current state of industry practice in the area of competitive intelligence and market intelligence is presented. This paper builds on a process model previously developed by the author. A benchmarking study of sixteen companies was conducted to determine how the market intelligence function is structured in these organizations. Implications of how an organization can take a process model and change it into a workable, effective function are discussed.

Session 8: Holmes/Foster Room 10:45 am – 11:45 am

Curriculum, Technology

Session Chair: David William Jordan

Information Systems Approach to Making Corporate Social Responsibility Decisions under Uncertainty

Zinaida Taran — Penn State Harrisburg
Stephen C. Betts — William Paterson University

Corporate Social Responsibility (CSR) is increasingly important to companies as policy makers, consumers and various publics become increasingly concerned with issues such as climate change, and as competitors increase their levels of commitment to “making the planet a better place.” However, choosing

particular activities is akin to navigating a maze: the choices are numerous and complicated and the consequences and benefit potential of these choices are uncertain on several levels, with multiple stakeholder interests adding an extra layer of complexity. Questions from "will it do more good than harm?" to "will our reputation with group X" in addition to the usual financial concerns illustrate some of the complexities. We suggest the Information Systems approach to making CSR decisions in the presence of multiple stakeholder interests and uncertainty.

Panel Discussion-Critical Thinking Skills in Freshmen Business Curriculum

Beth Buckman Drexel University
Susan Epstein Drexel University

Drexel University's LeBow School of Business requires all freshmen to enroll in Foundations of Business for the Fall and Winter quarter. This class covers a broad scope of topics, and many times the experience is simply receiving information to better understand the business world around them. While this is an important part of the learning as a new student at LeBow, we are expanding the course outcomes to focus on student development of critical thinking and problem solving skills.

This coming academic year we will test new strategies in the Foundations of Business course to help freshmen develop and refine critical thinking and problem solving skills. In the past we have identified five freshmen Foundations of Business classes as "Writing Intensive" and those sections have incorporated more written assignments than the other sections. This upcoming academic year we are changing the focus of the assignments, class activities and discussion to help students develop not only writing skills, but also critical thinking and problem solving skills in the "Writing Intensive" sections. We believe a focus on critical thinking this will make our students better decision makers and problem solvers, which will ultimately make students more valuable to potential employers. Once results from the test are analyzed, we hope to expand the critical thinking focus to all Foundations of Business sections at Drexel.

Critical thinking skills are important for students to understand how to use information, make decisions and eventually solve problems in the workplace. More specifically, the test sections of Foundations of Business will focus on evaluating different references for points of view and validity, reviewing business trends to develop new ideas, work on collaborative group projects, and formulate strategies based on research and observations.

Our panel discussion will include background material about the importance of critical thinking for undergraduates. Additionally we will share the class activities and assignments developed to help students with critical thinking and problem solving skills.

Session 9: Sylvan Room 1:15 pm – 2:15 pm

Healthcare

Session Chair: Melanie O. Anderson

Consumer Directed Health Plans and the Association between Medical Savings Account & Plan Choice

David William Jordan Slippery Rock University of Pennsylvania

This study examines the association between medical savings accounts, integral components of Consumer Directed Health Plans (CDHPs), and their association to plan choice. Consumer Directed Health Plans (CDHPs) emerged as a new form of health plan with the intent to slow the growth of escalating insurance costs for employers. Such plans have a focus on demand side cost controls through high initial cost-

sharing and consumer engagement via the use of such as Health Reimbursement Accounts (HRAs) and Health Savings Accounts (HSAs). These medical spending accounts are intended to engage consumers by requiring them to manage the first several thousand dollars of their health care needs. HRAs and HSAs share some characteristics with Flexible Savings Accounts (FSAs) that have existed for some time pre-dating CDHPs. Findings suggest consumers who previously funded and FSA in effort to manage some initial funding of out-of-pocket healthcare costs may not seek CDHPs due to the continued ability to manage initial healthcare spending, but only to seek a method to reduce their financial burden of accessing healthcare.

Obesity, Poverty and Income Inequality in USA: Evidence from Panel Co-Integration

Tahereh Alavi Hojjat DeSales University

Over the past several decades, obesity has grown into a major global epidemic. Obesity in the United States is widely acknowledged to be a severe and growing problem. In the United States (U.S.), more than two-thirds of adults are now overweight and one-third of the overweight population is obese. There is growing evidence that obesity in America is largely an economic issue. In this paper, we will provide an overview and an economic analysis of obesity based on behavioral economics as a non-rational behavior. Economic costs of obesity are discussed with an emphasis on healthcare costs, as obesity is perhaps the largest medical problem in America. Research to date has identified at least four major categories of economic impacts linked with the obesity epidemic: direct medical costs, productivity costs, transportation costs, and human capital costs. Stemming the obesity epidemic cannot be separated from stemming the tide of poverty and income inequality gap. Some expert arguing that income inequality is the major cause of our nation's health problems. In this paper, panel-cointegration test was used using data from 1998-2002 and our result rejected the null-hypothesis of "no coinegration, which indicates there is a cointegration exists among obesity, inequality and poverty. Thus improving health depends upon transforming economic conditions. Other contributing factors include; rising fast-food outlets and availability of vending machines, too much advertising for unhealthy food, the falling value of minimum wage, government subsidies, income inequality gap, and lack of health and family benefits. These issues need to be addressed through a concerted program of environmental and policy interventions.

Intrabound Channeling of Healthcare Services within the United States

John Cameron Pennsylvania State University

Companies are continually faced with financial and operational risks attributable to health care benefit decisions. The trend for the business community to increase their involvement in health care benefit decisions is related to the increases in medical expenditures, administrative and regulatory compliance, a sluggish economic recovery, lower operating margins and an aging workforce. Healthcare providers are establishing accountable care organizations to coordinate the delivery of health care services to patients. Employers and their employees seek economic opportunities and innovative technologies to obtain the most affordable, quality healthcare services without location constraints. The concept of the medical exchange program fulfills this corporate philosophy by establishing reliable referral services to health plan participants. Prior research has not examined administrative, regulatory and fiduciary compliance risks associated with intrabound channeling of healthcare services within the United States. To address this gap in the literature, this paper will examine the design trends, special incentives that insurers and self-funded plans offer their enrolled subscribers, out of network considerations, and access to high acuity services.

Session 10: Willow Room 1:15 pm – 2:15 pm

Human Resource Management, Marketing

Session Chair: Bonnie M. Rohde

Eudaimonia: Using Aristotle to Inform Organizational Communication in order to Reimagine Human Resource Management

Matt Fuss Geneva College

The current study seeks to explore Aristotle's concept of eudaimonia, or the good life, as a means to inform organizational communication in order to reimagine human resource management. The project begins by laying bare the current paradigm of egoism/altruism as the inappropriately accepted method to interpret relationships. Google is used as an example of a successful contemporary organization widely criticized for their profitability and exploitation of workers. A historical example, Robert Owens, of the 19th century social utopians is used to illustrate a successful enterprise widely lauded for their altruism and benevolence. If one judges Google by the criteria applied to Robert Owens and Robert Owens by the criteria applied to Google, it becomes clear that praise and blame are dependent solely on the bias of the critic. A new paradigm of reciprocity is offered as an alternative to the Hobbesian paradigm shown lacking. Aristotle's concept of the polis is used to illustrate reciprocity as the dominant paradigm for interactions between individuals. McIntyre provides insight into reciprocity as does Thames. Aristotle's concept of eudaimonia is discussed and connections are made to organizational communication, specifically those done internally to create a culture or brand. I end with a discussion of what human resources according to Aristotle should look like, as well as implications for further study.

Human Resource Management Perceptions of Sustainability and Its Competitive Advantage: A Quantitative Analysis

Rhonda S. Clark Slippery Rock University of Pennsylvania
John Golden Slippery Rock University of Pennsylvania

This paper explores Human Resource Management's (HRM) capacity to impart sustainability to for-profit businesses in the United States by surveying the perceptions of Human Resource professionals. In addition, it examines HRM perceptions as to whether sustainability can lead to a competitive advantage in the marketplace. A quantitative analysis is provided.

Banking Market Structure and Competition in China: An Empirical Study

Min Lu Robert Morris University

In this study, the Panzar-Rosse model is used to analyze the banking competition in China. By using panel data for more than 10 banks, we find that the banking market in China is a monopolistic competitive one. The banking market structures are evolving with more competition elements from 2000 to 2010. Interestingly, the banking profitability and market competition move in the same direction, no matter big or small banks. The market competition also has impacts on the banking risk. We believe that the banking competition could help build more stable and healthy financial systems at the current stage. We will discuss the implications of our findings as well.

Session 11: Logan/Harris Room 1:15 pm – 2:15 pm

Accounting Education

Session Chair: Patricia Z. Galletta

Designing Classroom Activities to Create Student Engagement in Introductory Accounting

Kathy Raye Baughman Juniata College

This presentation reviews the research that has been conducted about creating student engagement in a classroom environment. This research is then applied by analyzing two classroom activities that were designed to increase levels of student engagement with specific content. These activities were utilized once in the classroom and then modified based on student comment and instructor observation. The modified activities were then also used in the classroom with instructor observation and results summarized. The activities were designed to be used in an introductory accounting course with an enrollment size of 40-70.

Experiential Learning Efforts to Augment Student Comprehension of Cost Accounting Concepts and Functions by Integrating NetSuite ERP Module Based Solutions & Excel Models

Robert L Kachur — Richard Stockton College of New Jersey
Warren Kleinsmith — Richard Stockton College of New Jersey

The functional intersection of Financial and Managerial Accounting emerges in Cost Accounting. Product and service operational cost information for strategic and tactical decision making is a typical deliverable of Cost Accounting systems. Cost accumulation methods, standard costing and budgeting in manufacturing, construction, service, healthcare and professional markets are crucial for long-term organizational viability.

This session will demonstrate experiential learning opportunities in the accounting curriculum relevant for both traditional and online environments. Students create solutions to various projects, and utilize both NetSuite ERP and sophisticated Excel models as information tools to master multiple related learning objectives.

Session 12: Holmes/Foster Room 1:15 pm – 2:15 pm

Assessment, Technology

Session Chair: Robert S. Fleming

Rapidly Changing Technology - Ethics & Privacy Issues

Michele L. Langbein — Point Park University
Lou Sabina — Oklahoma State University

In a rapidly changing world, the one fact that everyone in industry must accept is that technology is everywhere and continuously evolving. Technology has many benefits for organizations. However, there are also some issues that come with the evolution of technology advancements such as privacy issues. Most employers use electronic monitoring of employees. Employee monitoring can be controversial and many legal cases that have arisen from such actions. This paper will examine privacy issues and employer monitoring of internet, email, telephone and social media.

Assessment: More than Program Quality

Marlene E. Burkhardt — Juniata College
Clarence Yeung — Juniata College

This research examines senior and alumni survey responses to determine what contributes to perceived satisfaction with a business education. It is hypothesized that alumni will be overwhelmingly positive about their educational experience particularly if they held an internship prior to graduation. Likewise, seniors who have held an internship will also be more positive than those who did not. It is also

hypothesized that self-driven individuals are also more likely to perceive their education as positive. Data was collected from 35 seniors (57% response rate) and 287 alumni (19% response rate) in order to assess a business department at a small liberal arts college. Overall results indicate that while the majority of students and alumni were willing to "do it all again" their attitudes were not simply a function of the program but also affected by whether or not they held an internship. Seniors who reported being self-driven were also more likely to be happy with their education. The results of this research will be used to improve the program and provide future research opportunities for students.

Session 13: Sylvan Room 2:15 pm – 3:15 pm

Finance

Session Chair: Zinaida Taran

Microfinance v. Macro finance Technologies: What's the Difference?

Patrice Flynn Mount St. Mary’s University

Microenterprise development first came on the scene in the 1970s thanks to a $17 business loan by Dr. Muhammad Yunus to 42 basket weavers in Bangladesh. Over the past four decades, millions of women with low incomes across the world have lifted themselves out of dire poverty through income-generating activities made possible by microfinance. Today, a new economic development model is in the making that builds on microfinance but is best understood as macro finance. What is the difference between microfinance and macro finance technologies? Why the shift? What are the implications for the rural poor?

How Monetary Policy Can Prudently Reduce Forecasting Uncertainty

James M. Haley Point Park University

Federal Reserve Chairwoman Yellen has recently warned in testimony before the House Financial Services Committee, “It would be a grave mistake for the Fed to commit to conduct monetary policy according to a mathematical rule...it is utterly necessary for us to provide more monetary policy accommodation than those simple rules would have suggested” (da Costa & Leubsdorf, 2014). Interestingly, Yellen is guided by simple policy rule as well by keeping interest rates low (high), when the economy is operating below (above) its trend. Instead of stabilizing the economy, as this Yellen Rule intends, the unintended consequence is greater forecasting uncertainty, due to nonlinear feedback. This evolution of forecast errors can be modeled by applying a Sprott nonlinear dynamical system of financial chaos, perturbed by random noise and shocked by excess demand for real money. It can be proven that a simpler monetary policy rule exists, which prudently improves everyone's forecasts by targeting the long and short-term interest rates to equal the same fixed expectation, which is estimated to be 4%. In this way, the economy can be stabilized.

Commonalities in Basic Business Education Curriculum delivered through Microfinance

Treva Clark Lebanon Valley College

This study, undertaken within the context of multiple objectives and varying measures of success applied by microfinance institutions (MFIs), examines points of commonality and degrees of standards present in basic business education curriculum delivered as a microcredit plus service by microfinance lenders. By comparing the curricula developed and delivered by microfinance institutions of distinct operational categories (NGOs, NBFIs, and Banks), a core set of industry standard content may emerge reflecting curriculum and delivery methods derived from existing practice as well as content grounded in educational theory and appropriate instructional pedagogy. When used to inform basic business education in microfinance, realized contributions could include greater assessment potential leading to

more successful lender and borrower experiences. A combined academic perspective has been applied as the conceptual frame, bridging the disciplines of educational theory, business and economic development, and sociology in formation of human capital. The results of this research will further the discourse regarding the provision of microcredit plus services as a crucial component of successful microfinance delivery in multiple contexts, and will support the argument for the consistent inclusion of basic business education and training with microcredit loans.

Session 14: Willow Room 2:15 pm – 3:15 pm

Economics, Law

Session Chair: Kathy Raye Baughman

Analysis of the Statutory Rights of Redemption in Various States

Jerry D. Belloit Clarion University of Pennsylvania
Frank Shepard Clarion University of Pennsylvania
William Pratt Clarion University of Pennsylvania

Several states have a Statutory Right of Redemption that is designed to allow a borrower to redeem their former property after it has been sold in a foreclosure sale. The statutory period, in states that allow it, may be as long as two years. Thus, a borrower who has lost their property through foreclosure is allowed to redeem the property after repayment of the debt or foreclosure sale price, whichever is greater, plus some additional fees. The idea of a public auction at foreclosure is to allow the market to bid up the price to a "fair" level. This paper will examine the laws in the various states and identify potential impacts on the auction price by this statutory right.

The Economic Impact of the Marcellus Shale and Natural Gas on Pennsylvania's Economy

M. Arshad Chawdhry California University of Pennsylvania
Ismail Cole California University of Pennsylvania
Saima Bashir California University of Pennsylvania

After experiencing years of energy shortage in the U.S., there is a lot of excitement about the recent development of horizontal drilling and hydraulic fracturing as new source of energy. There appears to be a large reserve of Marcellus Shale natural gas deposit beneath the Appalachian Mountains in West Virginia and surrounding areas in the north. Some studies have estimated the recoverable reserves to be approximately 500 trillion cubic feet (TCF), worth trillions of dollars. The discovery of a large volume of "dry" gas which is used in homes and businesses has resulted in a glut of available natural gas. Substantial investment has been made into the Marcellus area in Pennsylvania and West Virginia.

Our study will analyze the economic impact of Marcellus related activities on the economy of Pennsylvania. New technological advances in the Marcellus Shale drilling process have increased the average production of natural gas by nearly 75 percent. This production of natural gas has created over 24,000 jobs in Pennsylvania and is likely to increase tax revenues for local, state and federal governments significantly. Low cost natural gas can attract manufacturing industries to Pennsylvania in the near future. However, there is concern about the contamination of ground water wells from hydraulic fracking. Our research will explore these and related issues.

Session 15: Logan/Harris Room 2:15 pm – 3:15 pm

Entrepreneurship v. Liberal Arts

Session Chair: Rhonda S. Clark

Experiential Learning of Entrepreneurship in a Liberal Arts Environment

Bonnie M. Rohde Albright College

Engaging students in Entrepreneurship education is critical for the future success of the student in their planned future in business, as an entrepreneur or graduate study. The difficulty is immersing the student in entrepreneurship experiences who have limited business experience, various majors other than business and limited funding. It is possible to provide the student with a rich experience which drives the student to be an active learner of entrepreneurship. This paper reflects various class activities, projects, and events that can be used to expose the student to entrepreneurship culture and leadership in a liberal arts environment.

Session 16: Holmes/Foster Room 2:15 pm – 3:15 pm

Marketing & Workforce Service Learning

Session Chair: Michele L. Langbein

Experiential Workforce Service Learning Within the Classroom: Lessons Learned

Loreen M. Powell Bloomsburg University of Pennsylvania
Hayden Wimmer Bloomsburg University of Pennsylvania
Daniel Powell North Pocono School District

The ubiquitous adoption of technology has transformed businesses operations on so many different levels which has left businesses vulnerable and in need of information technology assistance. Offering experiential workforce service learning opportunities for undergraduate information technology students enrolled in various technology courses may be one way to contend with the ongoing technology challenges and needs of businesses. Experiential workforce service learning can provide free monitored help for businesses as well as "real world" experiences for students inside and outside of the classroom. This paper will explain the past and present experimental workforce service learning opportunities, environments, and courses in which undergraduate Pennsylvania State System of Higher Education information technology students were involved. This paper will also share the challenges and lessons learned.

Stimulating Creativity in a Marketing Communications Class

John M. Zych University of Scranton

Effective marketing requires a balance of art and science. One way of enabling students to appreciate this balance is to have them analyze marketing communications campaigns produced for a variety of applications. To enhance their appreciation of this balance an assignment has been developed which places students in the role of content creator.

Student teams are assigned to a brand portfolio project in which they examine the communications campaigns of two competing brands across media options. At the end of the project students develop and produce an unplugged presentation for the class in which they summarize their findings. Presentations cover a range of possibilities including: creating a mock store set-up; creating a television commercial; and taking the class on a photo shoot.

The conference presentation will discuss how the assignment was developed and implemented in the classroom. A range of recent examples will be presented, along with students' reactions.

Session 17: Sylvan Room 3:30 pm – 4:30 pm

General

Session Chair: James M. Haley

Online Auction Segmentation and Effective Selling Strategy

Yanbin Tu Robert Morris University

Based on the theory of online trust and information asymmetry, we empirically find structural differences in auction success and price determinants between new and experienced sellers, and between new and used items in online auctions. We classify auction listings into four segments ((new sellers, experienced sellers) × (new items, used items)) and find that sellers in these four segments behave significantly differently. We also discover that, given the same product condition, experienced sellers with unsuccessful auctions can more likely transition to successful auctions (via re-listing) than new sellers with unsuccessful auctions. In addition, trust enhancing strategies are found to be relatively more important than transaction enhancing strategies for auction success. The auction segmentation knowledge attained in this study not only provides the online auction house with solid guidance to customize its services for different groups of market participants, it also helps sellers better position themselves and buyers more intelligently select auction items to bid in online marketplaces.

An Alternative View of Transformational Leadership Research Results

Mark Arvisais Stevenson University

Research demonstrates Transformational Leadership's (TFL) positive influence on individual and organizational performance. A review of abstracts from 219 studies (2009 – 2014) chronicles TFL's effectiveness across a broad range of variables, situations and cultures; only 14 studies suggest negative relationships. This paper offers an alternative perspective of existing research and focuses on study results that demonstrate where TFL's relationship was non-significant, weak and/or in an unexpected direction. The review suggests ethical orientation, authenticity, personality and the subscribed values of the leader or follower can counter TFL's typical effects. The paper proposes it is time to consider where TFL is not optimal and offers considerations for future study.

Ensuring Organizational Resilience in Times of Emergency through Employee Communication

Robert S. Fleming Rowan University

Contemporary organizations face many challenges during times of emergency that can compromise their continued success and survival. This session will consider the importance of effective communications with employees during emergencies and techniques for enhancing organizational resilience through proactive communication with an organization's most important resource - its employees.

Session 18: Willow Room 3:30 pm – 4:30 pm

Technology

Session Chair: David William Jordan

Hybrid Software Development Methodologies Pay Dividends

Gerald Paul Wright Husson University

Despite research to the contrary, it appears that software projects using hybrid software development methodologies may be slightly more successful than project using a strictly structured or agile approach. 94 United States software development Project Managers participated in a web-based survey. Software project were classified as either structured, agile, or with some degree of hybridization. Ten critical success factors were examined to determine the impact of the software development methodology utilized during the project on each success factor. The results suggest that Project Managers have adapted a hybrid methodology in order to increase the probability of success as defined by these critical success factors.

To Tweet, Instagram, or Facebook....That is the Question.

David Gargone Misericordia University

Social media provides businesses with the opportunity to reach consumers instantaneously and have an ongoing relationship real time. As platforms like Twitter, Instagram, and Facebook continue to evolve as marketing tools, companies are dedicating more resources to the cultivation of these tools. Specifically, social media allows professional sports teams to interact with their fans and develop lasting relationships through different social media platforms. Although keeping fans informed is the primary focus, engaging the fans by eliciting retweets, likes, and comments open up the lines of communication and builds interactivity amongst the fan base. This study will measure the effectiveness of teams in building fan engagement by analyzing the type of social media message sent and the amount of fan engagement (retweets, likes, and comments) across the platforms of Twitter, Instagram, and Facebook with the intent of establishing best practices for professional teams and their usage of social media. The results should help guide teams in developing messages and utilizing platforms that are more effective in creating fan engagement.

Perceptions of Social Networking in the Age of Technology

Lou Sabina Oklahoma State University
Michele L. Langbein Point Park University

Social networking has radically changed our society. Information on an individual is easily accessible to anyone with the ability and necessary knowledge to seek it out. For example, if you perform a Google search on either of the authors of this paper, over 150 unique hits are returned. This can become a problem for recent college graduates, who have the responsibility of presenting themselves in an acceptable manner in their initial positions, where colleagues, subordinates, and executives can search for virtually any information on their new co-worker. Social networking sites such as Facebook, MySpace, LinkedIn, and online dating sites broadcast personal information from anyone willing to use their services, which can aide individuals in finding positions, but also reveal personal information that might create a bias that can impact their perceptions from colleagues. The challenge then becomes determining what information to reveal on social networking websites or even to use them at all. This paper will provide a comprehensive literature review on the research that has been done on social networking in organizations and the impact it has had on decisions involving staffing. Through this literature review, a framework will be presented that addresses some of the considerations that organizations may face when enacting policy and determining what should be considered acceptable and unacceptable behavior.

Session 19: Logan/Harris Room 3:30 pm – 4:30 pm

Accounting/Auditing, Economics

Session Chair: Patrice Flynn

Student Loans and Net Price: A Financial Look at the Numbers

Bradley C. Barnhorst DeSales University

Student loan default rates and the net price of higher education are currently hot topics in the financial press. But is the data and analysis on these numbers accurate? This paper looks at inconsistencies in the data and the methodology used, and considers alternative explanations to the current narrative.

Fraud Prevention

Patricia Z. Galletta College of Staten Island

The purpose of this paper is to discuss what companies can do to prevent, deter and detect fraud and will include the importance of:

- Implementing internal controls (traditional weak areas in internal control)
- Risk assessment (how to prepare a risk assessment)
- Hotlines
- Company code of ethics (suggestions for good company code of ethics)-discuss impact of new AICPA Code of Conduct
- COSO Integrated Frameworks (governance, internal control and fraud deterrence)
- Auditing Standards (AU316)
- Sox (ethics and disclosure)
- Foreign Corrupt Practices Act/UK Bribery Act/other laws to follow
- Using data analytics/data mining to detect fraud
- Cyber security (what to enforce/procedures to protect your company)

From the Credit Crunch of 1969-70 to the Saturday Night Massacre: Battling the Great Inflation

William Carlson Duquesne University

In the mid-sixties economists talked confidently of "fine tuning" the economy. Little did they know what a mess would be made in the next 20 years and problems still remain. The Great Inflation of the late 1960s to 1982 was a turbulent, exciting, unfortunate time. A legacy from the Great Depression, Regulation Q which put ceilings on savings interest rates caused a new phenomenon, credit crunch disintermediation. In turn this led to a revolution in finance with various innovations, casualties, and new problems. This article traces what happened from the 1964-5 boom to the appointment of Federal Reserve Chairman Paul Volcker in 1979 and the Saturday Night Bond Market Massacre. This paper explores these and related issues.

Session 20: Holmes/Foster Room 3:30 pm – 4:30 pm

Management, Taxation

Session Chair: Marlene E. Burkhardt

Maslow's Hierarchy of Needs and Emotional Intelligence

Zhen Ma Misericordia University
Corina Slaff Misericordia University
John Kachurick Misericordia University

We propose to present our current work-in-progress research at the 2014 NABET Conference and invite colleagues who have conducted or are interested in conducting research in relevant/related fields to critique, discuss, share with us any ideas and suggestions on the research topic, methods and possible outcomes.

The research we will discuss examines whether the basic human needs, which are defined by Maslow in a hierarchical order as physiological, safety, belonging, esteem and self-actualization, are correlated with the individual's age, gender, education and income. This research also investigates whether the level of satisfaction of Maslow's needs affects the individual's emotional intelligence. Two instruments are used to collect data: the 50-item scale designed by Lester, Hvezda, Sullivan, and Plourde (1983) to measure the level of satisfaction of the five basic needs in Maslow's hierarchy; and University College London Psychometric Lab's Trait Emotional Intelligence Questionnaire (TEIQue-SF) to measure emotional intelligence levels (Petrides & Furnham 2006). Based on the responses, the level of Maslow's needs and emotional intelligence of each respondent are determined. An ordered profit model is estimated to see if age, gender, education and income are significantly related to the levels of needs, ceteris paribus. A linear regression is run to test whether emotional intelligence is affected by the level of satisfaction of needs holding age, gender, education, income and other control variables constant.

Our research is about two of the most important theories in management and leadership. Maslow is one of the oldest and most used theories in employee motivation and EI is the most popular concept in leadership theory and employee motivation as related to performance, turnover and absenteeism. They are rooted in psychology yet essential to good management leadership, and more importantly employee motivation.

Futuring Workshop: Plausible Alternatives to the Federal Income Tax

Scott MacFarlane — Regent University

Has anyone ever wondered why large organizations such as IBM, McDonald's and Coco-Cola have been able to weather economic boom and bust yet still remain successful, while others like Pan-American Airways and Montgomery Ward have failed? Pan-Am's demise came in 1991 after they could not recover from the 1988 terrorist bombing of Flight 103 over Lockerbie, Scotland (Sipika, 1993, p. 138). Montgomery Ward was forced to file Chapter 11 bankruptcy in 2000 after 128 years in business because of the market encroachment of newer retailers Target and Wal-Mart (Kaufman & Deutsch, 2000, p. C4). While both scenarios are different, they show the range of events from the catastrophic to the subtle. They also illustrate that neither company was able to envision or forecast such threats.

The ability to forecast potential future trends is vital to any organization today. It is a must to identify these trends so organizations can take corrective action in an effort to counteract any negative scenario (Cornish, 2004, p. 61). This workshop will present one possible economic future scenario as an example, and attempt to generate other plausible scenarios based on external trend analyses of the organization.

Session 21: Sylvan Room 4:30 pm – 5:30 pm

****Best Paper Award Winner****

More Evidence of the Nevada Effect: SEC, DOJ, FBI, and IRS Regulatory Enforcement Actions

Anthony J. Cataldo — West Chester University of Pennsylvania
Lori Fuller — West Chester University of Pennsylvania
Thomas Miller — West Chester University of Pennsylvania

Cataldo, Fuller and Miller (2014) examined a published sample of Securities and Exchange Commission (SEC) and Public Company Accounting Oversight Board Engagement Quality Reviewer violations (Messier, Kozloski and Kochetova-Kozloski 2010) and the entire population of 2012 SEC trading suspensions. They found that Nevada firms disproportionately consume scarce Federal regulatory resources. Their results support what has been characterized as *the Nevada Effect*.

Additional evidence in support of *the Nevada Effect* is presented in the current research. In this extension, regulatory enforcement actions by the SEC, Department of Justice, Federal Bureau of Investigation and Internal Revenues Service during 2011 and 2013 are examined. Additionally, measures associated with related stock promoters and promotional schemes are identified. Our methodology used a forensic approach and examined publicly available information not previously executed or explored in the literature. Publicly traded Nevada corporations dominated our analysis of this information at a variety of detectible levels. We discuss our findings, in the context of information asymmetry, hidden and private information.

Executive Board Meeting – Sylvan Room **5:30 – 6:00 pm**

NABET Social Hour I **6:00 – 7:00 pm**
Windsor Suite/Room 208

Dinner – Linden Room **7:15 – 8:30 pm**

NABET Social Hour II **8:30pm - ?**
Windsor Suite/Room 208

Friday, October 24, 2014

Session 22: Sylvan Room 8:20 am – 9:20 am

Session 23: Willow Room 9:30 am – 10:30 am

Management, Law

Session Chair: John Zyck

Who Owns What Lies Beneath? The Status of Dormant Oil and Gas Rights in Pennsylvania, and a Call for Revision of the Law

Donna M. Steslow Kutztown University of Pennsylvania

With the growth of Marcellus shale natural gas drilling over the past decade, laws pertaining to mineral and oil and gas rights have been revisited. When subsurface oil and gas rights have been severed from surface ownership years ago, it is difficult to determine who owns the rights and who should benefit financially from the natural gas extraction. This paper proposes that Pennsylvania should consider revision of its current dormant oil and gas law to ensure that surface owners can make a claim for ownership of abandoned oil and gas rights below their land.

Collaboration: Models and Best Practices in Business; What about Academia?

Roger Hibbs Kutztown University of Pennsylvania
Kathleen Kaminski Kutztown University of Pennsylvania

Today's business environment has gotten too complex for a company to formulate policies and strategies without bringing in internal and external stakeholders. Collaboration is essential, but takes time, effort, and resources. If not done properly or attempted in the wrong environment or culture, collaboration can increase time-to-market and possibly result in sub-optimal decision-making. This literature review focuses on what collaboration looks like in business today by citing common models and best practices. It ends with a look at bringing such models and practices to academia.

Session 24: Sylvan Room 9:30 am – 10:30 am

Technology

Session Chair: Yaya Sissoko

Data Visualization: Seeing the Invisible

Miles DeCoster Kutztown University of Pennsylvania

Data is usually made of numbers. Information is gathered, quantified, measured, and categorized. In the digital age even sensory input is converted to hard numbers. A picture is a matrix of numerical color values; a sound is a matrix of frequency and amplitude samples converted to numbers. But, how is data visualized?

Data visualization is not a new thing. Humans have been doing it for centuries via maps, bar charts, pie charts, histograms and scatter plots. What has changed is the quantity of data that one attempts to consume and the technology available to process all that data. Big Data has become a part of popular culture, the topic of radio and TV chat shows and PBS specials as well as an academic field with journals and conferences. The primary purpose of data visualization is to make the meaning of data, big or small, apparent.

At its best, data visualization is not just eye candy; a dressing up of data for public display. Rather it is an essential part of the process of understanding data. Imagine a photograph as data. The grid of numbers is almost meaningless as such. Certainly the meaning of the resulting image is not apparent in the numbers. Only through a process of visualization does the actual meaning of the data become apparent. This paper will explore these and related issues.

This presentation will provide a brief overview of web-based data visualization with a sampling of types of visualization and outline of the tools and processed used to create them.

An Empirical Study on Mobile Technologies to Enhance 21st Century learning
Kathleen Houlihan Wilkes University

The integration of technology into the curriculum has been studied for decades with very little consensus on a best approach. Opposing views about the most effective ways of integrating technology have delayed the mainstream adoption in the classroom. A study of business students in mobile enhanced classrooms were compared to business students taught without mobile enhancement and the findings informed educators regarding the student perception of learning and perceived social presence in the classroom. Student perceived learning and social presence are constructs in the Community of Inquiry (CoI) Model which has been used by many disciplines to develop curriculum. This study supports CoI as a best practice for technology integration in the classroom. The remarkable finding of this study indicated overall weaknesses in the student's perception of learning and in their sense of community in classrooms that were not mobile enhanced.

Second Life Virtual World Adoption Concerns and Experiences in Institutions of Higher Education
Mark Choman Marywood University
Uldarico Rex Dumdum Marywood University

Virtual world and related technologies are increasingly adopted in business, government and educational setting. This study, using a grounded theory approach, aimed to gain a more robust understanding of the Second Life virtual world adoption concerns and experiences of 34 administrators, faculty, and instructional technologists at institutions of higher education. Emergent themes, key findings from multiple iterations of data analyses, and implications of the study are discussed.

Session 25: Logan/Harris Room 9:30 am – 10:30 am

Accounting, Taxation
Session Chair: David Gargone

Dynamic Asset Allocation
Pawan Madhogarhia York College of Pennsylvania
Marco Lam York College of Pennsylvania

This paper analyzes whether dynamically adjusting a portfolio with multiple asset classes can lead to superior returns. This paper utilizes mean reverting behavior of different asset classes and applies a relative valuation technique to dynamically allocate funds to six different asset classes. The dynamic asset allocation (DAA) strategy generates a positive annualized geometric mean return differential over 20 -30 year horizons. The standard deviation of the DAA strategy was lower than that of the six individual asset classes. The approach developed in this study can be useful to investors in identifying the most undervalued asset class at a particular point in time. This strategy may also be very well suited for retirement portfolios which are inherently long term in nature.

Considerations in Addressing an Internal Revenue Service Audit of an Individual Taxpayer in the United States

James Biagi Marywood University

This paper to be submitted will present a discussion of certain procedural issues that confront an individual taxpayer in the United States when dealing with a civil tax audit conducted by the Internal Revenue Service ("IRS"). Given the nature of the topic, the paper cannot address every such issue because the topic is vast and each individual situation is unique. It is, however, the author's hope that the reader will come away with a deeper understanding of the IRS' civil tax audit and protest process. It is the author's further hope that this paper will inspire students of accounting and taxation to develop a deeper appreciation for the tactics and techniques used during the civil tax audit and defense process and that these students can utilize this information in their professional careers. Issues pertaining to IRS criminal tax investigations and prosecutions under the Internal Revenue Code of the United States or other related laws are beyond the scope of this paper.

Session 26: Holmes/Foster Room 9:30 am – 10:30 am

Marketing and Business Education

Session Chair: Robert S. Fleming

Product Color Choice and Meanings of Color for Teenagers

Okan Akcay Kutztown University of Pennsylvania

The teenage market has become a very important consumer segment and has strong buying power in the USA. The population of teenagers is over 32 million and growing at twice the rate of the overall U.S. population. The teenage market represents incredible opportunity for marketers who understand the consumer behavior of teenagers. Marketers know that product color influences a consumer's decision to purchase a product. Consumers make decisions within minutes of seeing the product. Color connects the consumer more quickly than any other identifying characteristic. Research suggests that meanings of color and product color choices vary according to age, gender and ethnicity of consumers.

The focus of this paper is to analyze the meanings of color and the variety of product color choices of teenagers. In this research paper, data was collected in two high schools. The questionnaire was divided into four sections. The first section deals with the importance of color when purchasing nineteen different products. The second section concern favorite products colors for frequently purchase products. The third section deal with the meanings of nine different colors among teenagers. The last section covers demographic variables; age gender and ethnicity. The author will carry out a literature review, analyze the collected data and present the findings.

Implementing Spreadsheet-Based Monte Carlo Simulations in Business Education: Where and How

Mark H. Haney Robert Morris University

Monte Carlo simulation is a useful technique for analyzing business situations that have an element of risk or uncertainty. In recent years, academics have begun to use Monte Carlo simulation in the classroom, providing business students with knowledge of this useful technique, and helping them to better understand risk and its effects on business outcomes. This presentation reviews the use of Monte Carlo techniques in business and business education, provides guidance on how to implement Monte Carlo models in spreadsheets without the use of proprietary add-ins or Visual Basic for Applications programming, and suggests several topics in the business curriculum where Monte Carlo simulation activities may be introduced to help students better understand concepts, and/or to better prepare students

for real-world practice. Several examples will be demonstrated. Audience members will learn the basic techniques necessary to implement Monte Carlo simulation activities in their classes.

Setting the Foundation for Information Literacy in Freshman Business Majors

Andrea Farro Rowan University
Michelle Kowalsky Rowan University

Rowan University requires all first semester freshmen to take the Rowan Seminar course. The Rowan Seminar is embedded in each majors' introductory course and includes components that facilitate the students' transition to college life and college level work and introduces them to the University's resources. With multiple sections of our introductory business course for freshmen, Rowan Seminar, the Rohrer College of Business capitalizes on this opportunity to set the foundation for information literacy in all business majors. Through a partnership, faculty and business librarians develop activities to help students learn about the library resources which support each of the business programs, management & entrepreneurship, marketing & MIS, and accounting & finance.

We will report on an information literacy activity which asked students to predict employers' questions and determine which resources would meet their information needs. Five sections of management and marketing freshmen business majors were able to demonstrate critical thinking skills beyond previous instructional goals.

Session 27: Sylvan Room 10:45 am – 11:45 am

General

Session Chair: James Biagi

A Study of the Fan Motives for Varying Levels of Team Identity and Team Loyalty of College Football Fans

David Gargone Misericordia University

Fan motives, factors that influence a person's decision to attend a sporting event, affect sport consumption at both the amateur and professional levels. This study identified the fan motives, selected from the Sport Interest Inventory (SII), most influential on college football fans and more specifically examined the effects on fan motive prevalence of seven variables: team identity, team loyalty, team affiliation, conference affiliation, household income, age, and level of education. All seven variables exhibited a statistically significant effect, at the $p < 0.001$ level, on a majority of the 17 fan motives considered, with team loyalty exhibiting a statistically significant effect ($p < 0.001$) on all 17 motives. In general, higher levels of team identity and team loyalty were associated with greater preference for fan motives. This paper will show that excitement, drama, sport knowledge, and interest in team were identified as the most common college football fan motives; interest in players, bonding with family, interest in sport, and escape were identified as the least common motives.

Labor Market Response and Its Slow Recovery after the Great Recession of 2007-2009

Farhad Saboori Albright College

The purpose of this study is to examine the macroeconomic effects of the recent business cycles on the U.S. labor market over the period of 1980-2014. The paper focuses on the labor market's slow recovery after the Great Recession of 2007-2009. Despite recent improvements, there is evidence of significant slacks in the labor market in the five years following the recent recession. The paper also investigates the effects of highly accommodative monetary and fiscal policies over the same period. In addition to cyclical

factor, the literature provides additional explanations, including structural factors, such as aging of the labor force, and changing dynamics of the U.S. labor market, following the increasing globalization of the economy. Using quarterly data, we apply a structural vector autoregressive (SVAR) model to study the dynamic interaction among eight variables (total employment, labor force participation, unemployment rate, real output growth, oil prices, inflation rate, as well as monetary and fiscal policy variables) for the period of study. The paper provides additional insight into the complexity of the interaction among these variables and provides some explanation for the slow labor recovery after the Great Recession.

Session 28: Willow Room 10:45 am – 11:45 am

International, Assessment

Session Chair: Okan Akcay

Trade Openness and Economic Growth: Empirical Evidence from Singapore and Malaysia

Yaya Sissoko Indiana University of Pennsylvania

This paper examines the long-run relationship between trade openness and economic growth in Singapore and Malaysia over the period 1960-2013. It is often argued that more outward-oriented countries register better economic growth performance in the long run. We use two groups of trade openness measures and the GMM, SUR and 3SLS estimation techniques to establish the links and causality between trade openness, growth and income distribution. Our preliminary results show trade openness plays a key role in economic growth in both Singapore and Malaysia. In addition, trade barriers seem to have negative impact on growth and are consistence with the conventional view on the growth effects of trade barriers.

Using Technology to Ease the Pain in the... Assessment

Cori Jo Myers Lock Haven University of Pennsylvania
Peter Huegler Lock Haven University of Pennsylvania

While some colleges and universities may have embraced learning outcomes assessment and others may not, all institutions must collect, analyze, use, and communicate data results to demonstrate accountability to key stakeholders and comply with reporting/accrediting requirements. Although most institutions have established assessment plans and collect data, many fewer transparently present their assessment outcomes especially online; however, the Web provides an easy way to demonstrate accountability to all key stakeholders and show student achievement. This paper explains a simple and inexpensive way for institutions to use common technologies (e.g., Excel and the Web) to collect, maintain, and present easy-to-comprehend assessment results.

Session 29: Logan/Harris Room 10:45 am – 11:45 am

Accounting

Session Chair: Mark H. Haney

Effects of Accounting Standards during the Financial Crisis

Jorge Romero Towson University

During years 2007 and 2008, financial institutions keeping risky subprime mortgaged-backed securities reported vast losses. The trade of mortgaged-backed securities was common practice during previous years. This financial crisis has been linked to fair value regulations (Magnan, 2009). In response to this, the International Accounting Standards Board (IASB) had to amend IAS39 (Financial Instruments: Recognition and Measurement) to allow the reclassification of some financial assets. Therefore, there are still unanswered questions on the effects of this amendment, such as, is it possible that financial

institutions may have taken advantage of this amendment to be involved in earnings management? This paper examines and attempt to clarify mechanisms of accounting regulation during the financial crisis.

A Progressive Accounting Monopoly Project for Junior Accounting Majors: Version 6.0

John Olsavsky State University of New York at Fredonia

This presentation will describe version 6.0 of a project incorporated in the junior year coursework of an accounting major (e.g., Intermediate Accounting I) to provide practice and reinforcement of their knowledge and skills related to the accounting process. The project utilizes the popular Monopoly® board game as a tool to generate accounting transactions data over three, one-year periods of twelve turns each year. This project provides students with progressively more difficult corporate accounting and financial reporting tasks including the preparation of journals (general and special), ledgers, work papers (worksheet and account analysis), financial statements, notes to the financial statements and financial analysis. Students are responsible for preparing all entries that affect the elements of the financial statements including, transactions, adjustments resulting from analyzing all accrual and deferral accounts and the income tax or benefit from any net operating loss carry forward or back. The project is first prepared manually using Microsoft Excel worksheets followed by the use of QuickBooks software to confirm the results for the last two years.

Corporate Tax Avoidance Trends: Facts and Misconceptions

Robert E. Duquette Kutztown University of Pennsylvania
David D. Wagaman Kutztown University of Pennsylvania

The United States presently has the highest statutory corporate tax rate in the world. However, there has been much discussion recently, including Congressional hearings, about abusive corporate tax avoidance strategies that have shed light on how most U.S. large multinational corporations (MNCs) pay a much lower "effective" tax rate. The more recent techniques, referred to as "BEPS" (Base Erosion and Profit Shifting), serve to shift US profits to low tax foreign jurisdictions.

What many have taken from these hearings is that these abuses have reduced corporate tax receipts to one-third of their level in the mid-1980s, which has worsened our national debt. In addition, the hearings suggested that effective tax rates for corporations have declined by 50% since the mid-80s. The most recent form of "abuse" is known as a "corporate inversion", whereby the U.S. MNC is effectively acquired by a foreign corporation allegedly to immediately reduce the U.S. tax base and move jobs overseas. Our presentation is intended to:

1) Shed an objective light on the facts of these transactions;
2) Discuss how the U.S corporate tax code discourages U.S. investment compared to the rest of the world;
3) Explore a key defense of U.S. MNCs - they have a "fiduciary responsibility" to minimize taxes;
4) Highlight the facts about the historical level of corporate tax receipts and why its apparent decline may also be caused by other factors besides BEPS;
5) Summarize conflicting studies that attempt to determine the true "effective" U.S. corporate tax rate after considering preferences, incentives, and loopholes, and the historical trend of that rate.

Finally, we will summarize the factors that support why substantive corporate tax reform is needed; the criteria for sound reform; and a summary of the more significant corporate tax reform proposals.

Session 30: Holmes/Foster Room 10:45 am – 11:45 am

Curriculum Development

Session Chair: Kathleen Houlihan

Panel Discussion - Development of "Business Communication and Mentoring Course"

Joan M. Blewitt Kings College
Barry Williams Kings College
James Dolhon Kings College
Mark Leffler Kings College

Proposal for Panel Presentation for October, 2014 NABET Conference Graduates of business programs are often criticized by employers for not possessing effective communication skills. While students in a liberal arts college engage in writing and speech courses, assessment evidence at our college showed that there was a need to develop a course that would focus on the further formation of written and oral communication skills to assist students in the preparation of business-related documents and the delivery of business content oral presentations. The faculty of the King's College McGowan School of Business focused on addressing this need by developing a course that would train students to become more effective writers and presenters in the business workplace. In addition to improving our business foundations curriculum, this course was seen as a vital component to fulfilling our Assurance of Learning (AOL) goal that all graduates of our business school should be effective communicators. A very collaborative process was used in the development of this course. Members of the Business School Advisory Board contributed by making valuable suggestions on course content and a faculty member from the communications department was used to evaluate, contribute to, and determine expectations for the oral communications aspect of the course. Several interactive software programs were explored to assist students and business faculty in the successful delivery of the course. The result was the addition of a course "Business Communication and Mentoring" which focuses on the essentials of style, organization, and professionalism in the development of fundamental business correspondence, reports and presentations. Career exploration and mentoring components are woven throughout the curriculum to better prepare our students, which adds a unique aspect to this course. This panel presentation will consist of five presenters who played a key role in the development and delivery of this course. Presenters include the dean of the McGowan School of Business, who will address the learning goal linked to the establishment of this course and how it ties into our foundation courses, two business school faculty members who selected the course materials and software and who piloted and currently teach the course, the faculty member from the communications department who was instrumental in refining and evaluating the oral communications aspect of the course and a representative from the Career Planning office who has been an active participant in the mentoring aspects of the course. A timeline on the development of the course, resources used and the course curriculum will be provided in this presentation. Questions and discussion will be most welcome among audience participants.

Building Sensemaking Capability: Implications for Curriculum and Program Development

Uldarico Rex Dumdum Marywood University
Murray James Pyle Marywood University

The Institute for the Future (2011) analyzed several key drivers of change and disruptive shifts that will impact the landscape of work and identified work skills that will be critical for the next ten years. The top skill identified was sensemaking. According to Deborah Ancona (2011), Director of the MIT Leadership Center at the MIT Sloan School of Management, sensemaking; the ability to make sense of what's going on in an unpredictable, uncertain, rapidly changing and complex environment; the ability of framing and acting in the unknown; the ability of discovering the new terrain as you are inventing it is a particularly important predictor of leadership success. This paper explores and discusses what sensemaking is and

how sensemaking may be built and integrated into curricula and taught as a core business and leadership capability.

Session 31: Sylvan Room 1:15 pm – 2:15 pm

Energy and Environment, Law

Session Chair: Jane Brooker

How Does Shale Gas Extraction In Pennsylvania Affect Ecosystem Services?

Kshama Harpankar Lebanon Valley College

Advances in horizontal drilling technology made tapping into the Marcellus Shale formation possible and put the state of Pennsylvania at the forefront of natural gas production in the USA. Production in PA nearly tripled from 2008-2010. According to the Pennsylvania Department of Environmental Protection, over 9,500 active and permitted Marcellus Shale gas wells existed in 2012. It is important to understand where this development in taking place and how it may affect ecosystem services. This presentation will synthesize relevant finding from available literature
on this topic and identity research gaps.

An Evaluation of Inspection and Violation Rates for Natural Gas Drilling the State Forests of Pennsylvania

John Pendley Susquehanna University

The state of Pennsylvania is looking to sell more oil and gas leases that allow fracking in state forests and parks. However, little information is available for the oil and gas development that already exist on state lands. The purpose of this paper was to examine the inspection record for wells developed under three leasing events in 2008 and 2010. The data developed in the study showed that compliance statistics for hydraulically fractured wells on state forest tracts were generally similar to other wells in the state. This result means that the wells in the state forests were generally receiving the same inspection scrutiny that wells on private lands received. While the aggregate compliance rates for state forest versus non-state forest were comparable, the data did reveal certain anomalies for individual drillers. These anomalies were identified and described so that they may be analyzed in future research. The conclusions reached in this paper may give regulators and others in authority, information useful in the administration of the current leases and new leases that have recently been approved.

The Forte Case: Learning from a Ponzi Scheme

Kevin Eugene Flynn West Chester University of Pennsylvania
Phyllis Belak West Chester University of Pennsylvania
Glenn Soltis West Chester University of Pennsylvania

In recent years, investors have lost billions of dollars resulting from a common fraud known as a Ponzi scheme. Using a real-life Ponzi scheme, we prepared a fraud case study that is designed to be a comprehensive assignment in a fraud examination or forensic accounting course. The case may be assigned to students after fraud in general, and Ponzi schemes in particular, are covered in class. This case is relevant for two reasons: 1) it focuses on an actual Ponzi scam perpetrated in the Mid-Atlantic Region, and, 2) it comprehensively depicts the many aspects of a fraud scheme including: motivation, ethics, red flags, the "clawback process", income tax implications, and strategies for future deterrence.

Session 32: Willow Room 1:15 pm – 2:15 pm

General

Session Chair: Jerry D. Belloit

Publishing 101: So You Want to Become a Published Author

Robert S. Fleming Rowan University

Have you ever considered publishing a book or contributing a book chapter or case study? The author will share his extensive experience in preparing a successful proposal and navigating the challenges of preparing and publishing your work.

The Role of School Milk Programs as a Tool to Market Milk in Developing Countries; a Long-Term Benefit Imbedded in Short-Term Investment

Daniela Feenstra Pennsylvania State University
Kirstin Torgerson Cornell University

Providing milk to children in developing nations through school feeding programs (SFP) has short term benefits such as a alleviating hunger and improving the cognitive and educational abilities of children (Jomaa, McDonnell, & Probat, 2011). School feeding programs, and school milk programs (SMP) also play a role in the marketing of dairy products by introducing milk and other dairy products into the diet of children who will: 1) influence their parents' purchasing behavior, and 2) become life time consumers of such products.

Marketing milk and milk products to schoolchildren in developing nations, through school feeding programs and school milk programs are marketing tools that can be utilized to create a growing demand for milk and milk products in targeted regions. Peter Ngaruiya, executive director of Easter and Southern Africa Dairy Association mentioned in an interview "most of the countries which have transformed their dairy sector have a functioning school milk program". This comment was in reference to a desire to restart a school milk program in Kenya (Capital FM, 2014).

Creating product awareness and dependency through school feeding programs and school milk programs has the long-term benefits of 1) life time consumption of milk by the student participants, 2) the exponential introduction of milk and milk products to future generations who will grow up with milk as a staple food, and 3) a growth in the demand of milk and milk products, which therefore creates a boost to the local in the local economy.

This paper looks at examples of how school feeding and school milk programs have been used in developing nations as a marketing tool to kick start their local industries and create a long term demand for milk and milk products.

Using Agricultural Development as a Tool for Rural Poverty Alleviation in Kenya

Yaya Sissoko Indiana University of Pennsylvania
Riley G. Smith Indiana University of Pennsylvania

Numerous studies have set out to establish a connection between agricultural productivity growth and rural poverty in developing nations. Time and time again, results show that development in the agricultural sector is crucial in reducing rural poverty. This paper applies the conclusions drawn from these studies to the current state of agriculture in Kenya, where the sector represents a significant portion of economic activity. Using the percent change in GDP per capita from the previous year as a proxy dependent variable for rural poverty, results show that the percent change in agricultural value added per

worker from the previous year, the percent change in terms of trade from the previous year, and the percent change in agriculture as a percentage of GDP from the previous year are all significant. Policy implications are explored, with a focus on alleviating rural poverty.

Session 33: Logan/Harris Room 1:15 pm – 2:15 pm

Management, Technology

Session Chair: Darrell Leslie Steckler

Getting to How: Is the Current Use of Data Preventing Managers from Gaining a True Understanding of What is Important?

Murray James Pyle Marywood University
Uldarico Rex Dumdum Marywood University

Many management problem-solving approaches employ quantitative methods and virtually every business program requires students to take at least one statistical methods course. In the last decade a proliferation of statistical tools has surfaced in many areas of business under the general category of analytics. From operations management to marketing and decision making, quantitative methods dominate the curriculum and application community.

This paper explores the notion that such tools are being taught and applied in a manner that does a disservice to those relying on the results. Using data and an example drawn from popular culture with a strong connection to the boardroom, this paper explores what is presented as a penchant to focus on what happens and fail to address the more interesting questions of why or how something happens.

Contemporary Management Authors: Do They Really Have New Ideas for Success?

Cori Jo Myers Lock Haven University of Pennsylvania
Marcia Kurzynski Lock Haven University of Pennsylvania

How many managers run to the bookstore or log on to Amazon when the newest, hottest management book is published seeking ways to miraculously improve business performance? As companies continue to struggle, management theorists work to concoct the next remedy often by recycling and repackaging fundamental ideas. So, are the contemporary authors really on to something new or have the classical authors provided a viable foundation that requires a more concerted effort on the part of management and staff to implement? This paper seeks to examine selected contemporary works and compare them to selected classical works to determine if some common themes for success emerge.

Session 34: Sylvan Room 2:15 pm – 3:45 pm

Finance, Business Education

Session Chair: Daniela Feenstra

Financial Flexibility as a Mediating Variable for Organizational Culture

Daniel Singer Towson University
Susan Flaherty Towson University
Jeffrey Hillard Towson University
Richard Rosecky Towson University

This paper examines the impact of financial structure on organizational culture. We find that the internally generated financial attributes of a firm play a significant role in determining whether an organization adopts a traditional culture that is resistant to change or a positive culture which embraces change. Binary Logistic Regression is used to analyze a set of internal and external financial attributes

that impact organizational culture. Our results suggest the importance of a complex of internal financial attributes in the formation of Traditional or Positive cultures.

An Evaluation of MBA Student Success and Streamlining the Admissions Process

William Pratt Clarion University of Pennsylvania

Within this study we examine factors commonly employed as MBA applicant evaluation criteria to see if these criteria are important in determining an applicant's potential for success. After a review of our initial findings a subsequent research question emerged: "is the GMAT a necessity in the admissions process or can other factors be employed to confidently determine if a student is likely to be successful in a graduate business program?" The findings indicate that the GMAT is not a significant predictor of student success when considering factors such as undergraduate grade point average and work experience. Furthermore, the results suggest that prior findings in support of the GMAT maybe the result of missing variables in the model specification. Our results show that undergraduate GPA alone can be employed as an admission criterion of potential success in lieu of the GMAT and in doing so streamline the admission process while minimizing student expenses. Within the discussion section we offer suggestions for reducing the need of GMAT score information in the admissions process.

I've Got a Degree, But am I Marketable?!

Darrell Leslie Steckler York College of Pennsylvania

This paper discusses and attempts to answer some basic questions as we, representing the professional technology training possible at a variety of institutions, come to grips with remaining a viable source for the needs of this ever-evolving landscape! Is there a gap between what we are offering and what our Information Technology students need to prepare them for their entry into the professional arena? This paper evaluates whether or not graduates are prepared for the technology environment they will be facing as they head out into the 'real world' and the beginning of their professional careers. It reviews what skills Information Technology groups look for in new hires today and what skill sets they will find valuable for the next 5 years. There is a discussion on how recent graduates feel about the education they received, from a systems technology perspective. Did they feel prepared to enter the workforce? From the perspective of technology courses to the emphasis on professionalism and business, we will take a look at how trends have affected the hiring process. Over 30 school curriculums are evaluated to develop a course gap analysis on where our schools are today and where we need to be heading for the future.

Panel Discussion

Accounting Students Writing-to-Learn Using Social Pedagogy and Technology

Andrea Bianca Francis LaGuardia Community College -CUNY
Rajendra Bhika LaGuardia Community College –CUNY

Accounting faculty in the Business & Technology Department leveraged their participation in the Writing in the Disciplines professional development seminar to find an innovative way to assist students in two Principles of Accounting I classes to explore and enhance their general writing and business writing skills. This work was in response to a recent Periodic Program Review that cited a lack of low-stakes writing in the Accounting Program, which creates challenges for students and faculty as students progress through the course sequence. Faculty used this initiative to help students explore writing within the context of the accounting discipline, thereby allowing students to dispense with the notion that accounting is 'only number-crunching'.

The use of social pedagogical practices and technology allowed faculty to make this initiative a challenging, yet stimulating experience for students. Students were paired across two classrooms via a

community ePortfolio. ePortfolio is a technology used at the College to encourage student self-authorship, build connections, and showcase student work. Through a series of ePortfolio-based assignments, along with an in-class writing workshop conducted by faculty from the English and Business & Technology Departments, students were able to understand the importance of writing in the accounting discipline, explore their writing abilities, learn about different forms of business communication and apply them, and use analysis and problem-solving to document their responses to accounting inaccuracies. The semester concluded with students completing a written reflection and a survey to document and share their experiences.

During this presentation, faculty will share the structure, assignments and activities, and results of the writing-to-learn initiative. We will also discuss with participants how this work can be adapted and implemented throughout an accounting program as well as across disciplines.

The Loan-out Company; What is It, and Who Benefits?

Norman Sigmond Kutztown University of Pennsylvania

For many years entertainers and professional athletes have sought a device that can give some level of shielding of the income that they earn from endorsements, personal appearances and other income earning activities that lay outside of their primary professional work. Over time, a variety of mechanisms have been used for this purpose. One of the most effective of these is the Loan-out Company. Even though this device has specific benefits, there exist serious restrictions to its use. This paper explores the complexities, benefits and drawbacks of this device.

Session 35: Willow Room 2:15 pm – 3:35 pm

Ethics

Session Chair: Dawn Parasolick

The Coming Robot Revolution: Problematic Impacts and Ethical Considerations

Mohammed Sidky

This presentation will examine the growing role of robots and computerized systems in modern society. On the one hand such technological advancements promise greater efficiency and effectiveness in both manufacturing and service industries, relieving humans from dangerous and undesirable jobs and heralds a new age of greater leisure, productivity, and creativity.
On the other hand, given that this revolution is built on the foundations of socio-economic inequality and motivations that focus primarily on efficiency and profit maximization, important ethical issues and problems can readily be seen.
Central topics in this presentation include issues of job displacement, socio-cultural transformations threatening human subservience to robot workers, automated decision centers and implementation agents. Central questions include the following:

1. What are the motivating factors behind this revolution?
2. Who gains and who benefits from the continuing encroachment of robots into human society?
3. How does/would increasing robotization of society affect socio-cultural and social-psychological issues of identity for modern humans?
4. What are some important ethical considerations regarding the role, place and identity of human members of society?
5. Were the Luddites right after all?

Bandwagon Effect on Plastic Bag Reduction: Ban or Reward?

Jingze Jiang Edinboro University of Pennsylvania

This work addresses the need by identifying alternatives to bans and taxes in order to promote the formation of environmentally friendly social norms. We focus on the program for plastic shopping bag reduction, especially stores' reusable bag reward programs. By considering the bandwagon effects of green program participation, this study searches for the economic motivation for stores' voluntary rewards program, identifies optimal reward programs and assesses the effectiveness of reward programs in encouraging consumers to exhibit environmentally friendly behavior in the long-run. Finally, this research characterizes the behavior of stores and consumers, as well as the economic environments in which they operate, for the broader application of the model. Results of this study show that rewards are effective for controlling plastic bag use, since the number of reusable bag users increases after a reward is put in place. We also find the threshold that guarantees consumers keeping using reusable bags even without reward programs. In addition, results show that the winning store attracting more consumers participating will increase store profits.

A Theoretical Explanation of Unethical Behavior among Movers and Shakers

Mark Ciavarella Pennsylvania College of Technology
John Grigsby Pennsylvania College of Technology

We explore salient individual characteristics and situation factors that are potential antecedents to unethical decision-making among successful "movers and shakers." We define movers and shakers as those individuals that are high-level achieving professionals that have risen to power within their organizations. We propose that direct relationships exist between the individual characteristics of high-level achieving professionals and unethical decision-making such that situational effects may have no bearing on the ethical decision-making capability of the individual inasmuch as these individuals will act unethically regardless of the situation. As in previous models of ethics, we propose a contingency approach to studying the interaction between individual characteristics and situational factors, such that situational factors potentially moderate the relationship between individual variables and unethical decision-making for most high level achieving professionals. However, we argue that, in some cases, the high-level achieving professional's personality could lead to unethical decision-making regardless of the situation. Finally, we raise questions for future research in order to understand not only the antecedents to unethical decision-making among high level achieving professionals, but also the implications these behaviors have on workplace culture and morale.

How to Protect Your Data Effectively From Mobile Access

Kustim Wibowo Indiana University of Pennsylvania
Azad Ali Indiana University of Pennsylvania

Mobile systems are information systems that support users in motion. Mobile systems users access the system from any place using any smart devices at any time. Globally, the major reason for the importance of mobile systems is the size their market. As of 2012, there are 5.9 billion and as of 2013, there are 6.8 billion wireless subscriptions. The number of subscriptions approaches of total global population of 7.1 billion. One third of those subscriptions involve smartphones and other mobile devices. The remaining two-thirds of those subscriptions provide an enormous opportunity of future mobile system users. Additionally, mobile use is favored by the young. The younger the age group, the greater the percentage of people with mobile devices. There are some advantages of personal mobile devices in the business environment such as cost savings, greater user satisfaction, reduce need of training, higher productivity, and reduce user support costs. However, there are many disadvantages such as data loss or damage, loss control, compatibility problems, risk of computer virus infection, and greater user support costs.

This research focuses on how to protect data loss or damage due to the mobile access. When data is accessed and brought into users' or employees' owned mobile computing devices, the business and organization loses control over where it goes and what happens to it. Also, if the user or an employee loses his or her device, the data goes with it, and when an employee leaves the organization, the data on their personal devices will have to be revoked or deleted, somehow. There are some existing control mechanisms for data access and well BYOD (bring your own device) and BYOA (bring your own application) policies in most organizations to protect network and data access. This research will discuss the existing and will introduce new and improved mechanisms and regulations that will provide a better and more flexible data access, as well as data protection. This research will utilize information in the university libraries, journals, newspaper, and magazines, as well as online resources.

NABET OFFICERS

Acting President
Norman Sigmond, Kutztown University of Pennsylvania

Vice-President of Programs and Conference Chair
Corina N. Slaff, Misericordia University

Conference co-Chairpersons
Loreen M. Powell, Bloomsburg University of Pennsylvania
Dawn Parasolick, Point Park University

Secretary and Webmaster
Bradley C. Barnhorst, DeSales University

NABET Executive Board

Chairperson
Norman Sigmond, Kutztown University of Pennsylvania

Treasurer
Arshad Chawdhry, California University of Pennsylvania

Secretary and Webmaster
Bradley C. Barnhorst, DeSales University

Conference Chairperson and Vice-President of Programs
Corina N. Slaff, Misericordia University

Conference co-Chairpersons
Loreen M. Powell, Bloomsburg University of Pennsylvania
Dawn Parasolick, Point Park University

Journal co-Editors
Melanie Anderson, Slippery Rock University of Pennsylvania
Norman Sigmond, Kutztown University of Pennsylvania
Jerry Belloit, Clarion University of Pennsylvania

Proceedings co-Editors
Norman Sigmond, Kutztown University of Pennsylvania
Cori Myers, Lock Haven University of Pennsylvania
Jerry D. Belloit, Clarion University of Pennsylvania
Marlene Burkhardt, Juniata University
Michael Gallagher, DeSales University
Loreen Powell, Bloomsburg University of Pennsylvania

Board Members at-Large
Marlene Burkhardt, Juniata University
Kevin Roth, Clarion University of Pennsylvania