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(4) Fostering professional development of faculties, by encouraging them to engage in research and submitting papers for presentation to the annual meetings of the Association. Selected referred papers will be published in the *Pennsylvania Journal of Business and Economics*, which is a broad-based forum to present scholarly research and views on a variety of business and economic topics.

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THE EUROPEAN UNION EXPANSION AND TURKEY'S DESIRE FOR MEMBERSHIP

Okan Akcay
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ABSTRACT

European Union (EU) expansion has taken place four times already. The EU announced twelve-candidate countries in 1997 at the Luxembourg meeting. Turkey became a candidate country at the Helsinki European Council meeting on December 10, 1999. The European Union accepted ten new members in to the union on May 1, 2004. This was the largest EU expansion and it was very costly and difficult to manage admitting these countries. Turkey has been seeking EU membership for four decades. This 45-year adventure to become a member of the European Union produced a major agreement, the Custom Union, which went into effect January 1, 1998. Turkey is committed to becoming a part of the EU and has recently made substantial political and economic reforms necessary to meet the Copenhagen Criteria. In my paper, I will discuss Turkey's path towards economic and political integration with the EU and some of the recent economic, political and cultural developments that are taking place in Turkey towards the goal of meeting the Copenhagen Criteria required for EU membership. I will also present some of the barriers and benefits for Turkey becoming a member of the European Union.

INTRODUCTION

Turkey has a dynamic mixed economic structure with a strong, rapidly growing private sector. The state still plays a major role in basic industries such as banking, transportation and communication. The private sector dominates the most important industries of textiles and clothing, which are the largest exporters in Turkey. The economic situation has been marked by erratic economic growth and serious imbalances in recent years. In 2001, the country went through its worst economic crisis in a generation, although by year's end, the economy began to recover. The Turkish currency (Lira) depreciated nearly 50 percent and the economy shrank by 8.5 percent. Turkey has embarked on a strengthened economic reform program, backed by the International Monetary Fund (IMF) and World Bank funding (Dun and Bradstreet, 2002/03).

Turkey has a flourishing democracy, a lively free press and a stable government with a large parliamentary majority. The economy is booming over the past two years, GDP has been growing by an annual average of 8.4 percent and inflation has fallen by three-quarters, close to single figures. Turkey is a secular country with a tolerant society and a young, educated and growing population (The Economist, Sept. 18, 04).

Turkey has desired membership in the EU since 1959. In December 1995, the EU Parliament approved the Customs Union with Turkey, which went into effect January 1, 1996. Turkey's 45 years of adventure in trying to become a member of the EU produced a major agreement, the Customs Union. Despite the implementation of a Custom Union with the EU, foreign direct investment (FDI) remains low (less than one billion dollars annually) because potential investors around the world are concerned about the political and economic stability of the country. The future may be brighter for Turkey as far as foreign investments are concerned. Recently the government is stable (There is no coalition government-Justice and Development party has been in power since November, 2002) and has been implementing a major economic reform program. It includes a tighter budget, social security, banking reforms and an accelerated privatization program (Dun and Bradstreet, 2003/04). On December 10 1999 Turkey become a candidate country of the Helsinki European Council meeting and has recently made substantial political and economic reforms necessary for becoming an EU member (www.hurriyet.com.tr/arsivim)

EUROPEAN UNION EXPANSION

European Union Expansion took place four times already (www.europea.eu.int and Cateora/graham, 04) and the EU accepted twelve-candidate countries in 1997. Turkey was announced as a candidate country on December 10, 1999 in Helsinki. Ten new members jointed the Union on May 1, 2004 and it was the largest expansion in the EU history (Wood and Yesilada, 2004). It was very costly and difficult to admit these countries, as they all met the Copenhagen Criteria, which are as follows (The Economist, September, 18, 04):

- Having stable institutions that guarantee democracy, rules of law, human rights and respect for minorities
- A functional market economy
- The capacity to cope with competition with in the EU
- The ability to take on obligations of membership

At the December 12-13, 2002 Copenhagen Meting, the EU decided to give dates to commence accession negotiation with new members but Bulgaria and Romania will wait until the year 2007. Turkey will wait until a 2005 date in order to see the application of the Copenhagen Criteria to daily life in Turkey. Human rights issues were the biggest stumbling block. Turkey recently has passed legislation to meet many of the political requirements of the Copenhagen criteria. It appears that Turkey is being treated differently than other EU candidate countries with different standards being applied to its membership bid. EU officials say they need to see that legislated reforms are fully implemented before Turkey can be given a timeline for its accession; but Turkish officials have noted that six countries that had not met all of the political criteria, were given negotiation dates and they all become members of the EU on May 1, 2004.

Turkey has been waiting for the EU membership for four decades and the EU has accepted countries which applied for full membership only five or ten years ago. The EU does not seem to be sincere in its decision to set a date for opening accession negotiations with Turkey. Turkey has been a faithful member of NATO for 50 years and has spent tremendous amounts of resources: money and manpower to protect herself and European security and western interests against communism during the Cold War. Turkey is also growing very fast economically and is one of the emerging markets, with the following characteristics (Cateora/Graham, 04):

1- It is a physically large country
2- It has a significant population, which is young and highly educated
3- It represents a considerable market for a wide range of products
4- It has strong economic rates of growth or potential for significant growth
5- It has undertaken significant political and economic reform programs
6- It is a regional economic driver and affects other economies in the region
7- It will encourage further expansion in neighboring markets as the country's economy grows
8- It is a crossroad between Europe and Asia and adopted a market economic system a long time ago.

Turkey also needs to meet economic criteria and free herself from financial problems in order to be part of the EU. Turkey is a long way from adapting the Euro as currency, but she must meet the convergence criteria related to inflation, long-term interest rates, government budget deficit, gross government debt and exchange rates (The Economist, September 25, 04). Turkey needs rapid economic development to increase tourist revenues, export levels and to attract foreign direct investment (FDI) within a short period of time. Turkish foreign trade partners are Germany, United States, Italy, France, United Kingdom and Russia. Turkey is highly dependent on trade with the EU, which is close to 70 percent of foreign trade (www.die.gov.tr). If Turkey is committed to becoming part of the EU, trade relations with the EU need to strengthen and continue and at the same time trade relations with USA, Russia, Japan, China, neighboring countries and other emerging markets in the world need to increase. Turkey should not put all their eggs in one basket but should diversify trade relations in the world market. This would put Turkey strategically in a better foreign trade position in the future. I believe that Turkey will sooner or later become a part of the EU in a very dignifying way. Turkey has lots to offer to the EU and both sides will gain political and economic strengths. Turkey historically belongs in Europe (The Economist, December, 02). This is an official government policy, which was established by the founder of the Turkish Republic, Mustafa Kemal Ataturk. It is my opinion that 2005 is too long a time for Turkey to await possible membership to the EU. It is hard to predict what will happen to world economy, politics and the European Union. Some literature is already saying that the EU is a mature market and has lost its competitive edge in a number of sectors and future growth will be in emerging markets, which are mostly located in Asia.

BARRIERS AND BENEFITS

Turkey's European identity has always been a controversial matter of discussion by politicians, scholars and ordinary people in Europe and Turkey. Some Europeans are reluctant to start accession negotiations in early 2005. The people against Turkey's membership have a lot of excuses, such as: Turkey is too large, too poor and will not integrate with European culture. Some argue that Turkey must make progress on key issues like civilian control of the military, civil liberties, freedom of the media, eliminating torture in detention. Turkey would be the most populous country in the EU after Germany, and one of the less prosperous members, which would allow her to receive extensive subsidies and financial support from EU funds (Turkish Forum web site, articles can be accessed at www. mehmetogutcu.com).

ECONOMY

Turkey is a dynamic large emerging market and has made great strides in significant economic development over the last four decades by substantially increasing per capita income, education levels and industrial production. The population is 72 million and per capita income is $5,890. Two-thirds of the population lives in urban areas and Turkish economy grew at an average annual rate of 4 percent between 1965 and 2001. The agricultural production rate is 16 percent of its GDP; industry is 24 percent and services 60 percent. The unemployment rate is little over 10 percent. A substantial increase in economic activities will start creating new jobs. In terms of purchasing power parity, Turkey is the world's 19th largest economy with a 2002 GDP at around $430 billion. It has the 10th largest area of arable land in the world and is the world's 17th most populous nation. According to some estimates, Turkey's DP could arguably rise six-fold to $ 1.2 trillion by 2023, population is estimated to reach 92 million and average per capita income would be $13,000. The goal of Turkey is to become a regional hub for energy and water interconnections, trade, transportation, finance and investment through increased interdependence with its neighbors. This situation will positively affect the EU's future energy supply security. Turkey was burdened with a huge domestic ($140 billion) and foreign debt ($147 billion) at the end of 2003. It has a $19 billion standby agreement with the IMF and the economic reform program provided a strict budget discipline. Turkey has a lot to offer for foreign investors; especially an inexpensive, educated labor force, a sound infrastructure and very good location (Turkish Forum, www.mehmetogutcu.com). Turkey may receive some economic benefits to joint the EU such as; free flow of labor and capital, monetary aid and might have to adapt the Euro as a currency in the long term (www.byegm.gov.tr, Dis Basinda Turkiye, November 29, 2004).

POPULATION

The Turkish population is young and educated; 60 percent of the population is under the age of 35. Its domestic market has a great potential for growth; its labor force is hard working and cost-effective; and its unique location gives it access it's Europe, Central Asia and the Middle East. More than 60,000 foreign companies have invested in Turkey. Politicians, economists and sociologists in the EU predict that Turkey's population will continue to increase due to the momentum and growth potential of the young population structure. The total size of population is likely to be stabilized at around 95 million towards the middle of the 21st century. Turkey's population is expected to be stabilized at 99 million towards the year 2070 (Turkish Forum, mehmetorgutcu.com).

RELIGION AND CULTURE

Some Europeans will continue to oppose admitting an Islamic country to the EU, because its values have been shaped by Christian/Western tradition. Some parts of Europe are still haunted by a frightening vision of the Turks storming the gates in Brussels looking for jobs. Few people now insist that the EU is a "Christian club" but the feeling that it should be is widespread, especially among Christian Democratic Parties and conservative people in Europe (The Economist, September 18, 2004). The EU political strength is first and foremost based on values of democracy, human rights and the rule of law. Turkey is a Muslim populated country but a secular state and she is ready and willing to embrace and abide by these values, which are universal in the western world. EU countries have been home to 3.6 million Turkish immigrants of which 1.2 million are citizens of the EU. Europe hosts a Muslim immigrant population of millions. They constitute three to five percent of the total population in Germany, Belgium, France and the Netherlands. According to current estimates roughly 15 million people of the Muslim faith live in the 15 nations of the EU. Two other potential candidates for membership (Albania and Bosnia) are partly or wholly Muslim. In fact, Islam has already become a significant element of Europe's cultural landscape (Turkish Forum, www.mehmetogutcu.com). Turkish entry to the EU would in a broader sense be positive to the Muslim world; a no vote to Turkey would be a slap in the face delivered by the West against Islam. Ever since September 11th, the West has been anxious to avoid a "clash of civilizations", and to show that democracy and liberal economics are compatible with Islam (The Economist, September 18, 2004).

The EU leaders are facing a huge challenge but nobody is expecting that Turkey will become a member of the EU today or tomorrow. Turkish negotiations will take place over the next ten years with a target date of perhaps 2015 for actual entry to the EU. Turkey's entry needs to be approved unanimously by the existing members. It is hard to understand why negotiation dates are not being given to Turkey if she meets the Copenhagen Criteria. Other applicants; such as Bulgaria and Romania have implementation problems of the Copenhagen Criteria, but are ready to start talks and possibly join the EU by 2007. Turkey is in many ways ahead of these countries. There seems to be unwritten criteria and other factors that come into play. The EU must not apply a double standard to Turkey and Islam. The EU countries should adopt a multi-cultural attitude when applying policy for the future peace and prosperity of Europe.

No country has ever agreed to sacrifice so many fundamental aspects of its culture in order to affirm its European identity. Modern Turkey went so far as to abandon its old Arabic alphabet, replacing it with Roman letters; Turks were obliged to abandon traditional dress and wear western clothing all in the name of official secularism inspired by law passed in France in 1905 (www.mondediplo.com, English edition, November 2004).

RECENT DEVELOPMENTS

Turkey has a series of substantial reforms packets passed through the national assembly to meet the Copenhagen Criteria. She made 43 amendments in the constitution between 2001 and 2004. More than 66 laws including eight harmonization packages, 49 circulars and 29 regulations and one rulebook were assessed and implemented. Turkish people ware recently affected by 175 laws that influence their life daily. Listed below are some of the laws which were mentioned in an article written by Mehmet Ali Brand which was publish in the Turkish Daily News internet web site on November 25, 2004 (www.turkishdailynews.com).

- A new civil code and a new media law
- Abolition of the death penalty
- End of emergency rule in the Southeast
- Lifting of the ban on Kurdish and allowing broadcasts in local languages
- Purchase of tangible assets by non-Muslim communities and restricting the opening of places of worship was eased
- Foundations and associations laws were changed
- Limits imposed on the right to gather and hold rallies were lifted and the matter was harmonized with EU norms
- Important changes on laws of torture and mistreatment were made, and the laws that protected state servants found guilty of such crimes were abolished
- The maximum time spent in police custody was decreased to 48 hours
- State Security Courts (DGM) were abolished
- The European Court of Human Rights decisions (such as retrials) become applicable
- The National Security council (MGK) was transformed into an advisory body and its executive powers were changed
- The appointment of a civilian as the secretary-general of the MGK was made possible
- Amendments to ensure that the Office of Chief of General Staff expenses were put under scrutiny.

Hopefully these laws will pressure the EU to get a date during the December 17th, 2004 EU Summit negotiations for the opening of entry talks sometime in 2005 without any further delay or pre-conditions attached. Turkish Prime Minister Recep Tayyip Erdogan concedes that implementation of these laws is essential for the future of Turkey even if EU leaders say no at the December EU meeting. These reforms are needed to make Turkey a modern democratic state. But he insists that the EU must not apply double standards to Turkey because other applicants who had implementation problems have been deemed ready to start negotiations for the opening of entry talks (The Economist, September 18, 2004).

CONCLUSION

Turkey has made progress in enacting demographic reforms and satisfying their "Copenhagen Criteria". This includes having stable institutions that guarantee democracy, the rule of law, human rights and respect for minorities, a functioning market economy, the capacity to cope with competition within the EU and the ability to take on the obligations of membership (The Economist, September 18, 2004). The prospect of EU membership has already reinforced Turkey's democratization, secularism and respect for human rights. Turkey's membership will provide a concrete message of hope, peace, prosperity, stability, better governance and democracy in the region. For that reason; Turkey needs to aggressively pursue EU membership and stay the course. This task will a very difficult and long winding road for Turkey but it is worth it to try in the long-run. Both the EU's and Turkey's expectations are so high that it might be impossible to satisfy both sides. The EU is divided about Turkish negotiation talks; entry is supported by England, Greece, Poland, Italy, Spain, and Portugal. EU members against are Austria, Denmark, Belgium, and Holland, also Slovakia for cultural and political reasons. Germany's and France's leaders support Turkey but have a lot of pressure from conservative parties and groups (www.milliyet.com.tr, 11/10/2004). Turkey must improve trade relationships with the USA as well as with developing and emerging markets such as China, Russia, India, South Korea, Latin America and neighboring countries. Turkey is already trading with these countries but there are tremendous export-import opportunities available for both sides, because economic growth will continue in Asia and other emerging markets in the next decade.

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ELECTRONIC PORTFOLIOS: HAS THEIR TIME ARRIVED?

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ABSTRACT

This paper examines the developmental process experienced by the Department of Administrative Science as we introduced the outcomes assessment portfolio project. It covers the initial attempts through to the current electronic format for the project. Suggestions for implementing such a project in other settings is included.

In 1998, driven by AACSB International, the Clarion University of Pennsylvania College of Business Administration, (COBA), determined the need for outcomes assessment. The specific methodology was left to be determined by the individual departments. Following a number of alternative suggestions and discussions, the Department of Administrative Science decided to use the portfolio as a tool to assist us in the assessment process. A portfolio is simply a collection of documents that demonstrate the acquisition of knowledge, skills and abilities. We viewed the portfolio as a summative document that would be an excellent measure as well as the least costly method of assessment.

We saw a second benefit of the portfolio, that is, students could use the portfolio in their career search activities. During an interview session students could highlight the discussion of their skill, knowledge and abilities by actually showing the interviewer specific, concrete examples of various related class assignments, projects, and previous work experiences. Having this paper portfolio certainly makes the student stand out from the other candidates and has the potential to make the candidate a bit unique from the others in the applicant pool.

An unanticipated benefit for the industrial relations students resulted from their hands on experiences associated with the creation of their portfolio. They were able to improve their ability to recognize a "good" portfolio applicant from a "weak" applicant in their future career activities. The skills associated with this process were further refined via an in-class assignment to review and critique the portfolios of four of their peers and make a recommendation for hiring based on an imaginary human resource entry level position. This activity provided additional feedback to the student in the form of a memo to each applicant highlighting strengths and weaknesses observed by their peers.

The initial portfolio project focused on a creation of a paper portfolio. From an assessment perspective this created a bit of a time management problem. Since students need a major portion of the semester to create the project, it leaves a very short time window for the actual assessment process on the part of the departmental faculty. We initially accomplished this by having an "open house" type of session where faculty were invited to come in for refreshments served while reviewing and discussing the portfolios with students. Unfortunately, not everyone was available or able to make the sessions. Because many of the students were either graduating or using the project for interviewing activities, the portfolios had to be returned in a timely manner which also limited access for the departmental faculty.

There were additional drawbacks of the paper portfolio in that students were able to show the interviewer their materials but had nothing beyond their paper resumes to leave with the interviewer. Plus the paper pages often reflected wear as a result of people looking at the documents. Thus, what was initially professional in appearance, became less so with use. To get around this issue several students began using clear plastic protective pages. This was a less-than-ideal solution due to the glare which often makes reading the pages difficult. A second problem with this alternative was that frequently students placed more than one page within the page slips making it cumbersome to read the entire document.

After several attempts to improve upon this paper portfolio project, the department determined that it was time to switch to an electronic portfolio. Since technology was rapidly changing, it became obvious that more and more students were going to be using the Internet to conduct their job search activities and an electronic portfolio may just be the wave of the future.

In 2002 the Department of Administrative Science switched to an electronic format for the portfolio. We initially required all students to publish their portfolio to a web site. For confidentiality reasons and resource restraints (students no longer have access to the university web server once they graduate) we have modified the assignment to where the students now have the option of creating a published web page portfolio or burning the portfolio onto a CD.

There are several benefits to this new methodology. First, students now can submit their project at their convenience. This in turn means that they come in randomly making it much easier to evaluate each individual portfolio. Second, the instructor is now able to provide the electronic links to the other departmental faculty for their ease in reviewing the portfolios. Third, feedback can also be provided electronically via an e-mail message created while viewing the portfolio. Students are encouraged to have an electronic link at the closing of their portfolio for communications of either the potential employer or the instructor.

This procedure has additional values for the student. The electronic portfolio now provides the interviewer with something to "take back" to the office and share with other colleagues. The electronic portfolio is also helpful for job fair visits. Although recruiters may be willing to take the time to view a paper portfolio, if rushed, most would be unwilling to spend the necessary time to do a thorough review of the documents contained in the packet. However, with an electronic format, students can highlight their web link on their resume, or, provide selected job fair recruiters with a CD version of their portfolio along with the paper resume. It is more likely that the student's interest in the firm will be remembered as standing out from all of the other fair visitors and viewed more favorably at the leisure of the recruiters upon their return to the office.

More recently, a number of graduate programs are asking students to include a portfolio as a component of their application package. Having the CD ready gives the student more confidence in their ability to be successful in the application process.

For this project to be successful, one must provide the students with the opportunity to plan their project over their academic career rather than introducing it in their last semester. In our case, the Department of Administrative Science introduces the idea of the e-portfolio to all management and industrial relations incoming freshmen during a group session on "Meet Your Advisor" day and repeats the information during a group advising session for freshmen. Since our majors don't take the upper core and business major courses until their junior year, students basically have two years until they are required to begin actual construction of the portfolio. In Management 324: Human Resources Management (a required course in both majors) students are required to prepare the foundation work. That is, they develop a detailed outline of what their final project will look like. It includes items such as their welcome page, table of contents (index), resume, introduction to the various sections and documents, references, work experiences, professional development activities, community service, and concluding (thank you) page. This assignment is completed on a points basis and is due at the end of the semester. Because the assignment does not involve the actual publishing of the portfolio it is a much easier assignment and gets the students to thinking seriously about what they have been learning over the past three years.

It is not until their senior year that the students are responsible for submitting their electronic portfolio. This requirement is a part of all senior level management courses which are a component of the major course work. Although the department recognizes that we do miss some of the graduating management majors, we know that a significant number of them do take one or two of the industrial relations required courses as an elective for their management major. Evaluating thirty to forty portfolios per semester provides ample evidence of growth and development by our students. It is easy to spot weaknesses in our program if a large number of students have empty areas in their final portfolio.

This portfolio project is not as straight forward as it may initially appear. There are a number of resources that have to be available. One of the major needs is sufficient server space for the students to publish their portfolios. Clarion University provides such space but, the students have to be made aware of the fact that upon graduation, their work is removed. As a result, we strongly encourage all students to save their files onto a CD for future use. Along with the server space is the need for other support tools such as CD burners, scanners (for documents), video and digital cameras to record events or presentations. Software such as Front Page, Dream Weaver and/or PowerPoint also have to be readily available. Most important is the need for support staff to assist in the actual transfer of files from their hard drives to the server.

The important key here is patience. It is a learning process for everyone. Initially we invited a representative of the Computing Services office into the classroom for a one hour demonstration. Each student in the class had access to a computer to work on their files simultaneously with the instructor. The individual demonstrated the publishing process, however, it had several drawbacks. First it took time away from the regular instructional program and second, often the students were not ready to publish when the individual came was present. The result was that when they were ready they forgot the helpful hints presented and / or the procedure itself. Through experience we now know it is essential to have a graduate student dedicated to 10 hours per week to assist students with the publication process. We also have developed a paper guide for students to use as they work on the publishing process.

The question arises then as to whether or not the students are using the final product. The answer is a resounding yes. They are very proud of their final products and have definitely used them in their interviews. An example is where a student was interviewing for a human resource position in a hospital and was asked about her experiences with training. She was able to give the recruiter her CD as she explained about the training practices sessions she and her team-mates created in the employment law class. She received the position offer as a direct result of her portfolio. Other graduates have told us about using their portfolios in career changes. Several recruiters have also provided us with positive feedback. The individual who conducted the department's five year review provided very favorable feedback on the portfolio as the assessment tool. The answer is yes, students are using the portfolio and the department members are quite satisfied with the final products which reflect a job well done. Further evidence of success with this assessment tool is the fact that the Clarion MBA program is now initiating the electronic portfolio as a requirement for completion of the MBA degree. The Department of Administrative Science sees this curricular change as a validation of our work.

THE IMPACT OF THE TAX REFORM ACT OF 1986 ON THE REAL ESTATE AND SAVINGS AND LOAN INDUSTRIES

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ABSTRACT

The Tax Simplification Act of 1986 dramatically restructured many aspects of the taxation of income, particularly income from real estate rentals. Among the unintended consequences of this tax reform was a dramatic reduction in the values of income-producing properties. As a consequence of that reduction in values, many investment properties had value reductions that resulted in values that were less than their mortgage values. During the years immediately following the legislation, there was a near collapse of the savings and loan industry resulting from loan loses.

INTRODUCTION

The Tax Reform Act of 1986 had a profound impact upon the real estate industry and as a result, the Savings and Loan Industry. It has often been suggested that the collapse of the industry during the late 1980s and early 1990s was a result of poor management, fraud, and incompetent appraisals. This paper will suggest that the primary reason for the Savings and Loan difficulties during the late 1980s and early 1990s were the losses incurred through the default of real estate loans caused by the loss in values of the properties used as collateral for those loans. With the implementation of the 1986 Tax Reform Act, this paper will show how the values decreased instantly by about 29-31%. With loan to value ratios of 80%, this reduction left little or no equity in many properties. Where there was market weakness from overbuilding and a decline in the oil industry, many property owners found that they were unable to collect as much rent as they had forecast. When faced with little or no equity in the properties and negative cash flows, many defaulted. These defaults had an even more negative impact as they began a downward spiral in values as the supply of properties increased. As the lenders sold more properties in an attempt to recover on the defaulted loans, prices were driven downward even more. As prices fell further, more owners found themselves paying on mortgages that were greater than the values of the properties that secured them. This spiral became so severe in some markets that prices dropped as much as 75%.

To understand how this occurred, it is important to regress to the end of the Carter Administration in 1980. At that time, the top marginal tax bracket was very high (70%). Taxable income losses from real estate operations could be used to offset earned income without significant limitation. Many doctors sought out real estate investments and structured them so that they would have a positive cash flow but a negative taxable income primarily because of the depreciation deduction.

Depreciation allowances allowed the taxpayer to elect any class life for their real estate property provided that the life was justified. This might allow a depreciable life for a convenience store of 25-30 years, while an apartment building might suggest a life of 40 years. However, while the structure proper had a longer class life, the taxpayer was allowed to depreciate individual building components at more accelerated rates based again upon justification. For example, the value of the roof covering would be deducted from the value of the overall building, and then it would be depreciated perhaps over twenty years rather than the 40 years for the apartment building. Likewise, the carpeting was segregated and depreciated over 5 years. This segregation of building components often was extended to the plumbing, the electrical systems, the mechanical systems, paving, painting, etc. Shenkman (1987) suggested that this effectively gave a property with a 33-40 year class life, an effective life of 22 years. Double Declining Balance depreciation was also allowed, resulting in increasing the depreciation deduction during the early years of the asset's life.

With the major overhaul in the tax code implemented during the Reagan Administration in 1981, the attractiveness of real estate as a tax shelter was significantly increased. The depreciation calculation was significantly changed in that it allowed a larger depreciation deduction. Taxpayers were relieved of the obligation and expense of justifying class lives, while both double declining balance depreciation and segregating building components were no longer available for new acquisitions. However, the class life for real estate was established under the Accelerated Cost Recovery System (ACRS) at 15 years. Using Shenkman's (1987) estimate of an effective 22-year class life pre-ACRS, this change resulted in about a 47% increase in the depreciation deduction over what it would be under the straight-line method. While taxpayers who opted for double-declining balance would not have benefited as greatly under ACRS during the early years of the class life, nevertheless their depreciation deduction was enlarged.

At the onset of the 1981 Tax Reform Act, market interest rates were 16.82% (FHLMC data for 1981). Just prior to the implementation of the Tax Reform Act of 1986, market rates had fallen to 10.18%. From 1981 to 1986 the ACRS class life ratcheted upward from 15 to 19 years thereby reducing the depreciation deduction and making new acquisitions less beneficial from a tax standpoint. However, the falling interest rates reduced the actual interest expense of ownership. The net result of lower interest costs offset by the reduction in the depreciation tax deduction was still a significant increase in the after-tax cash flow afforded by real property investments. Consequently, there was a construction boom that lead to a significant increase in supply in many more popular markets.

THE TAX REFORM ACT OF 1986

The Tax Reform Act of 1986 (TRA)[1] was sponsored by Representative Richard Gephardt (D-MO) and Senator Bill Bradley (D-NJ) and signed into law on October 22, 1986 by President Ronald Reagan. In his speech before the signing, Reagan remarked "I feel like we just played the World Series of tax reform – and the American people won."[2] Although the TRA included sweeping changes to many areas of tax law, below is a summary of the major changes that had the potential to affect the value of real estate.

- Changes to the Marginal Income Tax Rates

The TRA placed all individual taxpayers into two brackets: 28% and 15%. Previously there had been more than a dozen tax brackets. The top marginal tax rates fell from 50% to 28%, which is a 44% drop. The lowest tax rates increased from 11% to 15%, which is a 36% increase.

- Passive Loss Limitation Rules

Losses generated from passive activity (activities in which the taxpayer did not materially participate) were no longer available to offset gains from non-passive activities. Rental of real property was generally classified as passive income regardless of the extent of the owner-taxpayer's participation. However, if the taxpayer materially participates in the rental activity[3], up to $25,000 of the passive losses may be used to offset earned income. This particular provision had an egregious result for many taxpayers who had purchased significant real estate investment properties to shelter active income. Real estate investments that had positive cash flows yet negative taxable incomes were limited as to their future ability to shelter active income. In effect, it was almost retroactive in penalizing taxpayers in this circumstance.

- Lengthening the Recovery Period for Real and Personal Property

The recovery period (useful life) for depreciable assets was increased dramatically. Real estate could no longer be depreciated in 19 years as it could be just prior to the TRA. Under the 1986 law it was to be depreciated over 27½ years for residential and 31½ years for non-residential properties. Most personal property that would be used in real estate had been depreciated over three or five years prior to the TRA. Now it had to be depreciated over five or seven years.

- Repeal of Non-mortgage Interest as an Itemized Deduction

Prior to the 1986 Act any interest expense was an itemized deduction. After the TRA only mortgage interest was included as an itemized deduction. This put market pressure for mortgage interest rates to rise and non-mortgage interest to fall due to their new status of desirability/non-desirability.

- Repeal of Preferential Treatment of Capital Gains

Only 40% of capital gains had been taxed prior to TRA. Under TRA capital gains were 100% taxable. Since the maximum tax rate prior to TRA was 50%, the maximum effective tax rate on the capital gain was 20% (40% times 50%). Under the TRA, with the repeal of the 60% capital gains exclusion, the effective maximum capital gains tax rate was 28%.

- Elimination of the Investment Tax Credit

Prior to TRA an Investment Tax Credit (ITC) of 10% was given for investment in certain personal property that could be used in real estate. That credit was eliminated with the passage of the TRA.

- Low-income Housing Tax Credit

A Low-income Housing Tax Credit was created in the TRA to offset the anticipated ill-effects the TRA would have on the investment in low income real estate projects.

- Restriction on Banks' Write-off of Bad Debt

Prior to TRA banks could write off as a tax deduction their allowance for (anticipation of) bad debt. After TRA larger (more than $400 million in total assets) banks were permitted to write off only actual bad debts.

EXAMPLES OF THE IMPACT TRA HAD ON REAL ESTATE VALUE

To demonstrate the impact of the TRA on real estate values, an apartment building example and an office building example will be given. In each case, the investment value of the property will be estimated assuming the purchase of a property under the tax law existing just prior to the TRA and then under the TRA. These two types of properties were chosen because of the difference of how residential and commercial properties are treated under the tax law. The projects had similar expected return-on-investments commensurate with those available at the time. A detailed five-year cash flow analysis for each project, its assumptions, and its expected profitability under each tax code is included in the appendix.

The apartment project is typical of the kind of property that provides an appropriate tax shelter for investors prior to the TRA 1986. It was analyzed using the average market interest rates and financing terms commonly available in 1986. The project is a 40 unit apartment building with a purchase price of $1,606,000. Land value is estimated at 15% of the sales price. The investor's pre-1986 marginal tax rate was assumed to be 50%. That was lowered to 28% by the 1986 TRA.

The office project is also typical of the kind of property investors seeking a tax shelter pre-1986 TRA would have sought. Again, it was analyze using the prevailing market interest rate and terms commonly available at the time. The project was a three-story 12,000 sq. foot suburban office building. Land was again estimated at 15%. The building purchase price was $1,250,000. The same assumptions were made about the taxpayer's income tax rates.

Table A summarizes the investments under the pre-1986 TRA and the 1986 TRA. An examination of these cash flows demonstrates how dramatically the after-tax cash flow for the investor was reduced. The after-tax cash flow was reduced by 25% and 26% for the apartment and office investments, respectively. This reduction in value was solely due to the Tax Reform Act of 1986. More disturbing, when the investments are examined for their investment values before and after the implementation of the TRA, the investment values for both types of investments fell below the values of the mortgages on each property. This is particularly significant in that the investment value gives an indication of what investors would pay to acquire the property if available for sale, thus it is indicative of its market value. In times of financial difficulty, the likelihood of default substantially increases when the balance due on the mortgage is greater than the market value of the property.

CONCLUSION

The collapse of the Savings and Loan Industry has been attributed to many things, but this paper demonstrates that perhaps one of the more significant causes of their financial failures was the decline in the collateral base of their commercial real estate loans caused primarily by the changes in the 1986 Tax Reform Act. This Act not only caused the decline in property values outright, but also because the provision limiting the offset of active income by passive losses was not restricted to new acquisitions, many taxpayers found that previously purchased real estate assets no longer afforded the tax sheltering benefits. As a consequence, many chose to liquidate those assets. This resulted in a further increase in the supply of investment properties that lead to a further drop in real estate prices.

Table A

	Apartment		Office	
	Pre-1986 TRA	**1986 TRA**	**Pre-1986 TRA**	**1986 TRA**
Rent Revenue	$174,096	$174,096	$136,864	$136,864
Less Interest	$131,393	$131,393	$101,679	$101,679
Less Loan Points	$3,855	$3,855	$2,983	$2,983
Less Depreciation	$71,855	$47,577	$53,591	$32,325
Taxable Income	-$30,012	-$8,728	-$21,389	-$123
Taxes	-$15,006	-$2,444	-$10,695	-$34
Rent Revenue	$174,096	$174,096	$136,864	$136,864
Less Annual Debt Service	$138,171	$138,171	$106,925	$106,925
Less Income Taxes (Savings)	-$15,006	-$2,444	-$10,695	-$34
After-Tax Cash Flow	$50,931	$38,368	$40,634	$29,973
After-Tax Overall Rate[4]	0.031709579		0.032506973	
Given Investment Value	$1,606,164		$1,250,000	
Calculated Value		$1,209,996		$922,063
Mortgage	$1,284,931	$1,284,931	$994,354	$994,354
Loan-to-Value Ratio	80%	106%	80%	108%
Expected IRR	16.42%	13.08%	16.90%	13.65%

[1] PL99-514

[2] The Official Web Site of the Ronald Reagan Presidential Library
http://www.reagan.utexas.edu/resource/speeches/1986/102286a.htm

[3] A taxpayer-property owner can materially participate if the taxpayer-property owner either functions as the property manager or is the employer of the property manager. Thus a taxpayer-property owner who hires a property management firm to manage the property (rent and maintain) is still materially participating.

[4] The After-tax Overall Rate is computed by dividing the After-Tax Cash Flow by the value of the property. The ratio can then be used to compute the investment value of similar investment properties by dividing their After-tax Cash Flow by the After-Tax Overall Rate. Investment Value = After-Tax Cash Flow ÷ After-tax Overall Rate.

PRE-1986 TRA APARTMENT INVESTMENT

Cost	$1,606,164		Operating Expenses		35%	V&C	4%
# of Units	Mo. Rent	Annual Rent	Rental Increases		3%		
30	550	$198,000		Land	15%	$240,925	
10	675	$81,000		Building		$1,365,239	
		$279,000		Owner's MTR		50%	
Holding Period		5	YRs	Depreciable Life		19	
				Month Placed in Service		1	
Capitalization Rate		10.9%		Selling Expenses		8.0%	
Term	10		Interest	10.25%		Points	3%
Amort. Period	30		Pay/Yr	12		DSCR	1.26
Principal	$1,284,931		Points	$38,548		ADS	$138,171
	Year	**1**	**2**	**3**	**4**	**5**	**6**
Gross Potential Income		$279,000	$287,370	$295,991	$304,871	$314,017	$323,437
Less Vacancy		$11,160	$11,495	$11,840	$12,195	$12,561	$12,937
Adjusted Gross		$267,840	$275,875	$284,151	$292,676	$301,456	$310,500
Less Expenses		$93,744	$96,556	$99,453	$102,437	$105,510	$108,675
Net Operating Income		$174,096	$179,319	$184,698	$190,239	$195,947	$201,825
Less Annual Debt Service		$138,171	$138,171	$138,171	$138,171	$138,171	
Before Tax Cash Flow		$35,925	$41,147	$46,527	$52,068	$57,775	
Less Mortgage Interest		$131,393	$130,664	$129,858	$128,964	$127,975	
Less Depreciation		$68,861	$71,855	$71,855	$71,855	$71,855	
Less Points Expensed		$3,855	$3,855	$3,855	$3,855	$3,855	
Tax Income		-$30,012	-$27,055	-$20,869	-$14,435	-$7,738	
Taxes		-$15,006	-$13,528	-$10,434	-$7,217	-$3,869	
Before Tax Cash Flow		$35,925	$41,147	$46,527	$52,068	$57,775	
Less Taxes		-$15,006	-$13,528	-$10,434	-$7,217	-$3,869	
After-tax Cash Flow		$50,931	$54,675	$56,961	$59,285	$61,644	
Sale Price (Year 6 NOI/Capitalization Rate)				$1,854,839			
Less Selling Expenses				-$148,387			
Amount Realized				$1,706,451			
Less Mortgage Payoff				-$1,242,929			
Before-Tax Cash Flow from Reversion				$463,523			
Basis Calculation			Cost				$1,606,164
			Accumulated Depreciation Taken				$356,280
			Adjusted Basis				$1,249,884
Amount Realized				$1,706,451			
Less Adjusted Basis				$1,249,884			
Capital Gain				$456,567			
Less Exclusion (60%)				$273,940			
Taxable Gain				$182,627			
Less Unexpensed Loan Points				$19,274			
Taxable Income from Reversion				$163,353			
Tax on Reversion				$81,676			
Before-Tax Cash Flow from Reversion				$463,523			
Less Tax on Reversion				$81,676			
After-Tax Cash Flow from Reversion				$381,846			
Expected Holding Period Internal Rate of Return				16.42%			

APARTMENT INVESTMENT UNDER 1986 TRA

Cost	$1,606,164		Operating Expenses		35%	V&C	4%
# of Units	Mo. Rent	Annual Rent	Rental Increases		3%		
30	550	$198,000		Land	15%	$240,925	
10	675	$81,000		Building		$1,365,239	
		$279,000		Owner's MTR		28%	
Holding Period		5	YRs	Depreciable Life		27.5	
				Month Placed in Service		1	
Capitalization Rate		10.9%		Selling Expenses		8.0%	
Term	10		Interest	10.25%		Points	3%
Amort. Period	30		Pay/Yr	12		DSCR	1.26
Principal	$1,284,931		Points	$38,548		ADS	$138,171
	Year	**1**	**2**	**3**	**4**	**5**	**6**
Gross Potential Income		$279,000	$287,370	$295,991	$304,871	$314,017	$323,437
Less Vacancy		$11,160	$11,495	$11,840	$12,195	$12,561	$12,937
Adjusted Gross		$267,840	$275,875	$284,151	$292,676	$301,456	$310,500
Less Expenses		$93,744	$96,556	$99,453	$102,437	$105,510	$108,675
Net Operating Income		$174,096	$179,319	$184,698	$190,239	$195,947	$201,825
Less Annual Debt Service		$138,171	$138,171	$138,171	$138,171	$138,171	
Before Tax Cash Flow		$35,925	$41,147	$46,527	$52,068	$57,775	
Less Mortgage Interest		$131,393	$130,664	$129,858	$128,964	$127,975	
Less Depreciation		$47,577	$49,645	$49,645	$49,645	$49,645	
Less Points Expensed		$3,855	$3,855	$3,855	$3,855	$3,855	
Tax Income		-$8,728	-$4,845	$1,341	$7,775	$14,472	
Taxes		-$2,444	-$1,357	$375	$2,177	$4,052	
Before Tax Cash Flow		$35,925	$41,147	$46,527	$52,068	$57,775	
Less Taxes		-$2,444	-$1,357	$375	$2,177	$4,052	
After-tax Cash Flow		$38,368	$42,504	$46,152	$49,891	$53,723	
Sale Price (Year 6 NOI/Capitalization Rate)				$1,854,839			
Less Selling Expenses				-$148,387			
Amount Realized				$1,706,451			
Less Mortgage Payoff				-$1,242,929			
Before-Tax Cash Flow from Reversion				$463,523			
Basis Calculation			Cost				$1,606,164
			Accumulated Depreciation Taken				$246,157
			Adjusted Basis				$1,360,007
Amount Realized				$1,706,451			
Less Adjusted Basis				$1,360,007			
Capital Gain				$346,444			
Less Unexpensed Loan Points				$19,274			
Taxable Income from Reversion				$327,170			
Tax on Reversion				$91,608			
Before-Tax Cash Flow from Reversion				$463,523			
Less Tax on Reversion				$91,608			
After-Tax Cash Flow from Reversion				$371,915			
Expected Holding Period Internal Rate of Return				13.08%			

PRE-1986 TRA OFFICE INVESTMENT

Cost	$1,250,000		Operating Expenses		35%	V&C	6%
# of Sq. Ft.	Rent	Annual Rent	Rental Increases		3%		
8000	21	$168,000		Land	15%	$187,500	
4000	17	$68,000		Building		$1,062,500	
		$236,000		Owner's MTR		50%	
Holding Period		5	YRs	Depreciable Life		19	
				Month Placed in Service		1	
Capitalization Rate		10.9%		Selling Expenses		8.0%	
Term	10		Interest	10.25%		Points	3%
Amort. Period	30		Pay/Yr	12		DSCR	1.26
Principal	$1,284,931		Points	$38,548		ADS	$138,171
	Year	**1**	**2**	**3**	**4**	**5**	**6**
Gross Potential Income		$279,000	$287,370	$295,991	$304,871	$314,017	$323,437
Less Vacancy		$11,160	$11,495	$11,840	$12,195	$12,561	$12,937
Adjusted Gross		$267,840	$275,875	$284,151	$292,676	$301,456	$310,500
Less Expenses		$93,744	$96,556	$99,453	$102,437	$105,510	$108,675
Net Operating Income		$174,096	$179,319	$184,698	$190,239	$195,947	$201,825
Less Annual Debt Service		$138,171	$138,171	$138,171	$138,171	$138,171	
Before Tax Cash Flow		$35,925	$41,147	$46,527	$52,068	$57,775	
Less Mortgage Interest		$131,393	$130,664	$129,858	$128,964	$127,975	
Less Depreciation		$68,861	$71,855	$71,855	$71,855	$71,855	
Less Points Expensed		$3,855	$3,855	$3,855	$3,855	$3,855	
Tax Income		-$30,012	-$27,055	-$20,869	-$14,435	-$7,738	
Taxes		-$15,006	-$13,528	-$10,434	-$7,217	-$3,869	
Before Tax Cash Flow		$35,925	$41,147	$46,527	$52,068	$57,775	
Less Taxes		-$15,006	-$13,528	-$10,434	-$7,217	-$3,869	
After-tax Cash Flow		$50,931	$54,675	$56,961	$59,285	$61,644	
Sale Price (Year 6 NOI/Capitalization Rate)				$1,854,839			
Less Selling Expenses				-$148,387			
Amount Realized				$1,706,451			
Less Mortgage Payoff				-$1,242,929			
Before-Tax Cash Flow from Reversion				$463,523			
Basis Calculation			Cost				$1,250,000
			Accumulated Depreciation Taken				$356,280
			Adjusted Basis				$893,720
Amount Realized				$1,706,451			
Less Adjusted Basis				$893,720			
Capital Gain				$812,731			
Less Exclusion (60%)				$487,639			
Taxable Gain				$325,092			
Less Unexpensed Loan Points				$19,274			
Taxable Income from Reversion				$305,818			
Tax on Reversion				$152,909			
Before-Tax Cash Flow from Reversion				$463,523			
Less Tax on Reversion				$152,909			
After-Tax Cash Flow from Reversion				$310,613			
Expected Holding Period Internal Rate of Return				16.90%			

OFFICE INVESTMENT UNDER 1986 TRA

Cost	$1,250,000		Operating Expenses		35%	V&C	6%
# of Sq. Ft.	Rent	Annual Rent	Rental Increases		3%		
8000	21	$168,000		Land	15%	$187,500	
4000	17	$68,000		Building		$1,062,500	
		$236,000		Owner's MTR		28%	
Holding Period		5	YRs	Depreciable Life		31.5	
				Month Placed in Service		1	
Capitalization Rate		10.9%		Selling Expenses		8.0%	
Term	10		Interest	10.25%		Points	3%
Amort. Period	30		Pay/Yr	12		DSCR	1.26
Principal	$1,284,931		Points	$38,548		ADS	$138,171

Year	1	2	3	4	5	6
Gross Potential Income	$224,000	$230,720	$237,642	$244,771	$252,114	$259,677
Less Vacancy	$13,440	$13,843	$14,258	$14,686	$15,127	$15,581
Adjusted Gross	$210,560	$216,877	$223,383	$230,085	$236,987	$244,097
Less Expenses	$73,696	$75,907	$78,184	$80,530	$82,945	$85,434
Net Operating Income	$136,864	$140,970	$145,199	$149,555	$154,042	$158,663
Less Annual Debt Service	$106,925	$106,925	$106,925	$106,925	$106,925	
Before Tax Cash Flow	$29,939	$34,045	$38,274	$42,630	$47,117	
Less Mortgage Interest	$101,679	$101,116	$100,491	$99,800	$99,035	
Less Depreciation	$32,325	$33,730	$33,730	$33,730	$33,730	
Less Points Expensed	$2,983	$2,983	$2,983	$2,983	$2,983	
Tax Income	-$123	$3,141	$7,994	$13,042	$18,294	
Taxes	-$34	$879	$2,238	$3,652	$5,122	
Before Tax Cash Flow	$29,939	$34,045	$38,274	$42,630	$47,117	
Less Taxes	-$34	$879	$2,238	$3,652	$5,122	
After-tax Cash Flow	$29,973	$33,165	$36,036	$38,978	$41,994	
Sale Price (Year 6 NOI/Capitalization Rate)			$1,455,623			
Less Selling Expenses			-$116,450			
Amount Realized			$1,339,173			
Less Mortgage Payoff			-$961,850			
Before-Tax Cash Flow from Reversion			$377,323			
Basis Calculation		Cost				$1,250,000
		Accumulated Depreciation Taken				$167,245
		Adjusted Basis				$1,082,755
Amount Realized			$1,339,173			
Less Adjusted Basis			$1,082,755			
Capital Gain			$256,418			
Less Unexpensed Loan Points			$14,915			
Taxable Income from Reversion			$241,503			
Tax on Reversion			$67,621			
Before-Tax Cash Flow from Reversion			$377,323			
Less Tax on Reversion			$67,621			
After-Tax Cash Flow from Reversion			$309,702			
Expected Holding Period Internal Rate of Return			13.65%			

GOAL-BASED SCENARIOS IN TEACHING ACCOUNTING

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ABSTRACT

This paper provides a framework for using role-playing in the accounting classroom. Using two scenarios ---one for an intermediate accounting course and the other involving ethical decision making-- the authors provide a template for applying role-playing exercises. Further, this paper describes how these exercises can be augmented with writing assignments to qualify for writing-intensive or writing-across-the-curriculum designations.

INTRODUCTION

Goal-based scenarios are simulations in which learners become participants in real-world problem-solving. In essence, the learner's "goal" is to accomplish this mission within a given scenario. Although these types of learning exercises have found their way into social sciences such as history and psychology, this teaching technique has only recently made its way into the accounting classroom, usually in the form of case study. This paper provides a framework for using goal-based scenarios in accounting courses. Using two scenarios – one for an intermediate accounting course and the other involving ethical accounting decision making – the authors provide step-by-step explanations of how goal-based scenario exercises can be used to provide students with a deeper appreciation of the complexities encountered in formulating accounting policies. In addition, this paper demonstrates how these exercises can be supported by writing assignments that may qualify a course for a writing-across-the curriculum designation.

A GOAL-BASED SCENARIO TEMPLATE

Implementing a goal-based scenario exercise requires five steps: picking a scenario or issue, identifying the role of participants, establishing a forum, arriving at a resolution – or not, and concluding the exercise. Deciding on an issue is the most important step. In general, controversy should be embraced rather than avoided. One potential topic for an intermediate accounting course involves American and international pension accounting rules. Financial Accounting Standard (FAS) 87, Employers' Accounting for Pensions, has been criticized for allowing companies to manipulate earnings through the use of unrealistic expected rates of return and through the amortization of pension plan gains and losses (MacDonald 2003). In addition, critics claim that U.S. pension rules interfere with transparency by allowing off-balance sheet financing of certain pension liabilities. International accounting standards promulgated by the International Accounting Standards Board (IASB) as well as standards issued in the United Kingdom address some of these problems (Kwan 2003).

Once an issue has been selected, step two involves assigning students' roles in the scenario. In this instance, students can be divided into three groups. The first group represents corporate interests who do not want any fundamental changes. Financial Executives International (FEI) is one such interest group. The second group can consist of representatives from the Big 4 accounting firms. After being raked over the coals by the media, Congress, and the public, because of recent accounting scandals, this group has mixed feelings about changes. On one hand, they want to see changes made that bring the pension rules in line with basic accounting principles of full disclosure, specifically, revenue realization and matching. On the other hand, they understand the concerns of corporate executives who fear new rules will create more earnings volatility and affect stock prices. The third group consists of analysts from the investing community who want to put a stop to the earnings manipulation and increase transparency by incorporating the best aspects of the IASB's standard, IAS 19, or the United Kingdom's standard FRS 17. All groups will have to research the recent controversy surrounding U.S. pension accounting as well as the accounting approaches favored by the IASB and in the U.K.

In goal-based exercises, the third step involves establishing a setting for examining the issue at hand. In this example, we will assume that the Financial Accounting Standards Board (FASB) is engaged in a project designed to increase the international comparability and quality of standards used in U.S.

pension accounting. The forum for this scenario is a FASB public meeting designed to solicit comments on the need for changes in U.S. pension accounting rules. At this meeting, students present the research and analysis relevant to their positions. For example, the group representing corporate interests may defend the use of expected return instead of actual return on pension plan assets in the computation of pension expense. Of course, other groups at the forum would respond by challenging these assertions. Independent analysts from the investment community might argue with the expected returns cited by the fund managers using historical data from financial markets (thereby drawing on their finance courses). Further, they may generate examples of how different amortization approaches or no amortization affect the bottom line. Perhaps, representatives from the Big 4 accounting firms would propose a middle way through the issue by offering suggestions on accounting changes that would improve financial disclosure while moderating earnings volatility.

While some students may play more explicit roles (e.g., those presenting a position), other members of a given team will be involved in the research, writing, and presentation. Typically, a presentation involves handouts and PowerPoint slides. Hence, students are required to use the skills developed in their writing and business communication courses. To maintain interest and to give students a stake in the outcome, a decision or resolution should be enacted. In our example, this may involve one group making the decision. A possible way of structuring the outcome is to have several accounting professors attend the presentation and assume the role of FASB officials. Based on the strength of the presentations, professors might vote to adopt some, none, or all of the points advocated by a particular group. Remind students that compromise should not be viewed as failure. In fact, they often mirror real-world outcomes.

As a last step, instructors may require students to write a report, position paper, or executive summary as the topic permits. Students may be permitted to modify their arguments or provide more factual support for their positions. Depending on class size, these papers may be individual or team-written. A useful method of obtaining feedback for the instructor is to have students use reflective journals. Here, students may log their difficulties, surprises, and disappointments. Taken together, these writing assignments should easily qualify a course for a writing-across-the curriculum designation.

AN ETHICAL ACCOUNTING EXAMPLE

The previous example demonstrated five steps in developing a goal-based scenario for an intermediate accounting course. In this section, a realistic example of how ethical problems can be encountered when formulating accounting policies is presented. The scenario involves the XYZ Corporation which has experienced several years of declining earning due, in part, to foreign competition for their consumer products. In May, the Board of Directors hired a new CEO from outside the company who has a reputation for rapid earnings improvement. On July 1, she notified the CFO, Audit Committee, and the company's outside auditors that she would like to see the following policies and changes instituted:

- Increase the useful life of factory equipment from 8 to 12 years. XYZ has historically taken a conservative approach to asset depreciation and depreciated equipment over 8 years even though about 20 percent of the equipment lasts longer than 8 years. Some equipment has lasted as long as 12 years.

- Ask customers to place their usual first quarter orders early in December. These orders will be shipped in mid December as opposed to January and February of next year unless customers do not have sufficient storage space. In that case, XYZ will warehouse the orders for the customers until the new fiscal year which begins with the calendar year.

- Increase production between now and the end of the fiscal year by 20 percent. This increase in production will result in a reduction in product unit cost. The sales department is not aware of any increase in demand.

- Effective at the beginning of the fourth quarter, delay until January issuing authorization numbers to customers who want to return merchandise. The company has a policy of not accepting returns without an authorization number.

- Capitalize all forthcoming promotional and advertising expenditures and amortize them over a two year period. The CEO reasoned that these expenditures will most likely benefit the company into next year.

Of course, the instructor can add to or subtract from this list as time allows.

Once a scenario has been established, step two requires identifying and assigning roles. In this instance, three groups can represent the CFO's department, the Audit Committee, and the outside auditors. The CFO and his department are charged with analyzing the proposals and determining whether or not each can be justified under accounting rules. As backstory, it is useful to add that the CFO was hired by the CEO. Hence, there may be a loyalty issue for the CFO when determining support for the CEO's more aggressive accounting approach. Like the CFO's department, the outside auditors must consider the theoretical soundness of the proposals. The instructor should point out potential conflicts for the auditors, such as, trying to maintain a long-term (and potentially lucrative) relationship with the corporation without jeopardizing their credibility and honesty. The role of the Audit Committee becomes apparent in step three, establishing a forum.
The setting for this scenario is an Audit Committee meeting. To enrich the debate, one might note that some individuals on the committee are friends with the CEO and were instrumental in bringing her on board. At the meeting, the Audit Committee will hear from the CFO's group and the outside auditors in order to decide whether to implement all, part, or none of the CEO's proposed changes. Students, including those on the Audit Committee, must determine the general effect each of these measures will have on reported earnings. To develop their recommendations, they must research and analyze rules on revenue and expense recognition, changes in accounting estimates, as well as the effect on income when production is increased. A clear consensus among members of the Audit Committee may or may not occur. However, ambiguous endings in these type of exercises are often the most interesting and realistic. Either way, the Audit Committee must issue some recommendations (step 4).

At the end of the exercise, each team may be required to submit a position paper. The Audit Committee may be given the task of summarizing its recommendations and including justifications for its decisions. Having students maintain a journal of the process reinforces the lessons learned. If desired, the professor may offer some guide questions, such as: What pressures did your group encounter when developing its position? From where did these pressures emanate? In your opinion, were any of the issues clear cut in terms of right or wrong?

CONCLUSIONS

This paper shows how goal-based scenarios can be used in the accounting classroom. A flexible, five-step process is developed which can be adopted for most accounting courses. Goal-based learning is predicated on the idea that students learn more effectively through "cognitive conflict" or disagreement (Savery and Duffy, 1995). By requiring students to explain and defend their positions in a scenario, they are required to draw upon both theory and facts in order to support their stance. As a result, they acquire a more realistic view of how accounting policies are developed.

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MANAGING TRANSITIONS IN AN AGING SOCIETY: WHAT SHOULD BUSINESS STUDENTS KNOW?

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ABSTRACT

How might our business schools better prepare our current students for leadership in a world where a youth culture will no longer be dominant. As the 75 million "baby boomers" begin to retire the biases of gerontophobia will likely give way to the power of gerontocracy. This paper explores how an age-informed curriculum will help our students to live and thrive in an older world where more and more of their customers and organizational colleagues will be older baby boomers. The magnitude of the challenge is no less than that which business schools faced in preparing a previous generation of students for an unprecedented wave of globalization.

THE WAVE IS UPON US

Our population, we as individuals, our families and our generations are all clearly in the process of unprecedented aging. What might not be so obvious is that already in 2001 consumers over the age of 45 accounted for 52% of total consumer spending in the United States (AARP, 2002). Dychtwald reports in 1998 that people over age 50 controlled more than $7 trillion in wealth -- 70% of the total. They comprised 66% of all stockholders, owned 40% of mutual funds, and almost half the credit cards in America. They purchased 41% of all new cars and 48% of all luxury cars (Dychtwald, 1999).

POPULATION AGING

The retirement baby boom wave is about to make landfall. Hard to believe but those 75 million people who were born between 1946 and 1964 are now beginning to retire. By 2011 the oldest of the boomers will have reached the "traditional" retirement age of 65. As can be seen in Figure I, what was once a pyramidal age and gender distribution profile in 1900 will look much more like a rectangular box or a barrel by the year 2030, when the youngest of the boomers reach 65. One other important aspect of our population aging is that women, given their longer life-expectancy, represent a growing percentage of the total. The female, or right side of the "box," is larger than the male or "left side."

This "box-like" profile means that the median age for Americans will increase to 38 in 2030, and that the percentage of people over age 65 will increase from 12.4% to 19.4%. As an aside, in the year 2000 Pennsylvania was one of three of the "oldest" states (Florida and West Virginia are the other two). Twenty-seven percent of Pennsylvania households had at least one individual over age 65 (US Census Bureau, 2000).

This major change in our age distribution profile reflects great increases in longevity (the life expectancy of an American at birth in 1900 was 47 and now is 76) and the unpredicted decrease in birthrates in the recent decades. During the baby boom years the total fertility rate, or lifetime births per woman, reached a high of 3.68 in 1957. We are now close to the stable population replacement rate of 2.1 per woman. The average marriage age continues to increase and women's labor force participation rate has grown from 37.7% in 1960 to 60.2% in 2000 while that for men declined from 83.3% to 74.7% (Szafran, 2003).

The old-age dependency ratio of people over the age of 65 to the traditional working age population of 20 to 64, often used as one measure of the impact of aging on the economy, is predicted to increase from 0.21 in 2000 to 0.29 in 2020 (Cutler, 2002). Viewed differently, the number of working age people for each older adult will decrease from 4.7 to 3.4. . (Cutler, 2002) This widely used ratio is a somewhat misleading indicator of the economic challenge future aging might cause. First of all not everyone over 65 is financially dependent on working –age people. A second concern is that the underlying assumption that everyone 65 years or older is retired, and everyone younger is not, makes little sense. The concept of retirement as a point in time is increasingly being challenged (Cutler, 2002). Simple dependency ratios do not measure the output of the working-age population. For a given size working-age population, changes in the labor force participation rate and the rate of labor productivity growth can significantly affect what can be produced. The sensitivity of the age-dependency ratio to underlying assumptions is illustrated in FIGURE II. An increase in the full-benefit social security retirement age from 65 to 67 was enacted by congress. It is in the process of being phased in with the minimum age of 67 being reached for those who were born in 1960 and later. This simple change in the assumed retirement age from 65 to 67 makes a considerable difference in the elderly dependency ratio (Fair, 2000).

In any case there is no doubt that, age and demographic related changes will have a major impact upon future public policy. There has been, and will continue to be, a growing number of popular and scholarly books and articles warning that public policy must change now if we are to avoid an aging "train wreck."

Most developed countries are faced with the harsh reality that, with populations aging even faster than that in the United States, their retirement programs are currently financed by non-sustainable inter-generational income transfers rather than through actuarially-sound funded annuities. The growing dependency ratio, even if an imprecise measure, presents major challenges for many countries. It would seem apparent that any solution of the looming retirement funding crises is likely to combine some increase in retirement age for benefit eligibility and tax increases.

Although little of substance has been said by either candidate during this year's presidential campaign, it is clear that the sooner we act to address the "baby boom" problem the less draconian the solution. The Kansas City Federal Reserve Bank, August, 2004 symposium addressed the topic "Global Demographic Change: Economic Impacts and Policy Challenges." In his opening remarks Allen Greenspan (Greenspan, 2004) provided sage policy advice when he said :

> A doubling of the over-65 population by 2035 will substantially augment unified budget deficits and, accordingly, reduce federal saving unless actions are taken. But how these deficit trends are addressed can have profound economic effects. For example, aside from suppressing economic growth and the tax base, financing expected future shortfalls in entitlement trust funds solely through increased payroll taxes would likely exacerbate the problem of reductions in labor supply by diminishing the returns to work. By contrast, policies promoting longer working life could ameliorate some of the potential demographic stresses.
>
> Changes to the age for receiving full retirement benefits or initiatives to slow the growth of Medicare spending could affect retirement decisions, the size of the labor force, and saving behavior. In choosing among the various tax and spending options, policymakers will need to pay careful attention to the likely economic effects.

It is highly unlikely that the solution to the pending Social Security/Medicare "train wreck" can be addressed simply by increasing payroll taxes. The train has been gathering momentum for some time. When Social Security was first established in 1937 there were 40 productive workers per benefit recipient, average life expectancy was 63 vs. the current 76, and the maximum contribution was 2% of $3,000 or $60. The maximum contribution is now 12.4% of $87,900 or $10,900. This does not include the Medicare rate of 2.90% with no income limit. Effectively the old age security payroll tax is now 15.3%. The number of productive workers per recipient is currently 3.3 and is predicted to fall to as few as 1.6 as retired boomers live longer lives. (Dychtwald, 1999) Kotlikof estimates that a payroll tax only solution would take an immediate and permanent hike in the payroll tax rate to 16.9% (Kotlikoff & Burns, 2004).

Following Greenspan's advice, an increase in payroll tax rates of almost 30% would likely reduce the labor force participation rate and thereby the productivity of the working-age population. It is not likely to help create new jobs or win political favor with working America. On the other hand encouraging longer working years will require a significant change in corporate and individual attitudes towards what is both productive and fair.

As an aside, it is somewhat disingenuous that current political discourse tends to focus on the level of income taxes paid by different income groups and ignores the growing burden of payroll taxes on all but the highest income households. The Congressional Budget Office reported in 1998:

> Most families pay more in payroll taxes than in income taxes. In 1995, the employee portion of payroll taxes (including the Medicare portion of payroll taxes) exceed income taxes for about 40 percent of

> families and individuals who had earnings. The combined employee and employer taxes exceeded income taxes for 80 percent of those families and individuals (Kasten, May, 1998).

Iin 1995 the actual social insurance rate paid by all households below the highest quintile income group exceeded the actual individual income tax rate they paid. The lowest four quintiles accounted for 59% of federal government's total social insurance tax revenue and only 29% of the federal government's individual income tax receipts (Kasten, May, 1998).

It should be noted that there is some evidence to support the claim that when progressive retirement benefits and life-time taxes are considered together, our social programs for the elderly might be considered progressive. However it should also be noted that in a 1998 survey of baby boomers, "just over one third (36%) feel personally confident that Social Security will be around when they retire" and "Only about four in ten (39%) feel confident Medicare will be available to them during retirement" (AARP, 1998).

INDIVIDUAL AGING

Population aging gives an aggregate view of how individuals, families and generations are changing. Viewed in a more personal way, if you live to age 65 you can currently expect, on average, to live another 17 years. The quality of the expected longer lives is also improving. For example, in 1982 26.2% of the older population was classified as having a chronic disability. In 1999 this had dropped to 19.7%. (Cutler, 2002) The good news is that there has been a surprising improvement in the rate of chronic disabilities especially among the "young" old. The bad news is that disabilities are still all too common among those over 80 years old. For example, Alzheimers has been referred to as "elderly AIDs" with 47% of the people over 85 having this disability. (Dychtwald, 1999) Life expectancy and the length of time lived before the onset of a disabling disease are both related to healthy behaviors such as not smoking, not being obese, and getting proper exercise. In a 1986 study of University of Pennsylvania alumni with an average age of 68 disability onset was 7.5 years later for those individuals with healthy habits (Fries, 2002).

GENERATIONAL ATTITUDES

One word of caution is that the members of the baby boomer generation have very diverse profiles. It would be a great mistake to assume that everyone born in the period from 1946 to 1964 has had similar experiences and will age in the same way. Some demographers define the first boomer cohort as those born from 1946 to 1954 who came of age from 1963 to 1972. The second half were born from 1955 to 1964 and came of age from 1973 to 1983.

Beverly Goldberg observes that for the first group, defining events included the civil rights movement, the Vietnam War, and economic good times. These early boomers likely share many of the views of the older war babies who also participated in the good economy, experienced Vietnam and played significant roles in the civil rights movement.

For the younger boomers the Vietnam War and the civil rights movement were history. Their reality was economic decline and the oil shocks of the '70's, rampant inflation, high nominal interest rates and a tight 1980's job market. Goldberg makes the important point that these younger boomers often had to settle for second best jobs and faced a housing market that made homeownership out of reach for many and reduced their ability to accumulate wealth. Marriage, home ownership and raising children all became more difficult. Divorce rates rose. Women's increased labor force participation rates reflected both budgetary imperatives and life style choices (Goldberg, 2000).

FAMILY AGING

Families are also aging. At one time parents had primary responsibility for supporting their children and shortly after the nest emptied they died. As longevity increased they were able to save toward retirement and enjoy the freedom of the empty nest. Things are different now. More and more working adults are becoming part of the "sandwich" generation. Eighty percent of fifty year olds today have at least one living parent and 27% have both. (Cutler, 2002, 57) This represents an increase from 67% and 14% in 1960. Cutler agrees with Eldon Weisheit observation that, "The majority of middle age people now have more parents than they have children" (Cutler, 2002).

RETIREMENT AGE

There is strong reason to believe that as our population ages the very concept of retirement will continue to change and become even more difficult to measure. In any case it is not an easy thing to measure now. Patrick Purcell makes this observation, "Retirement is most often defined with reference to two characteristics: nonparticipation in the paid labor force and receipt of income from pensions, Social Security and other retirement plans." (Purcell, 2000). However many individuals receive retirement income and continue to be paid members of the labor force. For example, Purcell reports that in the year 2000 36.8% of men age 55 to 64 and 30.7% of the women received "early" retirement income and still were part of the paid labor force.

It is generally recognized that retirement security plans, both governmental and private, were put in place not only to meet the humanitarian and economic needs of the retirees but also to encourage older workers to move on and make way for the younger workers advancement. This made a great deal of sense when there were large numbers of young "baby boomers." Future business and governmental policies need to recognize that, without increasing labor force participation rates and/or massive immigration, the growth of our labor force will dramatically slow from a high annual rate of 2.6% in the seventies to an annual rate of 0.60% for 2010-15 and 0.20% for 2015-2020. (Toossi, 2002).

The data would suggest that past and current retirement incentives have significantly lowered the labor force participation rates of older people -- except for women between the age of 55 and 64. The labor force participation rate (LFPR) for 55 to 64 year old men declined from 86.9% in 1950 to 67.9% in 1999 and for men over 65 the rate fell from 45.8% to 16.9%. The LFPR for 55 to 64 year old women increased from 27.0% in 1950 to 51.5% in 1999. It is interesting to note that for women over 65 there has been a slight decrease(Purcell, 2000). The aging of the baby boomers, a trend toward earlier retirement, in combination with the birth dearth, leads to the inescapable conclusion that the U.S. labor force will not grow as fast as it once had.

One very simplistic way of looking at one change is that when Social Security was first introduced the full-retirement benefit was made available to only those who retired at age 65. Only those who exceeded their average life expectancy at birth of 63 by 2 years were eligible! If this same relationship held today the "normal" retirement age would be 78 or two years higher than average life expectancy today. One proposal that would surely give real meaning to the political assessment of social security being the third rail of American politics would be to propose tying retirement eligibility age to average life-expectancy.

SOURCES OF INCOME AND ITS DISTRIBUTION

There are many well off elderly and many not so well off. In 1997 the top twenty percent of 65 and older households accounted for 52.8% of that groups total income. It is true that the percentage of older Americans age 65+ living in poverty has significantly declined from 35.2% in 1960 to 10.5% in 1997, (Dychtwald, 1999) but not all of the new elderly are doing well. The income distribution of people over 65 is remarkably similar to that of those under 65 (Rubin & White-Means, 2000).

As can be seen in Figure III, in 1998 social security benefits were the largest single source of income for those aged 65 years and older accounting for 38% of the total. However it needs to be stressed that social security accounted for 52% of the income of those aged 85 years and older and was the only source of income for 17% of those aged 65+.

It is also interesting to note that a greater percentage of income came from earnings from work than from income from assets or employer benefits. While there has been much discussion about the advent and growth of 401 (k) defined contributions pension plans, the reality is that there has been relatively no growth in the breadth of pension plan coverage. Less than 50% of the private sector work force participates in either a defined benefit or defined contribution pension plan (Munnell & Sunden, 2004).

HOW MIGHT AGING IMPACT A BUSINESS SCHOOL CURRICULUM?

The public policy debates are sure to become more intense as the future comes closer to the present. While, it is not the purpose of this presentation to continue these debates it is important that our students understand how public policy changes might well effect the world in which they will build their careers. All our current business students will need to be aware of the issues and will play a major role in helping to navigate the course through a "Coming Generational Storm."

These business students will be both young, and not so young, and possibly even semi-retired. In 2002 roughly 25% of college students were older than 30. They will be entering a world where their own future well-being will require them to make intelligent financial decisions, work effectively in new settings, and understand where the boomers are "coming from" both as consumers and as fellow employees.

As we prepare our business students to assume leadership positions in an emerging new economy we should make them more aware of the transitions that will need to be managed as the economy and the world matures. There is money to be made, and challenging new career paths to be followed, by those who understand and anticipate what the future transitions hold. There is an especially strong need to prepare MBA age-aware specialists in health care administration, financial planning and human resources.

ECONOMIC POLICY

Many of the public policy issues will become major topics for both undergraduate and graduate economics classes. It is here that the weather map for Kotlikoff's "Coming Generational Storm" will be debated and analyzed. Topics to be covered might include the life-cycle theory of consumption, the meaning of changing overall dependency ratios, the role of private and governmental saving in a macro setting, the work-leisure decision, human capital formation through health care and education, poverty, taxes and income transfers, intergenerational accounting, immigration policy and international comparisons etc.

Continued globalization will demand broader understanding of global aging. For example, China the land of past over-population will soon be faced with an economy aging much faster than ours. Limiting families to one child controlled population growth, but at the cost of creating a huge elder-dependency problem starting 60 years later. The European Union, with birth rates well below the 2.1 replacement ratio, has similar problems.

It might also be important to discuss the growing organized political power of the current 32,000,000 member strong AARP. It might also be a good thing to remind our students that the voter participation rate for older citizens is more than twice that of 18 to 24 year olds (Dychtwald, 1999).

FINANCIAL PLANNING

Making intelligent financial decisions is becoming increasingly complex. The movement from defined-benefit to defined-contribution pension plans shifts the management of portfolios, and risk, from the employer to the individual. The need to coordinate separate pension plans for two-earner families further complicates the situation. For those who have "more parents than children" planning can quickly become a three generational event.

These complex and difficult decisions will require a better understanding of how investment markets work and especially the time value of money. Some of our students will pursue careers in financial planning. Those who do not specialize in the provision of financial planning advice will need to become educated consumers.

The techniques of financial and estate planning are already taught in some business schools as part of their tax and accounting offerings. However, in a survey undertaken by Brucker and Cutler two years ago as part of our membership on an Association for Gerontology in Higher Education (AGHE) Business and Aging task force we discovered that very few business schools offer courses that focus on the needs of an aging population. How to plan is important, and most people would benefit from professional advice, but what is being planned for may be at least equally important (Brucker and Cutler, 2003).

There is a growing challenge and opportunity to blend financial planning skills with a broader understanding of the aging process. Widener, in partnership with the American Institute of Financial Gerontology and the American Society on Aging, has assisted in the development of a new Registered Financial Planning (RFG™) certificate designed to give CFP™'s, CPA's and other financial experts some insight into the underlying aging processes that need to be considered when creating a financial plan.

The planning process should begin early in the earnings phase of the life cycle. However, it is hard for twenty-somethings to think seriously about their own retirement and/or death. In the case of our students, if they are fortunate enough to graduate and work for a company that has a 401 (k) plan, they will be faced with a series of pension decisions immediately upon employment. In 2001 fewer than half (43.9%)of workers under age 30 had 401 (k) plan eligibility. Of this group only 65.7% chose to participate (Munnell & Sunden, 2004). In many cases non-participation may be motivated by simple inertia and a reluctance to deal with the seeming complexity of the process.

The shift to 401(k) plans, in addition to having employees decide what percent of their salary to contribute, requires employees to decide where (often within limits) their money should be invested. Some participants will unwisely place and/or leave their funds in their company's stock. These individual investment decisions unfortunately create the possibility for Enron-like disasters where nondiversified retirement portfolios contain the highest risks of both financial and job loss.

Many plans permit borrowing against 401(k) balances and it is always possible to withdraw funds before age 59 ½ with a 10% penalty and a 20% income tax deduction applied. Munnel believes that these withdrawals are all too common with employees willing to trade future retirement income for current consumption activity. For example, in 1995 over $ 18 billion was withdrawn subject to the 10% penalty.(Munnell & Sunden, 2004).

The story of the $5,000 engagement ring is becoming a financial "urban legend." John, when he was 25, believed that best way he could show his affection for his fiancée, Sue, was to give her a $5,000 diamond ring. At the time he was changing jobs and as a result was offered a lump sum distribution of his 401(k) balances. The opportunity to pursue an "interest free" strategy presented itself. He withdrew the needed funds from his 401 (k). (With a 10% penalty and income tax withholding of 20% he must withdraw $7,142 to clear $5,000.) The ring was purchased, the wedding went forward and John, who now at age 60 is ready to retire, discovers through his financial planner that the ring reduced his retirement security by over $76,252. A 7% average annual rate of return was used in this calculation. If the rate were 10%, the pain would exceed $200,000!

In any case with the power of compound interest, early career decisions about 401(k) contributions and withdrawals have powerful effects on retirement security. Sue still has the ring, and is eligible for spousal social security benefits, since the divorce happened after ten years of less than marital bliss. Young love can cause considerable retirement pain!

Maintaining an appropriate mix between equities and fixed income investments as the years to retirement decrease presents another challenge. When retirement age is reached a decision will need to be made as to how the benefits will be distributed. Another notable new complexity is that the actual decision as to when to retire is much less structured. When mandatory retirement ages existed, there was much less discretion about continuing to work beyond a given age. When defined benefit pension plans were most popular they were designed to encourage retirement often by tying the benefit to the highest three or four year earnings prior to a certain age.

Individuals with defined benefit pensions have fewer concerns about "out living" their retirement income than others. Employers place funds in annuities which cover individual retirees as long as they live. Unfortunately, not all defined benefit plans are funded and actuarially sound. For example, current bankruptcy cases involving two different air lines are discussing abandonment of their defined and promised pension benefits. Retirees with 401(k) plans find that due to the phenomenon of adverse selection personal annuities are more expensive and many chose not to insure against living "too long." As an aside there is reason to believe that with the advent of 401(k)s, reluctance to draw down retirement resources will lead to larger bequests.

It is true that the aggregate net worth of people over 55 is large and growing. However, today's older Americans and tomorrow's retiring baby boomers are also more likely than in the past to take on consumer and mortgage debt. The cautious and conservative attitudes toward debt, that many older retired have reflects their depression experiences. This is changing. The number of homeowners over age 60 with traditional mortgage payments still being made has increased from 19% in 1980 to 28% in 2000. Average real credit card debt among families 65 years and older has increased by 249% from $1,626 in 1989 to $4,041 in 2001 (AARP, 2002).

It is disturbing to note that the number of bankruptcy filers over age 65 jumped from 23,890 in 1991 to 82,207 in 2,001. (The good news is that the number of filers under 25 actually decreased by 4%.) (AARP, 2002) It is reasonable to assume that the extensive marketing of credit cards and mortgage loans has made a significant inroad upon the older market. Never the less, it is still the case that reverse mortgage programs can provide a convenient way for older homeowners to transform the equity in their homes to retirement income.

There is little doubt that financial planning is more complex today than it was 15 or 20 years ago and yet the level of financial literacy is relatively low. Responses from the University of Michigan Monthly Surveys of Consumers for November and December 2001 and responses from the Federal Reserve Survey of Consumer Finances were combined to report the results of a quiz entitled "What is Your Financial IQ?" Some of the results are most disturbing. For example, only 60% of all respondents knew that the statement "Your credit rating is not affected by how much you charge on your credit card" was false (Hilgert & Hogarth, 2003). When the results of both practice and knowledge were analyzed by age it was found that 51% of all respondents were classified as either having bad money management skills or being absolutely "lost." Fifty-nine percent of those over age 65 were bad or "lost" money managers (AARP, 2002).

AN AGING AND SLOWLY GROWING LABOR FORCE

With population aging, the median age of the labor force is estimated to increase from 38.7 in 1998 to 40.7 in 2008. As can be seen below, the percentage of workers over 45 will increase from 33% in 1998 to 40% in 2008. The percentage of those aged 55 to 64 and age 64 plus will increase by 52% and 30% respectively from 2000 to 2010. There will actually be a decrease in the 35 to 44 age group which is the group most often viewed as the source of future leadership talent. (Dychtwald & Erickson, 2004)

Some occupational groups, that have an older profile and/or stronger retirement incentives will be faced with significant replacement challenges in the very near future. For example, Arlene Dohm makes the point that government employees, including those in the K-12 sector, have pension plans that encourage early retirement. Five of her top twenty occupations with the greatest replacement needs are in this sector. Giving the aging of our population, and the associated increases in the demand for health care, it is of some concern that both registered nurses and physicians are included in her top twenty list. (Dohm, 2000).

While the labor force ages, it is probably more significant that in the near future the rate of growth of the US labor supply will face a sharp drop from an average annual growth rate of 2.60% in the seventies to 0.20% in 2020 decade. Future labor markets are likely to be considerably "tighter" and employers will need to become more aggressive in their recruitment efforts to attract and retain the best workers. Dychtwald suggests that the challenge for the human resource function is large, "Long-standing human resource practices invest heavily in youth and push out older workers. This must change -- and public policy, too – or companies will find themselves running off a demographic cliff as boomers age" (Dychtwald & Erickson, 2004).

As we educate tomorrow's human resource specialists we will need to have them rethink the old corporate conceptions of the older workers. Probably the biggest false preconception is that all older workers can be viewed as a single homogeneous group. The reality is, that like any other group, individual differences are very important. Some 65 year olds are much more vital, creative and productive than many 35 year olds. Some 35 year olds act like the stereotypic 65 year olds. Some 65 year olds are shallow and devoid of wisdom, others are not.

When the supply of younger workers from the baby boomer generation was growing it made sense, or at least a quieter life for human resource people, to use simple markers such as age to determine employment policy. It wasn't illegal and was very handy. Such a policy in the decades ahead is a prescription for corporate disaster.

The transitions that need to be managed as the labor force ages are many. However, many firms have yet to seriously prepare for the coming change in managing an aging work force. Preparing for the challenges of managing, retaining and attracting older as well as women workers is not a high priority for most corporations. One survey indicated that "managing workforce aging" was tied with "decentralizing decision-making" as the least important human resources issue. The most important future issues were, "recruiting able employees" and "retaining able employees." Forty-six percent of the companies surveyed indicated that their organization did not monitor the age profile of its work force.(British-North, 2001).

Typically many unwarranted assumptions are often made about older workers. The facts are that older workers typically have higher attendance performance and take less sick and personal leaves than their younger colleagues. While their learning styles may be different than younger adults, they are quite capable of being retrained.

All too often corporate leaders restrict older employee access to training on the grounds that they will soon retire and the money spent will not be as readily recouped as that spent for training younger people. For example, The U.S. Bureau of Labor Statistics reports that in 1995 total annual hours of training per employee 55 and older was only 22.9 while the 25-34 age group averaged 46.5 or more than twice the amount (Goldberg, 2000). This argument ignores the reality that young workers may have higher turnover rates than older, more loyal, employees who stay longer at the firm that invested in their training.

While many younger workers have child care responsibility and need flexibility in their schedules, many aging workers have grandchildren care and parent care responsibilities that requires similar flexibility in their schedule. Many older workers have "more parents than children" to support. In an agricultural and/or industrial economy declining physical strength may have been a good reason to suspect that older people were less productive. In our emerging knowledge economy this argument makes as much sense as giving school kids summer vacation to work on the family farm.

How might the corporate world "retire retirement?" As discussed above, the concept of what retirement means is far from unambiguous. Many individuals receive retirement benefits, either public and/or private, and still work. In 2000 twenty-four percent of 65-69 year olds were in the labor force and 13.5% of those aged 70 to 74 (Wiatrowski, 2001). As mentioned above, about 21% of the income received by people over 65 represented payment for labor services. We should also note that many retired individuals provide non-paid volunteer services that are not counted in the labor force.

As corporate human resource departments attempt to attract and retain older workers in response to the slowing of the growth in labor supply a further distinction needs to be made. Retiring from a specific company does not necessarily mean retiring from work. An often cited AARP survey of boomers' retirement plans found that in 1998, 80% of the respondents said that they would stay in the workforce after age 65. Some of the respondents indicated that they would need to work to supplement inadequate income from other sources. Others wanted to continue to work more as a way to remain socially involved with others than for the financial rewards (AARP, 1998).

The real question is how many firms will actively and effectively recruit them. In Dychtwald's view "Most baby boomers want to continue working – and they may need to for financial reasons – but they may not want to work for you." (Dychtwald & Erickson, 2004).

Beverly Goldberg believes that different attitudes toward work will greatly influence when and how baby boomers will retire. The corporate upheavals of the late eighties and early nineties led employees to work harder and longer, burn out faster and become cynical and distrustful. The rise of global competition, mergers and acquisition, deregulation, the downsizing of organizations, and the smashing of managerial hierarchies destroyed any sense of employee security. The growing gap between CEO compensation rates and workers benefits and salaries furthered worker disillusionment. In her words, "The downsizings of the late 1980s and early 1990s destroyed the idea of organizational loyalty and created a general disillusionment with work. It also made the lure of retirement irresistible to many older workers."(Goldberg, 2000)

In Goldberg's view it will be difficult for large corporate organizations to make the case that their employees should stay any longer than necessary before taking retirement from their current job. She believes that the old social contract of extended employment and security of the sixties and seventies has been shattered. The challenge is to develop a new approach for the new knowledge-based jobs of the future.

High on the list is the restructuring of how jobs are designed. Flexibility is generally what older workers. The introduction of more flexible hours, more part-time opportunities, phased retirement, special assignments, job-sharing, telecommuting etc, are likely be developed.

The bottom line is that employers will need to "create a culture that honors experience" (Dychtwald & Erickson, 2004). In a growing knowledge economy corporate America will increasingly appreciate the value of the knowledge base of those workers who might have been forced out in an earlier time. As our students enter the world of work they too will need to understand better the needs and desires and contributions of older workers. Successful organizations will assure that workers who do not fit the majority profile are accepted and treated fairly.

THE FUTURE CURRICULUM

Some of the curricular challenges associated with managing transitions in an aging economy for economics, financial planning and human resource courses have been discussed above. In addition to the more technical courses in accounting, tax and law, age-enriched courses in advertising, consumer behavior, ethics, information systems, marketing, organizational behavior, strategic management, and in many other traditional business areas will be needed.

No doubt there will be many different approaches to how best to cover aging topics. Some will advocate for a separate course(s) on aging issues. Others will advocate for appropriate aging issue coverage to be integrated into specific functional courses e.g.

accounting, business law, finance, human resource management, taxation etc.
Business schools will likely be offering more age-related material in their undergraduate and graduate programs' credit courses. However given the arrival of the age wave, many individuals will want to enroll in short courses (both credit and non-credit) as well as participate in "just-in-time" certificate programs

CONCLUSIONS

Aging populations, individuals, families and generations present a wide variety of challenges and opportunities for business schools. The already strong economic power of the older 75 million baby boomers is certain to increase. More significantly our consumer and work cultures are also changing.

The boomers changed our culture at almost every point in their generational development. They protested the Vietnam war and supported the civil rights movement. They told us not to trust anyone over thirty when they were in their twenties. Might they tell us in the next decade not to trust anyone under 55 when they are in their 60's?

They supported the women's movement and created the dual income family unit. Products of the baby boom, they have been central to the birth dearth. They have benefited from vastly increased accessibility to college education. They are living longer and more healthy lives.

Future public-policy debates, concerning how best to support our old age social insurance programs especially Medicare, will be "stormy." There are no simple solutions. Our students, the future leaders of business need to be ready to take an informed leadership role in these discussion.

The boomer's double income plural pension families are faced with increased complexity as they become responsible for managing their 401(k) retirement plans. Financial planning skills and knowledge is sure to be in high demand,

Labor force growth is slowing and there is every reason to believe that corporate America will need to consider "retiring retirement" as we know it. Human resource managers and individual employees will be faced with much less certain and much more complex decisions. Age will no longer be a simple marker for either employee or employer decision to leave the workforce. The growth of more flexibly-structured work creates increased complexity for both employer and employee.

Some only see an aging generation in an aging population faced with many increasingly complex social and economic challenges. Many of the emerging solutions will be created and delivered by profit and not-for-profit organizations. Looking forward, we need to see these issues as presenting new and promising opportunities for management education.

The time to act is now.

FIGURE I

CHANGING POPULATION PROFILES

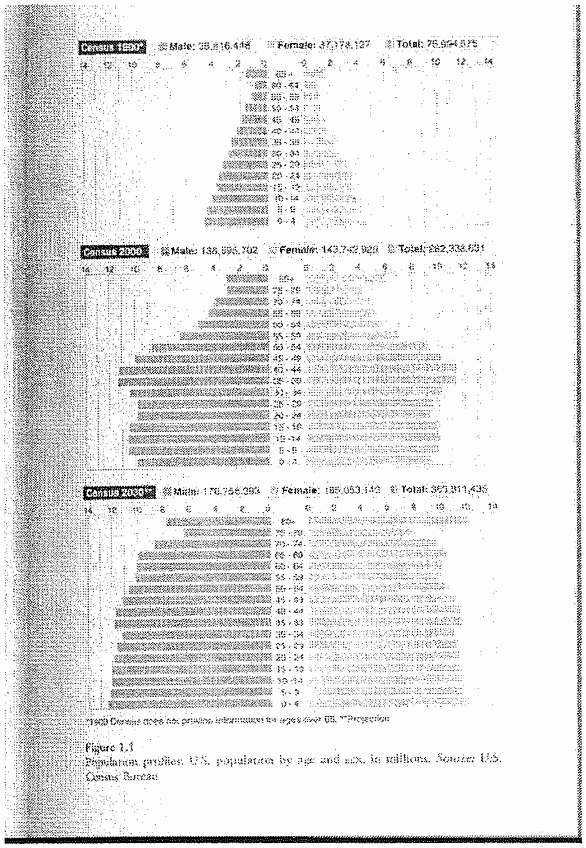


FIGURE II

DEPENDENCY RATIOS

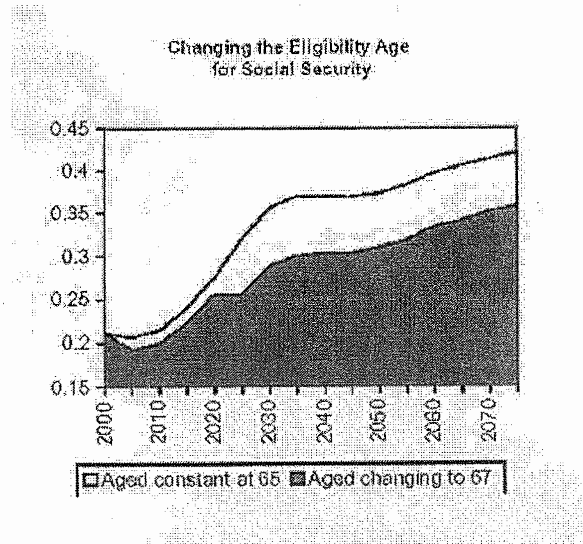
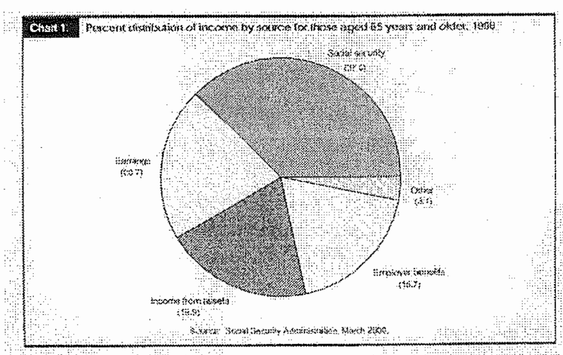


FIGURE III

SOURCES OF INCOME FOR 65+ POPULATION



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BIAS IN HEDGE FUND DATA

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ABSTRACT

The study of performance persistence in the hedge fund industry is a recent phenomenon. Bias is very closely linked to the issue of performance persistence. The direction of the bias is not clear even for traditional investments like mutual funds. We document the bias in performance data for all classifications of hedge funds in the ZCM/Hedge database. We also document the performance of complete portfolio, surviving portfolio, disappeared funds, and new funds. Hedge funds disappear from the database primarily due to poor performance. Hedge funds have a superior performance when they enter the database. Two kinds of biases act in opposite direction. The overall direction of the bias depends on the relative magnitude of these two biases.

INTRODUCTION

The study of performance persistence in the hedge fund industry is a recent phenomenon. Bias is closely linked to the issue of performance persistence; the direction of the bias is not clear even for traditional investments like mutual funds. For hedge funds, the issue becomes more complicated, because it is possible that hedge funds disappear from the database for various reasons. There is no way to track the *disappeared* funds. There is no regulatory authority that collects data for hedge funds, nor are the hedge funds required to report their performance. Therefore, it is necessary to estimate bias to better measure performance and to get an idea of the relative performance. Hedge funds have different performance characteristics depending upon their investment strategy. To measure performance accurately it is important to estimate bias for different categories.

LITERATURE REVIEW

Survivorship bias is the effect of considering only the performance of funds that are present in the database at a given time. Since investors are interested only in the funds that are available to them, most databases do not provide the performance of the defunct funds. Performance studies that use only *surviving* funds will result in biased measures. Much work has been done in providing estimates of survivorship bias for traditional investments. All these studies have documented an upward bias in measures of performance.

For bond funds, Blake, Elton, and Gruber (1993) find an upward survivorship bias of 27 basis points per annum. For equity funds, various researchers have come up with different estimates of survivorship bias. Grinblatt and Titman (1989) come up with several estimates of survivorship bias ranging from 10 to 30 basis points. Brown and Goetzmann (1994) estimate an upward bias of 80 basis points; Malkiel (1994) reports an upward bias of 150 basis points, whereas Carhart (1994) estimates an upward bias of 300 to 500 basis points. Elton, Gruber, and Blake (1996) estimate upward survivorship bias to range from 4 basis points to 97 basis points per annum depending upon the length of study. This apparent difference in estimates of survivorship bias for the same investment class is attributable to differences in methodology used and on the length of the study period.

For Commodity Trading Funds (CTAs), researchers have estimated an upward survivorship bias to range from 350 to 470 basis points. Schneeweis, Spurgin, and McCarthy (1996) estimate survivorship bias to be 120 basis points per annum. Fung and Hsieh (1997) estimate survivorship bias as the difference between the equal-weighted portfolio of existing CTAs and CTAs that have survived the complete study period, and find the bias to be 29 basis points per month, or 348 basis points per year. Diz (1999) studies the performance characteristics of *surviving* and *non-surviving* CTAs and find that survivors generated higher returns even on a risk-adjusted basis.

The estimates of survivorship bias for hedge funds range from 16 basis points to 300 basis points.

Brown, Goetzmann, and Park (1997), Fung and Hsieh (1998), Brown et al. (1999), and Liang (2000) calculate survivorship bias as the performance difference in the equal-weighted portfolios of *surviving* funds and that of all funds existing in the database. Ackermann, McEnally, and Ravenscraft (1997) calculate survivorship bias as the performance difference between *surviving* funds and *disappeared* funds.

All the studies in hedge fund survivorship bias have mostly concentrated on estimating bias for the complete database, except Liang (2000). The databases used for all these studies are different. The period of study also differs, as does the procedure of calculating the survivorship bias. The commonality in all these studies is the conclusion that hedge fund survivorship study is different from other survivorship studies.

Hedge funds presumably disappear from the database for two opposite reasons. Some funds disappear because of poor performance and others disappear because they no longer need new money or are closed to the general investors who have access to the database. This is because, unlike traditional investments, hedge funds are not required to disclose any information, and they report to databases with the sole purpose of attracting new investors. There is bias due to the disappearance of funds from the database. There could be bias also in the performance because funds presumably enter the database with positive performance experience. These three factors that lead to bias in the performance measurement could counteract each other depending on the magnitude and direction of bias. We use the term 'bias' instead of 'survivorship bias' since survivorship bias in mutual funds presumably leads to an upward bias in performance measurement.

We estimate bias for each class and category of hedge funds and for the complete database, including and excluding fund-of funds. Our study is comprehensive and allows for easy comparison of the results with the results obtained by other researchers. We vary the period under study to observe the impact of the length of the study period on bias.

DATA ORGANIZATION AND METHODOLOGY

Three primary databases are popular among academic researchers and the investment industry. Providers of these databases offer different services to the industry. Hedge Fund Research (HFR) database contains more equity-based hedge funds. ZCM/Hedge provides comprehensive coverage of global alternative investment (particularly hedge funds marketplace). TASS is the information and research subsidiary of Tremont Advisers, Inc. TASS classifies managed futures as hedge funds.

We use the ZCM/Hedge database. The ZCM/Hedge database classifies hedge funds into four general classes and eight broad categories of investment styles. The classes are 'onshore' hedge fund (HF-US), 'offshore' hedge fund (HF-NON), 'onshore' fund-of-funds (FOF-US), and 'offshore' fund-of-funds (FOF-NON). ZCM/Hedge database categories are shown in Figure 1

Data Organization

The ZCM/Hedge database provides monthly returns for all the funds. We select a study period from January 1994 and December 2000. ZCM/Hedge data has 180,180 observations of monthly returns for 2,797 funds. A study period dataset from January 1994 to December 2000 is constructed from the available dataset. The dataset is further divided into two parts; from January 1997 to December 2000, and from January 1998 to December 2000.

For the seven-year study period (1994 to 2000), 109,272 observations of monthly return data are available. A total of 74,657 observations of monthly return data are available for the four-year study period (1997 to 2000), and 57,691 observations of monthly return data are available for the three-year study period (1998 to 2000). These four-year and three-year datasets are used to observe the effect of the study period on bias.

Portfolio Construction

The bias can be calculated in two different ways, as in Brown et al. (1999). A *surviving* portfolio in a particular month during the study period consists of all funds that have reported return until the end of the study period. For example, for the study period that ends in December 2000, a *surviving* portfolio for each of the previous month will have only those funds that have reported return up to December 2000; the start date of these funds could vary. A *surviving* portfolio takes into consideration the new money coming in, but does not consider the funds that disappear from the database during the study period. An *observed* portfolio consists of funds that are in the database for that particular month irrespective of their start and end date. A *complete* portfolio consists of funds that have reported returns for the complete study period. By definition, a *complete* portfolio consists of the same funds each month during the study period.

Figure 2 illustrates the portfolio construction process. For the month of October 2000, the *surviving* portfolio consists of B, C, D, E, and F funds; the *observed* portfolio consists of B, C, D, E, F, and G funds; and the *complete* portfolio consists of funds C, D, E, and F. The *complete* portfolio consists of funds C, D, E, and F.

We calculate equal-weighted and value-weighted portfolio returns. Bias is calculated in two ways: the difference between the return of the *surviving* portfolio and the *observed* portfolio (SP-OP), and the difference between the return of the *complete* portfolio and the *observed* portfolio (CP-OP). The return data is available for each month, so bias is calculated on a monthly basis and is reported as average monthly bias for each year of study. Bias is calculated for each category, each class, total database including fund-of-funds, and total database excluding fund-of-funds.

PERFORMANCE CHARACTERISTICS OF DIFFERENT PORTFOLIOS

We consider both after-fee returns and before-fee returns. A before-fee return is more robust than the after-fee-return, because of the vagaries of the fee structure and the complexities of calculation. In general, hedge funds charge two types of fees: an asset management fee and an incentive fee. The asset management fee is based on amount of the assets in the fund, usually 1%, or 2% per year.

The incentive fee or the "carried interest" is the hedge fund manager's share in a fund's profit. Usually this is 20 percent and is paid annually in the United States. Two other important features of a hedge fund fee structure are the *hurdle rate*[1] and the *high water mark*[2]. The ZCM/Hedge database provides information on annual fee structure for each of the hedge funds. Subtracting 1/12th of the stated percent fee from the monthly return approximates the administrative fee. Both the hurdle rate and the high water mark feature are considered for computing the incentive fee.

Observed Portfolio

Table 1 provides the summary statistics (Before-fee return statistics are not reported here for the sake of brevity) for the categories, the classes of hedge funds and total hedge funds (both including and excluding fund-of-funds), for the study period of 1994 to 2000. The returns of hedge funds vary from a maximum return of 903% (*Global US* Category) to a minimum return of -99.99%. The maximum volatility of 14% of monthly returns is also for the *Global US* category.

The category *Sector* has outperformed all other categories on a risk-return basis, followed by the category *Event Driven* for both the study periods of 84 and 48 months.

Surviving and Complete Portfolio

We studied the performance characteristics of *surviving*, and *complete* portfolio. It appears that the *new* funds have better performance than the old funds (existing in the database at the beginning of the study period) that disappear. The median return for the *surviving* portfolio is above the mean return 51% of the time, indicating that probably there are some very poor and very good performers in the categories, pulling the mean towards their performance. No conclusion can be made as to the number of good versus poor performers as it is the magnitude of performance that will affect the mean and median measures.

The *surviving* portfolio has lower maximum return and higher minimum return, leading to the conclusion that probably the *surviving* portfolio has less variability in returns compared to the *observed* portfolio. This is intuitively correct if we relate dispersion in return to the risk taken by the hedge fund managers. The riskier the hedge fund, the greater the chance of its disappearance if the risk ultimately leads to poor performance. Before confirming this conclusion, it is important to see how the *disappeared* funds perform prior to their disappearance.

The return characteristics vary between the *surviving* and *complete* portfolio. This is expected since the two portfolios are constructed differently. If attrition and entry rate have any impact on hedge fund returns, then it is expected that the return characteristics will vary. The rate of entry of *new* hedge funds will affect the return of the *surviving* portfolio; whereas, by definition no *new* funds are included in the *complete* portfolio. The median return for the *complete* portfolio is above its mean return 72% of the time, indicating that probably there are some very poor performers in the categories, pulling the mean towards their performance. The minimum return of the *complete* portfolio is in most cases higher than the minimum return of the *observed* portfolio.

BIAS STUDY RESULTS

We calculate bias for each class, category, and total dataset separately. The bias is calculated both for after-fee return and before-fee return and for equal-weighted and value-weighted returns. The bias is calculated based on the *complete* and *observed* portfolios. The *complete* portfolio is the portfolio of hedge funds that have survived for the entire study period. By definition, the number of funds in the portfolio remains fixed for each year of study for the *complete* portfolio. The *surviving* portfolio consists of funds that have survived until the end of the study period (December 2000), irrespective of the starting date. The *observed* portfolio consists of all hedge funds that are in the database when the monthly return is calculated.

We also calculate bias as the difference between the *surviving* portfolio and the *observed* portfolio (SP-OP). The *surviving* portfolio considers *new* funds coming in, but funds that drop out before the end of the study period are not part of the portfolio. In constructing the portfolio, there is an implied assumption that funds that come in anytime during the study period will continue in the database. For example, if a fund enters the database in November 2000 it is considered a survivor even though it has an age of only one month. It is possible that the fund will survive, but it is equally possible that it will not survive if we change the end date of the study period. Calculating survivorship bias, as the difference in the *surviving* and *observed* portfolio is useful to understand performance characteristics of incoming funds.

Table 2 shows the bias calculated as the difference in portfolio returns of the *observed* and *complete* portfolios and as the difference in portfolio returns of the *observed* and *surviving* portfolios for 84-month study period. It also shows the corresponding t-statistics.

The Wilcoxon Signed Rank Test is used to calculate the t-statistic. The significant t-statistics are highlighted. In general, all the classes appear to have a significant t-statistic for bias calculated as SP-OP, and for total hedge funds both including and excluding fund-of funds.

The direction of the bias differs according to category. If bias is a negative number, then the average performance of *survived new* funds and *disappeared* funds (*new* and *old*) is greater than the average performance of funds that have survived for the complete study period. It is important to analyze the performance of *survived new* and *disappeared* funds. Hedge funds drop out of the database for two entirely opposite reasons, poor performance and probably also because of limitations in the arbitrage opportunities in the investment strategy. If funds drop out because of poor performance, this would, in general impart an upward bias in performance measures, if there is no impact from *survived new* funds. The analysis becomes more complicated when *survived new* funds also have an effect on the bias.

Table 2 shows that seven out of nine categories show a negative bias (calculated as CP-OP) for an equal-weighted method of bias computation while six out of nine categories show a negative bias for a value-weighted method of bias computation. Poor performers drop out from the database more frequently than good performers. The bias results are different for different hedge fund categories and for different ways of calculating bias (equal-weighted versus value-weighted portfolio). The bias (calculated as CP-OP) result varies from +0.13% to -0.44% for different categories for the 84 month study period, and the overall bias of hedge funds excluding fund-of-funds is -0.11% per month using value-weighted method. The corresponding results for the 48-month and 36-month study periods are +0.33% to -0.44% and +0.4% to -0.14%, respectively. The bias result of +156 to -528 basis points per year for different categories is different from the results obtained by other researchers. It could be because of the database and the methodology for bias calculation.

We calculate bias on a monthly basis and then average bias is calculated for the study period. This gives a better estimate because the monthly calculations are a good representation of the inflow and outflow of funds from the database, and of the monthly fund return data. Fund-of-funds have a slightly lower bias than hedge funds alone. Bias results for hedge funds, both including fund-of funds and excluding fund-of-funds are not significantly different. Composite bias for all categories can be inaccurate as the bias results of different categories may cancel out. The result for the complete hedge-fund database is provided for comparison with the results obtained by other researchers.

Table 3 compares the category and class bias results (Value-weighted results are available from the authors) for different study periods of 84, 48, and 36 months. As the length of study period increases, the CP-OP bias becomes more negative. This is because the *complete* portfolio (CP) depends on the length of the study period. The number of funds in the CP portfolio decreases as the length of study period increases. Presumably, these funds have lower risk and possibly lower returns leading to a negative bias. The magnitude of the change in bias result as a factor of study period length is much smaller for SP-OP bias than that of CP-OP bias. It appears that SP-OP is a more stable measure of bias, specifically with the varying lengths of the study period. However, as mentioned earlier this measure of bias has its limitation because of the way the *surviving* portfolio is constructed. The advantage of this measure of bias is in its robustness not its accuracy, compared to the CP-OP measure.

PERFORMANCE CHARACTERISTICS OF DISAPPEARED AND NEW FUNDS

The performance of funds that disappeared during the study period is analyzed for 36 months prior to their disappearance. In hedge funds, unlike mutual funds, survivorship bias does not necessarily mean that only poor performers have dropped from the database. The performance of *new* funds that entered the database during the study period is analyzed for thirty-six months after they enter the database.

Cumulative Average Excess Return (CAER) Of Disappeared funds

We analyze the performance o disappeared funds to help predict any pattern using the cumulative average excess return. For each class and category, we calculate excess return for the *disappeared* funds. Excess return is the difference between the fund return and the category return for that month. We do this calculation going back 35 periods for each *disappeared* fund from the last available monthly return. We calculate average excess return for the class or category by taking the arithmetic average of excess return of all *disappeared* funds in that category for a particular month. Cumulative average excess return is calculated by linking the average excess returns. The following set of equations represents the process of calculating CAER for disappeared funds.

$$\varepsilon_{it} = R_{it} - E\left[R_{it}\right] \tag{1}$$

$$AER_t = \frac{\sum_{i=1}^{n} \varepsilon_{it}}{n} \tag{2}$$

$$CAER_{t+m} = \left\{ \prod_{j=-m}^{0} \left(1 + AER_{t+j}\right) \right\} - 1 \tag{3}$$

where:

ε_{it} is the excess return of i - th hedge fund for time t,

R_{it} is the monthly return of i - th hedge fund for time t,

$E\left[R_{it}\right]$ is the category/class return for time t,

AER_t is category/class average excess return for time t,

n is the number of funds in the category/class,

$CAER_{t+m}$ is category/class cumulative average excess return.

The results of the average and cumulative average excess return of the *disappeared* funds for representative category, class are shown in Figure 3. All of the nine categories show a strong pattern of a downward trend, indicating that the categories had poor performers as the portfolio of *disappeared* funds. In the analysis of class of hedge funds, all the four groups show a downward trend and so does the total hedge funds, indicating that the portfolio of *disappeared* hedge funds consist of mostly poor performers. This is the same conclusion reached by analyzing the return characteristics of the *observed* and the *complete* portfolio.

Individual funds drop out for various reasons. Possibly, funds disappear from the database because they perform poorly or also because they no longer wish or need to advertise in the database. Hedge funds report to the database for the sole purpose of attracting new investors. They stop reporting if the fund-manager no longer needs new investors. This could be for a couple of reasons. There may be no arbitrage opportunity that would increase performance for the investment strategy followed by the fund-manager, or the fund manager may decide that it is better to confine to the present number of investors and obtain the necessary fund from the existing investors. Yet, it seems that the majority of the funds disappear due to poor performance.

Thus having ruled out the conjecture that, funds disappear from the database because of lack of arbitrage opportunities, it is safe to conclude that the average return of *disappeared* funds is less than the average return of the funds that have survived for the complete study period. This does not explain why the bias results are negative. If the *disappeared* funds have low average return, the funds that contributed to the negative bias could be due to the performance of the *survived new* funds.

Cumulative Average Excess Return (CAER) Of New Funds

We analyze the performance of the funds that entered the database after the first month of the start of the study period, namely the *new* funds, to help predict the pattern in the cumulative average excess return. For each class and category, excess return is calculated for the *new* funds. This calculation is done going forward 35 periods for each *new* fund from the start date of the fund. Equation 1 and equation 2 above represent excess return and average excess return for a category/class. Equation 4 below gives the cumulative average excess return for new funds.

$$CAER_{t+m} = \left\{ \prod_{j=0}^{m} \left(1 + AER_{t+j}\right) \right\} - 1 \qquad (4)$$

The results of the average and cumulative average excess return of the *new* funds for representative category, class, and total hedge fund are shown in Figure 4. Eight out of the nine categories show a strong pattern of an upward trend, indicating that these categories had good performers in the portfolio of *new* funds.

In the analysis of class of hedge funds, all four groups show an upward trend and so does the total hedge funds, indicating that the *new* portfolio of hedge funds consist of mostly good performers. There are two caveats to this result. There is an implied assumption that the start date of the fund return data in the database coincides with the date of the entry of the fund in the database. That is, there is no back filing of any fund performance data. Secondly, even if the assumption of no back filing is valid, there is no way of knowing the actual age of the hedge fund, that is, the actual start date of the hedge fund.
It can be concluded that hedge funds' performance is good for the first 36 months (from the date of registration in the database). It is very likely that funds register after a certain time lag from the date of the inception of the fund. Initially, the hedge fund managers probably manage without having the need to advertise in the database for attracting funds. When these funds reach a particular level of activity, they register in the database to attract more investors. However, it should be noted that not all funds reach this level of activity. In fact, some funds disappear in the process and their existence is never recorded. This should not distort the results much because the bias results are not based on the total hedge fund industry, but are specific to the database under study.

SUMMARY AND CONCLUSION

The performance of hedge funds is analyzed for each category and class of the ZCM/Hedge database. The performance of fund-of-funds is inferior to that of other hedge funds.

We estimate bias for different categories, class, and the complete database. For the 84-month study period, the bias result using the value-weighted method varies from +0.13% to -0.44% for different categories and the overall bias of hedge funds excluding fund-of-funds is -0.11% per month. The corresponding results for the 48 month (1997-2000) and 36 month (1998-2000) study periods are from +0.33% to -0.44% and from +0.4% to -0.14% respectively. This result of +156 to -528 basis points per year for different categories is different from the results obtained by other researchers.

The return characteristic of the *complete* and *complete-complement* portfolio is compared to that of the *observed* portfolio. To understand the characteristic of *disappeared* funds, the cumulative average excess return of the portfolio of *disappeared* funds is analyzed. All the categories, class and the total hedge funds show a strong pattern of a downward trend, indicating that they had poor performers as the portfolio of *disappeared* funds.

The average return of *disappeared* funds is less than the average return of the funds that have survived for the complete study period. If the *disappeared* funds have low average returns, the funds that contributed to the negative bias could be the performance of the *survived new* funds. It can be concluded that the *new* portfolio of hedge funds consists of mostly good performers. However, caution is appropriate here because of the voluntary reporting of hedge funds and possible back filing of return data in the database. It is probably safe to conclude that the hedge funds perform well for the first 36 months from the date of their registration in the database. It is very likely that there is a time lag between the inception of a fund and its registration in the database. If back filing is minimal or negligible, voluntary reporting should not distort the results much since the bias results are not based on the total hedge fund industry, but are specific to the database under study. This study uses the ZCM/Hedge database assuming that the database is a good representation of the hedge fund industry.

Bias study is carried out for three different lengths of study period. The results show that as the length of the study period increases bias calculated as the difference in return between the *complete* and the *observed* portfolio (CP-OP) becomes more negative. The analysis is also done for different study periods using the bias measure as the difference in return between the *surviving* portfolio and the *observed* portfolio (SP-OP). The study finds SP-OP to be a more stable measure of bias, specifically with varying lengths of study period although it has its limitation because of the way the *surviving* portfolio is constructed.

FIGURE 1: ZCM/Hedge Classification of Hedge Funds

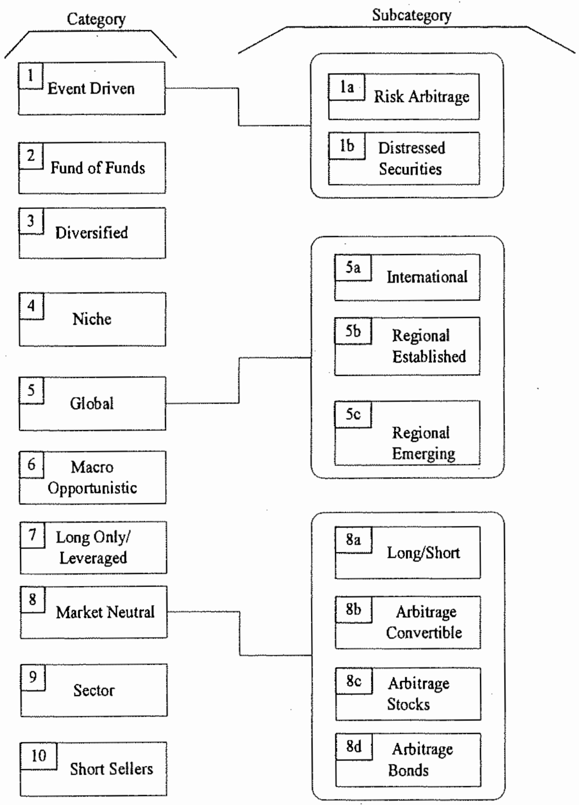


FIGURE 2: Portfolio Construction for the Study of Bias

January 1994	....	October 2000	November 2000	December 2000
-	....	-	A	A
-	....	B	B	B
C	....	C	C	C
D	....	D	D	D
E	....	E	E	E
F	....	F	F	F
G	....	G		
H	....			

TABLE 1: Summary Statistics of the *Observed* Portfolio, 1994-2000

Category/ Class/Total	After-fee Monthly Return (%) Mean	Median	Max	Min	Mthly Std. Dev
Panel A. Category					
Event	0.60	0.72	180	-58	5.47
Global International	0.68	0.59	64	-79	7.11
Global Regional Established	1.07	0.99	116	-63	7.70
Global Regional Emerging	-0.37	0.58	90	-84	9.79
Global US	-0.22	0.44	**903**	**-100**	**13.88**
Global Macro	0.22	0.36	104	-69	6.69
US	0.05	0.03	23	-50	5.52
Long Only/ Leveraged	0.24	1.02	83	-55	10.65
Market Neutral	0.68	0.70	219	-60	4.68
Sector	**1.25**	**1.32**	90	-78	10.25
Short Sellers	-0.20	0.28	71	-58	9.77
Panel B. Class					
HF-US	0.81	0.82	116	-100	7.41
HF-NON	0.31	0.62	**903**	**-100**	8.50
FOF-US	0.63	0.73	40	-46	3.30
FOF-NON	0.45	0.53	70	-49	4.09
Panel C. Total					
Excluding FOF	0.59	0.72	903	-100	7.87
Including FOF	0.58	0.70	903	-100	7.16

TABLE 2: Average Monthly Bias (before-fee), 1994-2000

	EW Bias (%)			
	Panel A. Category			
	SP-OP	t-stat	CP-OP	t-stat
Event Driven	0.02	**-1.70**	-0.09	-0.86
Global International	-0.02	-0.29	-0.37	**-2.14**
Global Regional Established	0.13	**4.06**	-0.25	**-1.89**
Global Regional Emerging	0.19	**2.46**	0.04	-0.23
Global Macro	0.20	**2.80**	0.13	1.06
Long Only/ Leveraged	0.18	1.03	-0.06	0.20
Market Neutral	0.18	**5.58**	-0.09	**-1.93**
Sector	0.05	0.81	-0.44	-1.49
Short Sellers	0.09	0.74	-0.10	-0.41
	Panel B. Class			
HF-US	0.15	**5.40**	-0.22	-2.17
HF-NON	0.20	**5.52**	0.01	0.56
FOF-US	0.05	**2.81**	-0.05	-0.74
FOF-NON	0.12	**5.18**	0.00	-0.23
	Panel C. Total			
Excluding FOF	0.18	**6.31**	-0.11	-0.91
Including FOF	0.14	**5.94**	-0.11	-1.58

Highlighted values are significant at 10% level of significance.

TABLE 3: Comparison of Average Monthly Bias for Different Study Periods

Category/ Class/ Total	Equal-weighted Bias for					
	CP-OP			SP-OP		
	36	48	84	36	48	84
Panel A. Category						
Event Driven	0.00	-0.05	-0.09	0.04	0.03	0.02
Global International	-0.14	-0.44	-0.37	0.04	-0.02	-0.02
Global Regional Established	-0.05	-0.10	-0.25	0.21	0.16	0.13
Global Regional Emerging	0.35	0.19	0.04	0.40	0.27	0.19
Global Macro	0.17	0.25	0.13	0.13	0.20	0.20
Long Only/ Leveraged	0.40	0.33	-0.06	0.60	0.34	0.18
Market Neutral	0.07	0.03	-0.09	0.16	0.16	0.18
Sector	0.05	-0.10	-0.44	0.33	0.18	0.05
Short Sellers	-0.05	-0.15	-0.10	0.08	0.11	0.09
Panel B. Class						
HF-US	-0.02	-0.11	-0.22	0.19	0.16	0.15
HF-NON	0.17	0.15	0.01	0.28	0.23	0.20
FOF-US	0.04	-0.02	-0.05	0.10	0.06	0.05
FOF-NON	0.15	0.09	0.00	0.20	0.16	0.12
Panel C. Total						
Excluding FOF	0.06	0.00	-0.11	0.23	0.19	0.18
Including FOF	0.06	0.00	-0.11	0.21	0.17	0.14

FIGURE 3: Average and Cumulative Average Excess Return of *Disappeared* Funds

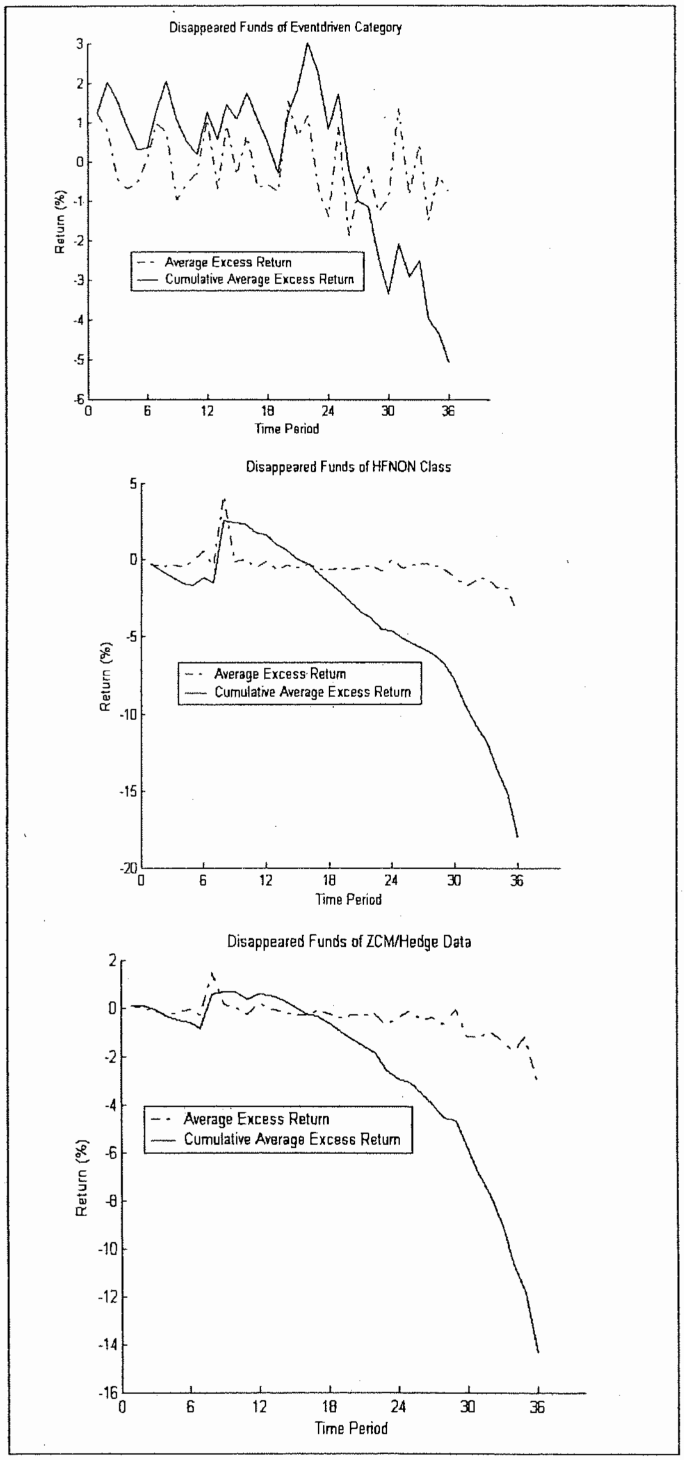
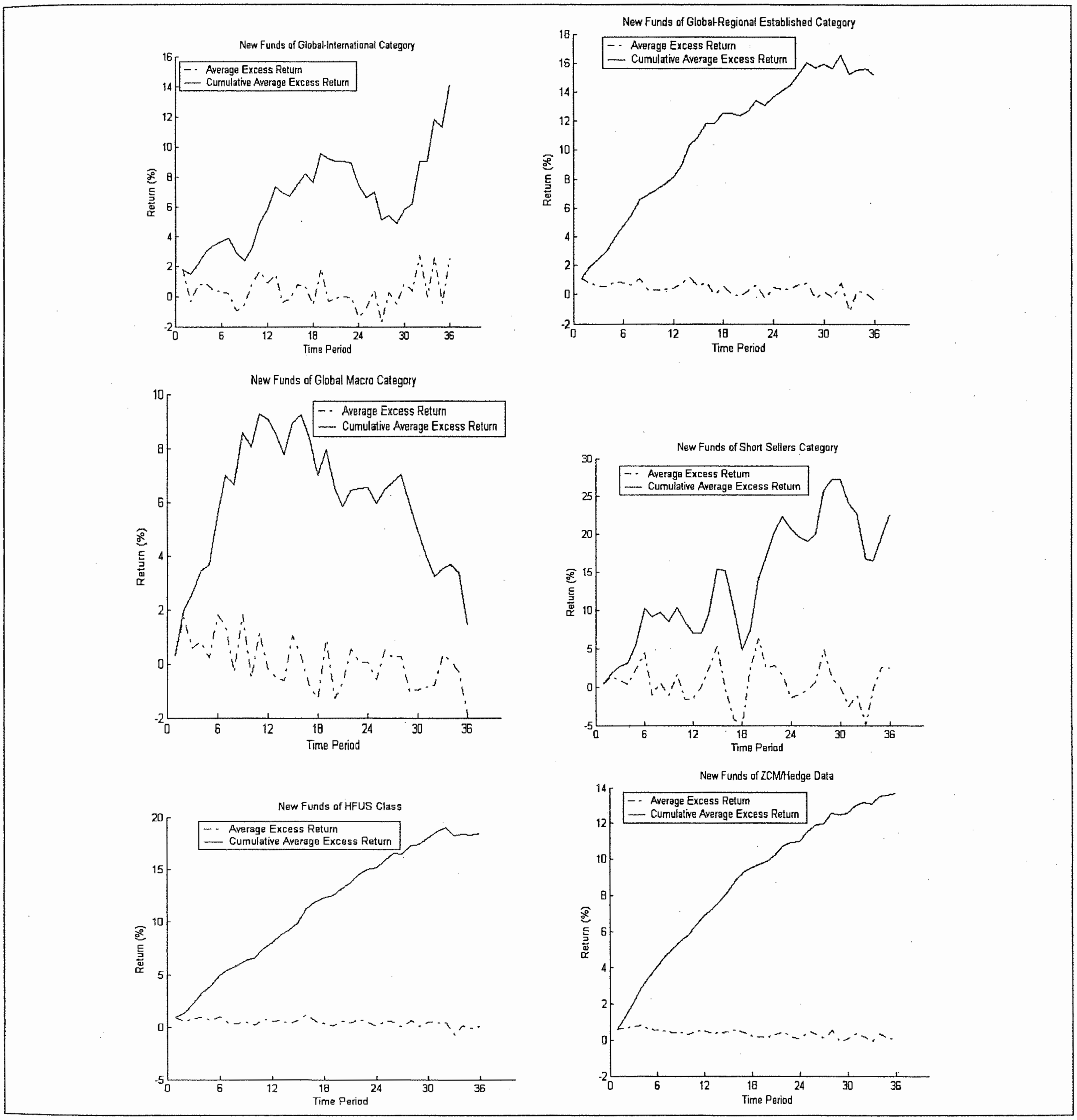


FIGURE 4: Average and Cumulative Average Excess Return of *New* Funds



ENDNOTES

1. A hurdle rate is a compensation feature, whereby fund performance must exceed that of a commonly recognized market index or rate for a given period in order for the manager to earn incentive compensation. When a fund's performance exceeds an established hurdle rate, incentive compensation is determined as a percentage of the calculated excess. The treasury-bill rate is often used as the hurdle rate.
2. A high water mark is a feature within an incentive compensation structure whereby losses are accumulated in a 'loss recovery account' against which future gains are applied in calculating incentive compensation. This feature ensures that incentive compensation is only derived from net positive performance on a cumulative basis.

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ENTREPRENEURSHIP: ENCOURAGED AND ENABLED, BUT NOT TAUGHT

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ABSTRACT

This paper presents a model for a non-traditional undergraduate business curriculum for entrepreneurship – "doing it rather than teaching it." The model evolves over four years. Each freshman class generates a large number of venture ideas. Over ensuing semesters, a winnowing process enables the stronger, more commercially sustainable venture concepts to develop, while weaker ideas wither. Survivors are nestled into an umbrella organization (e.g., horizontal conglomerate of SBU's). This umbrella represents venture capitalists or corporate executives who help intrapreneurs, and provides centralized staff functions, like human resources, accounting, finance and legal. It is managed by the upper-class students and supervised by the faculty and administrators.

INTRODUCTION

Entrepreneurial education is on the rise. Not too long ago, the "e" in front of a word or phrase meant "electronic" as in e-commerce, driven by the rapid spread of information technology and the euphoria of stock markets infatuated with IT. Now the "E" is more likely to be associated with entrepreneurship, which the national media has been trumpeting as the future of our economy.

Academic institutions are rated on their "E" programs. This fall The Princeton Review teamed with Forbes.com to publish "Top 25 Most Entrepreneurial Undergraduate Campuses in the Country." Larger universities with graduate programs and resources got off to an earlier start and now host programs, seminars and workshops to spread the word. "The Experiential Classroom" at Syracuse University's Department of Entrepreneurship and Emerging Enterprises is a good example.

The mantra of learning by doing is never more appropriate than more "E" programs. Business administration curricula have long used the case study method as a surrogate for actually managing. It's a very useful pedagogical tool, but the multi-million dollar decisions made in the artificiality of the classroom discussion are just that, artificial.

As the number of "E" programs increases, the question as to how to differentiate sets in. Since entrepreneurs tend to be competitive, business plan contests became a popular format for challenging students to refine, even escalate their thinking. It seems that every institution with an E-curriculum has some form of an E-competition. Many university-sponsored competitions require submission of business plans, which are reviewed by experts who select finalists or winners. Often only finalists get to make oral presentations to a panel.

While these competitions were once limited to currently enrolled students, often just MBA's, the trend has clearly been to broaden both the participant base and the disciplines represented. Purdue University's competition invites non-students as team members as long as there's a Purdue student on the team. I-Challenge is a joint technology contest organized by Stanford University's Business Association of Stanford Engineering Students and UC Berkeley's Engineering Entrepreneurship Club.

Competitions have gone global. The University of San Francisco sponsors a competition open to all graduate students from all universities and features a judging panel of Silicon Valley venture capitalists and $25,000 in cash prizes.

And the prize money has gotten globally big, too. The Southern Angels Business Plan Contest, affiliated with the Southern Illinois University – Carbondale, puts up $40,000 in prize money, with access to $250,000 in angel investments for promising start-ups.

It's hard to argue against creating plans. Planning is a basic management process and a useful way to engage students. But plans are just documents unless they can be put into action. They have the same artificial characteristics that case studies have. And why should the action be confined to the winners of a contest? Does the focus have to be high tech or engineering technology?

THE BASIC MODEL

The model proposed here is a four-year sequence of integrated and escalating learning experiences. Simply stated, each year the role of a class of students changes.

Freshmen create venture ideas, screen ideas for opportunities, and develop concepts into very basic business plans. Weaker ideas are winnowed and stronger opportunities are developed.

Sophomores nurture the surviving first-year enterprises. The business model is refined, as products are prototyped and test marketed. All management functions in the new venture, especially the financial expressions, become much more sophisticated.

Juniors manage the remaining growth ventures, or help freshmen with assessing ideas and drafting plans, or mentor sophomores on accounting, product design and marketing strategies.

Seniors, if not managing a venture, will manage the umbrella organization, host plan presentations, provide feedback and ultimately decide on whether to use seed capital to fund the newest venture proposals.

FEATURES OF THE MODEL

This model:

1. Engages first year students in entrepreneurship in an experiential way;
2. Enables students to push their entrepreneurial concepts into reality;
3. Releases non-entrepreneurially minded students into the traditional business curriculum, but keeps them connected as mentors to entrepreneurial students;
4. Provides upperclassmen with real managerial decisions and practical problem-solving experiences in the context of upper level courses.

Features #1 and #2 above focus on creating sustainable enterprises. This moves away from one-shot "projects" that masquerade as "learning how to run a business." The worst-case stereotype for such projects happened at a major land grant, research university in the mid-west. That "firm" of 32 students sold foam fingers imprinted with "We're # 1" to 28,000 football crazy undergraduates. While there's merit in such undertakings, it's just a simple project on a rather large scale.

First year students enroll in Introduction to Business which is taught from an entrepreneurial perspective rather than from the corporate mentality. The course includes a one-credit hour lab where the new venture concepts are applied. This is followed by a sequence of elective courses in New Venture Creation and New Venture Startups where students further develop venture concepts into business plans, seek initial seed capital and launch their enterprises.

Feature #3 above keeps the entrepreneurial ventures within the context of a traditional curriculum. Students not interested in new venture ideas pursue the traditional curriculum. For them, connection to the new ventures is maintained through class projects done in more advanced courses like Cost Accounting.

Feature #4 above enhances the integrative experiences of capstone courses. The artificiality of case studies, computer simulations and business plan competitions is replaced with the realities of decisions on funding venture proposals, managing more complex multi unit organizations, creating appropriate control and accounting systems, developing a set of human resources policies for all the ventures to share, etc.

BENEFITS OF THE MODEL

Benefits expected from the model include:

- Development of student portfolios to document refinements to the ventures and to demonstrate personal growth
- Building skills in logical sequences with repetition and reinforcement
- Greater continuity from course to course, enhancing retention of what has been "learned"
- More sophisticated career preparation over eight semesters
- Staged growth in professional experiences
- Evolutionary teamwork
- Engaging students in disciplines other than business administration in entrepreneurship.
- Engaging alumni in many important roles, such as reviewers of proposals and as mentors.

THE RESOURCES NEEDED

Resources help. Ideally there would be dedicated physical space, like an incubator, for student ventures. Such space can be justified as analogous to the laboratory space routinely provided for courses in the natural sciences or to the computer labs needed for computer science and information technology.

Ideally there would be financial resources to provide seed capital for student ventures. Having colleagues who would at least incorporate students' new ventures as client-based projects into their courses would be helpful. And support from administrators would always be welcome.

WHAT WE HAVE LEARNED SO FAR

In the fall of 2004, Juniata College is in the fifth semester of implementing a curriculum that is built on the principles outlined in the above model. Based on this experience, we offer the following observations.

As a practical matter, at the first year level, students are far too likely to latch onto the "wrong" kind of ideas for ventures. Not unexpectedly, their choices can reflect their newfound independence and lifestyles, resulting in too many proposals for sports bars and restaurants. First year students are also dealing with unfamiliar surroundings – "There's nothing to do here" – that engender entertainment centers, dance clubs and entertainment retailers. Students' new personal responsibilities stimulate the perception of a need for campus services (room cleaning, wake up, food delivery, laundry, computer set-up/fix-it, etc).

To help avoid the "single semester project" mentality, students need to think less about selling something to their mates in the residence hall and more about selling in larger, "off-campus" markets.

Using canned idea generation processes has proven to be a mixed bag. One process engages students in groups of three to tell each other about their interests. Combinations and permutations provide some interesting and sometimes strange ideas. It's wise to assassinate the sports bars at this time. Or better yet, have the upperclassmen who assist in this process pull the trigger!

Some idea generation exercises might inadvertently pigeonhole a student into a team rather than allow that individual to pursue an idea that he/she really wants to work on.

Dealing with the faculty committee that serves as the curriculum gatekeeper by evaluating new course proposals might get dicey. Be prepared to demonstrate that the field of entrepreneurship has content and a body of knowledge. Learning by doing may or may not resonate with faculty colleagues.

Upperclassmen can contribute in several ways. They love to serve as evaluators. While the constructive criticism can get pointed at times, the peer message carries a lot of weight. In athletics, it's the difference between negative feedback from a coach (it's his job to critique) versus that same feedback from a teammate. The latter carries more weight.

The importance of having one or more really qualified upperclassmen as student lab assistants cannot be overemphasized.

Prizes or some positive reinforcement through out the semester won't cost much but will pay off handsomely. This is especially true if the reward is tied into one of the ventures, is a little quirky or humorous, or is unexpected.

UNRESOLVED ISSUES

There are questions for which there is no ready answer. Some of the following might be perceived of as "good" problems.

What do you do with the students with the super-big ideas, like publishing a specialized book/DVD combination or producing a new television show?

What do you do with the student who is already "running" his/her venture? Does it matter whether the existing venture is more like a lifestyle sideline rather than a sustainable venture?

What do you do with the first-year student who has no personal idea and who has assiduously avoided joining any "E"-team?

Is there a way to guide students toward supporting and tying their ventures into local economic development initiatives? For example, if the institution is located in a rural area, can the venture address needs of agriculture or forestry?

How do you recruit the "E"-minded students in other disciplines? For example, how do we identify, encourage and enable the biology student with an idea that does address needs in agriculture or forestry?

Success of this approach to teaching/learning may result in some workload issues for the faculty involved. Colleagues from other disciplines may not appreciate your efforts, since you aren't doing "normal teaching" – i.e., standard classroom activities like lectures. Experience suggests that the challenges of guiding multiple student projects, either one-person or as "E"-teams, can be both invigorating and exhausting.

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University of San Francisco International Business Plan Competition,http://www/usfca.edu/sobam/nvc/

LINKS BETWEEN ORGANIZATIONAL CULTURE AND STRATEGY AT DOCTOR'S COMMUNITY HOSPITAL

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ABSTRACT

An initial research effort utilizing a competitive strategy model to explain the success of a not-for-profit community hospital (Doctors Community Hospital, Landham, Maryland) led to a much deeper understanding of the relationships between culture, strategy, environment and organizational performance. Based on an in-depth case analysis, the following observation is offered: a successful organization exhibits a strong culture which is effectively linked to its competitive strategy and is in harmony with its competitive environment.

CONTEXT AND OVERVIEW

In 2002, we had the occasion to meet Mr. Phil Down, Chairman of the Board and CEO of Doctor's Community Hospital (DCH), a very successful institution located in Lanham Maryland. He invited us to visit DCH and agreed to our request to make DCH the focus of a case study. Toward this end, we toured the hospital facility and studied various documents. Initially, we tried to understand DCH in terms suggested by Michael E. Porter (1996)—that is, we drafted a molecule-like "activity system" for DCH, one which emphasized key activities. Subsequently, the Vice President of Planning for DCH deflected our enthusiasm, when she insisted that the success of DCH was based on a strong organizational culture. Thus we studied, among others, the work of Edgar H. Shein (1992), who describes the role culture can play in creating cohesiveness among internal stakeholders. We then returned to DCH to conduct more interviews. Subsequently, we completed a lengthy case study of DCH that is highly descriptive and which asks students to ponder the relationship between strategy and culture, Fratantuono and Sarcone (2004). In contrast, in this paper, we try to explicitly share the insights that emerged from our project.

Towards this end, in Sections II and III we summarize the major ideas we found in Schein and Porter. In Sections IV and V, we describe the history of DCH and the organization's environment. In Section VI, we use Schein's terminology to identify what we take to be the major aspects of the DCH culture and Porter's framework to identify key elements of the DCH strategy. Finally, in our closing remarks, we elaborate the following points: the success of DCH can be attributed to the strong links between the hospital's culture and strategy; while the works of both Schein and Porter were useful to us, a "gap" remains between the two approaches; and when doing analysis of individual organizations in future, we believe it will be useful for us to search for symbiotic relationships between culture and strategy. We should note that many of the descriptive passages in Sections II through IV are excerpts from our case study.

ORGANIZATIONAL CULTURE

Edgar H. Schein is regarded as a leading authority on organizational culture. He describes culture as a

> . . . pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems, Schein (1992, p.12).

He says that organizational culture has three major components that lie at different "levels of awareness" for both employees and outsiders. The first, "Artifacts and Creations," are the most superficial component and are reflected in an organization's physical attributes and control mechanisms. The second, "Organizational Values," are more deeply embedded; nonetheless, they are articulated by senior management, provide the rationale for the artifacts, motivate the operating philosophy of the organization, and on occasion are subject to debate. The third, "Basic Assumptions," the foundation of organizational culture, are "invisible," "taken for granted," "preconscious," and "not debatable." They take shape as leaders form

fundamental views about the nature of reality and truth, human nature, human activity, human relationships, and the relationship of the organization to the environment.
Organizational cultures evolve over time, as the organization expands and diversifies or takes on new leaders and members. However, if an organization has a strong culture, then one would expect members of the organization to display a high level of awareness of the organization's values and intensely express approval—or perhaps disapproval—of those values.

To complicate matters, as an organization evolves, subcultures—centered on different functions, hierarchical levels, geographic locations, technologies, or products—can emerge. Thus, leaders must also proactively manage the different subcultures to avoid organizational conflict.

Schein believes that to effectively manage organizational culture, leaders must (a) understand how a culture forms, (b) know how to reinforce an existing culture; and (c) know how, when needed, to make an existing culture adapt to changing environmental conditions. Towards these ends, managers must act and communicate in ways that support values; give employees and stake-holders voice in shaping the work environment; and establish an incentive system consistent with cultural expectations.

In our view, Shein's emphasis on both the nature and management of culture provides insight about the internal mechanisms of the organization, into *how* the organization works. But we believe he leaves unanswered the question of *what* actual steps organizations must take to become competitively focused and maintain a competitive edge, especially with respect to the external environment.

STRATEGIC POSITIONING AND FIT

Michael E. Porter posits that "operational effectiveness and strategy are both essential for superior performance." Operational effectiveness refers to the ability to perform activities "better" than rivals, in order to reduce costs and improve quality. But, in an era of rapid dissemination of best practices and competitive convergence, advantage based on operational effectiveness is transient. Thus, while operational effectiveness is a necessary condition to competitive advantage, it is not a sufficient condition. In contrast, *sustainable* competitive advantage is the result of the activities undertaken by a company to deliver a product or service to targeted customers in a way that is distinctive and hard to mimic. Specifically, the company must either perform *different activities* from those being provided by rivals or perform similar activities in *different ways*. In this light, strategy is about managing the activities of a firm so that they will exhibit three attributes.

First, activities must be consistent with a "strategic position." That is, the company must decide to either produce a subset of an industry's products or services to a range of customers (variety based positioning); produce the full range of products or services for a group of customers (needs based positioning); or provide a product or service to customers who can be segmented from others and are accessible in different ways (access based positioning).

Second, the activities undertaken by the company in support of an established strategic position entail "tradeoffs." Tradeoffs arise because the value of products and services being provided must conform to the company's image and reputation; because resources and processes must be specialized; and because management has finite coordination and control abilities. An awareness of tradeoffs shapes decisions by managers about what activities the company should pursue as well as which it should avoid. Furthermore, if tradeoffs are present, rivals will find it hard to move into a new strategic position if they simultaneously try to occupy an existing position.

Third, the activities must "fit" with one another. Taken separately, each activity must be consistent with the company's overall strategic position. Furthermore, each activity must reinforce others. Finally, the activities must be holistically coherent. This coherence contributes to system wide efficiency. It also serves as a defense mechanism from potential rivals: to use Porter's illustration, while the probability of a rival duplicating any single activity may approach one, the probability of a rival duplicating many activities is much less (.9x.9 = .81; .9x.9x.9x.9 = .66; and so on.).

Porter illustrates his ideas through the use of molecule-like activity-system maps, with each map a schematic representation of a company's "strategic position." A map includes (a) a handful of high-order "strategic themes" that summarize the distinctive attributes of the company's product or service and (b) a larger number of clustered, linked "activities" undertaken to implement the themes.

In our view, Porter's emphasis on notions of positioning, tradeoffs, and fit provide an extremely useful framework for asking *what* a company should do to achieve sustainable competitive advantage. However, we do not find any explicit reference in his work to the cultural foundations of the enterprise or to *how* organizational culture enables firms to pursue activities.

HISTORY OF THE DOCTOR'S COMMUNITY HOSPITAL

Doctors' Hospital was founded in 1975 by a group of leading community physicians, in Lanham, Maryland, a primarily working-class, ethnically diverse community, located in Prince George's county Maryland, just inside the Washington DC beltway. By the early 1980s, the hospital was suffering from a poor reputation and legal and financial problems. In 1985, American Medical International (AMI), Inc. purchased Doctors' Hospital from the original owners and in early 1986, Phil Down was named the Executive Director of AMI Doctors' Hospital.

Over the next three years, the corporate leadership of AMI realized their strategic rationale for the acquisition was faulty and they became disenchanted with Doctors' Hospital, as the institution respectively showed annual losses of $434 thousand, $2.96 million, and $2.37 million for the 1987, 1988, and 1989 fiscal years, and a retained (cumulative) deficit over a 5-year period ending August 31, 1989 of $8.4 million.

Meanwhile, starting in 1987, Phil and other members of his Management Group began to explore the possibility of purchasing Doctors' Hospital from AMI and converting it from a for-profit to a not-for-profit community based institution. After 18months of negotiations with AMI, coordination among several professional entities, and consensus-building among numerous stakeholders, the Group achieved their objective. In early autumn of 1990, the newly named Doctors' Community Hospital (DCH) was registered as a non-stock corporation in the State of Maryland. Phil Down was named Chairman of the nine-member Board of Directors.

Funds for the acquisition were raised by the Maryland Health and Higher Educational Facilities Authority, which issued a total of $51 million in bonds. The proceeds were used by the Group to cover the purchase price of the existing facility, facilities upgrades, new equipment, startup costs, and administrative expenses. The Authority became the DCH mortgage-holder. The financing arrangement implied that at the outset, DCH had a debt to equity ratio of roughly 110 percent.

Following the acquisition, DCH experienced success. In 1993, DCH refinanced $10 million of its debt obligations, and in 1997, converted a portion of their remaining debt to variable rate bonds. In turn, those moves enabled DCH to make several capital improvements. Over the three-year period to 2003, among other projects, DCH installed the best critical care unit in the region, with 24 new beds; a new state of the art emergency room that was soon the 7th busiest in the state; a cardiac catheterization facility; multiple new nursing stations; and a very modern basic infrastructure. While eight other inpatient facilities were located within a ten-mile radius, in 2002, DCH managed to achieve an 85 percent occupancy rate for its 176 beds, a relatively high utilization rate by industry standards. By the late 1990s, DCH had earned a national reputation for excellence within the professional health care community and, for three years running, starting in 2000, was named by *U.S. News and World Report* as one of the top 50 hospitals in the United States.

COMPETITIVE ENVIRONMENT

Over the past 40 years, the U.S. health care environment has been difficult to navigate. Starting in the 1960s, expenditures on health care in the United States increased at a rapid rate, rising from 5.7 percent of GDP in 1965 to 14.9 percent of GDP in 2002, due to an aging population, advancements in technology, the growing availability of health insurance, and the evolution of expectations by patients and physicians. In light of rising costs, in the 1970s and 1980s, the federal government introduced various plans intended to reduce both the number and the duration of overnight hospital stays. In turn, the health insurance industry lobbied for a "managed care" model, which specified that hospitals would be reimbursed by insurers on a "cost-plus-basis," thereby shifting financial risk from the payers to providers. Starting in the early 1980s, to improve economic performance, some hospitals joined "horizontal networks" with similar institutions. Subsequently, private physician practices, clinics, and hospitals began to establish jointly-owned "vertical-networks"—indeed, by 1995 almost 28 percent of all U.S. hospitals were linked in such a structure. But, when economic gains remained elusive, experts began to advocate "virtual integration networks" in which separately owned entities would coordinate services and finances via operating agreements, contracts, or protocols; while such networks might result in more flexibility and efficiency, they would also require major adjustments in each institution and mutual trust among participants. By the turn of the century, U.S. hospitals were once again experiencing an increase in demand for in-patient admissions; but the composition of demand—a growing proportion of lower margin medical cases, rather than surgical cases—coupled with supply side constraints which drove up costs, resulted in "profitless growth."

In Maryland, hospitals operated in a unique environment: in 2002, Maryland was the only state with rate regulation still in place. The industry was regulated by the public-utility-minded Health Services Cost Review Commission (HSCRC). According to guidelines, every year the HSCRC approved rates for each Maryland hospital and established a "corridor" around those rates. If overcharges fell inside the corridor, the hospital had to repay the overcharges plus interest in the form of reduced approved rates in the next fiscal year; if the overcharges fell outside the corridor, then the hospital had to repay 140 percent of the overcharges, plus interest, in similar fashion. In contrast, if undercharges fell within the corridor, then the hospital would be able to recoup 100 percent of the undercharges in the following year, via a premium on approved rates; but the hospital would not be permitted to recoup undercharges that fell outside the corridor. While the objective of the HSCRC was to create stability across the state-level health care industry rather than ensure high profits for any particular hospital, the arrangement meant that each hospital was under constant financial pressure. From the viewpoint of each of Maryland's 52 hospitals, the process was a "zero sum game."

INGREDIENTS FOR SUCCESS

Strategic Focus

At its founding in 1975, Doctor's Hospital was primarily a surgical hospital. Although DCH experimented with a few initiatives following the 1990 acquisition, the institution retained a relatively sharp focus as it evolved into a primary-level and secondary-level, adult-care, medical and surgical facility that could respond to roughly 95 percent of the inpatient needs of the immediate community. Conversely, the management team decided they would not: develop an obstetrics unit or a pediatrics unit; support open heart or cranial procedures; run a trauma center; provide an in-patient psychiatric unit; administer an alcohol rehabilitation center; evolve into either a teaching or research facility; or be a member organization of a larger, comprehensive health-care system. In Porter's terms, DCH positioned itself to provide a limited range of services that were also being provided at other inpatient facilities, but to provide them in a *different way than rivals*.

A Distinctive Organizational Culture

While a strong organizational culture is important to the success of any institution, this may be especially true for hospitals, where employees are often motivated by intrinsic values. At DCH, we found evidence of a distinctive culture reflected in both artifacts and articulated values, such as the vision statement ("Continuously strive for excellence in service and clinical quality to distinguish us with our patients and other customers"), the mission statement (***D***edicated to ***C***aring for your ***H***ealth) and the prominent poster displayed throughout the hospital (***S***ervice ***E***xcellence ***R***espect ***V***ision ***I***nnovation ***C***ompassion ***E***veryone).

Perhaps more telling, members of the Management Group described themselves as "serious-minded," "self-managing," and "self-critical;" believed that as a team they got along well and had complementary personal attributes; placed a premium on loyalty to the organization and an old-fashioned work ethic; conveyed a sense of joint-ownership in the organization and pride in their co-workers; and believed their institution was distinctive. Furthermore, team members suggested that the lean staff and flat organizational structure were consistent with the managerial "culture," in which all executives and directors were visible and accessible; there were no "turf wars;" communication lines were relatively informal, and where team members had to "be nimble" to engage in "proactive problem solving." They characterized Phil Down as a kind and sympathetic leader who had an open and "old-fashioned" style of dealing with people; who had detailed knowledge of all aspects of the hospital; who had a cautious nature, good instincts, experience, and a strong track record which instilled confidence; and who was a "visionary leader" who had created a "visionary institution."

Finally, we speculated that at DCH, artifacts and values are based on five interlocking assumptions: (1) people are responsible, motivated and capable of governing themselves; (2) organizations work best when individuals make contributions to the collective endeavor; (3) people feel willing to share ideas and assume responsibility when the risk of doing so is low because colleagues are caring and committed; (4) the best solutions result from a participatory process that champions procedural justice; and (5) the organizations' customers expect and deserve high-quality consistently-provided health and social services.

Strategic Themes

In our analysis, four strategic themes are the basis of the activity system we constructed for DCH. In the Appendix, we provide a list of the associated activities that we identified for the organization.

Cultivate Personalized Relationships With Physicians. Physicians who treat patients in hospitals are either "general staff," who have their own practices, or "hospitalists," who are directly employed by the hospital. General staff are "free agents"—they receive no direct remuneration from hospitals and are often affiliated with more than one hospital. When working with staff physicians, hospitals earn revenues by providing ancillary services and care associated with overnight stays. In contrast, if care is provided by a hospitalist, then a hospital is able to charge the patient or the insurer for physician services. Thus, to cultivate a relationship, the Management Group made important symbolic gestures, such as creating a physicians' dining-room that dispensed high-quality free-food. As important, the Group worked to create a culture of respect for physicians based on open and honest communication and instituted a wide array of support mechanisms for both staff physicians and hospitalists; established an executive level Physicians' Liaison responsible for maintaining good relationships with staff and for recruiting new physician practices to the hospital; and took several innovative steps which created a truly distinctive, physician-friendly environment. Finally, even though technology breakthroughs made it possible for physicians to provide "outpatient services" in their offices that previously had been performed in hospitals, DCH refrained from engaging in direct competition with physicians' practices.

Manage the "Actual" and "Perceived" Quality of the Patient Experience. While physicians concentrated on the quality of health-care provided to their patients, the public tended to evaluate and respond to the "hotel services" dimension of the hospital stay. In turn, patients' satisfaction with the hospital stay influenced their overall satisfaction with the surgical/medical procedures and with their physicians. Given this relationship, DCH instituted procedures to monitor and improve patient satisfaction. They also invested in transportable equipment and in facilities configurations that enhanced nurses' productivity, reduced patients' discomfort, and increased patients' privacy. Furthermore, while the Management Group recognized that nurses arguably did more to shape the patient experience than any other group, they also acknowledged that their nursing staff was only average, and to compensate, they empowered selected nurses to serve as case-managers for all patients handled by one physician.

Foster a Can-Do Attitude Throughout the Institution In addition to technical factors, the Management Group believed the key to a good patient experience was personnel throughout the organization who had a "can-do" attitude, who felt empowered to act, and who believed they were part of a team. Thus, while the Group took many common-sense steps to enhance communication channels and build a sense of community at the hospital, they made sure that they fully included 2nd and 3rd shift employees in all initiatives. In retrospect, while each activity sounds conventional, the cumulative effect was to create a very positive environment.

Apply a Judicious Approach to Initiatives and a "Systems Engineering" Approach to Operations The fact that the acquisition of the hospital had been 100 percent financed by debt created a permanent and ever-present concern for the bottom-line. That concern, coupled with the basic economics of hospital management, strongly influenced the approach taken by DCH on several fronts. First, since hospitals primarily received remuneration based on illness classification rather than the actual services and tests provided, DCH took many small steps to reduce the average duration of the patient stay. Second, since some physicians generated more revenue, and margins with surgical patients were greater than margins with medical patients, DCH had initiated a plan for gradually reshaping the medical staff. Third, the Group had taken steps to increase the number of hospitalists in targeted units. Fourth, the Group had placed a premium on efficiency and productivity when it constructed the critical care and emergency room units. Fifth, in the critical area of information technology, the Group had encouraged progressive relationships between the hands-on practitioners in all functional hospital areas and IT programmers, and had insisted on one IT platform and compatible, off-the-shelf application modules. Finally, DCH had taken a holistic view toward all stakeholders and extended the idea of service to those more tangentially connected to patient care, such as the emergency rescue teams, who were employed by other companies.

CONCLUDING REMARKS

In this analysis, we relied heavily upon Schein's multilevel description of organizational culture to recognize and describe the artifacts and stated values found at DCH, and to speculate about the unarticulated, underlying belief system of the institution. We relied on Porter's definition of strategy as a framework to identify the tradeoffs inherent in the strategic position taken by DCH and for constructing a map of the hospital's strategic themes and related supporting activities. Based on our analysis of DCH, we offer the following conclusions.

First, we think the DCH senior management staff has embraced a belief system which prizes participation, collaboration, self-governance, due process, and service, and has effectively used artifacts and communicated values consistent with those beliefs to various stakeholders. As important, we believe that individuals have adopted those values in their daily activities.

Second, we think that there is a consistency and coherence in the activities we identified at DCH that conforms to Porter's notions of position and fit and helps explain the success of the institution. This gives us satisfaction and some confidence in the value of using Porter's framework.

Third, we think that the success of DCH can be attributed to the strong links between the hospital's culture and strategy. The culture resonates well within the organization and serves as the foundation for the formulation and implementation of the hospital's competitive strategy.

Fourth, in terms of the theoretical literature, as we worked with the frameworks suggested by Schein and Porter, we perceived a "gap" between the two approaches. In particular, we feel that while Schein's work helps one understand *how* organizations do what they do, Porter's work helps one understand *what* they do.

Fifth, in terms of methodology, as we created a map of the activity system for DCH, we felt that important components of culture permeated the themes and informed the various clusters of activities we had identified. To say this in another way, we came to believe that if DCH did not have its distinctive culture, it would not be able to perform its current activities. Thus, via our case study of a particular institution, we have much greater clarity on the following point: while Porter claims that it is the configuration of activities that provides an organization with a defendable strategic position in a competitive environment, we think that the underlying culture *enables* an organization to perform activities. In the future, when we analyze other successful organizations, we will always be on the lookout for examples of symbiosis between culture and strategy.

Sixth, we note that while the approach endorsed by Porter was developed for the for- profit-sector, we have benefited from applying it to a regulated, not-for-profit, service oriented organization.

In looking ahead, the question remains as to whether or not the existing culture and strategy of DCH will remain relevant and effective in the difficult health care environment. This environment of "profitless growth" rewards neither service quality nor accessibility in a community hospital. To survive, it is possible that Phil Down may need to reevaluate his world view and redefine the organization's culture, mission and strategy.

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APPENDIX

Activity System for Doctors Community Hospital

Theme 1: Cultivate Personalized Relationships With Physicians

Activity 1: Construct a Physician's Dining Room, proximate to the executive office suite, which provides free-meals from early morning till late evening; creates goodwill, a place where physicians and management interact and takes on symbolic importance.

Activity 2: Invite physician input on facility renovation thereby giving physicians a voice in the planning process.

Activity 3: Refrain from providing outpatient or clinic services that directly compete with services physicians are providing in their individual practices.

Activity 4: Hold bi-annual, expenses-paid retreats for management and physicians to strengthen informal communication channels and relationships.

Activity 5: Create an in-house, for-fee, answering service so physicians can have timely access to professional and personal messages.

Activity 6: Provide proactive administrative support to help physician's navigate the credentialing requirements of the hospital and other organizations.

Activity 7: Eliminate the language from DCH bylaws that mandated all physicians must serve "on-call" hours; instead, provide monetary incentives to encourage self-selection.

Activity 8: Invest in the newest technology requested by physicians when consistent with the range of services DCH seeks to provide.

Activity 9: Provide doctors' equitable access to most desired times for surgeries and procedures; try to give individual physician's clusters of time to promote efficiency.

Activity 10: Employ Executive-Level Physician's Liaison responsible for attracting new physician practices and ensuring physicians' concerns and needs are addressed.

Activity 11: Designate qualified nurses as case managers for patients "by doctor," rather than "by-floor" basis, to streamline communication about patients' status with physicians.

Activity 12: Provide each on-duty nurse with a cell-phone, with number registered at the front desk and in nurses' stations, to reduce inefficiency and physicians' "on-hold" time.

Activity 13: Include physicians in governance at the Board of Directors level.

Activity 14: Give physicians' responsibility for monitoring the quality of professional services and participating in the hospital's risk management.

Theme 2: Encourage Pro-Active Attitude Throughout Organization

Activity 15: Use a 360-degree interview process, involving superiors, peers, and subordinates, before hiring new managers.

Activity 16: Keep the senior management staff and other departments lean and flat and delegate authority throughout the organization.

Activity 17: Use monetary incentives, not directives, to achieve results, including wage-differentials for nurses to staff the 2nd and 3rd shifts and weekend slots.

Activity 18: Maintain standing, inter-departmental collaborative teams to share knowledge, anticipate problems, and come to solutions on routine operational issues.

Activity 19: Establish inter-departmental collaborative teams for planning of major projects, such as renovations to the emergency room and critical care units.

Activity 20: Seek fair outcomes when addressing employees' personal and workplace concerns; for example,DCH has avoided downsizing staff during stressful times.

Activity 21: Empower mangers with responsibilities for critical operational decisions.

Activity 22: Publicize individual contributions to team success via monthly in-house publications.

Activity 23: Celebrate organizational milestones and recognize important staff accomplishments in regular hospital-wide forums.

Activity 24: Ensure visible and accessible executive leadership, by locating office suite near main entrance and having management present during second and third shifts.

Theme 3: Shape "Actual" and "Perceived" Quality of Patient Experience

Activity25: Monitor and Manage Patients' Perceptions of Nursing Staff:

Activity 26: Retain a highly skilled and experienced infection control coordinator.

Activity 27: Provide high-quality "hotel services," including meals served in patient rooms and in the cafeteria; telephone and television services; and appearance and cleanliness of patients' rooms, of newspaper/gift shop, and of family waiting rooms.

Activity 28: To promote patient privacy, create special hallways that are only used to transporting patients to and from surgery suites or treatment rooms.

Activity 29: Provide digital posting in ER of patient status, including stage of treatment and elapsed time from when the patient was admitted, to provide all ER personnel an overview of conditions on the floor, to sensitize them to progress with particular patients, and to cultivate a sense of urgency and professionalism.

Activity 30: Provide patient services at bedside, when feasible, via transportable equipment, to reduce patient discomfort and enhance productivity.

Theme 4: Maintain Judicious Attitude Toward Initiatives and "Systems Engineering" Approach to Operations

Activity 31: Limit scope of support to providing primary-level and secondary-level medical and surgical services.

Activity 32: Pursue second-mover advantages by continuously scanning the external environment to see how the newest technology, and hardware and software systems perform at other institutions, and then move to adopt technology when it has proven successful.

Activity 33: Maintain disciplined, conservative attitude towards financial resources to manage the acquisition-related debt burden; avoid further financial risk; and effectively refinance debt to fund renovations and expansions.

Activity 34: Seek consensus between all interested and impacted stakeholders by communicating in an open, interactive style; by seeking input from second tier managers and from line-employees whenever possible; by maintaining a long-term view of relationships; and by learning to live with honest differences of opinion among the Management Group.

Activity 35: Trust and leverage the expertise and wisdom of the long-tenured Executive Leadership.

DESIGN AND DEVELOPMENT OF AN INTRODUCTORY INFORMATION SYSTEMS SECURITY COURSE FOR COLLEGES OF BUSINESS

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ABSTRACT

Using the research from Kim and Choi, Dark and Davis, the Certification of Information Systems Security Professional Domains, and the Organization Systems Research Association curriculum model, Bloomsburg University developed an introductory course in Information Security Management to meet the needs of business majors across the curriculum. The recommended instructional methods for presenting this course include case-based applications supplemented by lecture discussion. The course introduces the basic concepts of information security, specific security contexts, technologies and practices, and the broader implications and ramifications of information security practices as they apply to legal and ethical issues in a general business setting, and emerging trends in information systems security.

INTRODUCTION

Of interest to business educators are the 2003 CSI/FBI Computer Crime and Security Survey. This survey clearly shows a marked increase in computer security incidents and a significant rise in financial losses. It identifies an increase in total annual losses attributed to computer security incidence from $100 million in 1997 to $456 million in 2002. Over the past five years the total losses have exceeded $1 billion. In 2002, 91% of the respondents detected security breaches compared to 90% detected in 1999. Comparisons of the surveys from 1996 through 2003 show a significant increase in the Internet as a frequent point of attack (POA) (Power, 2001). The IT Risk Survey, compiled by Ernst & Young, found 66% of the respondents not using the Internet would begin to utilize it, and 83% respondents using the Internet would increase usage, if security concerns were adequately addressed (Earnst & Young, 1999).

In an environment in which these risks are inherent it is important that business students entering the workforce understand the ways to mitigate these risks (Grimaila, 2002). Many professional organizations have recommended model curriculum guides used by schools, colleges and universities in the design of programs in information technology. Office Systems Research Association's (OSRA) redefined model curriculum for organization and end-user information systems recognized the need for an introductory course in information systems security and has added the course as a recommended elective.

COURSE DESIGN

The baseline in this curriculum design is the study guide for the Certified Information Systems Security Professional (CISSP) common body of knowledge (CBK) domains. The CISSP is a broad top-down certification (Dugan, 2001) created by the International Information Systems Security Certification Consortium $(ISC)^2$ which is supported by the Computer Security Institute, Information Systems Security Association, the Canadian Information Processing Society, as well as other industry presences (Yang, 2001). This study guide outlines CBK requirements for certification as an Information Systems Security Professional. Ronald Krutz has written extensively on mastering the ten domains listed in the CISSP CBKs. His *CISSP Preparatory Guide* is one of the few books with detailed knowledge of the requirements needed to become a CISSP certified security professional. An analysis of the CISSP guide identified five domains applicable to an end-user information security curriculum:

1. Domain one: Security Management Practices.
2. Domain three: Telecommunications and Network Security.
3. Domain six: Operations Security.
4. Domain eight: Business Continuity Planning and Disaster Recovery Planning.
5. Domain ten: Physical Security (Krutz, 2001).

Kim and Choi (2002) were instrumental in determining actual information security requirements in Korean industry. They identified the work actually performed by information security professionals in the field. Their research on identifying the educational requirements for information security professionals in Korea identified the following as essential for practitioners of information security. In order of importance they are:

1. establishing information security policy,
2. establishing managerial security measures,
3. analyzing security environments,
4. risk analysis and assessment,
5. understanding basic cryptology,
6. acknowledging laws and regulations,
7. testing vulnerabilities in information security systems,
8. designing physical security measures,
9. coping with hacking,
10. managing intrusion check and detection,
11. privacy and ethics,
12. handling computer viruses,
13. knowledge of information security standards,
14. managing security education programs, and
15. knowledge of security system evaluation.

Dark and Davis (2002) reported on the output of two curriculum development workshops. The first was held in July 2001, and the second was held in April 2002. The workshops were sponsored in part by the National Science Foundation Grant *DUE # 0124409*. The undergraduate skills and knowledge from the requirements workshops were analyzed to determine applicability to the goals and objectives of an information systems security curriculum. The following skills and knowledge requirements, taken from Appendix C of the Dark and Davis (2002) report, were determined to fit the ongoing requirements in an end-user information systems curriculum:

General information assurance knowledge and skills

A knowledge of basic IT and traditional definitions of INFOSEC, history and concepts, information assurance mindset, survey/overview of the field, survey/overview of the context/environment, crimes and laws, business fundamentals of authentication and authorization, awareness of INFOSEC hardware products and E-commerce.

Risk assessment

A skill of identifying threats and vulnerabilities, classes of attacks, classes of attackers, methods and models for testing systems, assessing risk methods, models, and theories and how these interweave into IA, asset classification, cost benefit analysis, ROI of INFOSEC investments, security posture assessment, testing, validation, and verification.

Information security management

The knowledge of security policy, policy development process, classifications of policies, policy implementation and management, organizational behavior, cultural, societal, and ethical implications of information systems.

Legal and ethical

A knowledge of privacy, intellectual property, investigation, digital evidence, legal aspects of computing practices, forensic examination and associated tools, seizure concepts, legal principles of computer related investigations, presenting evidence in court, ethics, prepared to engage in discussion on ethical issues that remain open/not yet resolved.

Intrusion defense and response

The functions of IDS, types of IDS, Anomaly Misuse, advantages and drawbacks of different IDS, vulnerability scanners, firewalls, proxy, filtering, application, incident response, notification, manual response, automated response, disaster recovery, back up, redundancy, replicated sites, post attack network analysis and computer forensics.

Emerging technologies

These include hardware, biometrics, digital cash, wearable computing, and other emerging hardware and software in information systems.

COURSE DEVELOPMENT

Using the identified undergraduate skills and requirements from the CISSP Guide, Kim and Choi (2002), and Dark and Davis (2002), Bloomsburg University's Business Education and Office Information Systems Department developed a course titled Information Security Management. The course description is indicative of its end-user emphasis.

This course is an introduction of end-user systems security from a management aspect. The course emphasizes the methods for the management of information security through the development of policies, procedures, audits, and logs. It also provides an understanding of the methods used for identifying threats and vulnerabilities, as well as analysis of the legal, ethical, and privacy issues in information systems and discusses emerging technologies related to systems security.

The objectives of this course include:

1. Understand and apply the concepts and theories underlying the administration of information systems security.

2. Examine and use current methodologies for information systems security design, implementation, and monitoring.

3. Undertake review of information systems security practices, techniques, and methods for securing an organization's information assets.

4. Consider and analyze the impact of information systems security on organizations and society.

The course outline includes:

1. Introduction: Definitions, history of IS security, current concerns, and implications of IS security.

2. Information Systems Security Management: Key principles, management's role, standards, policies, procedures and risk management.

3. Systems Security: Exposures and threats, approaches to attack and penetration, exploitation, audits, and logs.

4. Legal and Ethical Issues: Protection of computer assets, copyright, computer abuse, and legal aspects of privacy.

5. Emerging Trends in IS Security: biometrics, smart cards, digital signatures, digital cash, etc.

The recommended instructional methods for presenting this course include case-based applications supplemented by lecture discussion. Learning begins with an understanding of the fundamental concepts of IS security. The first section introduces the basic concepts of information security in information systems. The next two sections deal with specific security contexts, technologies, and practices. The last two sections deal with the broader implications and ramifications of information security practices as they apply to legal and ethical issues and emerging trends in information security.

CONCLUSIONS

Although primarily an Office Information Systems course, Information Security Management was designed to meet the elective requirements of all majors in the College of Business. The outcomes have applicability to Finance, Accounting, Management, Marketing, and Information Systems majors. Further research is needed to develop more information security curricula that focus on end-user systems practitioners and cross departmental lines.

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THE EFFECTS OF MALPRACTICE TORT REFORM ON DEFENSIVE MEDICINE

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ABSTRACT

Positive defensive medicine occurs when physicians order additional tests or procedures primarily to avoid malpractice liability. This paper shows the degree of defensive medicine occurring across states is related to the malpractice environment in the states. As the environment changes due to malpractice tort reform, defensive medicine practices also change. This paper shows the existence of positive defensive medicine and how it adds to total health care expenditures for head trauma victims in 23 states in 2000. Moreover, given different malpractice environments across states, we witness variations in defensive medicine practices leading to differences in health care expenditures.

INTRODUCTION

Doctors march on state capitols to bring attention to the rising cost of malpractice insurance premiums. Although declining reimbursements by private health insurers and the federal government have hurt physicians' incomes, the chief culprit in the doctors' dissatisfaction is rising malpractice insurance premiums. While malpractice tort reform is debated in state capitols and reforms are undertaken, another implication needs to be addressed. How does the malpractice environment affect doctors' decisions in treating patients and do these decisions contribute to higher health care costs?

The behavioral response of doctors to liability concerns is called defensive medicine. Positive defensive medicine occurs when physicians order additional tests or procedures primarily to avoid malpractice liability. Negative defensive medicine occurs when doctors avoid seeing risky patients. Since the early 1970's economists, lawyers, and those within the medical community have debated the existence of defensive medicine. While recent economic analyses support the idea that physicians practice defensive medicine, complexities surrounding the topic have prevented economists from discerning its pervasiveness and direct contribution to health care costs. Given the role defensive medicine plays in health care and the scarcity of studies that link it to the malpractice environment, this study examines positive defensive medicine across states in light of differences in the states' malpractice environments.

MALPRACTICE THEORY AND PRACTICE

According to Danzon (1994), professional liability systems are necessary in situations where asymmetric information exists. Physician's extensive use of medical jargon and patients' inabilities to understand such terminology is just one example of the information gap that exists in medicine. Thus, the purpose of a liability system like the medical malpractice system is twofold; it is meant to both to deter negligence and compensate patients injured as a result of negligent care. A person is deemed injured if and only if the injury was preventable and it was reasonable to undertake preventive activities. Thus, adverse outcomes resulting from normal risks of medical procedures should not be considered under the medical malpractice negligence rule.

Regarding liability insurance, economic theory states that premiums should reflect the expected cost of claims based on individual physician's standards of care. Theory predicts that experience rating malpractice premia ensure that the physicians sued most often pay the highest malpractice premia, not unlike the automobile driver who pays the highest insurance rates because of multiple accidents. However, this is not the standard practice. Malpractice premia are experience rated across specialties, but not across doctors within a region within a specialty. A community rating is used within a specialty across regions. For example, the Philadelphia Inquirer (2003) reports an obstetrician in Philadelphia paid on average $140,000 per year for malpractice insurance, compared to $67,000 in Los Angeles, indicating different community ratings across states. These state variations in premia are the result of the malpractice tort law itself, since these laws are created by state legislatures. For instance, statute of limitations, capped damages, etc. vary across the country.

Experience ratings differ across specialties with riskier practices, say obstetrics, paying more. An orthopedic surgeon in Philadelphia only paid $115,000 on average in 2003 compared to the above obstetrician, according to the Philadelphia Inquirer (2003). Experience rating within a specialty could have the effect of retarding new technological procedures, which is why it is not used. It would effectively punish the doctors utilizing new, perhaps initially riskier techniques, causing doctors to shy away from newly emerging procedures. Such incentives could retard the forward movement of technological medical procedures. In addition to specialty rating, malpractice premia are also experience rated by location. Physicians from locales with above average suit awards will have higher premia due to higher insurer payouts. Frequency and severity variations within a state result in regional specialty specific premia variations. As such, Philadelphia orthopedic surgeons paid $7,000 more on average than doctors in adjacent Montgomery County due to Philadelphia's high jury payouts, according to the Philadelphia Inquirer (2003).

Unfortunately, the community rated system has its own disadvantages. Because physicians are grouped by specialty, they may experience premium increases if claim volume or claim awards grow within their specialty, regardless of their personal malpractice claims history. At this point, insurance companies are not offering hybrid pricing systems combining the advantages of both community and experience rating; community rating is the standard pricing technique.

Malpractice laws reside within state civil codes, either tort or contract, although there has been some discussion of instituting federal laws. The litigation process involves three steps, each of which increases litigation expenses. In the first step plaintiffs file suit. Lawyers screen potential cases due to the US tradition of contingency-based legal fees. If expected costs of litigation are less than the expected payout, a suit is filed. In pretrial discovery, the second step of litigation, defendants and plaintiffs exchange information by releasing medical records and naming expert witnesses, and the plaintiff officially names medical personnel involved in the incident. The third step of litigation, trial or settlement, is preceded in some states by voluntary or mandatory arbitration, which offer incentives to settle out of court by eliminating costs associated with trial.

PREVIOUS STUDIES OF DEFENSIVE MEDICINE

There are three methods to determine the existence and magnitude of defensive medicine: direct physician surveys; hypothetical clinical scenarios; and healthcare utilization studies. An OTA (1994) review of direct physician surveys shows physicians do practice both positive and negative defensive medicine. Sixteen studies reviewed by OTA found anywhere from 21 to 81 percent of physicians ordered additional tests out of fear of litigation. It is difficult to determine from these surveys, however, how often and to what extent it is practiced.

A second branch of literature uses physician surveys to assess actions given specific clinical situations. An advantage of this type of survey is the ability to focus on physician specialties and clinical scenarios in which defensive medicine is a concern. In an OTA (1994) study, the percentage of respondents who chose "malpractice concerns" as the primary reason for administering a clinical action ranged from 4.9 (back pain scenario) to 29.0 percent (head trauma scenario). It was estimated the aggregate cost of defensive Cesarean deliveries to be $8.7 million in 1991 compared to the aggregate cost of defensive diagnostic radiology of the head for Americans ages 5 to 24 to be $45 million.

While these studies provide an additional verification of the existence of defensive medicine, their hypothetical basis limits their predictive power and creates bias. Thus, a third branch of defensive medicine statistically analyzes the impact of liability risk on health care utilization. For example, Localio et. Al. (1993) examine the relationship between malpractice liability risk and the rates of Cesarean deliveries in a sample of New York state hospitals in 1984. The authors found that a patient in a hospital with high frequency obstetric malpractice claims was 32 percent more likely to undergo a Cesarean delivery than a patient in a hospital with low claim frequency.

PAST NATIONAL MEDICAL MALPRACTICE CRISES AND TORT REFORM

Literature on malpractice has identified two previous times during which the system was in crisis: one in the 1970's and one in the 1980's. Danzon (1984) cites stock market volatility and long claims tails as major contributors to the depletion in insurance capital in the 1970s. Both encouraged insurers to seek large premium increases to shore up depleted capital reserves in 1974-75. These premium increases led to crises in which physicians had difficulty paying for malpractice premiums.

Harrington and Danzon (1984) contend the 1980s crisis was the result of price undercutting and inadequate risk information. They believe the largest insurers deliberately underreported claims and used reinsurance to hide losses. Additionally, Danzon (1983) also finds the rising cost of malpractice claims due to pro-plaintiff trends in laws, erosion of traditional malpractice defenses (like the locality rule and charitable immunity), growth in the number and complexity of medical treatments, an increase in the number of lawyers per capita, and erosion of the patient-physician relationship leading to higher insurance rates.

In response to the malpractice crises occurring in the 1970's and 1980's, states enacted various tort reforms. Some are termed "indirect" reforms in that they indirectly reduce malpractice awards. Barker (1992) notes several indirect reforms following the first two crises. He indicates 34 states reduced their statute of limitations to two to three years and many decreased the length of time permitted for injury discovery. Several reforms that "directly" reduced awards also followed the crises. After 1975, nine states enacted reforms capping malpractice awards values; seven states capped total damage awards while two states capped only noneconomic damages of pain and suffering. Several states created Patient Compensation Funds (PCF), in which physicians were responsible for awards up to a certain dollar amount, after which the PCF paid the rest of the award due. Modification of the collateral source rule was also enacted. Originally, this rule prohibited evidence of collateral award sources to be introduced to the jury. Reform allowed juries to consider, and sometimes mandated, that they lower awards when plaintiffs had collateral award sources. These collateral sources could include other physicians, hospitals, or insurance companies. By enacting such reforms, plaintiffs could no longer receive duplicate malpractice awards from multiple sources; it eliminated double dipping.

To reduce costs associated with litigation, three major reforms were enacted. First, some states mandated pretrial screening. This reform required potential cases be screened by a panel before proceeding to trial; cases deemed unworthy did not reach trial, thus eliminating unnecessary trial expenses. Barker (1992) shows thirteen states created provisions for arbitration, either voluntary or mandatory, between pretrial discovery and trial, in order to eliminate expenses associated with trial. Under the process of arbitration, plaintiffs and defendants submit their claim to a third party who makes a decision regarding the case outcome. Under mandatory arbitration third party decisions are binding and cannot be appealed. A third reform, capped contingency fees for attorneys, limits the percentage of the award collected by lawyers following successful trials.

California can be viewed as a case study in tort reform. California was one of the first states to pursue tort reform aggressively, according to the Philadelphia Inquirer (2003). In 1975, California passed state passed the Medical Injury Compensation Reform Act, MICRA, which: capped pain and suffering awards to $250,000; enforced a collateral source rule; limited lawyers contingency fees to 40% for the first $50,000 awarded, 33% for awards between $50,000-$100,000; 25% for the next half million; and 15% for amounts in excess of $600,000; reduced the statue of limitations to three years; and allowed periodic payments non-mandatory arbitration. Then in 1991, Proposition 103 passed to mitigate rising insurance fees by requiring regulatory approval. Today, states such as Pennsylvania and New Jersey look to the California system as a model, according to the Philadelphia Inquirer (2003).

Kessler and McClellan's (1996) study examines how tort reform and malpractice environments impact defensive medicine. They are interested in the effects of indirect and direct reforms on positive defensive medicine. This study focuses on cardiac patients. The authors used a difference-in-difference analysis of longitudinal data on Medicare patients from 1984, 1987, and 1990 who treated for acute myocardial infarction (AMI) and new ischemic heart disease (IHD). They compared outcomes among states with reforms and without reforms. Tort law reforms were divided into two categories: direct, which directly reduce expected malpractice awards such as damage caps and mandatory collateral-source offsets and indirect ones such as mandatory periodic payments, statute of limitations reductions, or modification of the joint and several liability rule, which have a less discernable impact on malpractice pressures. Joint and several liability rules allocate payments according to degree of fault. Kessler and McClellan examine the occurrence of adverse outcomes one year after cardiac illness, including subsequent AMI, heart failure requiring hospitalization, and mortality. The magnitude of defensive medicine was estimated by the cost of an additional year of life to treatment intensity used.

Results from their study indicate reform states and non-reform states had similar baseline expenditures and outcomes. However, expenditure growth was 2-6% lower in reform states than in non-reform states for AMI. Trends for IHD showed slightly greater differences. Expenditures in states adopting direct reforms declined 5.3% relative to non-reforming states and expenditures in states with indirect reforms increased 1.8% relative to non-reforming states. The adoption of malpractice reforms lead to reductions in hospital expenditures of 5% for AMI and 9% for IHD by five years after reform adoption. Overall, the results of the study show direct reforms reduce expenditure growth without increasing mortality, while indirect reforms have no substantial effects on expenditure or mortality.

HEALTHCARE UTILIZATION MODEL OF DEFENSIVE MEDICINE

We build a healthcare utilization model to estimate the individual impacts of twelve tort reform measures. The purpose of the analysis is to discover how state malpractice environments influence the practice of positive defensive medicine. The scope of the study is limited to patients with skull fractures. Since these patients are associated with a high level of risk and uncertainty, it is likely that physicians practice defensive medicine on them. Thus, reductions in state malpractice pressures could diminish the level of defensive medicine associated with these patients, and result in substantial cost savings. The healthcare utilization model of defensive medicine is as follows:

$$\text{CHARGES} = b_0 + b_P\text{Patient Demographics} + b_H\text{Hospital Demographics} + b_T\text{Tort Reform} + \mu \quad (1)$$

The dependent variable, total in-patient hospital expenditures (*CHARGES*), is used to assess the level of defensive medicine practiced in each state. To construct a model distinguishing the effect of state malpractice environmental factors from other factors contributing to variations in patients' total expenditures, independent variable vectors accounting for patient, b_P, and hospital demographics, b_H , have been included. Dummy variables for various tort reforms serve as identifiable measures of differences in state malpractice environments. Chart 1 gives the matrix describing tort reforms in each of the 23 states included in this analysis. Table 1 lists the 12 dummy variables for the malpractice tort laws created for each state.

Several variables within the patient demographic vector account for differences in patient's hospital experiences and skull fracture injuries. Ultimately each can be held constant to examine the role of tort reform on total charges, though each variable will have its own individual impact on charges. A patient's length of stay, number of diagnoses, and number of medical procedures, all indicators of the patient's hospital experience, are expected to positively impact charges. Since hospitals charge a minimum daily fee for inpatient visits on top of charges associated with tests and procedures, increasing a patient's length of stay or increasing the number of procedures performed will increase a patient's total charges. It is also reasonable to expect that a patient with more severe injuries will have more diagnoses recorded on his or her hospital encounter than a patient with less severe injuries; thus, the number of diagnoses on a patient's hospital encounter serves as a proxy for the patient's extent of injury. All three variables are expected to have positive coefficients.

Other general patient demographics are also included in the patient demographic vector, as evident in Tables 2 and 3. The hospital demographic vector is made up of several variables, including variables describing hospital control, size, location, and teaching status. If government and non-profit facilities are less cost-conscious than for-profit facilities, they may have higher patient expenditures for patients with the same set of diagnoses, leading to an expected positive sign on the government and non-profit facilities coefficients. Since the other patient and hospital demographic variables are used as control variables to be held constant to discern the impact of individual tort variables, a full discussion of the remaining coefficients' expected signs is excluded.

To consider differences in state malpractice environments, dummy variables for 12 various tort reforms are included in the model. These reforms are: arbitration, pre-judgment measures, contingency fee caps, collateral source rules, damage caps, joint and several liability rules, periodic payments, physician compensation funds, and state's statutes of limitations. Within these reforms, the effects of voluntary arbitration versus mandatory arbitration, and the option to elect periodic payments versus mandatory periodic payments are considered. Periodic payments imply the award is paid over time, not in a lump sum, and they cease if the patient dies. We also separate damage cap reforms into two groups: those that limit noneconomic or total awards and those that only limit punitive damage awards. We hypothesize physicians working in states that have enacted malpractice tort reforms will feel less malpractice pressure than physicians working in states without malpractice reforms. In turn, these physicians will practice less defensive medicine than their counterparts in non-reform states; they will not order as many additional tests and procedures out of fear of litigation. Based on this, the above mentioned tort dummy variables are expected to have negative coefficients.

DATA

The data come from two major sources. Information on total expenditures, patient demographics, and hospital demographics for patients who had primary, secondary, or tertiary diagnoses of skull fractures were derived from the 2000 Nationwide Inpatient Sample, part of the Healthcare Cost and Utilization Project sponsored by the Agency for Healthcare Research and Quality. The diagnoses codes for skull fractures are based on the ICD-9CM codes valid for the patient's discharge date and include: 800.00-800.99 (fracture of skull vault), 801.00-801.99 (fracture of skull base), and 803.00-803.99 (other and unqualified skull fractures). Information on ICD-9-CM codes was obtained from a topsSearch ICD-9 Trial on e-mds.com and UMEA University's online directory of ICD-9-CM International Coding Standard. The data set contains 7,450,992 inpatient hospital stays from 994 hospitals in 28 states. Concentrating on a significant number of skull fractures the data were limited to 23 states: Arizona, California, Colorado, Connecticut, Florida, Georgia, Illinois, Kansas, Kentucky, Maryland, Massachusetts, Missouri, New Jersey, New York, North Carolina, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, Washington, and Wisconsin.

We understand significant differences in hospital charges can be due to extreme differences in patients. We attempt to make patients as similar as possible by using several restrictions on the patients considered in this study so that expenditure differences are more likely to be due to differences in state environments. Age is restricted to patients 18 to 65 old for two reasons. First, minors are eliminated because they are subject to different malpractice statutes of limitations in many states. Second, the elderly are eliminated because literature on malpractice suits has shown that successful elderly claimants are awarded low dollar amounts due to their advanced age. Thus, theory holds that physicians are less likely to practice defensive on this demographic group. Also, due to deteriorating health and health complications, the elderly are likely to be outliers with respect to length of stay, number of diagnoses, total charges, etc. To further reduce outliers patients considered in this study are restricted to those whose length of stay was ten days or less and who had ten or fewer diagnoses on their hospital encounter. Table 2 describes the means and standard deviations of the variables used in regression analysis.

The total charges obtained from the NIS are altered to consider state and regional variations in the price of medical care services. This is accomplished by dividing regional or city CPI data for a given state by a base state's CPI, thereby setting patient charges from all states on equal footing. CPI data for the year 2000 were obtained from the Urban Consumer Series "All Items" CPI index available on Bureau of Labor Statistics' website. If data for a metropolitan area within a given state were available or the state was cited as having a CPI value corresponding to a metropolitan area in a nearby state, this CPI value was used. If data for several metropolitan areas within a state or corresponding to a state were available, the average of these values were used. For states in which there were no corresponding metropolitan areas associated, the regional (Northeast, Midwest, South, or West) "All Items" Urban CPI value was used. Kansas was selected as the base state in this analysis because of its baseline number of malpractice tort reforms. This method of CPI base lining is the best approximation that can be made, given the limited amount of CPI information available for locations around the nation.

The second major source of data, from which information on state tort laws is compiled, come from the American Medical Association Advocacy Resource Center's state law charts on liability reform. The dummy variables are listed in Table 2 for each state. Since the patient and hospital data are for 2000, we use the tort law in place in 1998 to allow for a two year, albeit arbitrary, lag for doctors to respond to incentives.

RESULTS

Regression results are reported in Table 3. Using ordinary least squares, the adjusted R-squared value is 48.62, implying 48.6% of the variation in total charges can be explained by the variation in the independent variables. The mean total charge for patients with skull fractures is $21,127. The condition index of 35.91 suggests multicollinearity exists, but it is inconsequential in that numerous statistically coefficients with the expected sign are found. Based on the results of White's test, the null hypothesis of homoscedasticity was rejected. The T-values are found using White's consistent estimators of the variance and are indicated in parentheses in below the coefficients in Table 3.

Table 3 shows each additional day in the hospital is expected to increase total charges by $3,191, ceteris paribus, whereas an additional procedure raises them by $3,716. Similar interpretations of coefficients of the many statistically significant patient and hospital demographic variables are easily obtainable, but the thrust of this paper is on the reform coefficients.

All but one tort reform, voluntary arbitration, is statistically significant. The tort reform with the largest coefficient, indicating the most important reform in terms of savings from reduced defensive medicine, is mandatory arbitration. Having a provision for mandatory arbitration reduces total skull fracture charges by $12,177, a significant amount compared to the dependent mean of $21,127. This result supports the theory that physicians fear malpractice suits going to court and practice less defensive medicine when suits must first be assessed outside of court. Interestingly, having a voluntary arbitration policy has no impact on charges, thus on defensive medicine, implying the policy needs to have teeth, i.e., be mandated. Similar to mandatory arbitration, pre-judgment measures reduce charges by $5,174.99. Physicians will practice less defensive medicine if states screen claims before they can proceed to court because physicians are confident an objective board will eliminate frivolous suits.

Enacting contingency fee caps reduce charges by $4,534.50 or 20% of the average charges. A possible explanation for this reduction is that caps force attorneys to more closely scrutinize potential cases, resulting in fewer malpractice cases going to court. In turn, physicians may feel less pressure to practice defensive medicine due to the reduced frequency, and therefore probability, of malpractice court cases being filed.

Physicians may order fewer extraneous tests or procedures when they have a decreased risk of having their assets wiped out in a malpractice suit. The fear of litigation rises with the size of the expected payout. Doctors are not only concerned with the immediate payouts they may incur, but the impact on their insurance premium. Policies reducing the expected payout, such as periodic payments and joint and several liability rules, are expected to reduce defensive medicine. Making physicians responsible for the same proportion of damages as their actions though the joint and several liability rule reduces charges by $2,474.77. Mandatory periodic payments reduce charges by $7,842.91. Additionally, the existence of state physician compensation funds reduces defensive medical care by $1,856.49. Here, states pick up the portion of the payout above what the insurer will pay on behalf of the doctor. Interestingly, permitting periodic payment actually increases total charges by $2,775.17, in contrast with expectations.

Some results are contrary to expectations. The coefficient on the statute of limitations variable indicates that for each additional year a patient is able to take medical liability action, there is a $1,504.69 decrease in total charges for skull fracture patients. Theory predicts allowing patients an additional year to take action will increase the volume of malpractice claims filed, thus causing physicians to practice more defensive medicine; if a physician knows that a patient has more years in which he or she can file a malpractice suit, then perhaps the physician orders more tests for protection from a suit claiming that the proper standard of care was not met. More research on the relationship between defensive medicine and statute of limitations reductions is needed before firm conclusions can be drawn.

In contrast to theory, the collateral source rule and damage cap reforms significantly increase total charges. Having a collateral source reform, which eliminates double dipping for awards, increases charges by $3,866.88. Caps on noneconomic or total awards increase charges by $2,584.30, while caps on punitive damages only increase charges by $2,226.01. A possible explanation for these unexpected results is they result from an endogenous relationship between tort reforms and state malpractice environments. Tort reforms are generally enacted in states after some sort of malpractice crisis exists. These crises resulting from long claim tails, high numbers of malpractice suits, and severe damage awards, are often manifested through large annual physician malpractice premium increases; reforms on the collateral source rule and damage caps are generally enacted when a state is in crisis. Thus, the significantly positive coefficients on collateral source rule reforms, noneconomic/total award damage caps, and punitive damage caps most likely reflect this endogenous relationship between states in malpractice crises and the reforms they enact. The positive coefficients may reflect lingering crises effects originating before the reforms were enacted.

CONCLUSIONS

The regression results provide strong evidence that variations in state malpractice environments significantly influence the level of defensive medicine practiced by physicians on skull fracture patients. On the upper end, states enacting mandatory arbitration could reduce charges by $12,177, over half the mean hospital charge for skull fracture patients. Those enacting various pre-judgment measures could save $5,175, whereas capping attorney fees could save $4,534 per skull fracture patient. States mandating periodic payment of awards could also significantly reduce defensive medical charges by $7,843 per skull fracture patient. In contrast, damage caps and collateral-source rule reforms increase patient expenditures.

The results are consistent with some of Kessler and McClellan's (1996) findings, though contrary to others. Both studies find that joint and several liability rules and mandatory periodic payments reduce patient expenditures. Kessler and McClellan (1996), however, show damage caps reduce expenditures, contrary to findings here. Danzon (1986) finds damage caps decrease claims severity, but not their frequency. If this is the case, then physicians do not perceive a reduced likelihood of being sued with damage caps in place and thus do not practice less defensive medicine, which would contradict Kessler and McClellan's findings. The positive coefficient on damage caps here is not inconsistent with Danzon, and as mentioned previously, the endogeniety between higher medical costs malpractice crises may best explain it.

The major weakness of this study is that health outcomes are not held constant due to lack of data availability. Kessler and McClellan (1996) found no evidence of differences in health outcomes, and we take the liberty of presuming that would be the case with skull fracture patients. Despite this limitation, the results suggest significant costs savings from reduced defensive medicine. Based on the national estimate by Kraus et AL. (1996) that approximately 2 million head injuries occur each year, enacting mandatory arbitration could save over $24 billion in skull fracture defensive medical practices. Considering this estimate represents savings from only one percent of the total patient population, policy makers should seriously consider the impact of state malpractice tort reforms on the practice of defensive medicine.

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Chart 1	Malpractice Tort Laws Used in Analysis.
Reform	**Description of reform**
Arbitration (Permitted)	Arbitration is permitted, but not mandated.
Arbitration (Mandatory)	Arbitration is mandated.
Pre-judgment	Claimants need to obtain a certificate of affidavit of merit within a certain amount of time in order to pursue medical liability action.
Contingency Fee Cap	The proportion of an award that an attorney can contractually charge is statutorily capped at a specific level.
Statute of Limitations	The maximum number of years (from incident occurrence, discovery, or the maximum time limit) during which a claimant can commence an action for medical liability
Collateral Source Rule Reform	Damages payable in a malpractice suit are statutorily reduced by all or part of the dollar value of collateral-source payments to the plaintiff.
Damage Caps (noneconomic or total damages)	Either noneconomic, total damages, or both types of damages are capped at a statutorily established dollar amount.
Damage Caps (punitive damages)	Punitive damages are capped at a statutorily established dollar amount.
Joint and Several Liability Rule Reform	The Joint and Several Liability rule is abolished either for noneconomic or total damages in all claims, such that damages payable in a malpractice suit are statutorily allocated in proportion to the tortfeasors' degree of fault.
Periodic Payment of Awards (Permitted)	Part or all of the damages are permitted to be disbursed in the form of an annuity that pays out over time.
Periodic Payment of Awards (Mandatory)	Part or all of the damages must to be disbursed in the form of an annuity that pays out over time.
Physician Compensation Fund	A state-administered excess malpractice liability insurance program exists for physicians.

Table 1 State Tort Coding Matrix

State	Arbit	PreJudge	ContFeeCap	StatLim	CollSoRef	DamCap	JntSevL	PeriodPay	PCF
AZ	0	0	0	2	1	0	1	0	0
CA	1	0	1	3	1	1	0	1	0
CO	1	1	0	3	1	1	1	2	0
CT	1	0	1	3	1	0	1	1	0
FL	1	1	0	4	0	0	1	1	1
IL	0	1	1	4	1	0	0	1	0
KS	1	1	0	4	0	1	1	1	0
KY	0	0	0	1	0	0	1	1	0
MA	0	0	1	7	1	1	0	0	0
MD	2	1	0	5	0	1	0	1	0
MO	0	1	0	10	0	1	0	1	0
NC	2	0	0	4	0	0	0	0	0
NJ	0	1	1	2	1	2	1	0	0
NY	1	1	1	2.5	1	0	1	2	0
OR	0	0	1	5	0	0	0	0	0
PA	1	0	0	7	0	2	0	1	1
SC	1	0	0	6	0	0	0	0	1
TN	1	0	0	3	1	0	1	0	0
TX	1	1	0	2	0	2	1	0	0
VA	2	0	0	2	0	1	0	1	0
WA	2	0	0	8	1	0	0	1	0
WI	1	0	1	5	1	1	1	1	1
GA	1	1	0	5	0	2	0	0	0

STATE TORT CODING KEY *

*All reforms took effect in prior to 1998 in order to allow for lag time between tort reform enactment and physician behavior change.

Arbitration:

Arbit= 0 if there are no provisions for arbitration.

Arbit= 1 if there arbitration is permitted (voluntary) .

(In regression analysis transformed to: ArbitVol= 1.)

Arbit= 2 if there arbitration is mandatory .

(In regression analysis transformed to: ArbitMand= 1.)

Pre-judgment measures:

PreJudge= 0 if claimants do not need to obtain a certificate/affidavit of merit within a certain amount of time in order to pursue a medical liability action .

PreJudge= 1 if claimants must (mandated) file a certificate/affidavit of merit within a certain amount of time in order to pursue a medical liability action .

Contingency Fee Caps:

ContFeeCap= 0 if contingency fees are not capped (This includes HI, IA, and WA where courts must approve/determine reasonable contingency fees.)

ContFeeCap= 1 if contingency fees are capped.

Statute of Limitations:
StatLim= #. This number is the maximum number of years (from incident occurrence or discovery) during which a claimant can commence an action for medical liability. In cases where there were different time limits for occurrence, discovery, or a maximum statute of limitations I have used the maximum time limit.

Collateral Source Rule:
CollSoRef= 0 if the collateral source rule is in effect (juries cannot consider claimants' external compensation sources).
CollSoRef= 1 if the collateral source rule has been reformed such that juries are permitted to consider claimants' external compensation sources.

Damage Caps:
DamCap= 0 if there are no caps on any type of damage award .
DamCap= 1 if there are caps on noneconomic/total damages.
(In regression analysis transformed to: DamCapNT= 1.)
DamCap= 2 if there are caps on punitive damages only
(In regression analysis transformed to: DamCapPun= 1.)

Joint and Several Liability Rule:
JntSevL= 0 if joint and several liability is in effect (joint tortfeasors are each responsible for the entire judgment)
JntSevL= 1 if joint and several liability has been reformed such that damages are allocated in proportion to tortfeasors' degree of fault)

Periodic Payment of damages:
PeriodPay= 0 if there are no provisions for periodic payments of damages
PeriodPay= 1 if periodic payment of damages is permitted, but mandated
(In regression analysis transformed to: PerPayPerm = 1.)
PeriodPay= 2 if periodic payment of damages is mandated
(In regression analysis transformed to: PerPayMand = 1.)

Physician Compensation Funds:
PCF= 0 if the state did not have a patient compensation fund in 2000.
PCF= 1 if the state had a patient compensation fund in 2000.

Table 2. Means and standard deviations of variables used in regression analysis.

Variables	Mean	Standard Deviation
Patient Demographics		
(*AGE*): Age	35.190	12.499
(*FEMALE*): Gender	0.190	0.392
(*MEDICAID*): Medicaid Insurance	0.101	0.301
(*PRIVATE*): Private Insurance	0.476	0.499
(*TWENTYFIVE*): Income $25,000-34,999	0.277	0.448
(*THIRTYFIVE*): Income $35,000-44,999	0.256	0.438
(*FORTYFIVE*): Income $45,000 +	0.312	0.463
Patient Hospital Stay Demographics		
(*LOS*): Length of Stay	3.584	2.634
(*NDX*): Number of Diagnoses	5.854	2.438
(*NPR*): Number of Procedures	2.182	2.329
Hospital Demographics		
(*TEACH*): Teaching facility	0.572	0.499
(*URBAN*): Urban location	0.885	0.319
(*LARGE*): Large size	0.690	0.462
(*PUBLIC*): Public facility	0.087	0.282
(*VOLUNTARY*): Non-profit facility	0.149	0.356
Malpractice Tort Law Reforms		
(*ARBITVOL*): Arbitration- Voluntary	0.617	0.486
(*ARBITMAND*): Arbitration- Mandatory	0.098	0.298
(*PREJUDGE*): Pre-judgment	0.535	0.499
(*CONTFEECAP*): Contingency Fee Cap	0.466	0.497
(*STATLIM*): Statute of Limitations	3.950	2.009
(*COLLSOREF*): Collateral Source Rule	0.537	0.499
(*DAMCAPNT*): Damage Caps- Noneconomic/Total damages	0.404	0.491
(*DAMCAPPUN*): Damage Caps- Punitive	0.207	0.405
(*JNTSEVL*): Joint and Several Liability	0.622	0.485
(*PERPEYPERM*): Periodic Payment- Permitted	0.582	0.493
(*PERPAYMAND*): Periodic Payment- Mandatory	0.095	0.293
(*PCF*): Physician Compensation Fund	0.201	0.400

Table 3. Regression Results. (T values in parentheses.)[a]

Adjusted $R^2 = 0.4862$ Condition Index = 35.91244 Dependent Mean (Total Charges) = $21,127

Variables	Coefficient Estimates[b]	Variables	Coefficient Estimates[a]
Intercept	-$130.98 (-0.06)		
Patient Demographics		Malpractice Tort Law Reforms	
(*AGE*): Age	-$130.98 (-0.83)	(*ARBITVOL*): Arbitration- Voluntary	$686.81 (0.67)
(*FEMALE*): Gender	-$17.34** (-2.71)	(*ARBITMAND*): Arbitration-Mandatory	-$12,177.00*** (-10.40)
(*MEDICAID*): Medicaid Insurance	$3,596.63** (2.85)	(*PREJUDGE*): Pre-judgment	-$5,174.99*** (-6.18)
(*PRIVATE*): Private Insurance	$30.30 (0.06)	(*CONTFEECAP*): Contingency Fee Cap	-$4,534.50*** (-5.27)
(*TWENTYFIVE*): Income $25,000-34,999	-$1,535.95 (-1.54)	(*STATLIM*): Statute of Limitations	-$1,504.69*** (-8.98)
(*THIRTYFIVE*): Income $35,000-44,999	-$1,410.69 (-1.50)	(*COLLSOREF*): Collateral Source Rule	$3,866.88*** (4.73)
(*FORTYFIVE*): Income $45,000 +	$1,841.90 (1.90)*	(*DAMCAPNT*): Damage Caps-Noneconomic/Total	$2,584.30*** (3.97)
Patient Hospital Stay Demographics		(*DAMCAPPUN*): Damage Caps-Punitive	$2,226.01** (2.01)
(*LOS*): Length of Stay	$3,191.70*** (25.59)	(*JNTSEVL*): Joint and Several Liability	-$2,474.77** (-2.69)
(*NDX*): Number of Diagnoses	$191.68 (1.59)	(*PERPAYPERM*): Periodic Payment-Permitted	$2,775.17*** (3.48)
(*NPR*): Number of Procedures	$3,716.70*** (15.88)	(*PERPAYMAND*): Periodic Payment-Mandatory	-$7,842.91*** (-5.32)
Hospital Demographics		(*PCF*): Physician Compensation Fund	-$1,856.49** (-2.03)
(*TEACH*): Teaching facility	$654.39 (0.64)		
(*URBAN*): Urban location	$7,063.70*** (8.29)		
(*URBAN*): Large size	$3,954.61*** (7.22)		
(*PUBLIC*): Public facility	$2,686.13** (2.29)		
(*VOLUNTARY*): Non-profit facility	$2,714.92** (2.00)		

[a] T values produced using White's consistent estimators of the variance.

[b] All coefficient estimates have been deflated to 2000 dollars.

*Significant at the 10% confidence level.

**Significant at the 5% confidence level.

***Significant at the 1% confidence level.

LOCATING AN OUTFITTERS-TYPE BUSINESS ALONG THE SCHUYLKILL RIVER HERITAGE AREA

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ABSTRACT

This study examines the potential of business development along the Schuylkill River Heritage Area (SRHA) in Southeastern Pennsylvania. The study was funded with funding assistance from the Pennsylvania Department of Conservation and Natural Resources through the Schuylkill River National & State Heritage Area grant program. The project was designed to determine whether the economy in the areas along the SRHA will support businesses and services related to outdoor recreation. The findings indicate great potential for new business development along the SHRA. Economic indicators are strong, the population is increasing, and there is increasing government and local support for new businesses.

EXTERNAL ENVIRONMENT

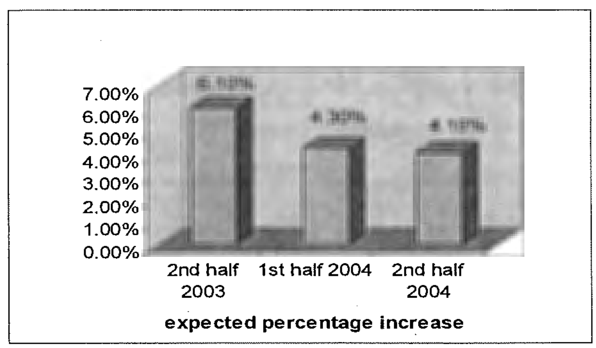
Economic Analysis of the Philadelphia Federal Reserve District

Information displayed in this economic outlook forecast relates to the Philadelphia Federal Reserve District. The Philadelphia Federal Reserve District is responsible for the Third District, which covers Eastern Pennsylvania, Southern New Jersey, and the state of Delaware. This study focuses on five counties (Montgomery, Philadelphia, Chester, Schuylkill, and Berks), which are part of the Philadelphia Federal Reserve District and the SRHA. This economic outlook focuses on five elements of the economy: economic growth, inflation, unemployment rates, interest rates, and corporate profits.

Economic Growth Estimates for the Philadelphia Federal Reserve District

The Federal Reserve Bank of Philadelphia projected that the Philadelphia Federal Reserve District's economic output would increase at an annual rate of 6.1% in the second half of 2003. They also predicted that this trend would continue in the first half of 2004 at a rate of 4.3 percent. Similar results are expected during the second half of 2004, where forecasters predict an increase of 4.1% (see Graph 1). The increase in economic output cited is of particular interest and importance as it reflects even higher estimates than previously reported by the Federal Reserve Bank of Philadelphia. This increase reflects even greater optimism compared to previous reports by the Federal Reserve Bank of Philadelphia relative to the region's growth.

Graph 1. Economic Growth Philadelphia Federal Reserve District

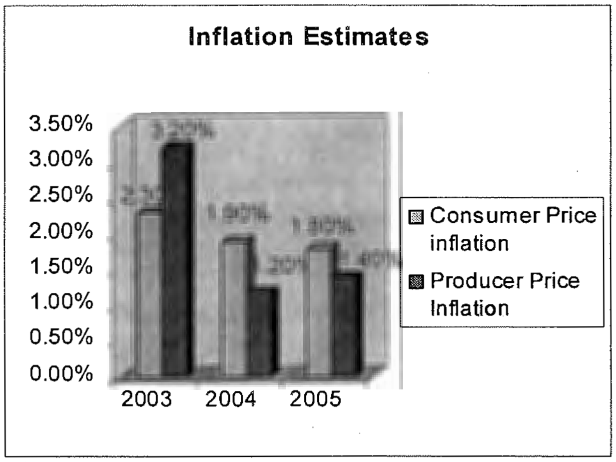


Inflation Estimates for the Philadelphia Federal Reserve District

The Federal Bank of Philadelphia forecasted that consumer price inflation for the Philadelphia Federal Reserve District averaged 2.3% in 2003. Consumer price inflation is expected to fall in 2004 to 1.9% and decrease slightly to 1.8% in 2005 as shown in Graph two (2).

The Federal Bank of Philadelphia predicted that Producer Price Inflation (PPI) for the Philadelphia Federal Reserve District at a 3.2% average. PPI is expected to decline to 1.2% in 2004. In 2005, the forecasters believe this percentage will increase slightly and reach the rate of 1.4% (see Graph 2).

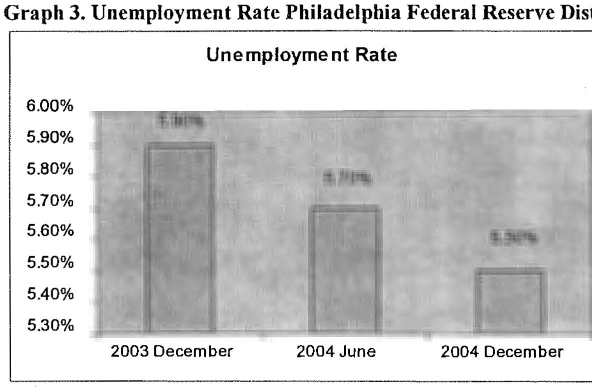
Graph 2. : Inflation Estimates Philadelphia Federal Reserve District



Unemployment Rate Estimates for the Philadelphia Federal Reserve District

The Federal Bank of Philadelphia predicted an unemployment rate for the Philadelphia Federal Reserve District in December 2003 averaging 5.9 percent. That number is expected to decrease in June 2004 to 5.7 percent. A similar trend is projected for December 2004, as experts expect the unemployment rate to drop to 5.5% (Graph 3).

Graph 3. Unemployment Rate Philadelphia Federal Reserve District

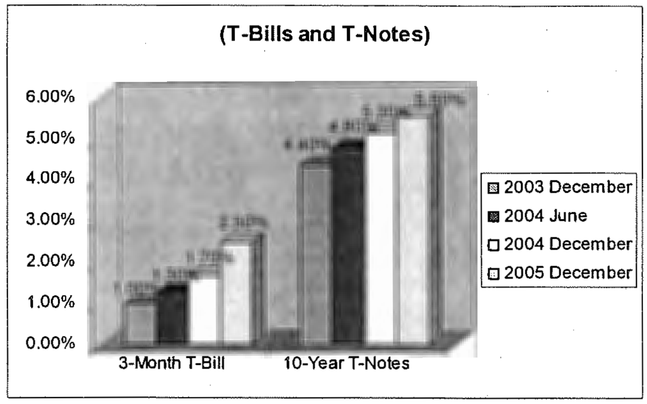


Interest Rates Estimates for the Philadelphia Federal Reserve District

The Federal Bank of Philadelphia projections predicted that the 3-month Treasury Bills would average 1.0% in December 2003. Experts expect that number to climb to 1.3% by June 2004 as presented in Graph four (4). This trend is expected to continue as estimates of 3-month T-Bills will rise to 1.7% by December 2004 and to 2.5% by December 2005.

The Federal Bank of Philadelphia predicted 10-year Treasury Notes to experience similar growth as the 3-month Treasury Bills over the next two years. Ten-year Treasury Notes were expected to average 4.4% in December 2003. Experts expect that number to climb to 4.8% by June 2004. Estimates indicate that the rate will rise to 5.2% by December 2004 and to 5.6% by December 2005 (see Graph 4).

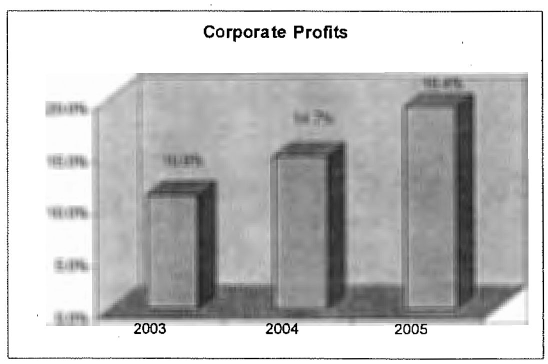
Graph 4. Interest Rates Philadelphia Federal Reserve District



Corporate Profits Estimates for the Philadelphia Federal Reserve District

Forecasters are optimistic about growth in corporate profits for the Philadelphia Federal Reserve District, as shown in Graph five (5). They predicted the growth rate of corporate profits would rise from 10.9% in 2002 to 14.7% in 2004. The trend should continue and increase to 19.4% by 2005.

Graph 5: Corporate Profits Philadelphia Federal Reserve District



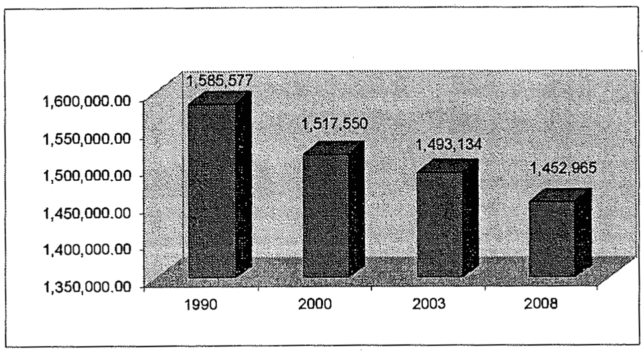
Overall, the economy is heading in a positive direction for the Philadelphia Federal Reserve District. The economic growth is on a slight decrease but by only a small percentage (see Graph 1). The unemployment rate is projected to decrease by an average of .20% until the end of 2004 (see Graph 2). Inflation for both producers and consumers is declining which is expected to continue (see Graph 3). Interest rates, during the period of 2003 – 2005, will increase by a small margin and within a range that is usually reflective of a strong economy (see Graph 4). Similar trends are expected for corporate profits (See Graph 5), providing another indicator of a strong economy.

POPULATION PROJECTIONS FOR THE SRHA

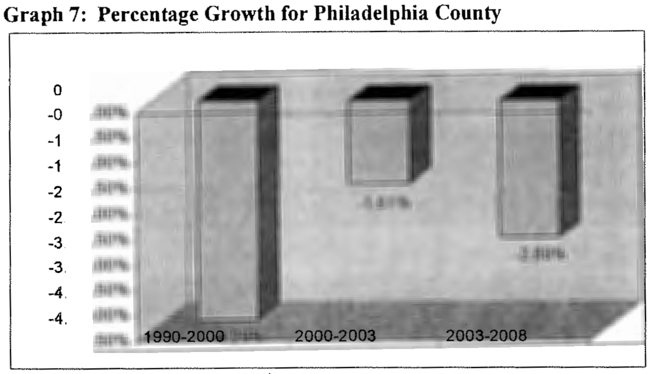
Philadelphia County

Currently (2003) Philadelphia County is the most populated county in the geographic region with a total population of 1,493,134. The population has declined since 1990 by 5.9 percent. This trend is predicted to continue through the year 2008 by an estimated value of 2.69% (40,169 people) to 1,452,965.

Graph 6: Philadelphia County Population Growth



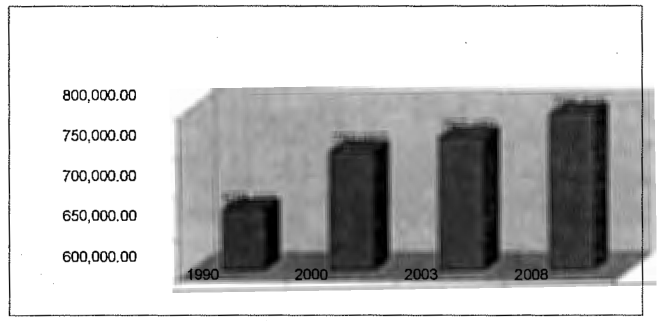
Graph 7: Percentage Growth for Philadelphia County



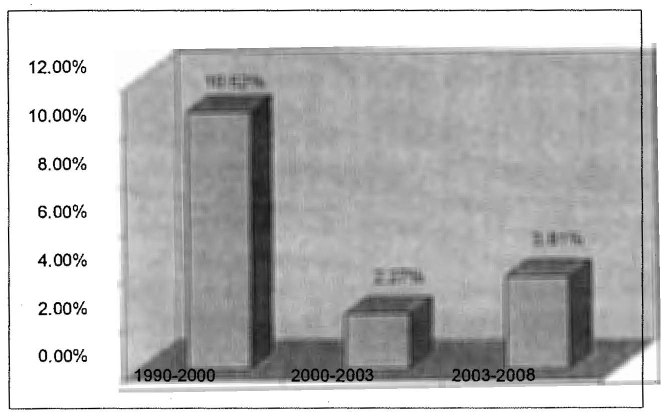
Montgomery County

Montgomery County is the second most populated county in the geographic region with a current population of 767,150. The population grew from 1990 to 2003 by 12.89 percent. The population is estimated to increase by 3.81% (29,265 people) by 2008.

Graph 8: Montgomery County Population Growth



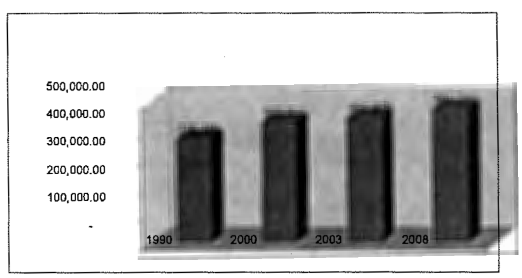
Graph 9: Percentage Population Growth for Montgomery County



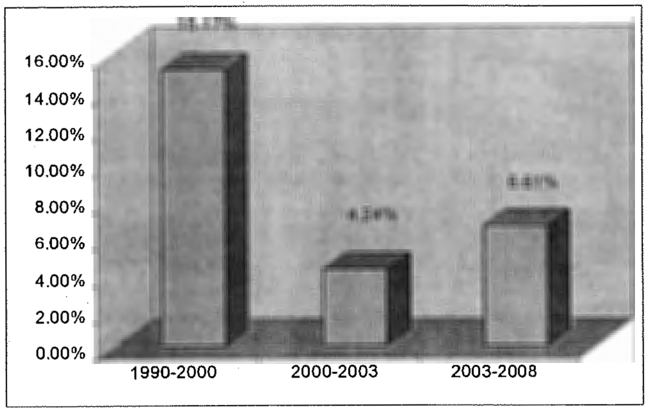
Chester County

Currently Chester County is populated by 451,870 people. Similar to Montgomery County, Chester County has been growing since 1990. From 1990 to 2003, the population in Chester County increased by 19.41% and is estimated to grow by 6.61%, or 29,872 people, by 2008.

Graph 10: Chester County Population Growth



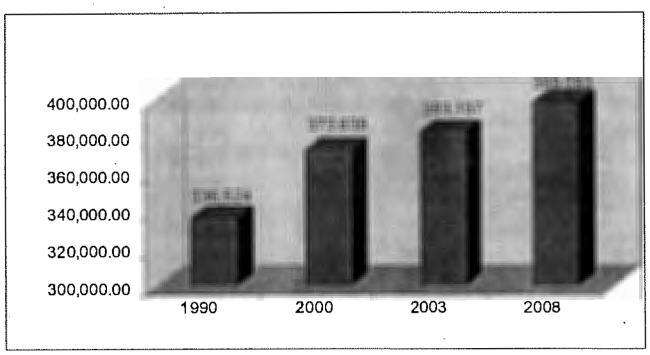
Graph 11: Percentage Population Growth for Chester County



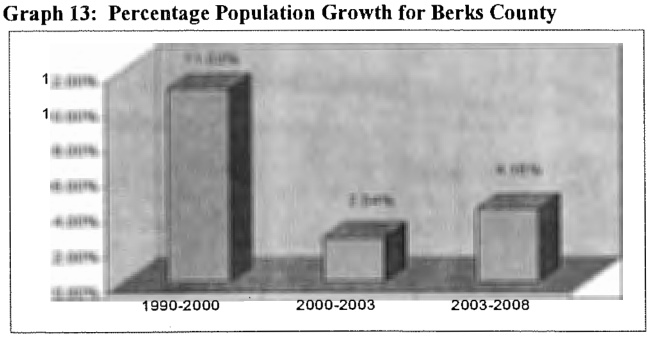
Berks County

Currently 383,137 people reside in Berks County. Berks experienced significant growth between 1990 and 2003 as the population increased by 13.57 percent. Berks County's population is expected to grow by 4.16% (15,956 people) by 2008.

Graph 12: Berks County Population Growth



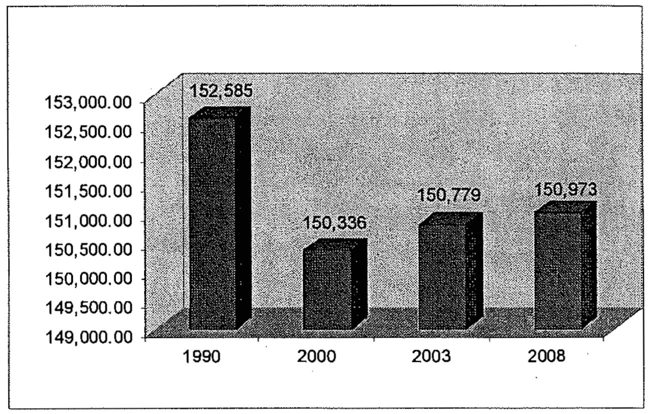
Graph 13: Percentage Population Growth for Berks County



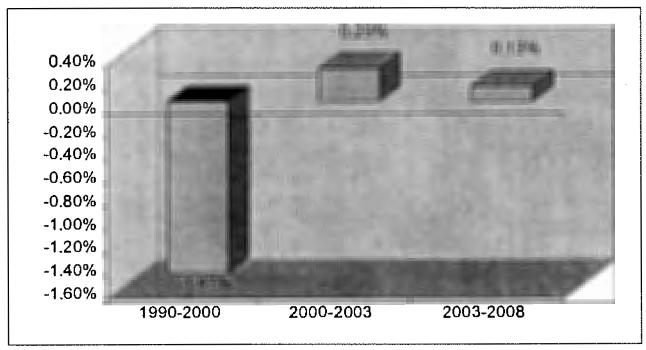
Schuylkill County

Between 1990 and 2000, Schuylkill County had a decrease in population by 1.18 percent. Currently 150,779 people reside in the Schuylkill County, but that number is estimated to increase by .13% (194 people) by 2008.

Graph 14: Schuylkill County Population Growth



Graph 15: Percentage Population Growth for Schuylkill County



Summary – Population Growth

Chester County is the fastest growing county within the Schuylkill River Heritage Area. Growth in population is expected to continue in Montgomery and Berks Counties. The number of additional people living in Montgomery County will be greater than the other four counties studied. Philadelphia County's population has decreased in population. That trend is expected to continue through 2008. All population data and projections are taken from Claritas site report data on April 7, 2003.

POLITICAL / LEGAL ENVIRONMENT EFFECTING THE SRHA

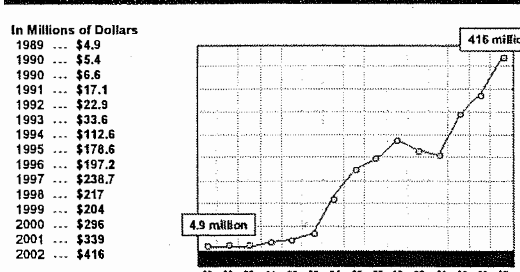
The Federal Government continues to increase its support for bicycle transportation. The government budgets transportation money for bicycle-specific facilities like bike paths and road improvements. Increasing government support parallels the bicycle industry's key initiatives for a more bike-friendly America. Cycling facilities construction is at an all-time high (National Bicycle Dealers Association, 2002). This will be an important factor in the industry's future growth.

On March 19, 2001 The Sporting Good Manufacturer's Association (SGMA) reported that Congress authorized the Land Conservation, Preservation and Infrastructure Improvement Trust to spend $12 billion over the next six years for conservation, parkland purchases, and grants to states and cities for parks, fields, and recreational facilities (SGMA Press Release, 2/10/04).

The Great Outdoors Act is before congress and is aimed at promoting active lifestyles through recreation, sports, and fitness. According to a SGMA press release (4/1/2004), the bill would create a multi-billion dollar trust fund to support historic preservation, park maintenance, recreation, and conserve wildlife. Annual allocations would include $450 million (which Congress has already earmarked for 2004 according to another SGMA press release (1/11/04) for the Land and Water Conservation Fund and $125 million to the Urban Park and Recreation Recovery Program. This legislation provides permanent funding for trails, parks, wild lands, ball fields, courts, and playgrounds. This is viewed as an important factor by industry proponents that will promote future growth of the industry by creating a culture and infrastructure that promotes healthier American lifestyles.

According to The Pedestrian and Bicycle Center Fact Sheet (www.walking info.org) the Federal Highway Administration has increased spending on bicycle and pedestrian projects from 1989 to 2002, from $4.9 million to $416 million. This increase is another example of the Federal Government's support for fitness activities.

Figure 16: FHWA Obligations for Bicycle and Pedestrian Projects (in Millions of Dollars)



SOCIAL / CULTURAL

According to the Sporting Goods Manufacturer's Association (5/13/04), between the years 2005 and 2010 the age group of children aged 5 through 19 will grow slightly. This is significant to outdoor recreation businesses (outfitters included) because this age group is the "mainstay of the sports-playing, equipment buying, sports apparel and athletic footwear-wearing group." Eighty-five percent of all Americans participate in sports or exercise (Leisure Intelligence Group, 2001).

INDUSTRY TRENDS

In an article titled Forecasting the Future of the Sporting Goods Industry – 2010, the Sporting Goods Manufacturer's Association projects the following developments in the sporting goods industry, of which Outfitters are a part (the ramifications of these developments as they effect outfitters are also noted):

1. Eight of ten sporting goods executives view strategic alliances and joint ventures as growth engines for the future.
2. Consolidation within the industry will continue.
3. The slow growth of the sporting goods industry suggests the industry is in a state of maturity. As a result, all distribution channels will seek to operate more efficiently in order to bring adequate to superior returns to investors and/or owners. Businesses will seek out relationships that are win/win situations wherever possible. The big fish will continue to eat the small fish, or, more appropriately, the strong fish will eat the weak.

Power will continue to shift from the manufacturer to the retailer. The supercenter concept (such as Sports Authority) will continue to grow. This poses challenges to the specialty sporting goods retailers (independents and small regional chains such as Nestors and Schuylkill Valley) as the supercenters seek to sell a wider variety and greater assortment of goods at lower prices. Small single store independents competing with supercenters and small regional chains will be forced to consider the economies of scale and scope associated with multiple store ownership. In addition, small independents need to consider small niche product categories that will not attract larger chains and supercenters.

USES OF THE SCHUYLKILL RIVER HERITAGE AREA

A Report on the Component Parts

Hiking

The American Hiking Society states that hiking is one of America's fastest growing recreational activities. In 2000, almost one-third of Americans went hiking. The USDA Forest Service predicts "steep increases" in backpacking and hiking activities over the next 50 years. The Society's Fact Sheet points to recreation and entertainment as growth industries, citing an increase in spending over a fifteen-year period (6.5 percent of total consumer spending to 10.5 percent). The number of people backpacking is expected to grow by 26 percent by the year 2050. However, the 2003 Sporting Goods Manufacturer's Association's Topline Report states that the participation in *day hiking* has declined over the last three years from 39,015,000 Americans in 2000 to 36,778,00 day hikers in 2002; a decline of 5.7%.

Hiking's current impact on businesses along trails is impressive. A 2001 study of the visitors to the trails at Rio Grande National Forest estimated that each hiker spent $567.93 for lodging, $319.44 for food, and $168.44 for transportation. In another study, after one season, 61 businesses along a 35-mile stretch of the Missouri River State Trail reported the trail having a positive effect on business. Eleven new businesses along the trail cited the creation of the trail as a major factor in their location decision. In addition, 17 businesses increased their business as a result of the trail being developed. A fact sheet, citing a Greenways Incorporated report, states that although all visitors to trails are not hikers, trails can foster substantial economic activity through new and existing business development and tourism. The types of businesses attracted are bike shops, cafes, and bed and breakfasts. Six new trail-related stores have opened, and two businesses have relocated next to the Baltimore and Annapolis Trail Park in Maryland, says the Greenways report (American Hiking Society, 2003).

Bicycling

According to the National Bicycle Dealers Association, the sales of bicycles 20" and up has increased from 9.9 million units sold in 1988 to 13.6 million units sold in 2002; an increase of 37.4 percent. More recently, bicycle sales increased from 10.9 million units in 1996 to 13.6 million units in 2002; an increase of 25 percent over six years. In 2001 the average selling price rose from $350 to $382; an increase of 9.1 percent in one year (*Bicycle Retailer and Industry News*, 2002).

Table 1: Bicycles Sold 1981-2002

Year	Bicycles Sold (Millions), 20" and up wheel sizes	Bicycles Sold (Millions), all wheel sizes
2002	13.6*	19.5*
2001	11.3*	16.7*
2000	11.9*	20.9*
1999	11.6*	17.5*
1998	11.1*	15.8*
1997	11.0*	15.2*
1996	10.9	15.4
1995	12.0	16.1
1994	12.5	16.7
1993	13.0	16.8
1992	11.6	15.3
1991	11.6	
1990	10.8	
1989	10.7	
1988	9.9	
1987	12.6	
1986	12.3	
1985	11.4	
1984	10.1	
1983	9.0	
1982	6.8	
1981	8.9	

Source: Bicycle Manufacturers Association, and apparent market consumption based on U.S. Department of Commerce import statistics, and estimates of domestic market production by National Bicycle Dealers Association Retail Data Capture program.
** indicates projected Graphs*

In 2000, *fitness* bicycling included 11,435,000 Americans and 11,153,000 in 2002. This reflects a 2.5% drop over a three-year period (SGMA Sports Participation Topline Report, 2003). The SGMA states that participation, not total industry sales, is the best indicator of the trends developing in a particular sport and overall industry health (Ibid, 2003). In the same SGMA report *recreational* biking over the same three-year period increased by 1 percent from 53,006,000 in 2000, to 53,524,000 in 2002. Although fitness bikers are expected to use trails, the more appropriate measure is the number of recreational bikers, of which there are 42,371,000.

Characterization of the buyers of bicycles in 2000 shows baby-boomers continuing to dominate spending on bikes. Boomers are looking for low-impact ways to exercise and biking is positioned to take advantage of this trend. Another group of users are the "enthusiast" riders. These frequent riders have tripled in numbers during the 1990s. Enthusiast owners are also the opinion leaders of the group. On average, they recommend bikes to six friends or acquaintances a year, with more than three of them buying on their advice. Bikers today are generally better educated consumers that spend less time shopping than in 1990, but shop more frequently (National Bicycle Dealers Association, 2004). The biggest influences on their buying are friends and salespeople. The implication is that because they are better educated they know what they want and take the time to shop several locations to get it.

Boating

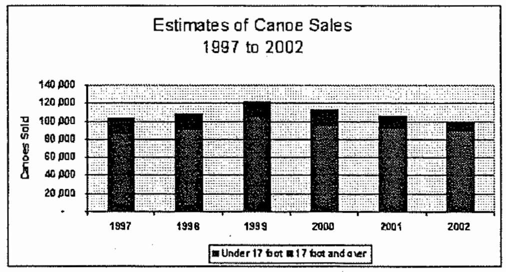
National trends are reported here for canoe and kayak sales and general boating population estimates for the United States. Compared to their base year of 1997, total canoes sold (all types) dropped 3.5% from 1997 to 2002, the last year sales statistics are given. However, during the same period, sales of canoes under 17 feet increased by 3.9%, and represent 88.6% of all canoes sold. Kayak sales are reported for the years 2001 and 2002 only. Kayak sales dropped during this period from 357,100 units in 2001 to 340,300 units sold in 2002, a drop of 4.7% (National Marine Manufacturers Association, 2003). The growth in *participation* in kayaking is impressive over the same three-year period. According to the SGMA Topline report (2003), participation in kayaking grew from 4,137,000 in 2000 to 5,562,000 in 2002; a 34% increase. Participation in canoeing dropped by 16.8% over the three year period from 13,134,000 participants in 2000 to 10,933,000 in 2002 (SGMA Sports Participation Topline Report, 2003).

Experts in the leisure industry report that the number of people participating in a recreational activity is an excellent indicator of future usage and purchase potential. Population estimates for people engaged in boating is presented below. Total people participating in recreational boating for the base year of 2000 was 69,820,000 and had increased by 2.5% by 2002 to 71,644,000 people. Recreational boating populations by category are shown to the right.

Table 2: Estimates of Canoe and Kayak Sales

Estimates of Canoe Sales

	1997	1998	1999	2000	2001	2002
Under 17 foot	85,300	90,800	103,800	95,200	91,800	88,600
17 foot and over	18,300	17,000	17,200	16,600	14,000	11,400
Total	**103,600**	**107,800**	**121,000**	**111,800**	**105,800**	**100,000**
Percent Change		**4.1%**	**12.2%**	**-7.6%**	**-5.4%**	**-5.5%**



Estimates of Kayak Sales

	2001	2002
Unites Sold	357,100	340,300
Type of Craft	**2001**	**2002**
Whitewater	7.5%	5.2%
Expedition	4.1%	2.9%
Day Touring	15.2%	13.1%
Touring Tandem	0.8%	0.4%
Sit-in Recreation	41.2%	46.6%
Sit-on Recreation	24.9%	25.2%
Inflatable	6.2%	4.6%
Total	**100%**	**100%**

SOURCE: NMMA January 2003

Table 3: 2002 Population Estimates – Recreational Boating

	2002	2001	2000
People Participating in Recreational Boating	71,644,000	67,973,000	69,820,000
Water Skiers	5,458,000	5,921,000	6,736,000
All Boats in Use	17,353,400	17,191,600	17,032,400
Outboard Boats Owned	8,361,100	8,335,700	8,388,400
Inboard Boats Owned	1,705,700	1,681,700	1,662,500
Sterndrive Boats Owned	1,767,100	1,740,700	1,708,700
Personal Watercraft	1,353,700	1,293,900	1,239,400
Sailboats Owned	1,613,800	1,625,000	1,637,200
Misc. Craft Owned (Canoes, rowboats, dinghies, and other craft registered by the states)	953,000	946,000	960,000
Other (Estimated canoes, rowboats etc. not registered by the states)	1,550,200	1,573,000	1,561,600
Outboard Motors Owned	8,976,500	8,759,400	8,702,800
Inboard Engines Owned (Includes gasoline, diesel, and jet drive marine engines)	2,207,000	2,185,000	2,216,800
Boat Trailers Owned	7,683,900	7,563,900	7,448,400
Marina, Boatyards, Yacht Clubs, Dockominiums, Parks, & Other	12,000	12,000	12,000

$30,308,782,000 spent at retail during 2002 for new and used boats, motors and engines, trailers, accessories,and other associated costs.
12,886,792 boat registrations as of December 31, 2001 for the U.S. and territories.

Cross Country Skiing

Cross country skiing is another use of the Schuylkill River Heritage Area. According to Chris Frado, Executive Director/President of the Cross Country Areas Ski Association, cross country skiing is a recreational activity that is experiencing slow growth (Phone conversation with Frado, 2004). The segment driving industry sales, according to Frado, is the elite racer or high performance cross-country skier. This segment continues to outspend other more casual skiers by buying the most recent technology in skis and multiple pieces of equipment. Total industry sales increased from $3.5 million in 2001 to $3.8 million in 2001; a 9% increase (SGMA Recreation Market Report, 2003). A point-of-interest here (according to Frado) is that the move toward "big box" retailers like The Sports Authority is not effecting the traditional cross country ski retailers as this segment is too small to attract big box retailers. An outfitter locating near the SRHA may want to consider cross-country ski rentals and/or sales as a component part of their product offerings.

Fishing

The Schuylkill River is increasingly becoming a river of choice among freshwater game fisherman (Depth Interview, 2003). 34.1 million people, or 16 percent of the population, fished in the U.S. in 2001 and spent $36 billion (U.S. Fish & Wildlife Service, 2001). This is a three percent decline in participants since 1996. Overall expenditures for equipment dropped 22 percent. According to the same survey, freshwater fishing has declined eight percent from 1991 to 2001. The SGMA Recreation Market Report (2003) lists fishing equipment (sporting goods) sales at the wholesale level holding steady at $1 billion in 2001 and 2002.

Wildlife Watching

The development of the Schuylkill River National & State Heritage Area will enable new wildlife watchers and avid wildlife watchers to have access to the Schuylkill River and its environs. Wildlife watching has increased by five percent from 1996 to 2001 (U.S. Fish & Wildlife Service, 2002). Expenditures during this same period rose by 16 percent. Targeting wildlife watchers is another way in which small outfitters can cater to a market that is largely ignored by larger sporting goods retailers.

Uses/Activities of the Schuylkill River Heritage Area

The following table lists uses/activities of the SRHA which have been identified through interviews with the staff of the Schuylkill River Heritage Area, SRHA literature, participants in the in-depth interview/focus group, and research into heritage corridors, biking trails, community trails, and rails to trails:

Table 4: Uses/Activities of the SRHA

• walking	• bicycling	• rafting
• fitness walking	• day hiking	• fresh water fishing
• power walking	• canoeing	• water skiing
• jogging	• kayaking	• wildlife watching
• running		

The following table adapted from the Sporting Goods Manufacturer's Association's *America's Favorite Sports and Activities in 2003* identifies the top thirty sports/activities categories of Americans (ages six and over), of which freshwater fishing, day hiking, fitness walking, and running/jogging rank in the top nine.

Table 5: Four of the Top 30 Sports Activities Related to the SRHA Participants Ages Six+

Ranking out of 30	Sports/Activity (2003)	# of Participants (in millions)
3	Fishing (Freshwater – Other)	43.8
7	Day Hiking	39.1
8	Fitness Walking	37.9
9	Running/Jogging	36.2

When the fifty-five and over age group was surveyed, SRN&SHA uses aligned well with this group. As the table shows, four Heritage Area uses (fitness walking, freshwater fishing, day hiking and running/jogging) rank in the top fourteen (SGMA's *Age 55+ - They Keep on 'Ticking,'* 2003).

Table 6: Four of the Top 15 Sports Activities Related to the SRHA Participants Ages 55+

Ranking out of 15	Sports/Activity	# of Participants (in millions)
1	Fitness Walking (100 + days/year	6.5
5	Freshwater Fishing (15+ days/year)	1.9
9	Day Hiking (15+ days/year)	1.5
14	Running/Jogging (100+ days/year)	1.0

Using selected sports participation trends provided by the Sporting Goods Manufacturer's Association's *Topline* report (2003), uses of the SRHA can be viewed in terms of participation over time. In general the number of people participating in these activities has declined from the SGMA benchmark year of 1987 (except for fitness walking, recreational walking, trail running, and kayaking, which have posted increases.). However, the numbers look very different, if viewed from the year 2000. The categories of fitness walking, running/jogging, walking, trail running, bicycling, and kayaking have all increased from 2000 – 2002, despite a recession during this time period.

Table 7: Selected SGMA Sports Participation Trends Related to the SRN&SHA
(in Thousands)

	1987 Benchmark	1990	1995	2000	2001	2002	% Change (2000-2002)	% Change (1987-2002)
Trail Activities								
Fitness Bicycling	n/a	n/a	n/a	11,435	10,761	11,153	-2.5	-17.7
Fitness Walking	27,164	37,384	35,621	36,207	36,445	37,981	+4.7	+39.8
Running/Jogging	37,136	35,722	32,534	33,680	34,857	35,866	+6.5	-3.4
Walking (Recreational)	n/a	n/a	n/a	82,561	84,182	84,986	+3.0	+5.1
Hiking (Day)	n/a	n/a	n/a	39,015	36,915	36,778	-6.0	-4.8
Trail Running	n/a	n/a	n/a	5,232	5,773	5,625	+7.5	+7.2
Bicycling (Recreational)	n/a	n/a	n/a	53,006	52,948	53,524	+1.0	-1.9
Skiing (Cross-Country)	8,344	7,292	5,458	4,613	4,123	4,080	-11.6	-51.1
Water Activities								
Canoeing	n/a	n/a	n/a	13,134	12,044	10,933	-16.8	-19.7
Kayaking	n/a	n/a	n/a	4,137	4,727	5,562	+34.0	+58.9
Rafting	n/a	n/a	n/a	4,941	4,580	4,431	-10.4	-20.4
Water Skiing	19,902	19,314	15,376	10,335	8,301	8,204	-20.6	-58.8

Summary

An analysis of the external environment shows that the Philadelphia Federal Reserve District economy is showing signs of improvement. Both the unemployment rate and inflation is declining and projected to continue to decrease. Interest rates from 2003-2005 will increase by a small margin and within a range that is usually reflective of a strong economy. Corporate profits are also steadily rising providing another indication of a strong economy. Overall the region is growing in population with four of the five counties showing positive growth projections through 2008. The political and legal environment of the area appears to support the development of active lifestyles through recreation, sports and fitness.

Trends in the sporting goods industry show that in general the industry is in a state of maturity. Because of this, distributors will seek more efficient operations and customer service becomes an area for differentiation. In addition those owners having more than one location achieve economies of scale. Due to the existence of supercenters, smaller retailers must examine niche businesses that do not compete directly with mega-retailers. Sporting goods executives view strategic alliances and joint ventures as avenues for growth.

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STUDENTS' PERCEPTIONS OF A GOOD INTERNSHIP

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ABSTRACT

Internship can be an effective link between classroom education and practice. Certain kinds of technical and practical skills are best learned in the workplace itself, under the guidance of experienced professionals. Many students anticipate that internship will provide a significant credential for their future employment. However, the experiences of interns vary. Some are given unchallenging work while others are receiving meaningful mentoring and training. A questionnaire was given to each intern to evaluate the level of learning, working environment, level of support and training, level of responsibility, and level of satisfaction concerning the internship. This study seeks to identify the elements that students find most important in a good internship. While the study is limited to business students in a local state university, the author hopes that the findings will help to improve the quality of internship.

INTRODUCTION

Most universities and colleges in the United States have internship program offering students practical experience during their junior or senior years. Many of these programs help students learn the meaning of teamwork, taking initiative, strengthening the communication skills, applying academic knowledge, as well as the general dynamics of how company works. In fact, there are increasing number of scholars that have suggested a new paradigm for higher education NCCE, (2004). They emphasize a cooperation among universities, industry, and government, as these institutions break down barriers and forge new alliances that will benefit student, industry, society, and the economy; Freeland, et. al. (1998). Businesses and industries are now emphasizing education and training of the future workforce. Partnerships between colleges and both public and private sector employers are abounded; McGiothlin (2003). Students normally expect their internship functions as a link between formal education and practice. A well-planned internship can be beneficial to both students and employers. Surprisingly, internship experience has received little attention from researchers. Given this, our knowledge of internship is mostly speculative and individualistic. This study tries to shed some light on student's view of a good internship.

METHODOLOGY

A total of 343 students in a college of business who participated an internship program between fall of year 2000 and summer of year 2003 completed a survey concerning their internship experience. Questions include working environments, skills used, opportunity on training, level of support, student's major, would recommend it to other students (Y/N), would accept it as a permanent job (Y/N), wages, and rating of the experience. Several descriptive statistics are calculated; cross tables are constructed, and rule induction is used to find the most important factors for a good internship perceived by students.

RESULTS

Data shows that accounting major has the largest number of interns followed by marketing, finance, decision science, and then MIS. Majority of interns (61.2%) rate their internship experience as excellent, 31.4% as good, and 7.4% as fair or poor. When asked whether or not they would recommend internship to other students, 92.3% indicated they would, 6.5% said no and 1.2% was not sure. Survey also asked interns if they would accept a permanent position with the employer. The result showed that 70% would, 22.2% would not and 7.7% were not sure. Surprisingly, opportunity to use academic skills, training and support received are not found to have major impact on experience.

Rule induction is used to find the most important factors for a successful internship experience. They are 1) supervisor provides feedback on job progress, 2) interns are given opportunities to demonstrate writing abilities, 3) interns are encouraged to ask challenging questions, 4) employer provides clear job description, and 5) interns are given opportunity to development critical thinking skills. The model predicts excellent experience the best with 89%

accuracy; good experience the second with 84% accuracy, and fair or poor experience the worst with 63% accuracy.

Rule for an excellent internship experience is found to be a good supervisor feedback on job progress followed by sufficient writing opportunity and being encouraged to ask challenging questions. Rule for a good internship experience is found to be an adequate supervisor feedback, being given the opportunity to develop critical thinking, having clear job description, and sufficient writing opportunity.

CONCLUSION

Although this study provides useful insights into issues concerning internship experience perceived by students, it has certain limitations. Its failure to include certain variables, such as GPA, gender, length of internship, size of company, and wages may misses an opportunity to explore the effects of these factors and their interactions on the experience. In addition, the results reflect only the perceptions of students from one university. Nonetheless, the study shows that students generally anticipate a positive and meaningful internship experience. They are willing and eager to learn, to be trained, and to be challenged. They are also ready and open to supervisor's feedback concerning their progress and performance. Thus, it is necessary for the employer to identify those elements of the internship experience that contribute most to student learning and a worthwhile internship experience.

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STRATEGY VS. TACTICS – MARKETING BUSINESS IN THE LEHIGH VALLEY

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ABSTRACT

While many small and medium enterprises (SMEs) are very proficient at their particular business activity, it is believed that very few of them have a strategic marketing focus. In today's competitive environment, strategic marketing is often the difference between the success and failure of an organization. This research looks at the marketing habits of SMEs in the Lehigh Valley to determine what type approach they use for marketing. Two Lehigh Valley firms that participated in a marketing analysis are presented as a case study of how these firms approached marketing their business. In addition, preliminary results from a quantitative survey of SMEs in the Lehigh Valley suggest that many of these businesses are tactically, and not strategically, driven in their marketing efforts.

INTRODUCTION

Many small businesses in general, and service providers in particular, are very proficient at their respective specialty (e.g., accounting, physical therapist, counseling, coaching) yet not many are well-versed in business and marketing skills. It has been shown that many small and medium enterprises do not use strategic marketing planning when they conduct their business. This is especially true for small, local businesses that see their competitive advantage in serving a niche market while trying to maintain current customers and don't necessarily have a cohesive strategic plan for attaining new customers (Lancaster and Waddelow 1998; O'Donnell, Gilmore et al. 2002).

Overall business strategy has been extensively studied in the literature. A key area of research has been in the area of marketing orientation and an organization's performance. Previous research has shown that adopting a unique positioning strategy is often more effective than competing on the basis of cost (Kumar, Subramanian et al. 2001; Langerak 2003). Other studies have examined the relationship between management philosophy and how market orientations are created (Harris 1999; Harris and Ogbonna 1999; Homburg and Pflesser 2000). A third stream of research involves studying the impact of a firm's marketing orientation on the development and implementation of a marketing strategy for larger organizations (Cravens 1998; Dobni and Luffman 2000; Hunt and Lambe 2000; Matsuno and Mentzer 2000; Uncles 2000).

A much smaller portion of research has specifically focused on the strategic marketing practices of smaller businesses. Part of the problem is that small and medium enterprises (SMEs) are not easily defined. The two most common ways these organizations are classified is either by gross revenues or number of employees, and yet these classifications vary greatly by the researcher(s) conducting the research. Of those studies that do look at marketing strategy in smaller businesses, the focus tends to be on either family-owned firms or international businesses and globalization issues that are encountered (Horng and Chen 1998; McGaughey 1998; Knight 2000; Enright 2001; Lee, Lim et al. 2001; Huang, Soutar et al. 2002; O'Donnell, Gilmore et al. 2002; Teal, Upton et al. 2003; Verhees and Muelenberg 2004). These studies tend to suggest that the marketing strategy and implementation is often done by fewer people who are not trained in marketing (often the principals or owners of the business).

PURPOSE OF STUDY

This study seeks to examine the marketing practices of smaller businesses (SMEs) in the Lehigh Valley, Pennsylvania. For the purposes of this study, a SME will be classified as one that employs fewer than 50 people. With smaller organizations such as this, it is believed that the principals or owners of the enterprise would adopt a more hand-on approach towards the marketing function of the enterprise It is believed that the great majority of these smaller businesses might be very proficient at their particular business activity, but not necessarily at marketing. Many SMEs are managed by the principals of the organization who often do not have formal training in marketing theory and strategy. Because of this, it is believed that the majority of these SMEs would adopt a tactical approach towards marketing, rather than a strategic approach, resulting in a sub-optimal business model.

The Lehigh Valley, Pennsylvania

The Lehigh Valley is a major transportation crossroads of the East Coast and home to many businesses both large and small. While many of the larger businesses in the valley are extensions of multi-national firms, there are a great number of smaller businesses in the valley serving the needs of the Valley's residents and beyond. The Lehigh Valley is situated on the Eastern side of Pennsylvania and is within a two-hour drive of major markets such as Philadelphia and New York City. Data gathered from the Lehigh Valley Economic Development Corporation (www.lehighvalley.org) reports the Lehigh Valley as a very robust business environment. This area reports a population of 30 million people within a 100 mile radius. The valley has a population of 600,000 with a 310,000 person workforce (2003 data). The Lehigh Valley also boasts an educated workforce with over 80% of the working-age population have a high school degree or higher.

The employment classification of the Lehigh Valley is predominantly professional, service, and sales/office oriented. The Lehigh Valley Economic Development Corporation reported a total of 14,000 employers in the Lehigh Valley for 2003. Of these employers, a full 94% are businesses that employ fewer than 50 people. In fact, 71% of the total number of employers in the Lehigh Valley employs fewer than ten people.

Marketing Practices

For the purposes of this study, the current marketing practices of an organization needs to be assessed. The marketing practices that are being utilized by any business can generally be classified as being either strategically-directed or tactically-directed. In order to be classified as a strategically-oriented firm, a business should have a cohesive marketing theme for all of their marketing endeavors. This overriding theme provides the organization with direction for coordinated business decisions in marketing. Successful strategic marketing decisions require a thorough understanding of the environment in which a business operates, as well as a complete understanding of all competitors to the organization and the capabilities and weaknesses of the organization itself. In essence, an organization that has a strategic-marketing focus addresses the "what to do" questions. The answers to these questions drive all of the tactics and steps an organization conducts in fulfilling this marketing strategy. Examples of a strategic-marketing focus would be whether all members of the organization can articulate and understand the positioning of the organization (e.g., unique selling proposition), does the organization make effective use of databases and tracking to identify customers and effective promotions and does the organization make use of education, joint-venturing, or other strategies in a coordinated manner? In addition, an effective marketing strategy would make use of testing and tracking all marketing campaigns and carefully manage its brand and perception of brand among its customers/clients.

By contrast, an organization that is primarily tactically-directed in its marketing efforts tends to have a shorter-term focus to its marketing efforts. The decisions for product, promotional, or branding campaigns tend to be made with a shorter-term focus and often in a reactive manner. These organizations often apply little forethought as to whether or not a particular marketing endeavor fits with the overall business strategy and very little, if any, testing or follow-up is initiated when a marketing campaign is conducted. Organizations with a tactically-driven marketing strategy tend to focus on individual marketing elements (e.g., a single brochure, mail-out campaign, website, etc.) and not an overall theme where the elements are all parts of the same structure. In essence, organizations that have a strategic-marketing focus tend to be proactive and coordinated in their marketing efforts and tactically-driven organizations tend to be reactive and disjoint in their marketing efforts.

RESEARCH STUDY

Case study 1: Physical therapy firm

The first phase of this study was exploratory in nature. During the summer of 2004, two SMEs from the Lehigh Valley agreed to participate in a marketing audit and analysis being conducted by an MBA class in strategic marketing. The first business was a physical therapy firm. This business had been in practice for over 25 years and had three full-time employees (including the owner). The owner of this business admitted that he had not had any training in business and would be considered marketing "naive" without a real notion of how to market effectively in today's economy. This business owner had relied heavily on referrals from doctors to attract new clients. Once a referral became a client, the owner reported that the client was very satisfied with their treatment, and even looked forward to coming to sessions (a pretty rare feat in physical therapy). This practice was known to have unique specialties within the physical therapy arena, such as working with hand pain.

The owner of this business reported that over the past several years, business had become very difficult for him. This was primarily due to the fact that many more local hospitals were opening their own physical therapy centers. When a doctor affiliated with a local hospital referred a patient for physical therapy, he/she would often recommend that the patient seek treatment at the hospital's program rather then the private practice (by law, doctors cannot refer physical therapy patients directly to a provider; i.e., the patient is free to seek therapy at any licensed provider they would like). Up until this point, the owner of the firm had relied on doctor referrals for new clients and did not know how work with this change in the business environment. The owner tried several different tactics, such as creating a brochure and talking to dentists, but there was no overriding theme to his efforts and they were being met with little success.

A complete marketing audit was conducted for the physical therapy firm. During the course of the audit it was discovered, not surprisingly, that the owner's approach towards marketing could be classified as reactive and tactical. He was still trying to generate business by talking to doctors, but they were becoming less willing to talk with him. His brochure appeared dated and did not speak to any type of positioning or benefits statements to the consumer and he did not have any plan for distributing the brochure in a meaningful manner. Aside from the attempts at generating referrals and the brochure, the business had made no marketing efforts.

Based on the results of the audit, it was suggested to the owner of the physical therapy firm that he not try to obtain clients through doctor referral, but instead develop a thorough positioning statement and unique selling proposition in order to coordinate his marketing efforts. The owner of the firm had mentioned that clients enjoyed their visits and thought of his practice as "family." It was suggested to him that he use this family philosophy in his efforts to help set his practice apart from his competition (which was not perceived in this light). In conjunction with this family approach, it was recommended that his practice position itself as the education and advice resource for people with problems that require physical therapy (e.g., side-sleeper syndrome). By adopting an education-based approach the physical therapy practice could appear to be the business that offers friendly advice, like you would receive from a favorite uncle. This helps build trust and awareness among the consumers and would result in a pull marketing program instead of the push marketing program he had unsuccessfully been trying to use. Given this overriding education orientation, it was recommended that he overhaul his current marketing collateral to conform to it. In addition, it was suggested that he develop white papers on these topics of interest to his clients and make them available to the public via a web-site. The web-site itself could then be used as a prospecting tool for more clients. Lastly, it was suggested that he implement a more formal referral strategy and use this throughout his marketing endeavors as well.

Case study 2: Metal storage and shelving installation

The second case study was centered on a relatively new business (4 years in existence) that designed and installed metal storage and shelving for businesses. This firm consisted of 17 full and part-time employees. The president of this firm did have formal business training (an MBA), but no specialization in marketing. She had started this business as a woman-owned business when several customers of her husband (a general contractor) had suggested that she become involved in this line of work. This business found itself in the unique position of selling what was perceived to be a commodity product. However, this business was on the smaller side and was finding that it could not compete successfully on price, as it would constantly be underbid by some of its larger competitors. This business was finding itself in constant bidding wars with these larger competitors and was having a great deal of difficulty in attracting new customers because of this.

The president of this company had been trying a series of one-shot marketing and promotional efforts to generate new business. She had recently returned from a trade show where she believed she had generated interest in her business. In addition, she had sent out a single mailing to the contact list from this trade show that resulted in two new customers.

During the marketing audit phase of this study, it was discovered that the president did not have a follow-through campaign for any of her mailings. In addition, she did not have a coordinated marketing approach to the new prospects she met. Her marketing collateral was almost entirely company-focused with very few, if any, customer benefits. Further, the president of this firm had difficulty in describing her ideal client or why they should choose to do business with her company. She spoke of working with different customer types, but seemed to have trouble articulating the differences or what they might be seeking. The president also mentioned that when she first started the company, other businesses had sought her out and indeed had suggested that she start this business.

Based on this audit, several recommendations were made to the president of this company. First, it was suggested that she revisit the reason why her initial customers chose her business, and in fact had requested that she start this business. It turned out that her initial customers felt they were not receiving adequate care from the current vendors. They had felt that the needed a little more hand-holding and were not solely price-driven. Based on this, it was suggested to the president that she try to move her product from a convenience product to a shopping product, where price was not the overriding factor. However, it was also suggested that this strategy would work most effectively for a particular segment of the market. It was recommended to the president that she implement a segmentation strategy in her business and focus on the niche that would be the most profitable for her business (i.e., smaller businesses that would be willing to pay a higher price in exchange for better education and service). The recommendations included creating an education-based marketing strategy whereby her marketing collateral and other marketing endeavors would focus on providing education about her industry and its products to a smaller niche. Based on this strategy, it was further suggested that she ensure all marketing materials conform to the same theme. Lastly, it was suggested that she implement a program to track and measure the results from her marketing campaign and to follow-up with the successful mailing that she had already conducted. Once she had accumulated and analyzed the necessary data, she could then more easily identify and approach businesses that would be a better match for her services.

Strategy Survey

Based upon these case studies, a quantitative strategy survey was pilot-tested among the persons responsible for marketing in their organization. This survey asks questions about the current marketing philosophy and approaches of an organization. The survey is focused on SMEs in the Lehigh Valley identified through their Chamber of Commerce listing. A total of 20 companies participated in this pilot study. While the results are not statistically significant, they do appear to be indicative of a lack of integrated marketing strategy throughout most of these organizations.

Four general categories of questions were asked in the survey. These categories were 1) Use of databases and tracking, 2) Understanding of internal organization and marketing efforts, 3) Understanding of competition and external environment, and 4) Marketing strategies currently or expected to be employed. Within each general category, specific questions were asked about how the organization approaches their marketing. These questions were rated on a ten-point scale where a ten meant the respondent strongly agrees with the statement and a 1 meant the respondent strongly disagrees.

The results from this pilot study suggest that the main areas of weakness among these firms are in their articulation of a cohesive marketing strategy and in their tracking and measurement of their activities and customer actions. The statements: “We constantly test our marketing collateral for its effectiveness,” “We have a coherent e-mail marketing strategy,” “We track the marginal net worth of our customers,” “We use our database to actively target our customers,” “We track and measure our customer’s lifetime value,” “We use sequential marketing campaigns in working with prospective and current customers,” and “We have a unified marketing strategy that controls and integrates all the tactics we deploy” all received average scores less than 5. In addition, when asked about the type of marketing strategy the organization employed, 36% of the respondents in the pilot study could not identify any strategy.

DISCUSSION

Based upon the two case studies and results from the pilot test of the quantitative survey, it would appear that a large portion of SMEs in the Lehigh Valley do not use strategic marketing in their businesses. It is seen that a lack of strategic marketing results in a reactive business model and not one which is better able to chart its own course. Anecdotal evidence supplied by the business owners who were contacted suggests that they are frustrated by this lack of strategy in that they believe they have a much more difficult time in finding and keeping business.

The preliminary results of the quantitative survey suggest that true marketing strategy is not used by a large percentage of small businesses in the Lehigh Valley. Further research will expand the sample for this survey and look at the patterns and relationships among the businesses and the marketing approaches they employ. It is further hoped that this research can be the springboard to an annual “status check” of marketing practices of SMEs in the Lehigh Valley.

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ACCOUNTING ETHICS: LEGISLATING ETHICAL BEHAVIOR

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ABSTRACT

Recent accounting scandals resulted in a call for more accountability in the accounting profession.. To that end, various professional and government organizations have pressured the states to add an ethics component to continuing education requirements. This paper studies licensure requirements in the United States to empirically test if these efforts increase ethical behavior within the profession. Based on the data collected, the various licensure and continuing education requirements have no predictive value on disciplinary action taken against CPAs. This study, however, reveals various opportunities for future research and study of the effectiveness of regulation in promoting ethical behavior in CPAs.

DEVELOPMENT OF HYPOTHESES

This study is a result of my interest in whether ethical behavior can be imposed on Certified Public Accountants (CPAs) by the states through regulation of licensure and continuing professional education (CPE) requirements. Specifically, many states are struggling with recommendations by the American Institute of Certified Public Accountings (AICPA) to impose more stringent education requirements to entry to the profession and from the National Association of State Boards of Accountancy (NASBA) to impose a minimum ethics requirement on CPE for CPAs.

The Pennsylvania State Board of Accountancy has taken the position that an ethics requirement will not improve the behavior of CPAs in the profession. This has been a point of discussion in the Education Committee of the Pennsylvania Institute of Certified Public Accountants (PICPA) over the past several months.

From the issues raised by the recommendations made above and in the PICPA Education Committee meetings this paper sets out to test the following six hypotheses developed before any statistical analysis:

- H1: States with an ethics requirement in their periodic CPE requirements for CPAs will have a lower incident of disciplinary action against CPAs than states which do not.
- H2: States with a greater initial licensure requirement for higher education and experience will have a lower incidence of disciplinary action against CPAs than states which do not.
- H3: Requirements that a CPA candidate be a minimum age, a United States citizen, or have contacts with the state will not have an impact on the incidence of disciplinary action in that state.
- H4: States with shorter reporting periods for CPE will have a lower incidence of disciplinary action against CPAs than states with longer reporting periods.
- H5: Mandating CPE in the areas of accounting and auditing, tax, and ethics will reduce the incidence of disciplinary action on CPAs.
- H6: Lower incidents of disciplinary action will be seen in states with a higher discipline-specific education requirements, higher experience requirements, more required minimum CPE credits per year, and higher discipline specific CPE requirements.

These hypotheses were developed before the collection of data, but after investigation of what data was available for study.

DATA COLLECTION

To test these hypotheses, this study gathers the requirements for being licensed as a CPA in each of the fifty United States and the District of Columbia along with each state's CPE requirements. Using data on disciplinary action taken by the AICPA, this paper attempts to test whether efforts to increase educational requirements of candidates and mandating CPE in specialized areas, specifically ethics, has any effect on the behavior of CPAs and results in a reduced number of disciplinary actions.

The data gathered consists of fifty-one observations which include the fifty states and the District of Columbia. Using tables provided by the AICPA's website (http://www.aicpa.org) and National

Association of State Boards of Accountancy (NASBA) website (http://www.nasba.org), along with verification at individual state boards of accountancy websites, information was gathered on requirements for initial licensure as a CPA as well as license renewal and CPE requirements. Where possible, requirements in effect prior to 1998 were used to account for a lag between implementation of policies on licensure and the ultimate impact on behavior of CPAs in each state. It would not be reasonable, given the purpose of this paper, to expect policies put in effect recently to have an immediate impact on behavior of CPAs and the ultimate disciplinary actions taken against them.

Using data published by the AICPA in *The CPA Letter*, as summarized on the AICPA website, information was gathered on the number of disciplinary actions taken against members from the various states and the District of Columbia. No distinction was made from one type of disciplinary action to another for purposes of this paper.

DATA SUMMARY

A list of the variables obtained for this paper appears in Table 1. While all states required candidates to take and pass the Uniform Certified Public Accountants Exam (CPA Exam), each state legislates additional requirements and qualifications to be certified in that state.

The first five variables use dummy variables to indicate whether the state imposes a specific requirement on its candidates for licensure. A variable of one (1) is used if the state requires the characteristic of its candidates and zero (0) if it does not. These variables include the imposition of the following requirements: a minimum age for application; United States citizenship; residency in the state; employment in the state; and maintenance of an office in the state.

The sixth and seventh variables collected deal with the educational background required of candidates for licensure. Most states have minimum educational requirements to sit for the CPA Exam and enter the profession. The requirement typically has two components: a minimum level of higher education and a minimum number of credits in accounting while in higher education. Most states require some level of college education. This variable is quantified as the minimum number of years of college required to sit for the CPA exam and be licensed in the state. One state's minimum requirement is a high school diploma. Therefore, it is quantified as zero (0) years. A bachelor degree is indicated as four years, while those states that require either a graduate degree or 150 hours of college credit are indicated with five years. Additionally, most states require a minimum number of credits in the accounting and accounting-related fields. This variable is quantified using the minimum number of credits required.

The final two variables related to minimum licensure requirements are the experience requirements of each state. Many states have different levels of educational and experiential requirements for entering the profession. As it would be unrealistic to quantify the number of CPAs licensed at the various levels of education, this paper only quantifies the experience requirements for the minimum acceptable educational requirement for that state. This experience typically takes place in the public accounting field. The data point used for each state is the minimum years of public accounting experience required of a candidate with the minimum educational background defined as the number of years of higher education. Since most states allow non-public accounting experience to be used toward this requirement, a dummy variable was created to indicate whether the state did allow non-public accounting experience (indicated as a one) or did not (indicated with a zero).

Next, data was collected on the license renewal and minimum CPE requirements of each state. The license renewal data is composed of the number of years between each renewal of a CPA license.

The CPE requirements include the number of years between each reporting date of compliance with CPE requirements (the reporting period) and the number of CPE credit hour required. First, many states mandate a minimum number of CPE hours each year, regardless of the length of the reporting period. Next, each state has a minimum number of credit hours required for each reporting period. Since reporting periods vary, this variable was standardized by dividing the total credits required in each reporting period by the years in the reporting period. This variable was the same for forty-nine of the fifty states and, therefore, is not relevant to the study of differences between state licensure and education requirements. Lastly, some states mandate CPE credits in specific areas. The three areas where mandates are issued are accounting and auditing, tax, and ethics. The number of credits mandated in each of these areas was also standardized by dividing the number of credits required in a reporting period by the number of years in the reporting periods.

Lastly, data was gathered from the AICPA on disciplinary action taken against its members during 2003. Disciplinary actions were not distinguished as to severity of conduct or severity of penalty. The total number of disciplinary actions effective in 2003 was tallied for each state. To standardize this data, the number of disciplinary actions in each state was divided by the population of each state (in millions) according to the 2000 United States census.

METHODOLOGY

The information gathered above was analyzed using the appropriate statistical tools to address each hypothesis. Before performing specific statistical tests on the six hypotheses, a correlation matrix was created with the variables collected for this study. This matrix (Appendix A) shows a strong correlation (here defined as any correlation above .60) between the state requirement of residence, employment, and maintenance of an office in the state. Additionally, there is a strong correlation between employment in the state and maintenance of an office within the state. There is also a high correlation between the mandatory requirement of CPE credit in tax and the requirement of CPE credit in ethics. While these high correlations do not necessarily represent causality, their existence must be considered when the analysis of any hypothesis involves two or more variables with high correlations.

Simple and multivariate regression analysis were used to calculate the estimated coefficients for each variable in each hypothesis. A two-tailed t-test with fifty (50) degrees of freedom (except as otherwise noted) and the related p-value were used to determine the statistical significance of the variable at a significance level of $\alpha < 5\%$.

DATA ANALYSIS

To follow is a discussion of each hypothesis and the results of the data analysis for each hypothesis.

Hypothesis 1

The first hypothesis (H1) hypothesizes states with an ethics requirement (E) in their periodic CPE requirements for CPAs will have a lower incident of disciplinary action (D) against CPAs than states which do not. Stated as a formula, the hypothesis is:

$$\hat{Y}_D = \beta_E E + \varepsilon$$

The hypothesis can be summarized as follows:

H_0: $\beta_E = 0$
H_A: $\beta_E \neq 0$

Upon performing a simple regression with disciplinary action as the dependent variable and ethics requirement as the independent variable, we fail to reject the null hypothesis. Although the regression results in a β_E of -0.026, this coefficient has a t-statistic of -0.3909 and p-value of 0.6975 indicating this coefficient is not statistically significant. We can therefore say with 95% certainty that the ethics requirement is not a valid predictor of disciplinary action against CPAs. It must be noted, however, that many of the disciplinary actions resulted from infractions committed in the early 1990's, before the implementation of some of the mandatory ethics requirements. Therefore, this leaves room for future research.

Hypothesis 2

The second hypothesis (H2) hypothesizes that states with a greater initial licensure requirement for higher education and experience will have a lower incidence of disciplinary action against CPAs than states which do not. To test this hypothesis, a regression analysis was performed using disciplinary action (D) as the dependent variable and years of higher education (HE), required credits of accounting (AE), experience in public accounting (PX), and whether the state allows non-public experience toward this requirement (NX) as the independent variables. Since there does not appear to be significant correlation between these variables (according to the correlation matrix in Appendix A), these variables appear to be independent of one another. Stated as a formula the hypothesized model is:

$$\hat{Y}_D = \beta_{HE}HE + \beta_{AE}AE + \beta_{PX}PX + \beta_{NX}NX + \varepsilon$$

This hypothesis can be expressed as follows for each of the four independent variables:

(1) H_0: $\beta_{HE} = 0$
H_A: $\beta_{HE} \neq 0$

(2) H_0: $\beta_{AE} = 0$
H_A: $\beta_{AE} \neq 0$

(3) H_0: $\beta_{PX} = 0$
H_A: $\beta_{PX} \neq 0$

(4) H_0: $\beta_{NX} = 0$
H_A: $\beta_{NX} \neq 0$

Upon running the regression analysis, coefficients were found for each independent variable as listed in Table 2 below.

It is clear that none of the variables tested are statistically significant and the null hypothesis, therefore is not rejected. Upon review of the ANOVA results, the F statistic of 1.6358 (where $F_{critical} = 2.57$ at an α < 5%) indicates it is not likely any of the independent variables influencing the dependent variable. Additionally, the t-statistics in Table 2 fail to meet the critical t as illustrated by the p-values in excess of the α of 0.05 indicating that we fail to reject the null hypothesis for each of the four independent variables. Therefore, we can say with 95% confidence that higher education, accounting education, public experience, and non-public experience have no predictive value as to whether CPAs are more or less likely to be subject to disciplinary action.

Hypothesis 3

The third hypothesis (H3) hypothesizes that requirements a CPA candidate be a minimum age, a United States citizen, or have contacts with the state will not have an impact on the incidence of disciplinary action in that state. Dummy variables are used for the state requiring the candidate to be a minimum age (A) (18 or 19 years for most states), a U.S. citizen (C), a resident of the state (R), employed within the state (EM), and maintain an office (O) within the state. The correlation analysis indicates a high degree of correlation between residency, employment, and maintenance of an office which raises the risk of multicollinearity. This hypothesized relationship can be expressed in the following formula:

$$\hat{Y}_D = \beta_A A + \beta_C C + \beta_R R + \beta_{EM} EM + \beta_O O + \varepsilon$$

This hypothesis can be expressed as follows for each of the four independent variables:

(1) H_0: $\beta_A = 0$
H_A: $\beta_A \neq 0$

(2) H_0: $\beta_C = 0$
H_A: $\beta_C \neq 0$

(3) H_0: $\beta_R = 0$
H_A: $\beta_R \neq 0$

(4) H_0: $\beta_{EM} = 0$
H_A: $\beta_{EM} \neq 0$

(5) H_0: $\beta_O = 0$
H_A: $\beta_O \neq 0$

An initial review of the regression results shows the F statistic (0.1651) fails to meet its critical value (2.57) indicating it is not likely any of the independent variables influence the dependent variable at an α < 5%. It is clear from the results in Table 3 that we fail to reject each of the five null hypotheses and there is no relationship between the variables of age, citizenship, residency, employment, or maintenance of an office in the state and the likelihood of disciplinary action against CPAs. None of the coefficients reach the critical value of t (±2.0086) nor do any of the p-values reach an α of 5% or less.

Hypothesis 4

The fourth hypothesis (H4) is: states with shorter reporting (RP) periods for CPE will have a lower incidence of disciplinary action against CPAs than states with longer reporting periods. Therefore, reporting periods (RP) is the independent variable in a simple regression. Stated as a formula, this hypothesized relationship is:

$$\hat{Y}_D = \beta_{RP} RP + \varepsilon$$

The hypothesis can be expressed as follows:

H_0: $\beta_{RP} = 0$
H_A: $\beta_{RP} \neq 0$

Since one state does not have CPE requirements to maintain CPA licensure, this state was not included in the analysis. Therefore, the regression of H4 has forty-nine (49) detrees of freedom and a t of ±2.0096. A review of the regression results indicates a t statistic of -0.3909, which fails to reach the critical value. Additionally, the p-value of this coefficient is 0.6975, well above the α of 5%. Therefore, the null hypothesis is not rejected leading to the conclusion, with 95% confidence, that disciplinary actions against CPAs are not influenced by the length of the reporting periods for CPE compliance.

Hypothesis 5

The fifth hypothesis (H5) is as follows: mandating CPE in the areas of Accounting and Auditing (AA), Tax (T), and Ethics (E) will reduce the incidence of disciplinary action on CPAs. This relationship can be expressed in the following formula:

$$\hat{Y}_D = \beta_{AA} AA + \beta_T T + \beta_E E + \varepsilon$$

They hypotheses for each coefficient can be expressed as follows:

(1) H_0: $\beta_{AA} = 0$
H_A: $\beta_{AA} \neq 0$

(2) H_0: $\beta_T = 0$
H_A: $\beta_T \neq 0$

(3) H_0: $\beta_E = 0$
H_A: $\beta_E \neq 0$

After setting disciplinary action as the dependent variable and accounting and auditing, tax, and ethics as the independent variables, a multivariate regression model was run. The results of the regression model appear in Table 4 below. Due to the high correlation between tax and ethics, there is a risk of multicollinearity.

Based on these results, we fail to reject the null hypothesis on each of the three coefficients. Each coefficient reaches neither critical t (±2.0086) nor $\alpha <$ 5%. Therefore, the hypothesized relationship between mandated CPE in accounting and auditing, taxation, and ethics, is not supported by the statistical results. Given this result and the fact that the model yields an F statistic of 0.7583 where $F_{critical} = 2.24$, the correlation of tax and ethics does require additional analysis.

Hypothesis 6

The sixth hypothesis (H6) focuses on the education within the profession. It simply states that lower incidents of disciplinary action will be seen in states with a higher discipline-specific education requirements, higher experience requirements, more required minimum CPE credits per year, and higher discipline-specific CPE requirements. The hypothesis specifically looks at the how accounting education (AE); public experience requirements (PX); minimum CPE requirements (ME); and mandated accounting and auditing (AA), taxation (T), and ethics (E) CPE credits as independent variables. As indicated above, taxation and ethics are highly coordinated and must, therefore be reviewed with care. The relationship hypothesized here can be summarized in the following formula:

$$\hat{Y}_D = \beta_{AE}AE + \beta_{PX}PX + \beta_{ME}ME + \beta_{AA}AA + \beta_T T + \beta_E E + \varepsilon$$

They hypotheses for each coefficient can be expressed as follows:

(1) $H_0: \beta_{AE} = 0$
$H_A: \beta_{AE} \neq 0$

(2) $H_0: \beta_{PX} = 0$
$H_A: \beta_{PX} \neq 0$

(3) $H_0: \beta_{ME} = 0$
$H_A: \beta_{ME} \neq 0$

(4) $H_0: \beta_{AA} = 0$
$H_A: \beta_{AA} \neq 0$

(5) $H_0: \beta_T = 0$
$H_A: \beta_T \neq 0$

(6) $H_0: \beta_E = 0$
$H_A: \beta_E \neq 0$

The results of the regression model appear in Table 5 below. The results of this regression model indicate that there is no statistical significance of any of the six variables as they relate to disciplinary action taken against CPAs. None of the variables meet or exceed the critical t (±2.0086) nor do they reach an $\alpha < 0.05$.

SUMMARY OF RESULTS

Upon analyzing the multiple regression results it can be stated with 95% confidence that none of the six hypotheses set forth at the beginning of this paper are correct in their prediction. It appears from these results that neither the specific requirements for CPA licensure, nor any of the CPE credit requirements for license renewal, have any influence on the likelihood of disciplinary action taken on CPAs by the AICPA. This is a surprising result and is very important to the profession as it considers measures to improve its licensing requirements. States are looking for ways to improve ethical behavior of CPAs through regulatory schemes. The results found here indicate that the variables currently used to license and regulate the CPA profession are not effective in improving ethical behavior from accountants.

POINTS FOR FURTHER RESEARCH

After analyzing this data, there is room for improvement on the models created herein through the data collected and the approaches taken.

First, due to issues related to availability of data, the variable of disciplinary action taken against CPAs for ethical violations was taken from *The CPA Letter*, a publication of the AICPA as summarized on the AICPA website. However, not all CPAs in the United States are members of the AICPA. In fact, the AICPA's membership has been declining over the past several years. Clearly, a better proxy for this variable would be actual disciplinary action taken by individual state a board of accountancy against CPAs licensed in that state. While some state boards of accountancy post this information on their websites, not all states have this information readily available.

Second, the standardization used for disciplinary action was population of the state based on the year 2000 United States Census. This standardization assumes the number of CPAs licensed in each state is proportional to the population in that state. As with any assumption, this must be tested for validity by reviewing the number of CPAs licensed in each state. A better proxy for standardization would be the actual number of CPAs in the state; however, this information was not available from the NASBA the AICPA, or an individual state board of accountancy. Future studies could survey each state board of accountancy to determine the number of CPAs licensed in each state to allow for a more valid standardization of the number of disciplinary actions taken against CPAs.

Third, the CPA profession has been changing over the past ten years. These changes have caused many states to implement more strict education requirements (specifically 150 credit hours of higher education) for entry into the profession. Additionally, many states have begun adding mandatory ethics credits to their CPE requirements for license renewal. As this is done, studies of the differences in means of disciplinary actions before such changes and after such changes should be done. However, the timing of these studies is crucial given the way disciplinary actions arise in the profession.

Last, the selection of data for disciplinary action must be done with care. Many disciplinary matters that were resolved and effective in 2003 (and therefore included in this study) were for ethical infractions as many as ten years before the resolution (dating back to 1993). When testing for improvement in behavior of CPAs before and after further regulation of the profession, the researcher should be careful to account for this issue. Specifically, the researcher should allow for at least one reporting period to allow for all CPAs to have undergone any ethical training mandated by such a change. Additionally, they should only be reviewing breaches of ethical duty resulting from action after the regulatory change. Alternatively, he or she could account for infractions by those CPAs licensed after the change versus those licensed prior to the change.

CONCLUSION

While this study fails to validate any of the hypotheses established at the outset, it is a useful piece of research for the profession. Although it does not validate these hypotheses, it exposes the failure of relationships that the profession assumes to be legitimate. Additionally, the data analysis leads to a more thorough understanding of how future research into this matter should be conducted.

Table 1
Variables Collected

Variable	Description
Licensure Requirements	
Age (A)	Candidate must be of a minimum age
Citizenship (C)	United States citizenship
Residency (R)	Residency in the state of licensure
Employment (EM)	Employment in the state of licensure
Office (O)	Maintenance of an office in the state of licensure
Higher Education (HE)	Number of years of higher education required for licensure
Accounting Education (AE)	Number of credits of required in accounting
Public Experience (PX)	Years of experience required in public accounting
Non-Public Experience (NX)	Years of experience acceptable in non-public accounting
License Renewal Requirements	
Renewal (RN)	Years between license renewals
Reporting (RP)	Years between review of CPE credits earned
Minimum CPE per year (M)	Minimum CPE required per year
Average CPE per year (CE)	Average CPE credits per year
A & A (AA)	Average CPE in accounting and auditing
Tax (T)	Average CPE in taxation per year
Ethics (E)	Average CPE in ethics per year
Discipline (D)	Number of disciplinary actions taken by the AICPA on CPAs in the state per 1 million residents of the state

Table 2
Regression Results (H2)

Variable	Coefficient	t-statistic	p-value
Education (HE)	-0.1713	-1.0359	0.3056
Accounting Education (AE)	-0.0212	-1.0359	0.0632
Public Experience (PX)	-0.1073	-1.9037	0.1877
Non-Public Experience (NX)	-0.3236	-1.1348	0.2623

Table 3
Regression Results (H3)

Variable	Coefficient	t-statistic	p-value
Age (A)	-0.0355	-0.1804	0.8577
U.S. Citizen (C)	-0.3673	-0.7512	0.4564
Residency (R)	-0.0787	-0.2383	0.8128
Employment (EM)	-0.0008	-0.0016	0.9988
Maintain an Office (O)	-0.0364	-0.0717	0.9432

Table 4
Regression Results (H5)

Variable	Coefficient	t-statistic	p-value
Accounting and Auditing (AA)	-0.0041	-0.1252	0.9009
Taxation (T)	-0.0298	-0.2418	0.8100
Ethics (E)	-0.0022	-0.0198	0.9843

Table 5
Regression Results (H6)

Variable	Coefficient	t-statistic	p-value
Accounting Education (AE)	-0.1873	-1.5567	0.1267
Public Experience (PX)	-0.0510	-0.5794	0.5652
Minimum CPE per year (ME)	-0.0013	-0.1911	0.8493
Accounting and Auditing (AA)	-0.0003	-0.0076	0.9940
Taxation (T)	-0.0184	-0.1375	0.8913
Ethics (E)	-0.0127	-0.1141	0.9097

Appendix A
Correlation Table

C	R	EM	O	HE	AE	PX	NX	RN	RP	CE	CE	AA	T	E	D
1.0000															
(0.1304)	1.0000														
(0.1121)	0.7579	1.0000													
(0.1121)	0.7579	0.8910	1.0000												
0.1875	(0.1217)	(0.1584)	(0.1584)	1.0000											
0.0485	0.1680	0.1728	0.1728	0.0837	1.0000										
0.1459	(0.0622)	0.0387	0.0058	(0.5865)	(0.2729)	1.0000									
0.1927	(0.3854)	(0.3089)	(0.3368)	0.1804	(0.2240)	0.3621	1.0000								
(0.0859)	(0.2444)	(0.1712)	(0.2359)	0.0650	(0.0861)	0.0069	0.0865	1.0000							
(0.2070)	0.1271	0.2473	0.1845	(0.1246)	(0.0888)	(0.0295)	(0.1444)	0.2439	1.0000						
0.0678	0.0070	(0.0712)	(0.1355)	0.1317	0.0686	(0.1157)	0.1292	(0.3786)	(0.2913)	1.0000					
0.0286	0.0913	0.0784	0.0784	(0.0283)	(0.0078)	0.0740	0.0788	(0.0388)	0.4328	0.1494	1.0000				
(0.1008)	(0.0916)	(0.0601)	0.0637	(0.1298)	0.1633	0.0192	0.0871	0.0267	0.0056	(0.2163)	0.0706	1.0000			
(0.0386)	(0.1235)	0.0442	0.0442	(0.3332)	(0.0364)	0.5806	0.1632	0.0525	(0.0662)	(0.1133)	0.0271	0.3743	1.0000		
(0.0777)	(0.1201)	(0.1790)	(0.1790)	(0.3913)	(0.0110)	0.5301	0.0947	0.1737	(0.0141)	(0.1176)	0.0544	0.2777	0.7816	1.0000	
(0.1083)	(0.0576)	(0.0535)	(0.0535)	(0.1163)	(0.2128)	(0.0510)	(0.1856)	(0.0234)	0.0556	(0.0312)	0.0758	(0.0428)	(0.0694)	(0.0558)	1.0000

TRENDS IN CONSUMER ACCULTURATION STUDIES

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ABSTRACT

This paper examines the literature and trends related to consumer acculturation. Consumer acculturation applies acculturation theory to consumer purchase decisions. Prior research on acculturation and consumer behavior theorizes that the degree of acculturation displayed by consumers is the primary construct of interest when investigating immigrant consumption patterns. Of interest in consumer acculturation studies is whether decision differences exist between high acculturated and low acculturated individuals in the purchase of products and whether such differences vary by the degree of acculturation an individual exhibits.

INTRODUCTION

Acculturation and ethnicity are two constructs that dominate the literature on subcultural consumption (O'Guinn, Lee, and Faber 1986; Rossman 1994). The purpose of this paper is to provide a review of literature identifies trends occurring in consumer acculturation research. This paper examines acculturation and ethnicity in a consumer context. Consumer acculturation includes the attitudes, values and behaviors, which collectively comprise buyer behavior (O'Guinn, Lee et al. 1986). Consumer acculturation is a subset of acculturation and consumer socialization. In turn, acculturation and consumer socialization (Moschis 1978) are subsets of socialization. Socialization is the process of learning about and adjusting to one's environment (Ward 1974; Moschis 1978).

The cognitive development model of socialization posits that learning is a cognitive-psychological process that emphasizes the interaction of personal and environmental factors (Ginsburg and Opper 1987). The social learning model views learning as the result of "socialization agents", which may be a person or organization that is in contact with the learner. These agents transmit norms, behaviors, attitudes and motivations to the learner. Socialization takes place during the course of a person's interactions with these agents and the environment (Brim 1966). A subset of socialization is consumer socialization, defined as the process by which people develop consumer-related skills, knowledge and attitudes (Moschis 1978). Acculturation, also a subset of socialization incorporates culture adaptation processes by which the members of one cultural group adopt attitudes and behaviors of another cultural group (Redfield, Linton et al. 1936). Acculturation and consumer socialization combine to form consumer acculturation, defined by Peñaloza (1994) as "the general process of movement and adaptation to the consumer cultural environment in one country by persons from another country" (p.33).
The study of culture and marketing has theoretical and managerial implications. A greater understanding of the factors involved in building relationships with markets from a particular cultural background will enhance the ability to predict the amount of resources necessary to devote to marketing efforts. Additionally, the research provides a theoretical frame of reference through which to view multi-cultural marketing. Most significantly research in this area will provide marketers and advertisers with a better understanding of how people from different cultural contexts learn to become American consumers. This understanding can improve strategic planning decisions. For example, if differences are found based on the degree of acculturation experienced by the consumer, it becomes more important for marketers to determine the acculturation degree and to develop marketing strategies that take differing degrees into account.

RESEARCH ON U.S. SUBCULTURES

Holland and Gentry (1999) used three eras to describe the research on ethnicity and marketing: The first era is pre-1960 when ethnic groups were largely ignored. The second era began about mid-1960 and continued until about 1980. During this period, research focused almost exclusively on differences between African-American and White consumers. The third era, which began in the early 1980s and continues today, is depicted by studies on a wide variety of ethnic groups that examine differences in culture that drive consumption.

Prior research suggests that the degree to which an individual has become acculturated to the United States may be a more important indicator of consumer behavior than country of birth (Kara and Kara 1996).

The international marketing literature is replete with studies that focus on behavioral differences in consumers across nations. Although this research has made significant contributions to understanding differences between nations, a gap exists in the literature about subcultural differences within national boundaries (Heslop, Papadopoulos et al. 1998), and specifically, whether individuals that are more acculturated to the United States' Western values behave differently than those who have assimilated to a lesser degree (low acculturation). Due to immigrant growth over the past two decades, the United States is a particularly appropriate context for the study of acculturation within subcultures. Such questions take on considerable importance to contemporary marketing because ethnic groups constitute a significant part of the economic environment.

DEMOGRAPHIC SHIFTS

The *United States Census Bureau* reports that African Americans, Hispanics and Asians make up the fastest growing groups in the United States. For the 2000 census, there were 35.3 million Hispanics, representing about 13% of the total population (Grieco and Cassidy 2001). In some major cities, such as Los Angeles and New York City, the minority population outnumbers the "non-minority" population. The growth of ethnic subcultures in the United States is expected to continue. It is estimated that by 2010, one in three American children will be African American, Hispanic or Asian (Schwartz and Exter 1989).

Although acculturation can affect one or both cultures, most researchers working with ethnic groups in the United States have assumed that change primarily affects the minority ethnic group, which is expected to become more like the dominant group (Keefe 1980).

Because of the Americanization efforts, in the early 1900s many of the European immigrants quickly assimilated. These early immigrants viewed the adoption of the prevailing culture as necessary for success. In contrast, recent trends indicate that the new immigrants no longer desire to be fully assimilated. Instead, many want to maintain their cultural identities (Miller 1993; Rossman 1994; Alba and Nee 1997; Dittgen 1997). These changes have prompted researchers to drop the analogy of the United States as a melting pot in which all ethnic groups eventually mix their characteristics and traits into one pattern (Hirschman 1983). Analogies such as a salad bowl in which each group maintains significant aspects of identity (Romano 1995) and a mosaic (Rossman 1994), in which different cultures combine to form a diverse country, have been used to describe the changing attitudes toward assimilation. In addition, changes in immigration policy during the 1980s and 1990s have altered the makeup of immigrants. During this period, Europeans accounted for only ten percent of legal immigrants; Asians made up about one-third and Hispanics nearly one-half of legal immigrants (Dittgen 1997).

One result of the changing demographic and the recognition of differences between subcultures is that major companies are directing more effort toward capitalizing on these growing markets. Take the Hispanic market, for example. Kraft Foods launched its first ever Hispanic targeted flavor, Mandarina (orange flavored Kool-Aid) (Thompson 1998); Frito Lay hired Dieste & Partners to develop ads aimed at Latino consumers (Krajewski 1998), and General Motors' Buick division launched ads aimed toward Hispanics (Gazdik 1998). In addition, retailers such as K-Mart, Sears Roebuck & Co. and J.C. Penney spent about $110 million dollars in Spanish-language network television (Zipkin 2000).

These trends indicate a need for investigation of differences and similarities among different ethnic segments within the U.S. market and an examination of whether marketing strategies should be adjusted to reach the U.S.'s diverse subcultures.

CULTURE

Culture impacts the way consumers perceive and behave (Hall 1977; Hirschman 1985; McCracken 1988; Clark 1990; Rossman 1994). This construct, however, is difficult to operationally define because of a variety of definitions, each reflecting different paradigms from varying disciplines (e.g., psychology, sociology, anthropology, etc.) (Kale and Barnes 1992). From a social-psychology perspective, Gordon (1964) defines culture as "...the social heritage of man--the ways of acting and the ways of doing things which are passed down from one generation to the next" (p. 32). More recently, Hofstede (1984), provides a psychological view of culture as "collective programming of the mind which distinguishes the members of one human group to another" (p. 21).

Culture and its associated behavior patterns are constantly changing. As a society is confronted with different forces, its culture adapts (Wallendorf and Reilly 1983; McCracken 1986). The goal of cultural research is to determine differences in the way people adapt. Perhaps, as Brown (1933) put it, "human nature is everywhere the same and everywhere different" (p. 2).

National Origin

Related to culture is national origin. The definition of national origin employed by the Equal Employment Opportunity Commission states that national origin refers to the place where a person was born or the country from which a person's ancestors are from (Brady 1996). For many people living in the United States, cultures, beliefs, opinions, and consumer behavior patterns are a result of influences from their native countries and, for those born in the United States, the national origin of their ancestors (Rossman 1994). The level of identification a person feels with a certain group influences their commitment to the group and, in turn, their behavior (Hirschman 1981; Valencia 1985).

Subcultures

According to Gordon (Gordon 1978), subcultures are subdivisions of a national culture which form "...a functioning unity which has an integrated impact on the participating individual" (p. 98, italics in original). Subcultures based on race, religion or nationality are referred to as ethnic groups. The term ethnicity comes from the Greek word "ethnos," which means "people" or "nation" (Gordon 1964). Most definitions of ethnicity include a historical commonality. For example, Gordon (1964) defines an ethnic group as "...any group which is defined or set off by race, religion, or national origin, or some combination of these categories," (p.27). Similarly, Parsons (1975) defines ethnic groups as "...a group the members of which have...a distinctive identity which is rooted in some kind of a distinctive sense of its history. It is...a diffusely defined group, sociologically quite different from collectivities with specific functions. For the members it characterizes what the individual *is* rather than what he *does*" (p. 56, italics in original).

Herche and Balasubramanian (1994) found that consumers, within a given ethnic background, are likely to display similar shopping behaviors, such as using the same information sources and patronizing the same type of stores. Other studies echo the premise that the differences between ethnic groups significantly affect buying behavior resulting in a need for different marketing efforts (Deshpande, Hoyer, and Donthu 1986; Donthu and Cherian 1994; Peñaloza 1994; Webster 1992).

SOCIALIZATION AND CONSUMER ACCULTURATION

Zigler and Child (1969) define socialization as the process by which individuals develop patterns of socially relevant behaviors. In a consumption context, investigating children's consumption patters, Ward (1974) coined the term "consumer socialization" as a "process by which young people acquire skills, knowledge and attitudes relevant to their functioning as consumers in the marketplace" (p. 2). The difference between consumer socialization and consumer acculturation is the multicultural context in which consumption and acculturation take place (Peñaloza 1989).

Acculturation and Assimilation

The concept of acculturation originated in the field of anthropology and has been studied extensively in anthropology as well as sociology and psychology. Redfield, Linton and Herskovits (1936) define acculturation as "...those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups" (p.149). In 1954, the Social Science Research Council defined acculturation as,

> ...culture change that is initiated by the conjunction of two or more autonomous cultural systems. Acculturative change may be the consequence of direct cultural transmission; it may be derived from noncultural causes, such as ecological or demographic modifications, induced by an impinging culture; it may be delayed, as with internal adjustment following upon the acceptance of alien traits or patterns; or it may be a reactive adaptation of traditional modes of life. Its dynamics can be seen as the selective adaptation of value systems, the processes of integration and differentiation, the generation of developmental sequences, and the operation of role determinants and personality factors (Barnett, Siegel et al. 1954 p.974).

Although changes may occur in either the dominant culture, the subculture or both groups, according to Berry (1997), in practice acculturation tends to produce more change in one of the groups. Although both the immigrant and the host culture undergo changes, the impact of immigrant cultures on the mainstream host culture is relatively insignificant compared to the influence of the host culture on the individual (Kim 1985). The immigrants need to adapt to the host culture is greater than the host cultures need to include aspects of the immigrant culture due to the larger number of people in the host culture compared to the number of immigrants and to the dominant resources of the host society that inhibit the immigrant culture from having the greater influence.

Many researchers have used the term acculturation and assimilation interchangeably, or in some cases, the meanings have overlapped (Gordon 1964). To add to the confusion, different disciplines use the terms to mean different concepts (Berry and Annis 1974; Padilla 1980). For example, sociologists like Gordon (1964), typically use the term "assimilation" to describe the process of meetings between ethnic groups. In contrast, anthropologists prefer the term "acculturation" to describe the same process (Gordon 1964). A review of the consumer acculturation literature reveals a similar inconsistency. Therefore, it is important to relay the *predominant* difference between assimilation and acculturation in terms of their usage in the consumer acculturation context. While assimilation occurs when an immigrant fully adopts mainstream values and gives up his/her cultural heritage, acculturation can occur when some elements of the mainstream culture are added without abandoning the native culture (Berry 1980; Padilla 1980; Wallendorf and Reilly 1983; Jun, Ball et al. 1993; Rossman 1994). Thus, the traditional view is that acculturation is more of a continuum, where there are varying levels of acculturation in each subculture. At one end of the continuum is the unacculturated extreme where the consumer's heritage is the strongest in influencing behavior. At the other end is the acculturated extreme, where the consumer is fully assimilated to the host culture and has adopted the prevailing consumer behavior of the host population (Hair and Anderson 1972).

Acculturation simultaneously occurs at both group and individual levels (Berry 1980). Literature in anthropology and sociology focus on the group factors of acculturation, such as relationship to socialization, social interaction, and mobility (Olmedo 1979). The psychology literature emphasizes individual characteristics such as change in perception, attitudes, values and personality (Berry 1980; Peñaloza 1989).

Measurement of Acculturation Constructs

Measure of acculturation typically attempt to determine the extent to which a person has adapted to a new culture (Magaña et al. 1996) and the resulting behavioral changes that occur as a result of the contact (Ward and Arzu 1999). There has been a great deal of variation in the measurement of acculturation and ethnicity in both the social sciences and the consumer behavior literature. Some factors, either individually or in combination, that have been considered in the measurement are language, reference groups, intermarriage, identity, culture (Laroche, Kim, and Tomiuk 1998; Lee and Um 1992; Peñaloza 1989; Valencia 1985), and religion (Hirschman 1981). Communication based measures, such as media usage, have also been used (O'Guinn and Faber 1985; Kim, Laroche et al. 1990). Because language is the primary medium for the flow of cultural elements (Barnett, Siegel et al. 1954), it is viewed as one of the most important indicators of acculturation, has been the most widely used factor in measuring acculturation (Olmedo 1979). Language-based scales contain questions about where, and to what extent, one's native language versus English is spoken.

Olmedo (1980) suggests a multivariate approach when measuring acculturation. Berry (1980) advocates independent measurement at the group level in terms of history and purpose of contact and at the individual level in terms of the interpersonal and intrapersonal experiences. Although researchers agree that multidimensional measures are necessary, several researchers have circumvented the use of these scales and opted for a self-judgement with regard to strong or weak identification to the original culture (Dana 1996). This trend also has appeared in the consumer acculturation research. Dana (1996) argues that self-judgements are too simplistic and are insufficient for the accurate measure of acculturation

The majority of acculturation scales used in consumer acculturation studies have focused on behavioral indicators. There are indications that psychological scales are being developed in the social sciences (Tropp, Erkut et al. 1999), which may lend themselves to consumer studies exploring the psychological aspects of consumption and acculturation.

Consumer Acculturation

As mentioned previously, consumer acculturation is a subset of acculturation and socialization. While acculturation is more general, consumer acculturation is specific to the consumption process. Consumer acculturation can be seen as a socialization process in which an immigrant consumer learns the behaviors, attitudes and values of a culture that is different from their culture of origin (Lee 1988).

The study of ethnicity in consumption is relatively new in marketing literature, and there is debate on whether the constructs of ethnic identity and acculturation are identical because they both rely on similar measures such as language, reference group influence, adherence to cultural customs, and food preferences to operationalize them (Hui, Joy et al. 1992 377; Webster 1994). Although some researchers support the idea that these constructs are independent, the prevailing practice in consumer research has been to use the same set of indicators to operationalize both the ethnicity and acculturation constructs (Hui, Joy et al. 1992). Peñaloza (1994, 1995) suggests that ethnic affiliation is negatively related to consumer acculturation such that the more a person affiliates with his or her ethnic community, the less are his or her chances to adapt to and adopt mainstream values and behaviors. Hui et al. (1992) disagree that ethnicity is opposite to acculturation. They contend that some immigrants can be somewhat acculturated to the dominant culture but still maintain strong ethnic identification. In a study of Korean sojourners in the United States, Jun et al. (1993) found support that acculturation is different from cultural identification and that both dimensions are influenced by different factors. Webster (1994) views ethnic identity as a subset of acculturation and assimilation as a mode of acculturation. Laroche, Kim and Tomiuk (1998) state that the primary difference between the two constructs is that ethnic identity measures focus on maintenance/retention of the culture of origin and acculturation measures focus on acquisition of the host culture.

ETHNICITY AND ACCULTURATION IN CONSUMER BEHVAVIOR RESEARCH

An earlier study that combined ethnicity and consumer behavior was carried out by Hirschman (1981). This research identified relationships between Jewish ethnicity and levels of consumer innovativeness. Hirschman concluded that ethnicity may be a useful determinant of consumption patterns. Her research suggests that ethnic norms may influence competency in making purchase decisions.

Hispanics. Webster (1990-91) found differences in attitudes toward marketing practices between Anglos and Hispanics who possessed varying degrees of subcultural identification. These differences were present even after social class and income effects were removed from the analysis. In another study, Webster (1992) found significant differences between Hispanics who identified more closely with their subculture and Hispanics who did not in information search patterns associated with reference groups, advertising, in-store search and miscellaneous readership. The research concludes that different strategies are required to reach language-based segments within the Hispanic subculture.

Kara and Kara (1996) found that Hispanics high in acculturation were more similar to Anglos in terms of the utilities placed on product attributes of selected products. In addition, differences in advertising effectiveness and media preferences between Hispanics low in acculturation and Hispanics high in acculturation have been found. For example, Ueltschy (1997), when researching preference for language and ethnicity of the models in advertisements, found that Hispanics low in acculturation preferred advertisements in Spanish compared to high-acculturated Hispanics who preferred English language advertisements. A surprising finding in this research was that Hispanics low in acculturation preferred advertising personalities that were Anglo instead of Hispanic. This finding indicates a need for further research.

O'Guinn and Faber (1986) conducted a study to determine if Hispanics and Anglos differed in their rating of the importance of different product attributes. When the product was a nondurable (detergent), few significant differences were found between the groups. In contrast, when the product was a consumer durable (television sets), significant differences were found between Anglos and Hispanics in their ratings of attribute importance. Additionally, there were also differences between low and high-acculturated Hispanics.

Asians. Research on the acculturation in the Asian ethnic group provides similar findings. Tan and McCullough (1985) found that a high level of acculturation to Chinese values was associated with a high reliance on price and quality, whereas a low orientation was associated with a high preference for image. McCullough, Tan and Wong (1986) found that Chinese values were slowly disappearing because of Western influences. Lee and Um (1992) found that mixed acculturation patterns contributed to differences between Korean immigrants and Anglo-Americans in consumer product evaluations. Specifically, highly acculturated Koreans, as compared to less acculturated Koreans and Americans, were more likely to adopt American cultural styles by observing what their friends buy, taking friends' advice on purchase recommendations and listening to advertising.

TRENDS IN ACCULTURATION STUDIES

Three trends have appeared in consumer acculturation studies: (1) the concepts of ethnic identity, (2) strength of ethnic affiliation and (3) situational ethnicity. The first trend is the increasing use of ethnic identity to identify ethnic groups. The objective perspective in defining ethnic identity uses sociocultural categories, while the subjective perspective derives ethnicity from the labels that people give to identify their ethnic background (Deshpande, Hoyer et al. 1986). The self-identification of ethnicity evolved from the problems that researchers faced when attempting to classify people into various ethnic groups. Frequently, assignment to an ethnic group is based on indicators such as surname (Hoyer and Deshpande 1982; Zmud and Arce 1992), area of residence (Wallendorf and Reilly 1983) or city (Saegart, Hoover et al. 1985). This can lead to misclassifications. Because of the potential for misclassifications, many researchers have adopted the self-identification method to measure ethnicity or ethnic identification (Cohen 1978; Hirschman 1981; Valencia 1982; Minor 1992). The assumption of this latter method is that ethnic self-identification reflects the internal beliefs of individuals about their perceptions of cultural reality. Combinations of subjective and objective measures have also been used to study Hispanic consumption (Deshpande, Hoyer et al. 1986).

The second trend has been an increasing reliance on the *degree* of ethnic affiliation, often called strength of ethnic identification (Webster 1994), to operationalize, or in some instances, substitute acculturation measures. This concept was inspired by Padilla's (1980) "ethnic loyalty" which is defined as "...the individual's preference of one cultural orientation over the other" (underline in original, p.48). The degree of ethnic identification has been used in lieu of traditional acculturation scales as an indicator of the degree of acculturation (Kim, Laroche et al. 1990). Using this approach, Hirschman (1981) found that the strength of Jewish ethnicity was positively related to, among other things, consumption innovativeness, and transfer of consumption innovation to others. Deshpande, Hoyer and Donthu (1986) found differences in Spanish media use, attitudes toward advertising and brand purchasing behavior within the Hispanic subculture, all based on the intensity of ethnic affiliation. Donthu and Cherian (1992) found that strong Hispanic identifiers had a higher degree of ethnic pride and were less responsive to coupons than low Hispanic identifiers. Some researchers have used multidimensional dimensions to measure the strength of ethnic identification (Padilla 1980) and others have relied on one measure, such as language usage (e.g., Webster 1992) to operationalize the construct. In addition, some researchers prefer to use a dichotomous measure of ethnicity (i.e., high vs. low ethnic identifiers), while others have utilized multichotomous or continuous measures (Hui, Joy et al. 1992).

The third development in consumer acculturation research has been called situational ethnicity or felt ethnicity (Stayman and Deshpande 1989). Situational ethnicity is based on the notion that the acculturation process may vary depending on the context in which behavior occurs. The underlying premise is that people take different roles in their daily lives and these roles may bring into play different levels of acculturation or ethnicity (O'Guinn and Faber 1985). Consequently, a consumer's consumption behavior can exhibit a considerable degree of situational variability depending on which personal meanings are salient in a given consumption context (Stayman and Deshpande 1989; Zmud and Arce 1992).

SUMMARY

The trends in consumer acculturation research indicate a need to come to agreement on definitions and measurement of the construct. With the changing ethnic demographics in the United States, it becomes increasingly important to understand the differences and similarities between and within subcultures. Research on consumer acculturation will continue to shed light on the consumption adoption process of immigrants.

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GRADE INFLATION AND ITS CORRELATES

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ABSTRACT

Is grade inflation altering student expectations of the colleges and universities that they are attending? Is grade inflation impacting the effectiveness of your and my teaching? This article explores the use of a student contract as a viable alternative to dealing with these two problems.

I. THE HISTORY: ATHENS VS SPARTA
Raymond F. Pisney

INTRODUCTION

In Ancient Athens, one of the basic premises of that city-state was about teaching citizens what they needed to know to live their lives fruitfully and thoughtfully. Students in the Ancient city were taught a body of knowledge and they and their teachers struggled back and forth in that educational process until the citizen was prepared to become a full-fledged and productive individual empowered to do the very best for himself and by implication the city-state.

In contrast to its historical rival, Ancient Sparta employed an operable philosophy that required citizens in the city-state to be taught to take directions. It was not important what they knew, but that they should take orders from their leaders to do what the state desired them to do to serve the interests of the state. Citizens were part of a cadre of productive laborers or they served in a military unit, and those in charge told them what to do without exception.

One of the strengths of our American institutions of learning as they developed in the 19th and early 20th centuries was that higher education was designed to enrich the intellect of individual students so they could live productive lives in a democratic and free society. Higher education was a valued commodity and college and university teachers were looked up to by the rest of the nation's population. Many university leaders were listened to and they were quoted by the newspapers and media just like leading clergymen, Presidents of the U.S., heroes, explorers, and others during the first half of the 20th century.

In the last four decades, however, many business and engineering processes have slowly wormed their way into the management of our nation's institutions of higher learning and they have created changes that are slowly strangling the systems and practices of education itself. In fact, during these years the application of business and engineering practices and processes in many of our nation's universities has taken place so gradually that many of the professors that have been teaching during these decades have been unaware of how pernicious it has become---till now!

How did this change in educational orientation get started? There are several threads that seem appropriate to explore to understand the transformations that have taken place in American universities during the past four decades, especially how the increased meddling from outside by a host of business, corporate and political leaders has impacted the role and life of university teachers---with attention to their wrestling with the grade inflation problem.

REORGANIZATION OF STATE GOVERNMENTS

Jimmy Carter had attended the U.S. Naval Academy and he had served on Admiral Hyman Rickover's staff at the Pentagon where they were responsible for the construction and deployment of the nation's nuclear submarine fleet. Spending hundreds of billions of dollars for the effort, Rickover's team came to believe that their highly sophisticated scientific management principles and processes were responsible for their success. Team members came to believe these techniques could be applied energetically to any program or project and that the planned for result would always be successful. When he left the U.S. Navy, Carter returned to his home state of Georgia and became a political figure.

Carter was finally elected Governor of Georgia, and he brought with him a strong engineering and business management perspective that he and his deputies energetically applied to all agencies and operations of state government. He and his appointees quickly set about devising a program for the total reorganization of Georgia state government. They adopted the "zero based budgeting" mantra for each of the departments, they chose the model of "program management" as a device to downsize and right size specific state programs and services and, in some cases to zero out entire state agencies. They also applied "outcomes based assessment" as a tool to realize their goals. As they applied these management and engineering processes to state government, they expected to either downsize many programs or to merge them with others, to flatten structures, to eliminate much of the bureaucracy, and to evaluate and correct systemic processes inside various structures that they felt were actively mitigating against increased efficiency and effectiveness.

At the same time, there were university based think tanks operating on the campuses of prominent institutions of higher learning in the United States which took note of the changes in Georgia. They formulated new political and economic agendas for the re-organization and management of other state and local governments. The United States was growing apace and many state government strategies and structures had been inherited from the 19th century and they were creaking under the weight of the many demands and needs that were being placed upon them by growing populations. The academics associated with these think tanks spent their off campus time acting as consulting teams to various governors and legislative leaders, and they advocated dramatic changes in the strategy and structure of government.

For example, in the State of North Carolina a prominent group advised Governor Robert C. Scott and the leaders of the state's Legislature that they should undertake a total reorganization of state government. They proposed to shrink 367 separate agencies down into 17 major super agencies with each headed by a Cabinet Secretary. As a result, North Carolina went ahead and totally reorganized the strategy and structure of its state government. The result was the collapse of 367 agencies of state government into 17 principal departments. When the Governor and the leaders of the legislature sat around the table, they thereafter met with only 17 department secretaries, rather than an assembly of hundreds.

The political and economic consultants that came to North Carolina were accompanied by a host of high-level managers that were recruited from private industry and they brought with them the concept of "zero based budgeting," "program management," and "outcomes based assessment." As a part of the re-organization process, each new department was asked to project a biennial budget (every two years, since North Carolina's legislature met only every other year) for the next ten year period on every division, section, office and capital project. Each of the 17 departments eventually was able to furnish to the Governor and state legislature a spread sheet for five biennia (the next ten years) projecting their financial needs for all programs and capital projects.

As the re-organization process unfolded in North Carolina, the corporate, business and political leaders for the first time were able to identify and to get their hands on the actual costs of operating the state's universities. They could visualize the costs of the entire process of higher education and, in particular, they acquired the ability to single out specific programs and personnel for consideration, critique, change and possible elimination. With this information, business leaders began to wonder aloud whether some of the university professors were actually "as productive as they should be." Some businessmen were even quoted in the state's newspapers about whether a particular Regent Professor's teaching of two graduate-level courses during a semester and his graduating six or seven doctorates each year was really the best use of the public's money. Another corporate commentator wanted to know if "performance standards for university professors could be developed and implemented to measure their individual productivity and effectiveness" and a colleague of his wanted to know about the grades that the professors were awarding to their students, "were they about average or were they being inflated."

GAINING A PERSPECTIVE AND A GRASP ON UNIVERSITIES

State legislators around the country were taking notice of government reforms taking place in Georgia and the total reorganization of state governments that were taking place in states like North Carolina. This was a process that many corporate and business leaders found very popular and they readily embraced and supported it. They were convinced in the first place that the cost of their own state government and the operations of its various departments were much too high---even though few of them had any intimate personal knowledge of such matters. These leaders were also convinced, since they knew very little about the inside operations of higher education, that there must be a lot of hidden costs that could be cut out of the universities' budgets and that they could still "leave the costly systems intact for their children and grandchildren." The movement gained ground around the country and caused much re-jiggering of the strategy and structure of state governments and along with them the systems and institutions of higher education.

This was also the decade that Ronald Reagan served as the Governor of California. Shortly after taking office as Governor, he and his staff quickly singled out the major universities and the university system in California for reform according to his ideology. The system of higher education in California had been built on the concept of "populism," so that every student who wanted to pursue a basic bachelor's degree or a graduate degree could do so with only minimal expense to the student and to their families. In fact, some universities in the California system charged students virtually nothing to attend.

Governor Reagan had been very active in the Screen Actors Guild in California during the tumultuous 1960s and he had seen the riots that had occurred on California university campuses. He came to distrust university administrators, professors and students, so when he was elected Governor, Reagan and his ideologically charged business and corporate cadre quickly sprang into action to exercise control over the system of higher education and to "eliminate that terrible loophole" of free education. Under his leadership, there was simply no longer going to be a "free lunch" given to any of "those in that group of academics and their students." He and his legislative supporters agitated and eventually rammed through the state legislature a reform measure that required every bachelor's and graduate student to pay tuition and in many cases hefty fees that did become burdensome to many parents and students in the state.

"If they have to pay for it, they will appreciate it more," were the Governor's firm political philosophy and his personal response to any public outcry. "The universities should be paying for themselves, particularly the consumers (meaning the students) that use the accumulated knowledge and expertise of their professors," blazed one political leader involved in the fray. The process of meddling in the universities in California that began in that period moved forward with questions about "professorial productivity" and whether "customers (students) were being awarded the grades that they deserved or not"---and it set a precedent for other states.

APPLYING THE PRINCIPLES OF BUSINESS AND ENGINEERING

When both the Carter and the Reagan administrations came to Washington, D.C., the principles of business and engineering management and the applications of these practices to the operations of government and higher education came along with them. Their supporters from the world of business quickly leapt into the fray. "All of these agencies and their various sections and offices need to justify their existence and financial needs and to prove to us, as their leaders, that the present level of funding is still needed.. If they cannot, then we will cut their budget until they cry uncle," became the battle cry of many among the new national leadership.

During the tenure of Presidents Carter and Reagan, several government departments and agencies within the federal government were down-graded, and at times they were even targeted for elimination, including the U.S. Department of Education, the U.S. Department of Commerce, the U.S. Department of the Interior, the National Endowment for the Arts, and several others.

Anything that did not have productivity standards in place and that had no idea how it was serving customers was suspect. In an effort to make the leadership of the Smithsonian Institution knuckle under and to furnish a detailed strategic plan to the U.S. Congress for the long-term development of that organization, one U.S. Senator purposely exercised his personal influence to cut the budget by a certain percentage each year until he was able to see a graphic vision of where the institution was heading. He sought to deny ordinary cost of living increases to the professional staff of the institution on several occasions as a "pressure tactic," and he purposely would not entertain public discussions in his committee about the Smithsonian's capital problems and the rehabilitation and repair needs of it's physical plant---which by 1998 had grown to more than $1 billion in total needs (requiring new roofs, tuck pointing, waterproofing, drainage, sidewalks, repairs, maintenance, and many others).

APPLYING "CUSTOMER SATISFACTION" TO UNIVERSITIES

Another development took shape by the late 1980s and that involved treating the clientele of government and nonprofits as "customers." "Get serious about customers" was a battle cry of the management gurus during those years, and that philosophy began to creep into the university environment --- all students, parents, alumni, and donors by the middle 1990s were classified as "customers that needed to be satisfied."

In exploring the role and meaning of the "customer," those who lead corporations and businesses have operationally presumed that "customers are always right." It means that whatever customers want, when they want it, how they want it, who they want if from, and what the outcome should be---will all come in a way that will be non-detrimental and highly satisfying to customers, not to the organization that they are dealing with. To some long-time veterans who were working in the university world, the new "customer focus" came to mean that "the inmates were now running the asylum." In this setting, it was assumed logically by students and their parents that if they invested $12,000 in annual tuition at University X, then the young scholars should logically expect passing grades and a graduation from the university in exchange for the dollars they spent there.

Unfortunately, the movement to apply business processes to higher education continued apace and nothing has seemed to be able to stop the runaway train. A leading automobile dealer in the State of Minnesota was appointed to head the Board of Regents of the University of Minnesota. During the first meeting he attended as Chairman of the Board of Regents, he wondered aloud why the university system could not be run as cheaply and as effectively as his chain of automobile dealerships. He also believed that the university should have a 100% customer satisfaction rate as he had in his dealerships. Thereafter he began to badger leading university administrators about improving processes and using business practices to hone particular operations inside the institution. The pressure he was allowed to exert on university administrators was considerable, and many of them bent like twigs before his onslaught. Focusing on the productivity of university teachers (to justify the state's investment in paying their individual salaries) and satisfying customers (e.g. students) by awarding them with "good grades" in exchange for their tuition payment was a priority that he desired and openly advocated.

TAX CUTTING MANIA

Unfortunately the application of business processes and ill-directed political ideology to solve apparent problems in the realm of higher education continued to march across the American landscape during the 1990s. Taxpayers led by business and corporate leaders began to apply more and more pressure to political leaders. As a result, many more state governors with limited budgets at their disposal found it popular to put the financial squeeze on their state university systems to help make up the differences in their budgets. Using business and engineering-based measures and ideological arguments, both governmental agencies and collaborative nonprofit organizations were being asked to accomplish mission oriented goals without increases in financial resources. "Doing more with less" was touted as an operable by-word of the day, which meant for the typical university that their teachers had to do without salary raises, they had to teach more classes, and they were expected to satisfy more of their customers---by awarding higher grades to their students.

Driven by the business and corporate management culture that demanded performance, more and more university regents and state governors pushed forward to advocate the use of business practices by the leaders of higher education in order to do more with less and to improve performance at the same time. A number of state governors were examining budgets that had allocated billions of dollars to higher education and with their personal backgrounds in corporations, businesses or the law, few of them understood the "seed corn investment" that their state universities meant for the future development of their state and the nation. Instead, they viewed the large budgetary expenditures as something that could and must be cut to force university leaders and managers into developing more efficient and effective operating and academic programs. They also looked for other measures of effectiveness in the university environment that was not monetarily motivated and one of those factors involved the level of the grading that individual professors were awarding to their students. If professor X had awarded 174 "A" and "B" grades last year, he/ must be the right investment; while professor Y who had awarded 225 "C" and "D" grades must not be a very good teacher and should be marked for elimination!

More university managers were being recruited from the leadership of corporations and businesses during the 1990s. This new blood brought with it the ever popular "this quarter" and "next quarter" mentality that demanded a measure of performance that the New York Stock Exchange was regularly asking of these leaders in their companies and businesses. After their accession to universities, they quickly egged their fellow university administrators to apply this thinking to higher education.

Their presence brought to the table new questions: "Should institutions of high education be expected to pay for themselves, or should they be viewed as an investment in the future of the state and nation?" Secondly, "Can we measure the performance of administrators by how much they cut the university's budget and starve its operations?" Thirdly, "How do you measure the performance of the teaching staff and target those that are unproductive?" "Is it appropriate to evaluate the effectiveness of university teachers based upon the highest number of "A" or "B" grades that one professor may have awarded, versus the number of "C" or "D" grades that a colleague may have given to his/her students?"

CONCLUSION

Universities as we know them have existed for more than 800 years, and they grew and developed in academic stature during those years without the benefit of scientific management which was developed and honed later on during the Industrial Revolution. Through the centuries universities have educated hundreds of generations of national leaders, clergymen, managers, humanists, artists, scientists, zoologists, biologists, and many, many academicians, professionals and technical people.

From the 18th century onward, professors in higher education in America have been teaching students a body of knowledge that graduates have used to become better citizens in a free and democratic society. Truly educated and enlightened about major subjects, the graduates of these universities have been given the opportunity to become the best that they could become without the benefit of scientific management dabbling in the day-to-day operations of the university.

With the increased meddling of business, corporate and political leaders with no real knowledge or understanding of what universities are or an appreciation for the work of individual professors, the increased scrutiny of the teaching staff and attention to the satisfaction of customers has become the order of the day. University administrators at the very top have too often knuckled under and they have become the veritable tools of their Regents hell bent on implementing business practices and processes in the educational environment with the hope that they will be commended for the hoped for, substantial cost savings (and resulting tax cuts) that could be realized.

In addition, university administrators have reacted to the customer serving pressures by believing that they must create an atmosphere of agreeableness. If a student as the university's customer protests the awarding of a particular grade, that squeaking wheel must be lubricated and the noise stopped at all costs. If university administration runs over an individual professor in the process of satisfying a customer, who may influence other customers to come or not to the university (meaning that the income stream to the institution may be affected), then so be it.

II. RESEARCH CORRELATES: STUDENT EVALUATIONS AND GRADE INFLATION

Louise B. Burky

Grade inflation is at the forefront of almost all academic discussions today. In reviewing the literature for this presentation I found that the notion of grade inflation in inextricably linked to student evaluations. In fact the two are discussed almost simultaneously. We begin by examining the conditions surrounding grade inflation. It immediately becomes obvious that arrows indeed have two heads and that perhaps the direction of the variables should be reversed. Intervening variables are the entertaining instructor, who gives most/least work, tolerance for plagiarism, grading leniency, and upper vs. lower courses, among other things. The research model would then look like this:

←——————————————————————→

Grade Inflation	Intervening Variables	Student Evaluations

STUDENT EVALUATIONS

In a controlled experiment (Sinclair and Kunda, 1999), a 2X2 research framework was used, with two evaluators and 2 scripts. One script praised students and the other criticized them. In the case where students were given negative feedback, the female instructor was rated significantly lower than the male instructor. In another experiment, Kaschak (1978) used one female and one male in the script. In the second group, the scripts were reversed. The male students rated the female instructor lower.

Others studies indicate that factors unrelated to teaching quality affect the student evaluations. Rated more favorable were upper level courses, where presumably there is more interest in the subject, leniency in grading, and plagiarism is ignored (Fich, 2003).

The dismal record of student evaluations is attributed to a variety of causes (Trout, 2000):

A. The first is that they are essentially consumer satisfaction surveys, where numerical forms query the level of the students' happiness with the instructors personality, the course requirements and their own grade.

B. The surveys are invalid, statistically unreliable, and inaccurate measures (Scriven).

In a study by David Reynolds, (University of Windsor) Students rated a movie they had not seen as better than a lecture they had not heard. Both had been scheduled and then cancelled. They rated them in fact, as better than the ones they had seen and heard!
Stanfel found students contradicted themselves in a longitudinal study over the course of a term.

C. An experiment was set up wherein a professor gave the same course to two groups of students controlling for the demographic profiles. The only difference was stylistic presentation in which the professor was carefully schooled in oratorical skills. The students received the same fictitious content. The professor's evaluation score increases from 2.93 to 4.05, when using the superior oratorical skills and hand motions. This has been termed the "Dr Fox effect".

D. Alan Dershowitz of Harvard Law school fame encountered students who objected this lectures on the legal ramifications of rape. He was told by them to expect to be 'savaged' on his next evaluations. The students claimed he was "teaching his own views."

Hostile reactions such as these could indeed cost a junior faculty member his/her position. Fortunately Dershowitz had nothing to worry about!!

In a 2002 article, The new York Times says that Duke university reports more than 45% of its grades are A's. Duke conducted an online study of student evaluations with a sample size of 1900 and 38 items. Those expecting an A were 20 to 30% more likely to review favorably. After the course was over those who got lower grade that expected lowered their evaluation and those who got a higher grade than expected raised their rating in the longitudinal portion of the study. The same student rating the same instructors were less favorable to hard graders. Additionally, students were two times more likely to take a course from an instructor who gives mostly A's than one who gives mostly B's.

The conclusion here is that *departments* do not like low enrolled courses, specialized courses or hard graders. These can shift enrollments away from the sciences to the humanities. These lead to disproportionate allocations of resources, away from the sciences. Additionally, low grades are hard to justify to angry parents. Grade inflation distorts student and faculty assessment. It allows the student to manipulate the QPA and honors status through what courses they select. It rewards mediocrity and discourages excellence.

GRADE INFLATION

Grade inflations emanates from the notion of self esteem. Some feel that the purpose of education is to make students feel capable and empowered, anything less is cruel and dehumanizing (Mansfield, 2001). Above all, the student must not be allowed to feel "stupid" or unknowledgeable. Mansfield (Harvard) further suggests that we need the determination to put our standards first.

The practice of grade inflation compresses all grades at the top leaving no room to recognize excellence,. Professors begin their efforts with what students "expect" rather than with a finite point in the content. What results is that they lose their authority and morale. The question arises as to whether the students are smarter now. Apparently not according to their SAT's and subtract from that the 100 point adjustment that all students get, that their professors did not!

There is a current case in South Carolina, where two professors were fired because they refused to support the president's new policy of "Success equals Effort". He prescribed that 60 % of the grade should be for effort and $0% for knowledge. The two refused to go along. The *STATE* newspaper commented that the president..." means well putting effort ahead of academics, but the practice sets students up to fail in life. It might help freshmen and sophomores pass classes. But if they don't learn anything, the time is wasted. If students aren't challenged to gain knowledge, they won't learn and won't be prepared for the real world or a real job". The case is now before the AAUP, and the president claims 'misinterpretation'.

Grades motivate students to work hard (Birk, 2004). They no longer indicate the content mastered but rather that they tried hard. In short they have become a medium of exchange. Grade inflation masks the failure of the impoverished schools. The trouble with grades is that as students focus on getting good grades, their interest in learning *declines* They conclude that the point of school is to get A's. Blount blames extra credit assignments with the idea of improving their grades the goal.

The website www.gradeinflation.com carries the recent trends and statistics on the situation. The literature shows alarming trends, and those specific to grade inflation show composite trends at three different types of schools. The odd of this happening by chance are indeed small. Since about 1970 grades have increased by 15% a decade. using the least squares method. Some will say that the phenomenon of grade inflation in confined to selective and highly selective schools. The charts in this article suggest this is not correct. There links to 29 schools and their self reported data.

There is a correlation between high grades and high student evaluations. This correlation HAS NOW BEEN PROVEN. Moreover teachers teach to these evaluations for obvious reasons. In a Colloquy from the Chronicle of Higher Education claims it is not the Student Evaluations themselves but their USE by inept administrators to influence merit, tenure and promotion.

It all comes back to consumerism. A college who makes it its policy to provide A's on demand will soon see the perceived value of its degrees wither away.

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III. ONE SOLUTION

Patsy Ronald Tarullo

GRADE INFLATION

The dramatic changes that have taken place inside the university during the past two decades has changed the educational strategy of the entire field of education and has resulted in a major change in the structure and organization of the university itself. These changes were brought on by bringing the "corporate and business mentality" into the strategic planning and daily operations of the university. Many of these changes were motivated by a changing political climate that increasingly demanded that state-supported and nonprofit educational institutions "turn a profit in their operations."

This lack of public and private funding and the implementation of business strategies and operations inside our institutions of higher education has resulted in the recruitment of a new cadre of college and university leaders and administrators who are no longer sympathetic to many of the chronic problems that you and I have faced as university professors during the past three decades. This new group of Presidents and Deans are now demanding that we knuckle under to support them in supporting and maintaining the viability of the university, and this is causing dramatic new changes inside the university setting.

As these new business strategies, structures and operations are implemented inside the university, the basis and process of education as we know it is changing. Universities are now viewing students as consumers and the top managers leading and managing universities promote customer satisfaction by demanding that students receive higher grades regardless of merit (Bartlett, 2003). This approach appeases students, who want to be prepared to succeed brilliantly and economically in the real world of work, and it satisfies parents, who want to make sure that their substantial investment in education will be worthwhile. They want their child to be a stellar economic success (Sarel)!

Unfortunately, this new system of customer satisfaction has done little to satisfy either the needs of business or the university teaching staff. Grading standards all across the board in higher education are being lost, and, as a result, corporate leaders and managers are seeking new selection criteria in today's job market. In this environment, whether we like to admit it to ourselves or not, the teaching profession is increasingly losing its independence in establishing appropriate performance standards and this is having a negative effect on the tenure system within the university (Bartlett, 2003). Lastly, students themselves are losing their self-esteem, although they may not be willing to admit it, and they are also losing potentially the ability to obtain a quality education.

Under these new business strategies enshrined inside the university, class size is very important and full time equivalent students per class are counted meticulously by the leaders and managers of higher education. Many students now take 10 semesters to graduate, because many of the courses that they would like to take are not being offered. To the business oriented leaders and managers of the university, only the number of students per class and academic program size are the only thing that matters. Cost benefit analysis and cost cutting have resulted in growth in individual class size. Many academic programs are being cut and program content is suffering as a result of these pressures.

With students and parents now the recognized customers of the university and the leaders and managers of the university applying business strategies and techniques to the day-to-day teaching of courses---they have all become partners involved in setting performance standards within the university. Reacting to these pressures, professors no longer give any grade lower than a "B" because: (1) fewer students would sign up for their courses, (2) they are tired of dealing with angry parents, and (3) they want to avoid the constant wrangle with university leaders and managers who are applying the "bean counting mentality" to their work (Bartlett, 2003). Unfortunately, the university has been transformed into a new climate of furnishing remediation for students to maintain the numbers, and the point is that the numbers now appear to be more important then education.

In this new university environment, grade inflation is not without considerable cost. With grade inflation compressing all grades at the top, it becomes increasing difficult to separate the very good student from the average performer. Grades are increasingly becoming meaningless as an evaluation tool of student performance. Professors are increasingly feeling that they have lost control and authority over the process of evaluating student progress and performance, and many have merely given up and are now reacting to student, parent and university management expectations with the pro forma awarding of higher grades across the board (Bartlett, 2003).

Unfortunately, the new process of grade inflation has brought about another major change inside the university that should not be considered positive. Increasingly the inflationary trends in grading and the growing importance of students evaluations is now influencing the promotion and tenure decisions for professors (Bartlett, 2003). This has resulted in the loss of morale among university faculty, as well as among the better students who come to the university of obtain a quality education as preparation for a productive and successful life. Gifted students are now discouraged from giving their very best effort, because students that do half as much as they do now get the same grades. Students are discouraged from taking Science, Mathematics and Economics courses where the nature of the subject matter has held down grade inflation. In this environment, professors are not setting the standards of excellence that students must strive for. Instead, they are increasingly reacting to student, faculty and university leadership expectations, and they are compromising their integrity in the process.

Within this new era of business-based expectations, I wish to offer a possible solution to these strategies of business applications in education that limit the effectiveness of my teaching and that limit individual student performance (See Exhibit 1 The Contract). I have devised a contract that details both teacher and student expectations for an individual course. I use this contract approach to a Business and Society course, in an Ethics course, in all of my Case courses, and in my Small Business course.

At the very beginning of each course, I introduce this contract to my students and we mutually negotiate for the grade that they desire. The criteria and the standards that will be used in evaluating individual student progress and performance are prepared in writing and they include: (1) effective presentation, (2) critical thinking, (3) accuracy of information, (4) presenting the full picture, (5) demonstrating insight, (6) effectiveness in bringing together different points of view, (7) completeness, and (8) organization. All elements of the course and the evaluation standards are reviewed with the student. This approach even includes student panel presentations, term papers, examinations, case studies and individual student evaluations.

CONCLUSION

For faculty members who are caught in academic inflationary grade turmoil, especially young and non-tenured faculty, the student contract may offer a solution to your problem. This is a contract between you and each of your students, where you draw up the timelines and expectations, the performance standards for your course, and you get agreement and a commitment from each of your students, before the course begins. In this document and during your meetings you must carefully explain and quantify all of the components of your course. In other words, you need to take control of your course again.

I took three semesters to develop the contract that I just explained to you and ten years of refinements. I took notes through each term and incorporated changes in the contracts for my students during the next term. I added things that seemed to work and deleted others that did not. I followed this contract approach not to limit my teaching experience, but to expand it. I also did not want to inflate my student's expectations, but to create an opportunity that encouraged them to excel.

Many of my students have reacted positively to the contract, because they like knowing exactly where they are and what levels they must attain in order to earn the level of recognition that they desire. The contract enables the professor to control the tempo of the course. Students can elect their grade and are aware of the standards that they are required to achieve to earn that that grade. The pressure is on the student to perform. Standards must be clear and the elements of the contract must be enforced. I feel that through the use of this approach, I am able to explore avenues that I would not be able to explore under a conventional grading system. I am also able to change the focus of the course as the relationships between business and society change. I am able to let some of the student panels select new avenues to explore with out fear of negative feedback. I am pleased to say that each semester there is a cadre of students who take the contract and use it to distinguish themselves and reach for a higher grade an they normally would achieve. By letting them select topics that they are truly interested in, the resulting discussion become alive and learning does take place. It also allows students to select performance levels consistent with their outside obligations i.e., family and jobs. Using the student contract is rewarding to me as a university professor, because I know that I am following the basic tenants of liberal arts education, rather than following the siren song and the downward spiral that the enforced application of business principles are bringing to our institutions of higher education i.e., grade inflation. It is an viable alternative to traditional grading that has worked.

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PORTRAIT OF BUSINESS TECHNOLOGY IN A TYPICAL AMERICAN TOWN

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Kutztown University

ABSTRACT

Most business technology surveys are conducted by vendors who primarily have an interest in large companies (ie - Fortune 1000) to whom they can sell lucrative contracts. The reality is that the majority of employees in America work for smaller companies. There is a need for unbiased, non-vendor-supported research into which technologies American businesses are actually using today. This survey reports on the technology in use in a typical American town. These results are more relevant to students and prospective employees than what they typically might see in the business or industry press.

INTRODUCTION

There are plenty of marketing surveys of the type of technology in use in American Business today. Unfortunately, there are five flaws found in existing survey methods. The flaws lead to several errors that commonly produce biased and misleading results.

First, most research is sponsored, either directly or indirectly, by the vendors of the very technology that is being measured, so the sample populations tend to come from their prospective client bases. Therefore, the sample population often does not include companies who focus minimally on technology. The sample also tends to miss companies who do not have a dedicated CIO (Chief Information Office) or other senior decision-maker dedicated to managing technology within the company.

This particular problem became apparent to me in January of 2004 at an invitation-only conference of a well-known commercial research group. The presenter showed a graph entitled "LAN Speeds in Use" that seemed to show that the majority of American businesses use **Fast Ethernet**, or **Giga Ethernet** (over 90% of the 600 study subjects). Since my own experience was quite the opposite, I questioned their data. Upon further investigation, the presenter indicated that the sample came from a population of customers and potential customers of the vendor who sponsored the study (a Fast/Giga Ethernet Switch vendor). This is similar to asking people in a coffee shop if they drink coffee.

Second, the surveys tend to focus on an individual technology instead of combinations of technologies. As Michaels pointed out (2004), real technology must be addressed in combinations of multiple related technologies rather than separated and addressed one or two at a time. It would make no sense, for example, to survey primarily Windows Server users on their Oracle implementation or the amount of Open Source software they use. That would be similar to asking people in a health food store which fast food restaurants they frequent.

Third, even third party polls and studies conducted by "independent" publications and research groups are normally studies **of** technology **for** technologists **by** technologists. Choices of "none" or "manual process" are not usually included.

Fourth, most polls of this type are conducted electronically, which greatly eases the administrative headaches of conducting a survey (and is the major force behind the plethora of surveys available on technology use today). Unfortunately, using technology to survey the use of technology introduces an inherent bias - only the technically literate will respond. The non-technical folk are discouraged by the survey method, and as a result are not represented well in the population.

Finally, also because of the focus on the population of companies with dedicated CIOs, the data is biased towards larger companies. Dehning and Richardson, (2002) noted this problem in a widely publicized research synthesis. According to the Small Business Administration, the majority of businesses in this country are small businesses (less than 500 employees). According to Yegge (2001) 89% of those are very small, with 20 or fewer employees. Furthermore, the needs of small closely-held companies are not the same as those of larger public companies.

OBTAINING UNBIASED RESULTS

Despite (and perhaps because of) the proliferation of biased survey results, there is a paucity of unbiased survey results. There is a need to conduct general survey of the technology in use by businesses in a typically small American town with more typically small businesses using unbiased survey methods. This information is essential for educational and economic planning. Students preparing for employment and counties trying to attract businesses should be aware of actual technology use, not the tainted picture painted by the media. Additionally, many studies show that the level of technology use affects both the profitability of a company as well as its stock price (Dos Santos, et al. 1993; Brynjolfsson et al, 2000; Poston and Grabski, 2001)

To obtain a more accurate picture, this study needed to be conducted via mail and fax, both sufficiently ubiquitous that they would not introduce bias into the results due to electronic data gathering techniques.

SURVEY METHODS

We sent the survey (Appendix A) to 2300 businesses that are members of the Berks County Chamber of Commerce. Two hundred seventy three responses were received either via the fax or through the mail. The sample was confirmed to be a stratified sample from the four major size demographic groups (business size) of the Berks Chamber to ensure that all business sizes were represented.

DEMOGRAPHICS

The size of the responding companies can be found in Figure 1 & 2, revealing a relatively even split between tiny, small, and medium. The sample was representative of the companies that would belong to a Chamber of Commerce.

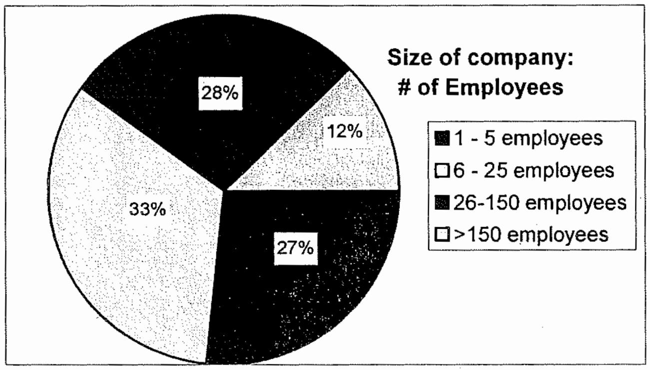

Figure 1. Size of Company by Number of Employees

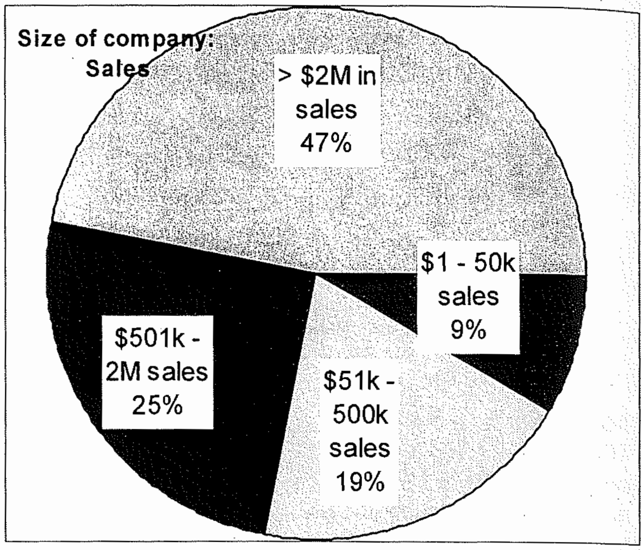

Figure 2. Size of Company: Sales

The population also tends toward local, rather than non-local clientele. In Figure 3, you see that less than a quarter sell outside of the state region.

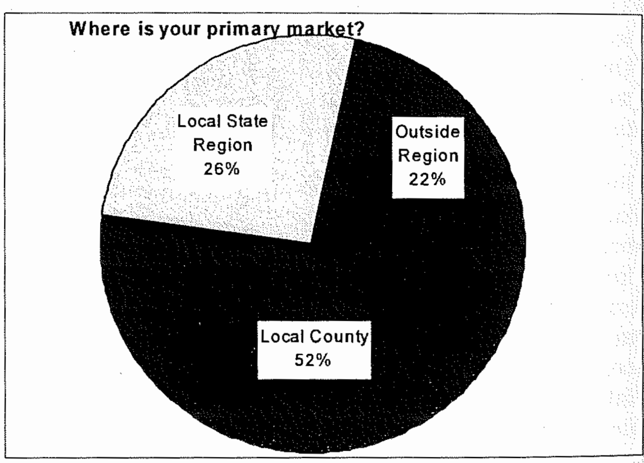

Figure 3. Primary Market

RESULTS

The first question dealt with email. Over 93% of the responding companies had some kind of internet email, but not all of them had everyone on email, as can be seen in Figure 4.

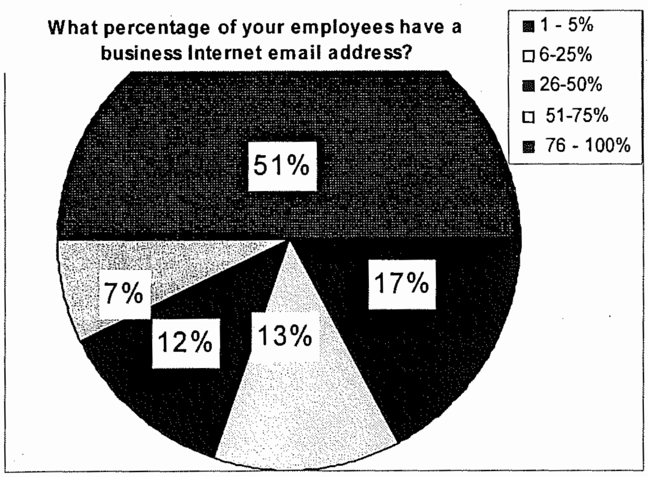

Figure 4. Percentage of Employees with Email

Spam (unsolicited bulk email) is becoming a problem - though most companies are dealing with it so that end users don't necessarily have to complain. According to the results shown in Figure 5, 57% of businesses spent time and money filtering out spam for their employees.

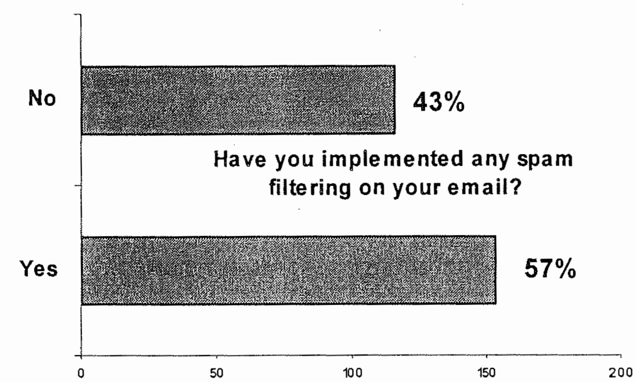

Figure 5. Have You Implemented Email Filtering?

As can be seen in the graph in Figure 6, only 38% of employees complained about spam.

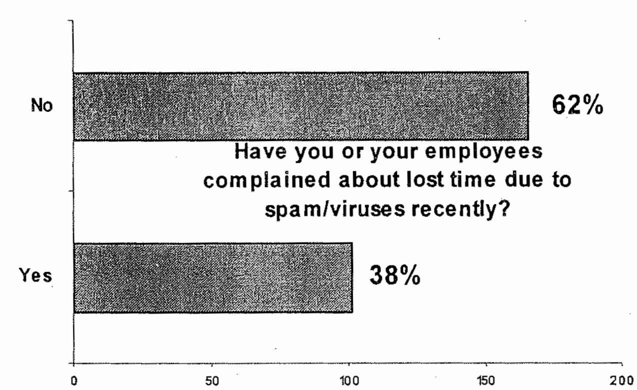

Figure 6. Employee Complaints of Spam

As shown in Figure 7, those who don't filter can expect to see a significant portion of their inbox filled with spam.

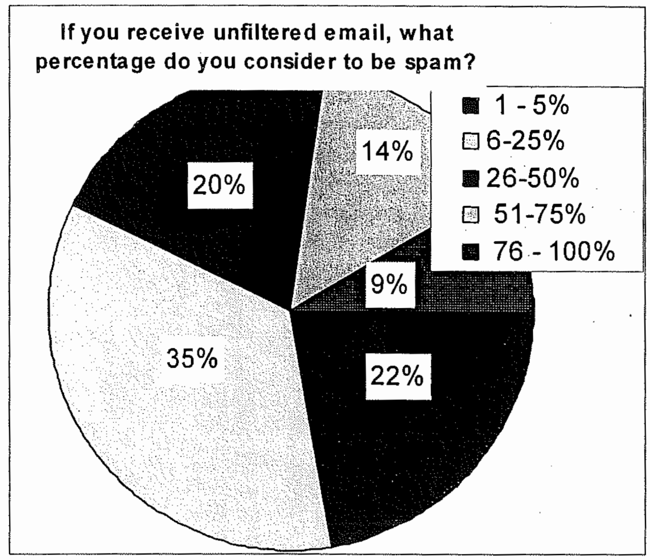

Figure 7. Percentage of Email that is Spam

The number of domain names registered haven't changed within the last year as can be seen in Figure 8. Obviously, those companies who could benefit from a web page already had one.

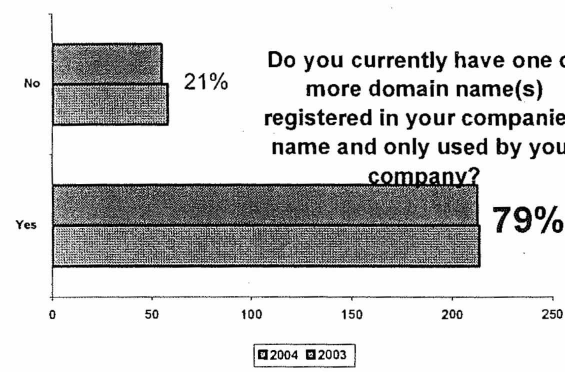

Figure 8. Domain Name and Web sites

Not surprisingly given the lack of attention to e-commerce recently, the number of companies who were planning to actually implement sales transactions on their web sites has declined (Figure 9). Additionally, last year almost half of the companies said they were already doing e-commerce. This year less than a quarter answered similarly. This may be attributed to a slight wording difference. Last year, if a company sold goods on a "third party site" like Amazon.com, it was considered e-commerce. This year we specified "your" web site in the survey.

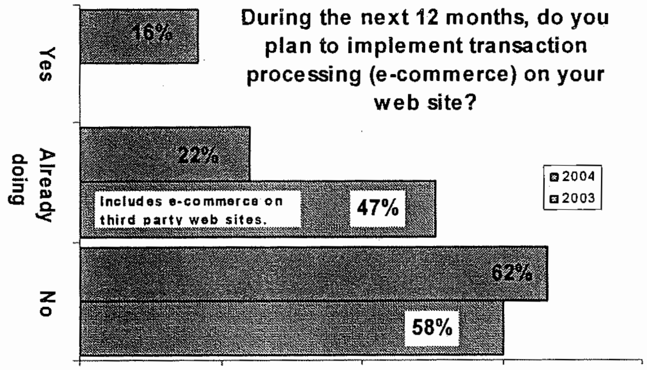

Figure 9. E-commerce on Web site?

Of those companies who had a web site, they tended toward in-house or local developer as shown in Figure 10. Less than 15% chose a web developer outside of the local region.

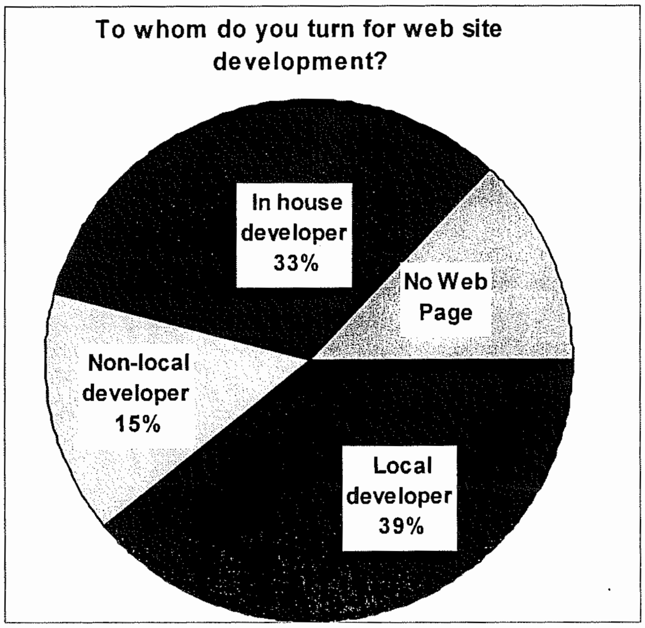

Figure 10. Web site Development

The majority of businesses in the sample group are still using either leased line (which included frame-relay) and dialup (plain old telephone) connections to the Internet as can be seen in Figure 11. However, in last year's survey a tiny percentage were on DSL or Cable (ie - broadband connections) and now 38% of the businesses are using broadband. You will note that in Figure 12, however, less than a quarter of the businesses plan on changing this year, which indicates that about half of those who were going to get broadband went ahead and did so. Last year 50% of the businesses planned on increasing their connectivity to the Internet.

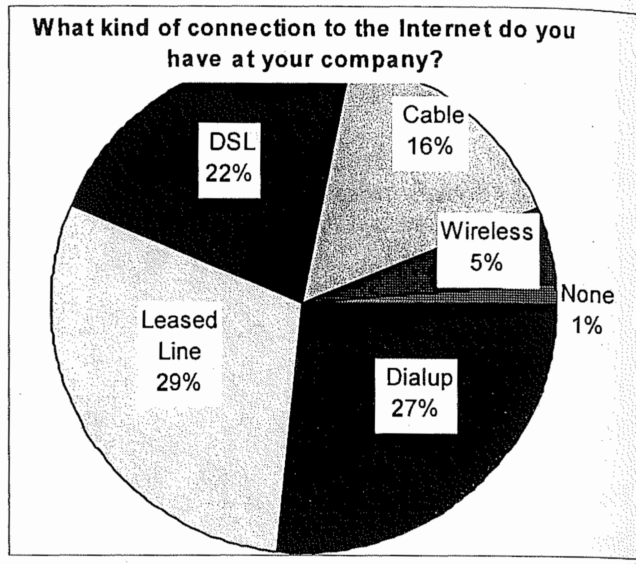

Figure 11. Type of Internet Connection

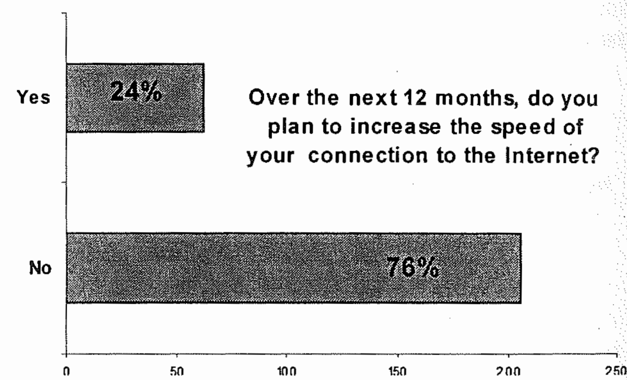

Figure 12. Plans for Increasing Bandwidth to Internet

Figure 13 shows the operating systems in use. As expected, the majority of businesses are using one of the newest Windows operating system on their desktop. A surprising 27%, however, are still using Windows operating systems that are no longer "supported" by Microsoft. A distant third place goes to Macintosh, which is staying surprisingly resilient. In 2003, Macintosh Operating System was not given as a choice, and it still got third place through a "write in" vote. Linux, Unix, and Minicomputer operating systems are vying for the remaining share and are divided equally.

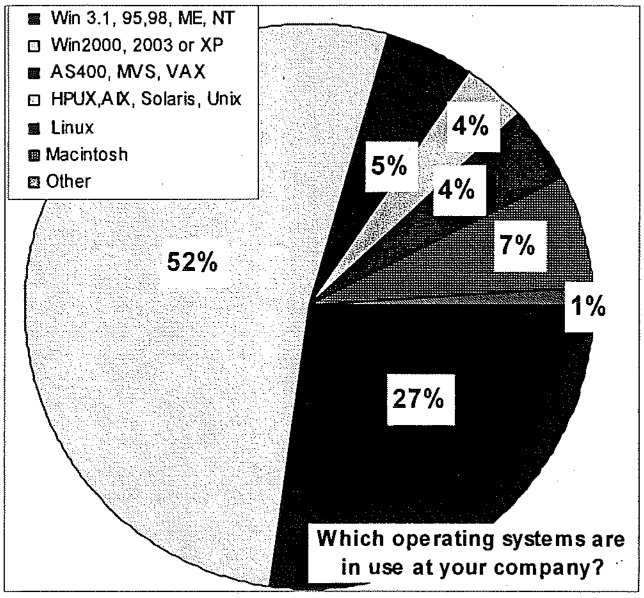

Figure 13. Operating Systems In Use.

One of the most interesting questions in this day and age of complexity is to whom the typical decision maker turns for information on technology. Figure 14 shows the sources of information used by decision makers. Last year, multiple answers were encouraged, so Publication and the Web, Vendors, and Local Consulting firms received a high percentage of responses. This year, the question encouraged single answers (ie - "most trusted source") and the answers put Local Consulting Firms at the top of the list with Vendors and Publications behind it. For the first time we also saw the impact of Family and Friends, which took a remarkable 10%. Suspicion of expensive advice is reflected in the poor showing two years in a row for top consulting companies. Despite their reputation, less than 6% identified them as the most trusted source.

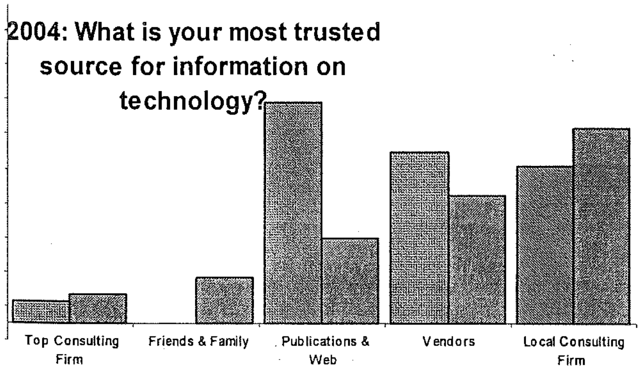

Figure 14. Trusted Source for Information on Technology

One of the most interesting surprises turned out to be the question designed to identify who the top decision maker was when it came to technology decisions (Figure 15). The expectation was that the CIO (Chief Information Officer) or IT (Information Technology) Director would have the lion's share of the decision making responsibility for technology decisions. Our findings indicate that, much like all other major decisions, the CEO, Executive Director, or President makes the final decision rather than the IT person. Less than a quarter of the IT people makes the technology decisions.

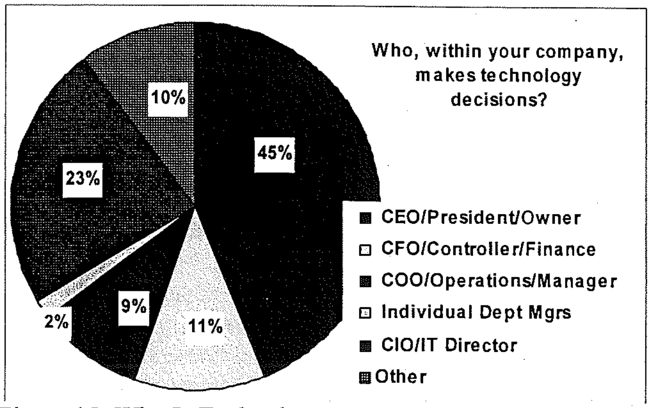

Figure 15. Who Is Technology Decisionmaker

One outstandingly clear perception came across: despite all its problems, technology brought value to those who implemented it as shown in Figure 16. Early research, often called the "Productivity Paradox" as described by Brynfjolfsson (1993) showed that implementing technology did not bring hard-dollar improvement to the bottom line in companies implementing it. The reality in the field, however, is that 97% of the companies that implemented technology thought that it had brought them value - 68% of them saying "much value". This result was not limited to soft dollars or fuzzy perceptions, however. The same 97%, (shown in Figure 17) had reported a positive Return On Investment from their technology projects.

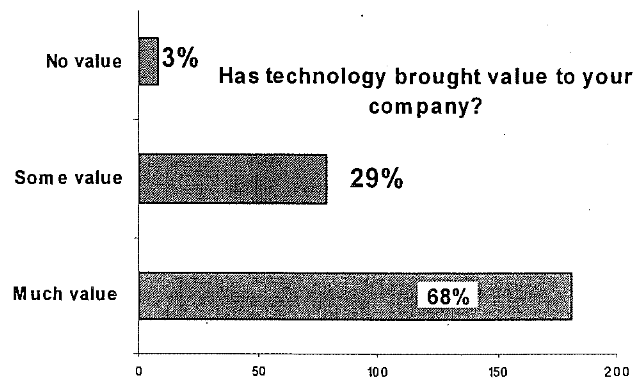

Figure 16. Perception of Value

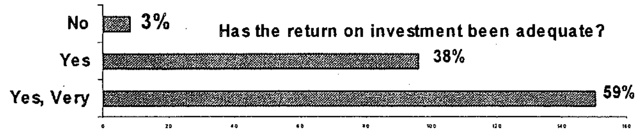

Figure 17. Return on Investment

SUMMARY

This survey has already been useful to economic planners as it was used as the basis for need in a grant to the Reading Community Foundation to increase the infrastructure choices for internet connectivity in downtown Reading. It can also be useful to local colleges and universities in planning their education so that curriculum of business and technology students matches the needs of the more typical businesses at which students would eventually be employed.

Though useful, this survey provides descriptive statistics only, and is the first step in trying to determine if there is, indeed, a difference between the "perceived" level of technology use presented by the media and the "actual" level of technology use presented in unbiased surveys of this type. Future investigations will compare the results found here to technology use found by reviewing the media published surveys and polls.

Another potential use for the survey is to dig deeper into one of the questions. For example - the response to the question of *Who makes the technology decisions?* was a surprise. Further investigation can compare the factors of technology decisions to the decision making factors of consumer goods such as those studied by Hibbs and Sraiheen (2001).

In any case, accurate reflections of technology use in businesses today will enable better planning and decision-making by those who must implement and accommodate new technologies.

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Appendix A
Berks County Chamber of Commerce 2004 Technology Survey

Please fill out and fax back to 610-376-4135, or mail to Suite 101, 601 Penn Street, Reading PA 19601 by January 20, 2004

Size of Company (Sales and # of Employees)

1. ❑ 1 - 5 employees ❑ 6-25 employees ❑ 26-150 employees ❑ >150 employees
2. ❑ $1 - 50k sales ❑ $51k-500k sales ❑ $501k-2M sales ❑ >$2M sales
3. Where is your primary market? ❑ Berks County ❑ Southeastern PA ❑ Outside Region
4. What percentage of your employees have a business Internet email address?
   ❑ 1 - 5% ❑ 6-25% ❑ 26-50% ❑ 51-75% ❑ 76 - 100%
5. Do you currently have one or more domain name(s) registered in your companies' name and only used by your company? ❑ Yes ❑ No
6. During the next 12 months, do you plan to implement transaction processing (e-commerce) on your web site? ❑ Yes ❑ No ❑ Already doing
7. To whom do you turn for web site development?
   ❑ Local developer ❑ Non-local developer ❑ In house developer ❑ No web page
8. What kind of connection to the Internet do you have at your company?
   ❑ Dialup ❑ T-1 (full, fractional, frame relay) ❑ DSL ❑ Cable (i.e. - Comcast) ❑ None ❑ Wireless (Satellite)
9. Over the next 12 months, do you plan to increase the speed of your internet connection to the Internet? ❑ Yes ❑ No
10. Have you implemented any spam filtering on your email? ❑ Yes ❑ No
11. If you receive unfiltered email, what percentage do you consider to be spam? (spam is unwanted bulk email)
    ❑ 1 - 5% ❑ 6-25% ❑ 26-50% ❑ 51-75% ❑ 76 - 100%
12. Have you or your employees complained about lost time due to spam/viruses recently? ❑ Yes ❑ No
13. Which operating systems are in use at your company?
    ❑ Win 3.1, 95,98, ME, NT ❑ Win2000, 2003 or XP ❑ AS400, MVS, VAX
    ❑ HPUX,AIX, Solaris, Unix ❑ Linux ❑ Macintosh ❑ Other________________
14. What is your <u>most</u> trusted source for information on technology?
    ❑ Top Consulting Firm (Gartner, Giga, Meta, Forest, other) ❑ Friends & Family ❑ Publications & Web
    ❑ Vendors (Microsoft,Oracle,CompUSA,Staples,Dell,Gateway,etc.) ❑ Local Consulting Firm
15. Who, within your company, makes technology decisions?
    ❑ CEO/President/Owner ❑ CFO/Controller/Finance VP ❑ COO/Operations/Manager
    ❑ Individual Dept Mgrs ❑ CIO/IT Director/ IT Manager* ❑ Other________________________________

*IT stands for Information Technology. May also be DP (Data processing), EDP (Electronic Data Processing), or IS (Information Systems)

16. Has technology brought value to your company? ❑ Much value ❑ Some value ❑ No value
17. Has the return on investment been adequate? ❑ More than adequate ❑ Just adequate ❑ Not adequate

Company Name ____

Company Web page URL: ____

Contact Person (optional) __________________________ Phone ______________

Email __________________________________

Please be assured that only aggregate results of the survey will be available. Your name, number, and email address will be separated from the results, and shall remain confidential. This information will not be used for soliciting or promotional purposes. Individual information will not be released by the survey compilers to anyone under any circumstances.

A PILOT EXAMINATION OF CUSTOMER SATISFACTION: IMPLICATIONS FOR CREDIT UNION PRODUCT/SERVICE STRATEGY

Kevin J. Roth
Clarion University

ABSTRACT

Achieving customer satisfaction has long been a primary objective for firms trying to create a differential advantage in the marketplace. Customer satisfaction has been measured through many different approaches and in a host of different industry settings. This research represents a pilot examination of customer satisfaction in the Financial Services sector. In particular, the research focuses on developing measures of customer satisfaction in a Federal Credit Union. Results will be used to assist credit union management in the planning and design of product offering and overall service strategy.

INTRODUCTION

Changes in the make up and composition of the market structure for Financial Services have caused many firms to adjust both short and long term strategies to remain competitive. Consistent public policy changes have forced firms in this industry to adjust their strategic direction. Credit Unions, which serve as one of a variety of players in this industry, have been particularly impacted by these structural and policy changes. Competitive modifications to product and service offerings, expanded and enhanced technology, government regulation, etc. have forced many organizations to completely re-vamp their positions in attempts to create competitive advantage in their respective marketplaces.

While extensive research exists on customer satisfaction in general and the financial services sector in particular, very little emphasis has been placed on the application of satisfaction research to credit unions. This might be explained by the more recent growth and resulting influence credit unions have had on this economic sector of society. Evidence of this is provided by Ferguson and McKillop (2000) who deal with classifying credit union development in terms of industry types. The authors identify the effect of deregulation in 1977 resulting in the introduction of a less restrictive interpretation of common bond requirement for membership, liberalization of the product/service offering and "professionalization" of management. According to the authors, during the decade of 1983 to1993, credit union membership experienced growth of 34%, total assets grew at a rate of 270%, the number of credit unions decreased by 32% due to consolidation, and 25% of the population are now members of a credit union. The purpose of this study is to begin to bridge this gap in research by placing an emphasis on customer satisfaction and its usefulness to the credit union sector.

The specific credit union in this study traces its history to a charter date of 1965. This particular organization is based on a University affiliation with members largely consisting of faculty and staff under direct employment by the University. Since 1990, the Credit Union has experienced consistent growth in terms of both assets and members (Appendix – A). Recent strategic changes have included the move to a new location with comprehensive new facilities and systems. In addition, the organization has expanded the field of membership to include students. It is expected that a penetration of this market over the next three years will lead to a forty percent growth in overall membership.

Literature Review

The literature in this research domain stems from past studies and insights from the consumer behavior/marketing discipline, behavior related to the broad services sector of the economy including banking and financial services, and research more specifically on credit unions. Each stream offers significant contributions to the current conceptual framework of consumer satisfaction and empirical insights regarding its role in organizational service strategy.

Much of the current work in customer satisfaction stems from the widely accepted "expectancy confirmation model" proposed by Oliver (1980). In this approach, expectations and disconfirmation are considered to be the primary antecedents of satisfaction. Extensions to this perspective highlight disconfirmation as the variable providing the majority of the influence on satisfaction Oliver

(1993). Further examination of satisfaction by Johnson and Fornell (1991) suggests that perceived performance plays a primary role in predicting satisfaction levels. In terms of the broader customer service concept, Zeithaml et al (1988) focus on service quality in their analysis as well as the role played by communication and control processes within the organization. This "Conceptual Model of Service Quality" has served as a primary foundation for continued work on the service aspects of customer satisfaction.

In terms of customer satisfaction, the financial services segment has recently seen increased attention and study. For example, Van Montfort et al (2000) apply the widely accepted expectancy-disconfirmation model identified above to situations within the financial services sector. According to Van Montfort et al, "The primary predictive element of consumer satisfaction is performance." Performance is seen as having a direct effect on satisfaction but no indirect effect through disconfirmation. Results suggest that customer satisfaction can be predicted by performance extremely well. In a similar vein, Krishnan et al (1999) examines customer satisfaction for financial services with an emphasis of determining the primary drivers of customer satisfaction. In this research, the quality of the customer interface is shown to positively influence service quality. The primary drivers of customer satisfaction in this study include satisfaction with product offerings, satisfaction with service delivery, and financial reporting.

Methodology

This paper is based on survey research as the main methodological approach. A questionnaire was developed and administered using primarily closed ended questions in a Likert-Type format (Appendix – B). Questions were developed based on discussions with practicing managers in the industry as well as relevant measurement variables derived from the literature. The questionnaire included various demographic descriptors, measures of satisfaction, product/service usage, and overall customer expectations. The survey was administered to three hundred randomly selected customers of a Federal Credit Union. This number represents approximately twenty five percent of the total customers (members) in this organization. The survey was administered via mail and included input from customers conducting business at the branch facility. The resulting sample consisted of 152 completed surveys based on a total membership of 1509. This represented a response rate of 50.66% or slightly more than 10% of the total population of members at the time of the survey.

The data was subject for this paper to preliminary analysis using descriptive statistics in order to gain familiarity and begin to examine observable relationships. Additional, more detailed analysis is anticipated beyond the scope intent of this initial study.

Implications

Initially, the descriptive statistical results of the study will be assessed, organized and presented to credit union management to better understand customer perceptions on product/service usage and overall satisfaction levels. The data stemming from the research should also provide a wealth of primary data for examining demographic composition, satisfaction levels and corresponding product/service strategy for this type of operation. These preliminary results should provide useful in extending the knowledge base of financial service strategy in general and assist in developing alternatives for creating credit union product/service strategy and competitive advantage in particular. Results will be targeting for presentation to relevant local institutions and members involved in the planning process for the credit union.

For preliminary analysis, the sample was split in two groups reflecting high and low levels of satisfaction. Comparisons of the data suggest that there are key differences among several of the demographic variables. While results show generally high levels of satisfaction, this level appears to vary across the demographic variables such as age, tenure as a credit union member, and patronage frequency. Managerial implications stemming from this are for the need to consider segmenting customers to allow for more targeted product/service design and a tailoring of other market mix considerations. Satisfaction levels do not appear to vary based on gender.

In terms of the individual measures of satisfaction, facility accessibility is identified as a primary concern among patrons and an area where high levels of dissatisfaction are found. A long term plan directly related to site location appears to be warranted. This consideration should include an assessment of the role of electronic banking and its relation to location considerations accented by patrons in several areas of the study. Electronic banking appears to be intertwined with customer reach and additional location considerations. There is also evidence of interest in expanded product offering that is particular to specific segments of the existing customer base. Extremely high levels of satisfaction are evident in the area of personnel and interaction with customers.

Limitations and Future Directions

Due to the growth and changing composition of credit union membership in this research, management should place a continued emphasis on the study of forces impacting customer satisfaction. While results show general satisfaction, dissatisfaction with individual measures suggest a need for market mix modification as well as identifiable opportunities for improvement.

This research effort represents a single credit union thus making generalization to other credit unions and financial service firms risky. Expanded analysis is necessary to more fully understand the underlying influences on satisfaction as it relates to the broader industry. Expanding the study to include a wider scope in terms credit union size and geographic location would move the applicability beyond organization specific strategy to industry level analysis and recommendations. Examining differences in variables such as life cycle stage, peer group association, and geographic location could offer richer and more meaningful information applicable to the broader credit union sector of financial services industry.

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APPENDIX – A
CREDIT UNION ATTRIBUTES

Charter Date – 1965
Nine Member Board of Directors
Industry Peer Group Categories and Association

- $0 – $2,000,000
- $2,000,000 – $10,000,000***
- $10,000,000 – $50,000,000
- $50,000,000 – $100,000,000
- $100,000,000 plus

Date	Assets	Asset Growth	Members	Member Growth
12/31/80	$325,594	n/a	404	n/a
1/31/86	$1,011,056	3.11	530	1.31
5/31/90	$2,014,959	1.99	854	1.61
1/31/93	$3,012,492	1.50	987	1.16
1/31/00	$4,053,600	1.35	1,187	1.20
4/30/02	$5,004,182	1.23	1,265	1.07
5/31/03	$6,027,107	1.20	1,284	1.02
5/20/04	$6,190,996	1.03	1,509	1.18

APPENDIX – B
SURVEY INSTRUMENT

1. Gender

   Male
   Female

2. Age

   15-18
   19-25
   26-35
   36-50
   51-60
   61>

3. Tenure – How long have you been a member of the Clarion University FCU?
   Less than 12 months
   1-5 years
   6-10 years
   More than10 years

4. Affiliation – Which membership group are you affiliated with?
   CUP Staff
   CUP Administrator
   CUP Faculty
   Student
   Family Membership
   Other

5. Mail – Do you conduct Credit Union business in person or via the mail?
   By mail
   In person

6. Patronage - How often do you conduct credit union business?
   Several times a week
   Once a week – twice monthly
   Once a month – less than once a month

Please check the services that you have utilized at the Credit Union

7. ATM
8. CD's
9. Club account
10. Debit Cards
11. Direct Deposit
12. IRA's
13. Auto loans
14. Other loans
15. Money order
16. PHEAA loans
17. Payroll Deduction
18. Savings
19. Theme park discount coupons

20. Travelers Checks
21. Wire Service
22. Western Union

23. Products – Total number of products used.

24. Hours1 - Are our business hours convenient for you?
    Yes (4)
    No (2)

If no, which hours are most convenient?

25. Hours - Monday – Thursday 8:30 a.m. – 3:30 p.m.
    Monday – Thursday 8:30 a.m. – 4:30 p.m.

26. Hours - Friday 8:30 a.m. – 5:00 p.m.
    Friday 9:00 a.m. – 5:30 p.m.

Please rate your credit union on the following:
Excellent
Good
Fair
Poor

27. Adequate waiting area
28. Location/accessibility
29. Privacy
30. Parking
31. Staff Courtesy
32. Overall Service

Please check the services you would use if available at your credit union.

33. Credit Cards
34. Electronic bill pay
35. Automated Teller Machine
36. Mortgages
37. Drive through window
38. Home equity loans
39. Home banking
40. Expanded hours

41. Do you read the Credit Union Newsletter sent to you?
    Yes
    No

42. Satisfy - Overall level of customer satisfaction measured by summing the scores from questions number 24, 27, 28, 29, 30, 31, 32

POWER, ETHICS AND LEADERSHIP: THE ROLE MODELING, AND EXPERIENTIAL LEARNING, OF MORAL LEADERSHIP

John Ryan
King's College

ABSTRACT

This article examines the relationship between power, leadership, and ethics from an organizational theory perspective. The organizational theory literature defines leadership as influencing employees to pursue organizational goals. This definition implies the use of power that benefits someone or something other than the leader herself (i.e., the use of socialized power). The authors argue that this understanding of leadership, based on organizational theory, is consistent with both stockholder and stakeholder frameworks of utilitarian ethical theory. Additionally, the Ohio State model of leadership is examined and proposed as an application of leadership consistent with the use of socialized power and moral leadership. The authors discuss an in-class exercise, the Prisoners Dilemma, for helping students experientially understand the consideration dimension of the Ohio State model of leadership and present a short survey to help teachers model, and assess, their leadership style (Are faculty who teach leadership ethical themselves?).

INTRODUCTION

"Influencing employees to pursue organizational goals" (Kreitner & Kinicki, 2004, p. 595) is a common definition of leadership among contemporary textbooks of organizational behavior (Hellriegel & Slocum, 2004; Dradt & Doe, 2001). This definition assumes leaders have sufficient power to influence others. Power is a necessary, but not sufficient, component of leadership. Behavioral scientists (Chusmir, 1986) distinguish between power directed at helping other people (socialized power) and power directed at helping oneself (personalized power). The former power qualifies as leadership, while the latter does not. The distinction between socialized and personalized power helps explain public dismay towards business executives who exercised personalized power (not leadership) in the current rash of business scandals (e.g., Enron, WorldCom, Arthur Andersen, Tyco, Global Crossing, Martha Stewart). These executives appeared to be concerned with their own interests (i.e., use of personalized power) to the determent of the interests of stockholders, employees, suppliers, customers, and creditors (i.e., use of socialized power). The exclusive use of personalized power is inconsistent with the definition of leadership and both stockholder and stakeholder frameworks of corporate social responsibility.

This paper examines personalized and socialized power and their relationship to leadership and the stockholder and stakeholder frameworks of corporate social responsibility. The Ohio State model of leadership, specifically the consideration dimension of that model (e.g., creating mutual respect and trust with followers), is suggested as a useful model of applied socialized power. The author discusses an in-class exercise, the Prisoners Dilemma, for helping students experientially appreciate the consideration dimension of leadership and presents teacher modeling, including a short student evaluation survey, as a tool to help teachers assess their leadership style (Are faculty who teach ethics leaders themselves?).

POWER, LEADERSHIP AND ETHICS

Power

The greater the leaders' power over people and resources, the greater their influence. Warren Buffett, investor and second-richest man in the world, remarked to a journalist upon being named Fortune Magazine's most powerful person in business: "It really means that if I do something dumb, I can do it on a very big scale" (Serwer, 2003, p. 61). In Warren Buffett's case, power is not confined to his financial decisions. For example, just days before the U.S. Congress voted on President Bush's tax proposal, Warren Buffett wrote an op-ed piece in the *Washington Post* arguing the inappropriateness of eliminating taxes on dividends (which would have been a great benefit to him personally). Many observers believe his comments were sufficient to influence members of congress to water down the final version of the tax cut. Warren Buffett's influencing tactic not only demonstrated his considerable power, but also the second necessary condition to qualify as a leader: power must be directed towards others and not solely for personal gain. Individuals who have, and exercise, power exclusively for their own goals would by definition not be called leaders. The important, though often overlooked, perspective of leadership from an organizational theory perspective is: All leaders have power, but not all people that have power are leaders.

An organizational theory understanding of leadership, influencing employees to pursue organizational goals, assumes leaders have sufficient power to influence others. Leadership implies an unequal distribution of power between leaders and those they influence. In their pioneering research, French and Raven (1959) identified five sources of leadership power: 1) Rewards power (e.g., pay, promotions, job assignments), 2) Coercive power (e.g., reprimand, loss of pay, layoffs, dismissals, demotions); 3) Legitimate power (i.e., occupation of legitimate position of authority, 4) Referent power (e.g., attractiveness, charisma), and 5) Expert power (e.g., expertise, knowledge, talent). These sources of power represent influencing potential but not the object or purpose of power. Chusmir (1986) provides a theory for distinguishing between power directed at helping other people (socialized power) and power directed at helping oneself (personalized power). The former power qualifies as leadership, while the latter does not.

Leadership

Prior to World War II the prevailing belief was leaders were born, not made. It was thought the physical or personality characteristics of individuals could be used to distinguish leaders from followers. For example, it was believed leaders were: taller than average, intelligent, self-confident, assertive, and had high levels of energy. This model of leadership was known as the trait theory. However, although leaders did indeed often have these traits, so did million of other individuals who were not leaders. The trait theory failed to be able to predict leadership ability. During World War II researchers at Ohio State University began to focus on leaders behaviors rather than traits. This stream of research generated as many as 1,800 statements describing leadership. Ultimately only two independent dimensions of leadership emerged: Consideration, creating mutual respect and trust within followers; and initiating structure, organizing and defining what employees should be doing. Subsequent theories of leadership have emerged (e.g., transactional leadership, charismatic leadership, and situational leadership theory). While an entire review of the leadership literature is beyond the scope of this paper it should be noted that the oldest and most widely known models of situational leadership, Fiedler's Contingency Model (Fiedler, 1964), has a leader-member relations dimension similar to the consideration dimension of the Ohio State Model. The leader-member relations dimension measures the extent to which leaders have the support, loyalty, and trust of the work group and is considered the most important component dimension of Fiedler's Contingency Model.

Creating mutual respect and trust with followers is opposed to exclusive managerial self-interest and Machiavellian behaviors and is representative of socialized power. Since by definition leadership cannot be directed solely towards the leaders self-interest, and must be other oriented, the development of an appreciation for and consideration of others by the leader is of fundamental importance for moral leadership training.

Ethics

The classical model of corporate social responsibility (Friedman, 1962) posits the duty of business leaders is to make as much money for their stockholders as possible while staying within the laws of society. The ethical defense of this position rests in part on a utilitarian ethical argument of maximizing overall happiness. The question of what constitutes happiness is decided by individual consumer choice. The priority of business leaders is to maximize profits by providing what consumers want (e.g., product, price, quality) and therefore maximize overall consumer preferences (i.e., proxy for overall happiness). Leaders under this model of social responsibility act primarily for stockholder interests and maximize consumer happiness by the efficient and effective utilization of scarce resources directed towards consumer preference. The stakeholder theory of corporate social responsibility (Evan & Freeman, 2000) differs from the stockholder theory in the answer to the following questions: "For whose benefit and at what cost costs should the business be managed?" (DesJardins, 2003, p. 57). The stakeholder perspective answer to this question is: any group having a vital interest in the survival and success of the firm (e.g., employees, consumers, debtors, suppliers, citizens, stockholder, etc.). For the stockholder perspective, the overriding interest is exclusively the stockholder. It is not the purpose to debate the relative merits of either perspective but simply to note that neither perspective supports the primary or exclusive interests of leaders (managers) over other constituents. Leadership or managerial power not directed towards organizational or stakeholder goals is not supported by either the classical model of corporate social responsibility or stakeholder theory.

Role Modeling

One review of the literature on role modeling (Moberg, 2000), concludes that behavior is "taught best not by employees being systematically rewarded or punished but instead by the experience of observing others (i.e., role models) who profoundly demonstrate excellence of character" (p.675). One application of this insight might be leadership role modeling by college professors. Teachers convey lessons not only in what they say but also in how they communicate and interact with students. For example, in one study of pedagogies that discourage cheating among college students (Busby, Sorenson & Anderson, 2004) the authors note "those who have studied cheating in the Higher Education community identify business-major students as the group most likely to cheat and report *that instructors of business subjects have been found to condone cheating*" (emphasis added, p. 19). In this particular study role modeling by business instructors appear to be related to higher incidents of cheating among business students. One possible explanation of the above findings is perhaps business students and instructors are more likely to have adapted what Albert Carr (1968), in an essay comparing business practice to the game of poker, argues are acceptable strategies within business:

> Poker's own brand of ethics is different from the ethical ideals of civilized human relationships. The game calls for distrust of the other fellow. Cunning, deception and concealment of one's strength and intentions, not kindness and openheartedness, are vital in poker.....no one should think any worse of the game of business because its standards of right and wrong differ from prevailing traditions of morality in our society (p. 9).

The Association to Advance Collegiate Schools of Business (AACSB) report "Ethics Education in Business Schools" (2004) makes special note of the importance of developing ethical leadership and the responsible use of socialized power in business school curriculum:

> We must ground students in the duties and rewards of stewardship, including the concerns of multiple stockholders and the responsibility use of power (p.17).

> A society where those holding power are neither moral nor accountable creates a state where the strong do what they will and the weak what they must (p10).

> Leaders demonstrate ethical leadership through being open, fair, trustworthy, and caring with employees ....by role modeling ethical conduct (p. 11).

The above AACSB report notes the need of responsible use of socialized power, proper role modeling and being open, trustworthy and caring with employees (i.e., the consideration leadership dimension) as important aspects of moral leadership.

Angelo Kinicki and Chest Schriesheim (1978) have utilized the consideration dimension of the Ohio State Model of leadership in proposing a measure for teacher leadership. This instrument is presented in Table 1 and is suggested as a pedagogical exercise for assessing teacher leadership style.

Teacher behaviors that are thoughtful of, and look out for, student welfare and needs are emphasized. Teachers instruct by role modeling as well as providing and managing subject content. Leadership role modeling that is student centered provides example of interpersonal relationships that respect the dignity and autonomy of individuals. This paper suggests that Kinicki and Schriesheim's leadership assessment exercise might be expanded for a greater range of role modeling behaviors. For example, the project for "global leadership and organizational behavior (GLOBE)", an ongoing empirically based theory to describe leadership involving a network of more than 150 scholars from 62 countries (House, Javidan, Hanges & Dorfman, 2002) has identified a number of leadership behaviors that are admired across various cultures. Table 2 lists five leader behaviors that are both universally liked as well as universally disliked.

Four of the five universally liked behaviors are other oriented behaviors that appear to fit the consideration dimension of leadership (and socialized power) while the universally disliked behaviors are generally self-centered (personalized power). One possibility for assessing teacher leadership in the classroom might be to expand the Kinicki and Schriesheim measurement to include positive leadership items of trustworthy, encouraging, motivational, and dependable as well as the negative leadership items (reverse coded) of irritable, non-cooperative, self-centered and ruthless. An empirical research study could be conducted combining the above two scales to produce a single instructor-student leadership evaluation instrument for course evaluation:

> **Proposition 1:** A combined Kinicki & Schriesheim and GLOBE item scale will constitute a single instructor leadership assessment factor that will discriminate from other student-instructor evaluation factors.

Experiential Learning

The disciplines of economics (Wernerfelt, 1988), science (Dugatkin, 1991), psychology (Komorita & Hilty, 1991), and sociology (Raub & Wessie, 1990) have explored cooperative behavior through Game Theory Models; the most popular being The Prisoner's Dilemma. The Prisoner's dilemma presents a basic scenario where two players have two choices: to cooperate and trust each other or to act opportunistically. If the game is played only once there is an incentive for the players to act opportunistically. As the game is repeated, more cooperative strategies emerge. For example, the "tit-for-tat" strategy is a well-known solution to the iterated Prisoner's Dilemma (Axelrod, 1980). This strategy is: (a) "nice" in that it cooperates on the first move of the game; (b) is retaliatory in that it matches opportunistic moves in kind; and (c) is forgiving in that it cooperates with repentant opportunists. The implications of this game theory literature suggest that cooperative strategies are rational because all parties achieve mutual gains through cooperative, and trusting, relations. Cooperative strategies are instrumentally effective in achieving superior results to all parties. Reputations play an important part in determining the willingness of others to enter into an exchange with a given party. Economic actors will avoid entering into an exchange with other actors who have a reputation for opportunistic behavior. Additionally, if one party is the victim of opportunism it is reasonable to suspect they will retaliate in any number of ways (e.g., withhold organizational citizenship type behaviors). Two studies, Anchor & Cross (1974) and Jacobs (1975), found significant relationships between higher levels of moral reasoning and cooperative moves (or unwillingness to use gratuitous aggression) on the Prisoner's Dilemma game.

The author has used the prisoner's dilemma exercise (Marcic & Seltzer, 1995) as a class exercise useful in training for the consideration dimension of leadership. In this exercise, an even number of teams are paired (red team, blue team) and told to come up with a consensus decision of either co-operating or competing with the opposing team. Outcome payouts, based on paired team decisions, are listed in Table 3. There is an incentive to act in an opportunistic fashion if you can deceive your paired team into cooperating while your team decides to compete. However, the teams soon learn that one opportunistic play, based on deceit or dishonesty, results in retaliation by the opposing team. The typical outcome, based on successive plays, is that all teams end up with minus points. The team with the lowest minus points does not win, it merely ends up losing less. Discussion following the game asks why the teams chose to compete when cooperation would have guaranteed all teams would have ended up with positive payments. Issues of bluffing, trust, and repairing reputation are discussed. The advantage of the game method is that the learning experience is affective as well as cognitive. The game offers a type of tacit knowledge that reinforces an abstract ideal such as leader consideration.

A research project to test the effectiveness of the prisoner's dilemma exercise in training for the appreciation of the consideration dimension of leadership might include testing for changes in appreciation for considerate leadership styles. The above mentioned instructor-student leadership evaluation instrument could be modified to ask students the extent to which they valued the leadership traits listed in the instrument and administer both before and after engaging in the prisoner's dilemma exercise. Pre-Post scores could be evaluated for significant changes in "appreciation for considerate leadership" scores and follow-up discussions could provide support for the reasons for score changes (or lack of changes). It is believed that the prisoner's dilemma exercise will demonstrate to students, both cognitively and affectively, the value of cooperative strategies over opportunistic strategies and the importance of considerate leadership.

> **Proposition 2:** Students will report statistically significant higher scores on the appreciating considerate leadership scale after engaging in the prisoner's dilemma exercise than before engaging in the exercise.

CONCLUSION

The purpose of this paper was to suggest the theme of socialized power (power directed at helping other people or achieving organizational goals) as the connecting concept between power and leadership. Power implies the ability to influence other people. The exercise of socialized power, influencing people towards the pursuit of organizational goals, converts power into leadership. Moral leadership is directed towards others (i.e., directed towards constituencies other than self) while immoral management is in part power that is exclusively self-directed (e.g., Machiavellian behaviors). It is suggested that much of the public outrage regarding recent business scandals is directed towards greedy self-serving behavior of certain executives (failure to use power in an ethical manner). Both stockholder and stakeholder perspectives of social responsibility were reviewed and were found to support socialized power as opposed to personalized power.

The consideration dimension of the Ohio State Leadership model was proposed as a construct that illustrates the use of socialized power. Following AACSB suggestions for the development of moral leadership, an instructor-student leadership evaluation instrument theoretically operationalized the consideration dimension of creating mutual respect and trust between leader and follower. It is proposed that instructor role modeling be utilized in the development of moral leadership in students and the instructors role modeling behavior be evaluated using the instructor-student leadership evaluation instrument. It is further proposed that prisoner's dilemma exercise will demonstrate to students, both cognitively and affectively, the value of cooperative strategies over opportunistic strategies and the importance of considerate moral leadership.

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TABLE 1

Assessing Teacher Leadership Style, Class Satisfaction, and Student Role Clarity

Instructions
A team of researchers converted a set of leadership measures for application in the classroom. For each of the items shown here, use the following rating scale to indicate whether your (1) Strongly Disagree, (2) Disagree, (3) Neither Agree nor Disagree, (4) Agree, or (5) Strongly Agree with the statement by filling in the appropriate number after each item. Next, use the scoring key to compute scores for your teacher's leadership style and your class satisfaction and role clarity.

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

1. My instructor behaves in a manner which is thoughtful of my personal needs. ________
2. My instructor maintains a friendly working relationship with me. ________
3. My instructor looks out for my personal welfare. ________
4. My instructor gives clear explanations of what is expected of me. ________
5. My instructor tells me the performance goals for the class. ________
6. My instructor explains the level of performance that is expected of me. ________
7. I am satisfied with the variety of class assignments. ________
8. I am satisfied with the way my instructor handles the students. ________
9. I am satisfied with the spirit of cooperation among my fellow students. ________

Scoring Key
Teacher consideration (1,2,3) _______
Teacher initiating structure (4,5,6) _______
Class satisfaction (7,8,9)

Arbitrary Norms
Low consideration = 3-8
High consideration = 9-15
Low structure = 3-8
High structure = 9-15
Low satisfaction = 3-8
High satisfaction = 9-15

SOURCE: Adapted from R. Kreitner & A. Kinicki, *Organizational Behavior*, *6th edition,* 2004, p. 604.

Table 2

Leadership Attributes Universally Liked, Universally Disliked

Trustworthy	Ruthless
Team builder	Loner / self-centered
Encouraging	Egocentric
Motive arouser	Irritable
Dependable	Non-cooperative

Source: Adapted from Kreitner & Kinicki, 2004, p.132.

TABLE 3

Prisoner's Dilemma: An Inter-group Competition

An even number of two types of teams is formed (Red Team and Blue Team). Each team is paired with another, with one side being the blue team and the other the red team.

Each team has three minutes to make a team decision to either cooperate or compete with their paired team. Payoff points for resulting decision are as follows:

Red Team	Blue Team
A = Cooperates	X = Cooperates
B = Competes	Y = Competes

AX - Both teams win 3 points.

AY - Read team loses 6 points; Blue Team wins 6 points.

BX - Red team wins 6 points; Blue Team loses 6 points.

BY - Both teams lose 3 points.

Each team must not communicate with the other team except when told to do so by the instructor. Successive rounds are played and points scored.

Follow up questions:

1. Why did the initial trust get betrayed?
2. What happens when trust is betrayed? Can you get it back?

SOURCE: Adapted from D. Marcic & J. Seltzer, *Organizational Behavior: Experiences and Cases, 5th edition*, 1995, pp. 195-196.

SIMULTANEOUS REALIZATION OF ENVIRONMENTAL SUSTAINABILTY AND ECONOMIC GROWTH

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ABSTRACT

The problem of managing industrial and solid waste is addressed; the solution proposed seeks to realize both economic and sustainable growth simultaneously. This implies achieving economic growth while preserving the ecosystem in a way that does not adversely affect the quality of life and the resources available for future generations.

The contribution sought is two fold: first, economics principles are extended to include not only exchangeable goods and services, but the ecosystem's entities as well. Secondly, these extensions are used to achieve both economic and sustainable growth, accounting for the impact of individuals and firms' behavior on current and future generations. A strategic framework denoted as "SAM" is proposed to guide this realization. It comprises three main processes starting by specifying points of strength and weaknesses in the internal environment, and the opportunities and threats in the external environment, analyzing these carefully, and then manage accordingly in a way that realizes appropriate fit between society's needs, and the available resources and capabilities. The core idea is to pursue continuous development and growth till no more improvement can be made for some stakeholders without adversely affecting others, including future generations.

Key Words: Sustainable Growth, Industrial and Solid Waste Management, Eco-efficiency.

INTRODUCTION

This paper addresses the problem of how to manage industrial and solid waste in a way that preserves the ecosystem while increasing the welfare of all affected parties.

The contribution sought is twofold:
First: concepts from welfare economics are extended to include not only market forces of supply and demand, but all the ecosystem's entities as well. Secondly: how to make use of these extensions to achieve sustainable growth is illustrated, accounting for the impact on current and future generations. A conceptual framework and implementation guidelines are proposed to help achieve sustainable growth in practice.

The plan of study consists of five parts. Part I comprises the problem of interest and scope of the study. The need for replacing the pure "Economics" view with an "Eco-centric" view is discussed in Part II along with its implications on sustainable growth. Part III discusses why and how sustainable growth can be realized. Waste management policies that help achieve this sustainable growth and implementation guidelines are presented in Part IV. We conclude in Part V by a summary of the research findings and suggested issues for future research. This study has been motivated by the observed implications of current management practices, emphasizing pure economic growth and the pursuit of self interest regardless of the impact on: society as a whole, the external environment and ecosystem, and the resources left for future generations.

Current management practice at the firm level is based on, and is directed by, three main assumptions: First, the fundamental principle of Economics that, resources are allocated and managed by the market forces of supply and demand. Except in the case of market failure. Secondly, there exists a dual consciousness toward natural ecology; i.e., maximizing one's firm self interest while neglecting the impact of such egoist focus on society as a whole in general, and on the resources left to future generations in particular. Risks associated with industrial and solid waste have negative impacts on human safety and health, and the environmental (SHE). Such impacts are often borne by the ecosystem and by uninvolved third parties, including future generations (Kleindorfer, 2001). Thus, market forces are not usually sufficient to motivate profit-seeking companies to operate efficiently. Thirdly, there is a focus on tangible monetary outcomes and quantitative measures while overlooking significant intangible consequences and non-quantitative factors.

The above assumptions that direct practice contradict the realization of sustainable growth, i.e., achieving development that meets present needs without compromising the ability of future generations to meet their own needs, as well. Thus, the above assumptions are insufficient and misleading. How business practice and human behavior driven by the above assumptions have resulted in drastic negative implications is now discussed.

Looking at the economy in mechanistic terms, where forces of supply and demand explain how resources are allocated, assumes adherence to communities' interests through the marketplace transactions, and that the pursuit of self interest balanced by a competitive system would result in society being better off in material wealth than by any other alternative system. Thus, people and organizations are encouraged to pursue their self-interest without any external controls on their behavior that might promote the welfare of the community. This means that people were "let off the hook," as the system itself would take care of any ethical or other concerns related to broader responsibilities to society.

As a result of this pure economic thinking, what cannot be traded in the market where the value can be determined by the forces of supply and demand, have no value, and is not worth considering. For example, the environment has no value in and of itself, as the environment deteriorates; this is not factored into marketplace transactions nor is part of our national accounting system.

While sustainable growth encompasses much more than pure economics, we become a money-centered culture; "if you cannot cash it, trash it." As a result, economic incentives have to be built in; otherwise, producers and consumers will not deal with environmental problems without being forced by laws and regulations. Yet, placing all moral freight on the regulatory process is asking this process to do more than it can deliver. Why this is the case is now discussed in more detail.

ECOCENTRICITY

The regulatory process involving environmental laws and regulations and enforcement agencies, such as EPA in the U.S., and the EEA in Europe, is not sufficient nor is efficient to cure the current business practices and its human behavior and its environmental implications. This is due to the facts that:

- Costs of compliance may be excessive and is placed eventually on the consumers, taxpayers, and on society as a whole.
- The proactive orientation toward the natural environment, where "prevention is better than cure," will not be faithfully practiced, if at all, as long as the pure market economics view remains the norm of practice;

- Since nature has no discrete owner to look after its interests, its rights will continue to be violated; and as common property, it can be and will continue to be overused, abused, and is subject to the tragedy of the commons;
- Furthermore, it should be noted that both the "Social Responsibility" view and the "Stakeholders" view are mainly human centric; i.e., they overlook the environment with its nature entities.

Therefore, an "Eco-centric" view should replace the "Anthropocentric" one. This implies that the emphasis should be on sustainable development and growth and not on economic growth. A focus on "Sustainable" practices of business, and human behavior, and "sustainable" productivity should replace the current emphasis on "economic" productivity.

Why and how this sustainable growth can be realized is now discussed.

REALIZATION OF SUSTAINABLE GROWTH

As indicated earlier, sustainable growth means achieving a development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

It should be noted that achieving sustainable productivity is much beyond classical economic analysis. It implies that both business firms and human behavior focus on <u>ecological sustainability</u>; i.e., the ability of one or more entities to exist and flourish – individually and collectively – such that the existence and/or growth of other collectivities of entities is permitted at related levels, times, and related systems (Buchholz and Rogene, 1993; Koeing, et. al., 2000).

Sustainable productivity implies sustainable development. It is the process of achieving human development in an: inclusive, connected, equitable, prudent, and secure manner, (Saad, 1994, 1999).

-<u>Inclusive</u>, means not harming any other entity <u>time</u> wise and <u>place</u> wise.
-<u>Connected</u>, means embracing economic, ecological, and social interdependence.
-<u>Equitable</u>, means inter-generational, intra-generational, and inter-species fairness.
-<u>Prudent</u>, i.e., connotes duties of care and prevention: technologically, scientifically, and politically.
-<u>Secure</u>, i.e., assures safety from chronic threats and protection from harmful disruption.

A legitimate question here is why do we need sustainable growth or sustainable productivity? This is because business practice and human behavior, which are in harmony with, and strive to achieve sustainability, will result in:

a) Improving the quality of life effectively and equitably; i.e., without adversely affecting the opportunities, or harming the resources, available for future generations (Ko, 1998).
b) Emphasizing qualitative improvements, not only quantitative expansion or measures.

Several studies have addressed the impact of environmental management on business performance and quality, e.g., (Klassen, et. al., 1996; Saad, 1999, 2001 (a), 2001 (b), 1994, 1991).

c) Making use of the important fact that, productivity cannot grow indefinitely, yet business and technology will.

d) Companies be able to minimize costs and stay competitive though adhering to an ecological approach to manufacturing, and handling of industrial waste, where ecological costs and benefits are taken into account. A leading example here Dupont practices, e.g., banning phreon and replacing it by environmentally friendly products (for more details, the reader is referred to, Talvo, et. al., 1997).

e) Societies will have a chance to raise their living standards only if they seek sustainability in their public policies, business performance, and productivity measures, and into the consumption patterns they adopt, as well as their solid waste generating and processing practices.

f) Recognizing people, businesses, and their technologies as part of the natural world makes it possible to imitate, and learn from, the best workings of biological ecosystems and build artificial ones that are sustainable as well.

How to reap the above benefits of sustainable productivity and what are the management policies that would generate these outcomes in practice? Is now discussed.

MANAGEMENT POLICIES AND IMPLEMENTATION GUIDELINES

To assure sustainable growth and guarantee generating the positive outcome outlined above, necessary changes have to take place:

First: From an Operations prospective ; companies can and should focus on environmental improvements. These comprise:

- Promoting new manufacturing technologies, e.g., use clean burning technologies, and cogeneration of their own energy along side conservation efforts. Good examples in this regard are followed by PG&E, H.B. Fuller, using solar energy and canceling plans to build large coal and nuclear power plants.

- Encourage technological advances that reduce pollution from both products and manufacturing processes. Example of this practice the 3M program that eliminated pollution at the source, and the Chevron's SMART program (Save Money And Reduce Toxic). This reduced hazardous waste by 60% and saved the company over $3.8 million.

- Develop new product Compositions, which result in source reduction of waste, pollution, and environmental hazards.

- Eliminate manufacturing wastes as possible, and find alternative uses for wastes generated that cannot be eliminated. For example, IBM's Endicott-New York facility has cut toxic emissions by 75% in 1990 compared to the previous year, by replacing water-based chemicals for the solvent-based chemicals used in high volume circuit panel manufacturing. Amoco and Polaroid have adopted similar programs, and the Dow's WRAP program (Waste Reduction Always Pays). This later program reduced the waste stream by 88 million pounds per year (Conservation Exchange, 1989).

- Expand the RRR (Reduce, Recycle, and Reuse) policy in the U.S. following the lead of many European countries, and Canada.

- Design for Disassembly. This is a very effective operations practice especially for metal and plastic products. This concept involves using fewer components, simpler designs, and new ways for fastening of things together.

Second: From a Quality of Life standpoint:

- The present systems of industrialization, productivity measurements, and solid waste generation and treatment have to change radically to provide the people's needs for both higher living standards and reduction of environmental impacts, simultaneously.

- Additionally, the traditional view of industrial activity as mere transformation of raw materials into products that enhance people's standard of living has to be replaced by a more integrated view. This means moving from an "industrial system" view to an "industrial ecosystem" view, where: consumption of energy and raw materials is optimized; waste generated is minimized; influence of one process on other processes is accounted for; give more incentives for: recycling, conservation, and resource recovery. Pertinent optimization methods to use, to achieve these results are discussed in (Gottinger, 1991) among others.

Third: Productivity measures used at the micro level of the firm should account for, and consider the macro impacts of the industrial processes used and the products produced. Such macro implications include each environmental entity, as well as the environment as a whole. For instance, consideration should be given to the currently overlooked impacts of industrial activity on: the natural environment and ecological systems; the resource base left to future generations; both local and global entities, and on societies external to the underlying firms.

Fourth: From a Financial Prospective; guidance to firms' and individuals' investment should focus on:

- Gaining the respect of socially responsible investment of business firms in general, and for sically responsible services in particular. Those investment funds that promote and help people invest with a "clean conscience", (Irwin, 1985). The theme here is that people should be able to "do well" while they are "doing good".

- Recognize the True Liability. For example, Smith Barney, and other investment firms search for true environmental liabilities in evaluating a company's performance. Also, the "people's right to know" act and the ISO14000 standards allow for, and induce environmentally responsible practices.

- Recognize business opportunities associated with solid waste businesses (e.g. Waste Management, Laidlaw industries and Browning-Ferris). Empirical evidence shaw that stocks of those businesses have outperformed the overall stock market performance consistently (Buchholz, et.al., 1992, p. 167).

Fifth: at the macro level; public policies at both national and international levels have to promote, assure, and provide incentives for micro practices (at the firm and individual levels) that are "eco-centric"; i.e., environmentally friendly and promoting sustainability. Example of these include:

- Generalization of the 'bubble' concept; by sale or trade of credits to other firms, which resulted in pollution reduction while expanding industrial and economic growth, simultaneously. This concept was adopted by EPA in the early 1980's (for more details on this policy the reader is refered to Buchholz, 1993, pp.161-163).

- Providing tax incentives for green products and sustainable agriculture.

- Banning the use of chemical fertilizers and hazardous materials for pest control

- The problem of sustainability involves more than physical production and consumption.(Gowdy, 1997, pp. 180-181). It is intimately connected with power relationships and the distribution of economic surplus, Thus, the trade agreements for example, should explicitly account for the impact of trade on income inequality, and be written in a way that deal with potential adverse effects on environmental quality.

As indicated by Arrow, et.al. (1995), the incompatibility between economic growth and environmental sustainability is an issue of increasing concern. Current trade agreements, as GATT and NAFTA, fail to recognize this incompatibility based on the belief that continual growth is the only solution to the problems of income inequality and environmental degradation. Therefore, progressive pressures should be put on governments to directly address these questions in trade agreements, rather that assuming that market forces will eventually correct them.
Thus, the issue of trade can be a mechanism for addressing the larger questions about the long range viability of our socioeconomic system. The lessons learned from constructing environmentally sound trade treaties could be a model for moving the global economy toward environmental sustainability.

Such *proactive* actions should prevail and replace the current *reactive* schemes of regulations and compliance enforcement.

Sixth: Coordination should take place between both micro policies at the firm and individual levels, and the macro policies at the national level (Saad, 1999). Such coordination is necessary to maximize the welfare for firms and nations on the one hand, and for the present and future generations, on the other hand, *simultaneously*.

It should be noted that a focus on sustainable growth in goals, means, and actions will assure realizing maximum efficiency; i.e., a "Pareto frontier" where:

every party (or entity) is better off without any other being worse off, internally or externally, in the present time or in the future. This point is now addressed in more detail.

Reaching Pareto's Maximum Efficiency Frontier

Pareto's concepts and efficiency frontier are of particular interest here. How these concepts can be extended and made use of, in managing industrial and solid waste, is now discussed. Two main Pareto principles are of relevance:

First: The 80/20 Rule: The idea here is that only a few significant factors control the majority of outcomes and results achieved. Hence, management can focus only on those few significant factors and neglect the insignificant many that contribute little to the end results, as illustrated in Figure 1.

Second: The Pareto frontier; i.e., maximum efficiency, is reached when nobody can be better off anymore without harming any other party. The authors view is that by extending this economics principle to include all elements of the ecosystem, not only humans or people, would help assure sustainable growth, (Saad, 2001 (b)).

When changes and/or improvements can continue to be made such that stakeholders are better off and no other entities of the ecosystem are worse off, only then maximum sustainability is reached, by not harming the resources available to both current and future generations simultaneously, as this assures accounting for all stakeholders' interests and concerns including the ecosystem entities and elements. An important consideration for good environmental policy is its dynamic effects, such as innovation. By affecting the nature of innovation, today's environmental policy not only affects today's environmental quality, but also influence the potential of future environmental quality, (Popp, 2003).

It should be noted however that in a non-zero sum economy some stakeholders plan on driving up the cost of their competitors. This implies a built in struggle working against reaching a Pareto frontier. Both government and public interventions are needed to provide incentives for environmentally sound innovations, and deterrents to the non-cooperating parts of the market. Example of these would be imposing penalties-fines- on unfair practices, and destructive competition. Anti-trust laws are one example of such actions. An important empirical lesson here is the influence of the CAA, which provided incentives for R&D innovations of scrubbers of higher removal efficiency, and the amount of output produced per unit of emission increased as well. Additionally, the development of cleaner technologies make it easier for policy proposition of tighter limits on future emissions, as it lowers the potential costs of compliance with such regulations.

As to how to make use of these propositions in managing industrial and solid waste in practice, we suggest the following conceptual framework and action guidelines.

A Conceptual Framework

The framework proposed consists of three main processes denoted as **SAM**, which stands for Specify, Analyze, and then Manage, as follows:

The starting process involves searching and specifying (S) the underlying community's characteristics, needs, and priorities. This can be done through a WOTS analysis; i.e., study the internal environment's weaknesses and points of strength; and the external environment's opportunities and threats. The aim here is to work on exploiting the opportunities and points of strength and avoiding and/or minimizing the weaknesses and threats. We suggest using a cause and effect 'fishbone' model at this stage to delineate, and understand the WOTS analysis results. This should be followed by a detailed analysis (A) of the underlying driving factors and tradeoffs. Such analysis should make use of the Pareto 80/20 rule, i.e. identify, and focus on, the most *significant few* factors; all the remaining, i.e., the *many insignificant* factors may be neglected or given less attention and concern. At this stage, effort should be made to adopt appropriate quality management policies to be able to exploit this analysis benefits to its fullest. For more details on these policies the reader is referred to (Saad and Siha, 2000). This analysis is then followed by a Management process (M) that would match and fit the results of Phase 1 and 2 above using Pareto Efficient Frontier for all stakeholders and ecosystem entities. As indicated earlier, this frontier is reached when "no one can be better off anymore without making other(s) worse off."

This can be realized through management practice and individuals' behavior seeking to match the market and communities' needs to the available resources and operational capabilities. This match and cooperation among all levels, will result in the appropriate *fit* between the society's needs on the one hand and its capabilities on the other hand.

Action Guidelines

To help realize the above framework in practice, some guiding actions are suggested on the part of both business managers and government agencies. Both should seek, and strive for continuous and equal participation of all stakeholders in the process.
Furthermore, business managers must conduct continuous benchmarking "peer-wise" among the different regions, and 'activity-wise' among the different activities involved. The aim here is not just to learn from the 'star' but also seeking to eventually lead and exceed the 'star', i.e., reversing the gap between the current firm performance and the pertinent leader.

It should also be noted that each party –business managers, legislators, and law enforcement agencies – should strive for continuous advancement productivity-wise and quality-wise. This should be the norm of both business and individual behavior. On the government's part for instance, tax incentives; regulations and educational programs can be used jointly, to foster this behavior. A tax –incentive approach for segregation of waste, provides a good example of close cooperation between both private and public institutions in India (sivramkrishna (2003). As reported by this author, the costs of enforcing waste generators to segregate organic waste, or to prevent illegal dumping, make this policy useless to implement. Instead, market incentives which induce households to segregate organic waste have been practiced intensively and successfully, in underdeveloped countries.

Additionally, practitioners at all levels and in all sectors should adopt and establish the Environmental Management System (EMS) under the ISO14000 international standards, and the related systems such as those promulgated by the European Union under the Ecological Management Audit System (EMAS), (Kleindorfer, 2001). Such systems when reinforced by public scrutiny, result in tangible benefits to both the industries, and the public, making all stakeholders better off. This is quite noticeable across Europe.

As indicated earlier, environmental concerns should be explicitly addressed and dealt with in international and bilateral trade treaties.

Furthermore, management should encourage not only continuous or gradual improvements, but also 'leap frog' advancements that can be achieved through business process and technical reengineering efforts and programs.

Positive outcomes are also assured by establishing appropriate national incentives for each stakeholder category. These include both positive reinforcement of preventive measures and desired behaviors and; negative reinforcement, i.e., 'penalty' for undesired actions, and/or behaviors, by business firms, households, or the public.

We agree with those who consider the distinction between public policy and private policy as a cultural artifact. Removing certain issues from public debate results in conflict privatization, and in a mismatch between the relative importance of many private decisions and the degree of public involvement in them. While ordinary people are not completely powerless, their ability to affect corporate decisions is quite limited (Van Horn, et.al., 2001, pp.81-83).

It should be also noted that public policy concerns are different for different stakeholders, and are also shaped by the nature of the times. While disagreement exists about the appropriate role government should play, there is a fundamental agreement on the nation's principal public policy aspirations. These include among other things, achieving sustained economic growth, ensure equal opportunity, and to protect the environment. These are central policy goals of all governments.

American public policy has achieved great progress to preserve and protect the air, water, and land for survival. Yet, these policies are not as effective as they should be. For instance, meeting the unprecedented threats to the environment resulting from global warming, preservation of nature treasures, and reduction of disruption risks faced in business operations, those of purposeful agents, and unintended acts.

To be able to overcome these challenges, extraordinary skills, coupled with further coordination and close cooperation between public and private policies, are needed.

SUMMARY AND CONCLUSIONS

This paper addressed the problem of managing industrial and solid waste in a way that assures preservation of the ecosystem, and welfare improvement for stakeholders involved.

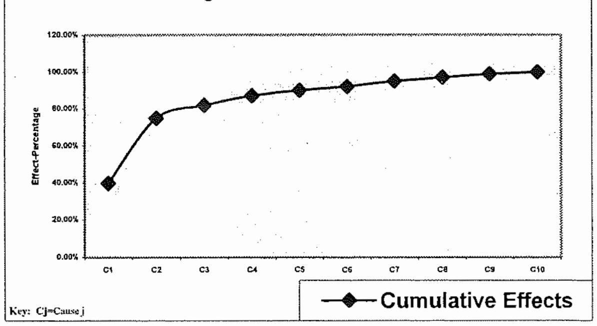
Two main economics principles have been extended and applied to realize sustainable growth, namely, the 80/20 rule, and the Pareto efficiency frontier. The efficiency frontier concept has been extended to include not only human concerns for the present, but also all entities of the ecosystem, and accounting for the impact on current and future generations.

To summarize, the negative implications of the pure economics "anthropocentric" view were discussed, and the need for replacing this view by an "eco-centric" one was justified, as a sustainable growth emphasis in the eco-centric view replaces the mere economic growth emphasis in the anthropocentric one. Thus, the eco-centric is a much better theme to follow. How to realize the "Eco-Centric Vision" and reap sustainable growth benefits has been discussed, and specific management policies and actions are proposed. An integrated SAM framework is introduced to assure reaching the efficiency frontier. This framework comprises three stages: specify, analyze, and then manage. How to apply this framework in practice has been discussed, along with guidelines that would facilitate its implementation.

Such implementation actions recommended includes the alignment of micro and macro policies on the one hand, and between both individuals' and firms' behaviors, on the other hand. These, in addition to accounting for, and incorporation of environmental protection considerations and Eco-efficiency concerns, in trade treaties. This include both international and bilateral trade agreements as well.

A necessary next step that would assure actual realization of this paper thesis is that each decision maker and policy developer acts accordingly at all levels, each in his/her own capacity. These include: managers and officials in business firms, individuals and households, government representatives and agencies, as well as the general public.

Figure 1. A Pareto Chart



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REENGINEERING THE BUSINESS CURRICULUM

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ABSTRACT

A hot topic the past few years has been the so-called need to re-engineer the business curriculum. Usually, the "drivers" for change in business curricula have been the needs of the students, the needs of prospective employers, accreditation standards/criteria, or response to trendy contemporary business issues and thrusts (eg, globalization, business ethics, etc.)

In response to these constant pressures/challenges, two new initiatives appear to be taking shape among many business programs. They are a review and questioning of needed core or common body of knowledge (CBOK) requirements, plus a drifting to more flexible and integrative business curricula.

A survey of over 30 colleges and universities (including the 14 state institutions) as to core/CBOK requirements is reviewed. Some questions that will be discussed are: Of the approximately 120 credits a student needs to graduate, why do most schools require the same course. Is business such a science that we know exactly what is taught and in what order? Do business programs tend to be incestual as to copying what everyone else is doing? What are some interesting things some institutions are trying? Is there more consistency or chaos ahead?

INTRODUCTION

Over the past number of years there have been calls for change of undergraduate business program. These calls come from the academic sector, accreditation groups, professional organizations and even business and industry must site a main premise that most undergraduate business programs follow a pedagogical model developed decades ago whereby students are taught business concepts through functional areas (accounting, management, marketing, finance, economics, etc.). A large number argue for an integration of traditional courses in the business curriculum to "break down the silo's" in education in a way parallel to integrative efforts occurring in business today.

The feeling is, as organizations change and adapt in response to changing environmental conditions, there should be a corresponding change and adaptation in institutions of higher learning.

Business schools often have a great deal of difficulty identifying important environmental shifts that will affect them. The academic tendency of the past was towards functional specialties versus a business education based on a strong interdisciplinary approach for a more broadly educated student. A related theme expressed by many executives was the need for students to be able to communicate and work with people from other functional areas.

THE CALL FOR CHANGE

Undergraduate programs today are adapting changes more commonly found with graduate programs in their thinking of getting students to think more broadly on how things come together. An example in the September 22nd 2004 edition of the Wall Street Journal's "Guide to Business Schools" supplement was Reneselaer Polytechnic Institute in NY – their Lally School of Management and Technology is replacing the core courses in discrete areas such as marketing and human resources with team taught cross functional "stream" courses that combine several disciplines.

The lack of cross-functional integration is especially troublesome at the undergraduate level due to the relative lack of job experience most undergraduates possess. Work experience often helps students to make the necessary integration and cross-discipline linkages themselves, providing a useful framework upon which to incorporate new functional information. To the degree students don't have this experience, the greater the need for instructors to provide such a framework within the course.

Research that the AICPA (American Institute of Certified Public Accountants) in the Core Competency Framework for Entering into the Accounting Profession – 2000 report probably articulated it best in reflecting other similar calls for change. That report suggests three primary ways business education be revised to improve the professional capabilities of accountants. They are: First, decision modeling, risk analysis, problem solving, and decision-making are key personal and functional competencies that should be developed. Second, students should be taught to consider both the internal and external business environments and how their interactions determine business success or failure. Third, four broad business competencies are crucial: strategic/critical thinking, industry/service perspective, international/global perspective, and resource management. These competencies are usually not structured around traditional subject/content areas typically found in core business program.

Research has indicated that a number of academic institutions have undertaken a review of their core programs, driven by efforts to either reform to improve students' skills or reform to integrate curriculum content. This integration, mind you, can be by integrating study within a discipline and/or integrating across a discipline. The purpose of integration is to demonstrate the interrelatedness of the various business functions and how they work together within the firm.

It is thought by many that today's undergraduate business programs must prepare students with skills in communications, teamwork, technology, and problem solving within an ethical framework and global perspective.

Another strong impetus for change has been accreditation guidelines. In an effort to address industry's concern that business graduates are too narrowly focused, the AACSB guidelines recommend that business curricula have a least half or more of the required undergraduate degree credits outside the business school. Under the "traditional" AACSB guidelines, many business programs include the common body of knowledge (CBK) courses (marketing, finance, management, information systems, international business, production/operations management, and quantitative methods), in addition to the accounting, economics, business law, and ethics requirements. Very little cross-functional integration is evident in this curriculum, since most CBK courses are taught as independent courses.

THE RESPONSE TO CHANGE

In response to the challenge to change, business schools have recently begun to re-engineer the undergraduate business curriculum with two main objectives: (1) to provide a more cross-functional, integrative business curriculum, and (2) to provide a more flexible curriculum that includes a strong liberal arts background. The new, integrative business curricula are designed to foster a cross-disciplinary view of business planning and decision making, build effective cross-functional teamwork skills, and improve communication skills. A stronger liberal arts background also prepares students to become more critical thinkers and to look at business problems in the broader context of the environment.

KUTZTOWN UNIVERSITY'S INITIATIVE

Kutztown University is beginning to seek AACSB accreditation. While this process would inevitably require a detailed examination of all of our course offerings including what we call our "core requirements", there were other issues at our institution, which was the impetus of a committee being formed <u>to review our core courses</u> (offering, content, what other institutions are doing regionally and around the country, <u>the timing issue</u> (when should these courses be offered, are they all needed before taking upper division courses, etc.) and related issues of <u>criteria</u> (e.g. do students need to have a 2.00 GPA in these and core courses <u>control.</u>

A small committee of four (one from each of the COB departments) of which I was representing marketing noted early on that our core course requisites had not changed (other than perhaps a course title change) in over 20 years. We certainly needed data and our first task was to gather information about core requisites at 25 what I would say regional or similar institutions including SSHE universities.

While we also realized that we wanted to know what others were doing with their core requirements, literature review painted the picture I just gave we discovered that most all of the institutions we surveyed had very similar core requirements as we did. The terminology varied as to what institutions referred to them as <u>core</u>, <u>foundation</u>, <u>common professional</u>, <u>component</u>, <u>common body of knowledge, etc.</u>, most all required between 10 to 12 courses. It got a bit convoluted since some institutions included capstone courses as a CBK course, some core courses varied within majors, some offered option course selection within a discipline (principles of economics and either international micro economics or intermediate micro economics) but here is a quick and dirty comparison to glance at – I have copied for distribution at the end.

Some general findings include that most all of SSHEE schools business core and common programs are similar in structure, implied content and timing of the courses. Some minor differences (West Chester requires two statistics courses not one; IUP requires two computer courses, etc.), but in general there was no radical departure.

Most all schools required the usual/typical (financial accounting, managerial accounting, econ. I, econ II, Business Law, a computer course, a statistics course. Some core requirements also include discipline specific course as principles of management, principles of marketing.

Our committee then decided to gather more information first within the college of business. We did this through a survey (a few copies which I brought along). Second additional information on what other leading business schools/programs are doing around the country. This I am currently doing.

Our internal survey was geared towards getting info on what is wrong or right with our present business core. Why must it be changed? What is the rationale for changing or leaving it as is? Why does it exist? What is the importance of the business core? What should the content of the business core consist of? Timing issues, control and criteria (standard) questions as well.

CONCLUSION

In response to the many challenges they face as they move into the twenty-first century, business schools are in the midst of change. Students, parents, and employers are demanding that curricula be relevant, innovative, and creative. Narrowly focused, compartmentalized curricula perhaps must give way to programs of study that are more inter-disciplinary and cross-functional. Recognition is growing, among both business and academic leadership, that complex business problems cannot be resolved by narrowly focused professionals. The new AACSB guidelines encourage business faculty to reengineer existing business core programs and develop new pedagogical approaches for cross-functional, interdisciplinary curricula. While I believe I will find some new innovative programs out there, so far all I have seen is some attention paid to changing course content (include or integrate perhaps an ethical or international component), some changes in design and delivery (far too few institutions doing any real team teaching), and very few resources given by institutional academic leaders to support integration efforts.

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Comparison of Common Body of Knowledge Courses in Business at Regional Universities

	Accounting	Business Law	Computers	Economics	Finance	Management	Marketing	Statistics	Strategy and Policy	Decision Sciences	Other
	Principles of Accounting; Managerial Accounting	One course	Intro to Comp and Info. Sci.	Macroeconomics	to Corporate Finance	Principles	Marketing	One course	Business Policies and Strategies		Applied
vania	Financial Accounting; Managerial Accounting	One course	MIS; Two gen ed connputerscience courses	Intro Microeconomics Macroeconomics;	Financial Management	Principles of Management	Principles of Marketing	One course	Strategic Management	Analytical Methods	Intro to
	Financial Accounting; Managerial Accounting	One course	Gen ad CIS course	Macroeconomics; Microeconomics; Intermediate Micro	Financial Management	Management Theory and Practice	Principles	Two courses		Production Management	Admin. D
	Financial Accounting Fundamentals; Managerial & Cost Accounting Fundamentals	One course	One Gen Ed CSC Course	Principles of Macro; Principles of Micro; Intermediate Micro; Managerial Boon	Financial Management	Principles of Management; Hunan Resources Management	Principles of Marketing		Organizational Strategy	Forecasting for soon, Fin, and Mgt. majors.	
	Accounting I; Accounting II	One course	Information Resources Management	Macroeconomics; Microeconorics	Principles of Finance	Principles of Management	Principles of Marketing	One course			Busines Busines Making
ania	Accounting 1; Accounting II	One course	Computer science course; Information systems	Macroeconomics;.. Microeconomics	Fundamentals of Finance	Principles of Management	Principles of Marketing	One course	Business Policy	Production and Operations Management	
	Financial Accounting; Managerial Accounting	One course	2 computer science courses.	Principles of Economics and either Intermediate Macroeconomics or Intermediate Microeconomics	Financial Management	Management Concepts and Strategies	Principles of Marketing	One course	Capstone in Strategic Management	Operations/Production Management	
	Accounting I; Accounting II	One course	Software Business Applications	Macroeconomics; Microeconomics	Managerial Finance	Management Principles	Marketing	One course		Operations Management; Quantitative Business Analysis	Introduc
	Financial Accounting; Managerial Accounting	One course	Information Science	Macroeconomics; Microeconomics	ManageriatFinance	Organization and Management; Human Resources Management	Principles of Marketing	One course	Strategic Management	Quantitative Methods In Business	Resear Busines
B)	Financial Accounting; Managerial Accounting	One course	Business Computer Systems	Principles of Economics (4 credits); Managerial Economics	Financial Management	Organizational Behavior	Principles of Marketing	One course	Strategic Management	Operations Management	Founda Adminis and Soc
	Accounting 1; Accounting II	One course	Productivity Software; Management Information Systems	Macroeconomics; Microeconomics	Managerial Finance	Organizational Behavior	Principles of Marketing	One course	Business Policy	Operations Management	
	Financial Accounting; Managerial Accounting	One course	Gen Ed Computer Science course	Macroeconomics; Microeconomics	Corporate Finance	Principles of Management	Marketing Management	2 courses	Business Policy		
	Accounting I			Economics (Above level 100)	Financial Management	Management Principles	Marketing Management		Seminar in Strategies and Policy	Production Management	Manage Informa Govern Society
	Financial Accounting; Managerial Accounting	Legal Environment of us nes	Advanced Computer Applications	Macroeconomics; Microeconomics	FinancialManagement	Principles of Management	Principles of Marketing			Quantitative Business Analysis	
	Financial Accounting; Managerial Accounting	Business Law I		Macroeconomics; Microeconomics	Managerial Finance	Principles of Management; Human Systems in Organizations	Principles of Marketing	Business Statistics	Business Policy	Operations Management Management Science or Statistical Analysis	Internat
	Accounting I	MIS 204	Computer Sciences	Macroeconomics; Microeconomics							BA 243 and IS
on	Financial Accounting; Managerial Accounting	Legal Environment of Business		Macroeconomics; Microeconomics	Intro to Finance	Principles of Management I & Ii (2 courses)	Intro to Marketing	Statistics for Business (2 courses) -		Intro to Management Science; Intro to Operations Manegement	
ty	Financial Accounting; Managerial Aceountingg0	Business Law I	Intro to Information Systems	Macroeconomics; Microeconomics	Financial Management	Principles of Management	Principles of Marketing	Statistics 1; Statistics II	Business Policy and Strategy	Operations Management	
	Intro to Financial Accounting; Intro to Managerial Accounting	Legal Environment of Business	(Excel competency required); Management Information Systems	Prin of Economics; Money, Banking, and Financial Markets; Applied Microeconomic Analysis	Business Finance	Management of People and Operations	Principles of Marketing	Statistical Methods	Business Management Policies or Entrepreneurship and Business Policy		Intro to
	Financial Accounting; ManagerialAccounting	Legal and Ethical Environment of Business	Computing and Spreadsheets; Management Information Systems	Macroeconomics; Microeconomics	Financial Management	Foundations of Management	Marketing	Elementary Statistics; Intermediate Statistics	Management Policy and Strategy	Operations Management	Internat
3)	Financial Accounting; Managerial Accounting	Legal Environment of Business	Intro to Information Systems Lab	Macroeconomics; Microeconomics	Intro to Finance	Organizations in Perspective	Principles of Marketing	Business Statistics	Business Policy	Quantitative Methods for Business	

BUILDING BRIDGES IN EXPERIENTIAL STATISTICS

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ABSTRACT

Clearly defined learning objectives precede the teaching of any course. This paper introduces a three dimensional objectives matrix and proposes pedagogy for attaining the goals of the matrix. The y axis shows Bloom's taxonomy with rote memorization near the origin and critical thinking skills at the top. The x axis shows Daggett's topic relevancy with "can be applied in the course being taught" at the origin, progresses through "can be applied in other courses" to "can be applied in the workplace." The z axis shows retention over time, progressing from "short term memory" through "working memory," to "long term memory." The conclusion is made that, by default, too many courses are centered near the origin of this matrix whereas employers need workers skilled at the outer region of the matrix. The paper discusses how this matrix is used as the focus of a business statistics course and describes three experiential learning techniques which reinforce these goals.

INTRODUCTION

Prerequisite to teaching any course is a set of well-defined learning objectives. These objectives often differ between the student and the instructor. The sole objectives in the mind of many students are to get a good grade in a course and to use the course to meet graduation requirements. Thus the imposition of larger objectives is left to the instructor.

Daggett had developed an interesting rigor/relevance framework which the author has modified into a three-dimensional Rigor/Relevance/Retention course objectives matrix for consideration (see Figure 1). The y axis shows Bloom's taxonomy, with rote memorization at the bottom of the axis and evolving to critical thinking skills at the top. Most instructors of statistics realize the possibility available in the subject matter of using the course to develop higher order thinking skills. The x axis shows subject applicability. Going from "can be applied in the course being taught" at the origin, it moves on to "can be applied in other courses in the curriculum" to "can be applied off campus in the workplace." Learning theory shows that students can place material in "short term memory," "working (medium) term memory," or "long term memory." The z axis reflects this important dimension to learning with short term memory at the origin.

Upon reflection, it will be seen that the learning objectives of too many courses occupy the space near the origin of this objectives matrix: rote memorization, for the short term, so that the student can get through the next exam in this course. It must be clear to anyone who thinks in terms of the matrix that a more useful set of objectives lie in the furthermost region: full comprehension of the material in a way that motivates clear thinking, retaining the material until after graduation, and possessing competency to apply the material wherever students find themselves after graduation.

The author focuses his entire efforts in the teaching of a two-semester sequence of statistics to moving students to the outer region of the matrix described above. The purpose of this paper is to describe how this is accomplished.

TIME

Learning theory states that humans place learned material into one of three categories: short-term memory, medium-term memory (working memory), or long-term memory. Material placed in short-term memory is available only for a matter of seconds or minutes: you look up the phone number for the pizza place and don't want to retain this information longer than it takes to place the call. Material in the medium-term memory is retained only for a few hours. Clearly, if our objective is to carry a practical competency of the subject matter into the workplace after graduation, knowledge regarding statistics must be placed in long-term memory.

To meet the time objective, students must first be made aware of the differences in kinds of memory and then told how material can be placed in long term memory. The author brings this point home forcefully in the second statistics course by giving the students a quiz the first day of class. The quiz (available on request) covers only the most fundamental basics of the statistics taught in the first course. The results are dramatic: thirty percent of the students get a zero on the quiz and the average grade is fifteen percent. Students who felt good about getting an 'A' or a 'B' in the previous course only a few months (or even weeks) before are shocked at how little material they have retained. Having thus motivated the need in the students for a more useful retention of subject matter, learning theory is explained and students are told that night-before-the-test cramming at best places subject matter in medium-term memory. Accordingly, a clear understanding, a social contract, is reached with the students the first day of class: the students will study statistics two or three hours between each and every class period, as opposed to the more typical mode of deferring study for two or three weeks and then camming the entire weekend before the test. It is only when the material is repeatedly revisited and thought about that it can seep into long-term memory.

HIGHER ORDER THINKING SKILLS

Higher order thinking skills are developed in two ways: the bridging exercises described below, and the approach to teaching taken in the classroom.

To the maximum extent possible, students are shown in class not only the statistical methodology under study but also why the method does what it does. Students, for instance, are never taught the "finger method" of doing a chi-square test of independence: they use their understanding of categorical data and the binomial probability distribution to derive expected frequencies. Students are never taught to look at which way the inequality is pointing in the alternative hypothesis to find the rejection region: they are forced to think through the sampling distribution and which values of the sample statistic are unreasonable and thus lead to the rejection of the null hypothesis. Students must understand and be able to do analysis of variance and simple regression by hand before being allowed to go to the computer. Students are never given the sample statistics when doing an estimation or hypothesis test on an exam; they are provided with raw data from which they must first calculate statistics before they are able to make inferences. The author avoids, where possible textbooks whose end-of-chapter problems include the phrase "assuming this situation can be modeled by the xxxx distribution (or which teach the 'finger method' or 'look at the direction of the inequality');" students must be able to reason through to the appropriate distribution from the situation given, just like in the workplace. When students are given definitions they are told that they are not to memorize them and expect to give them back to the instructor on an exam (rote memorization); rather they are expected to comprehend them and to make them part of their working vocabulary. Thus every effort is made in class to move the students from memorizing, and looking for crutches, to actually understanding concepts and developing the ability to apply them to real situations.

EXPERIENTIAL BRIDGING MECHANISMS

Learning theory says that most students best understand and retain material when they actually experience it rather than being told about it (though previously lectured, the author first understood sky-diving when he stepped off the wheel of an airplane at an altitude of 1800 feet). Three different mechanisms have been attempted by the author in recent years to allow the students to actually experience statistics. All have been quite successful. Each will be described below.

Bridging exercises

It seems clear to the author that, if one really buys into the notion that a course objective should be that the student must be able to apply the subject matter outside the college
campus, the best way to develop this ability is to require the student to apply the subject matter off campus. Thus, in the second statistics course (the concept could be used also in the first course or even a high school statistics course), every student is required to complete at least two "bridging exercises."

The name for the exercises derives from the fact that the purpose of the exercise is to develop the ability to build a bridge between the course and the "outside world." The student is free to choose the topics in the course that will be bridged to the outside world. Most students at York College work at least part time and students are encouraged to apply the selected topic in their place of work. If they do not work, they are encouraged to communicate with a working parent asking them to obtain actual work data. Confidential data is easily masked by moving decimals or multiplying by a constant. As a last resort, students are permitted to gather data from their personal lives (e.g., an interval estimate on how long it takes a roommate to take a shower, or a two-way analysis of variance to determine the best route to school given alternate routes, the time of day or day of the week), though few students are forced to take this approach.

Since the skill being developed is the ability to see the relationship between subject matter and the workplace (building the bridge) students are provided no help from the instructor in building the initial bridge. After the initial idea is proposed by the student, the instructor is available as a consultant for help with the implementation. At least two bridging exercises are mandatory but the students may do as many as four. Four major exams are given in the course (three during the semester plus the final exam) and ten points are added to an exam grade for a correctly-completed bridging exercise covering the material in that exam. Students must have a bridging exercise proposal approved before the exam which covers the topic being used, but then has until the end of the semester to gather data and complete the exercise. Again as practice for the workplace, the submitted document is formal: typed and of professional quality.

The author has found that, early in the semester, students exhibit considerable anxiety and distress about being thrown on their own resources and being required to think on their own. Toward the end of the semester, on the other hand, students gain confidence in themselves and get excited about, and quite adept at, applying statistics outside the class room. End of semester comments from students typically include remarks that they feel they really understand statistics and are confident about, and look forward to, interviews with prospective employers. Graduates sometimes report that "I now see everything that goes across my desk in terms of statistics."

Poker chip exercises

The author has found it useful to subject the entire class to a common experiential exercise that can provide a common reference throughout the semester. Accordingly, eight hundred poker chips are used to represent "widgets." Specifically, the class is told that it is a subcontractor to York International Air Conditioner Company (a real employer in York, Pennsylvania). Specifically, we provide air-conditioner fan blade shafts. Since the shafts must be press fit into ball bearing sets, the shaft diameter is critical; specifically the diameter must be 0.2000 ± 0.0003 inches. The only imposition on the student's imagination is to imagine that a poker chip is one air-conditioner shaft. A number painted on each chip represents the deviation of the shaft diameter from the target value with the decimal moved four places. Thus a chip showing a plus five is five ten-thousandths on the large side. In order to expedite an order for eight hundred shafts, two hundred shafts were made on each of four machines (represented by four "tote pans" each containing 200 poker chips). The number of red dots on the back of each chip represents the machine the "shaft" was made on. Finally, the number of blue bars on the back of a chip denotes which shift the shaft was made on. The worker who runs each machine on each shift is identified and some human resource data is provided on these workers. The students are told that we have a quality problem and that each student must prepare as an end-of-semester case study, on the basis of samples taken from the four "tote pans" of shafts we have, an analysis of our process, identification of possible problems, and recommended changes which should resolve the quality problem (alternatively, the student buys steaks for a restaurant chain: each poker chip represents a purchased steak and the number on the chip represents the number of ounces the steak deviates from the desired 16 ounces).

As can be seen from the Figure 2, the shaft dimensions (or steak weight) in each set of two hundred chips are normally distributed, each having different means and standard deviations. As the exercise is introduced, a few volunteer students come to the front of the class and sort the chips from one of the chip sets according to diameter (weight). This may be the only time in their lives that the students actually see something that is normally distributed. What is normally distributed - the shafts or the shaft diameters? Thus the student is introduced to the difference between an experimental unit (an entity) and the unit's characteristic of interest. When asked to restack the chips according to whether the shaft is defective or not (i.e. whether the magnitude of the number is greater than three), the student sees the different levels of measurement available for the characteristic of interest and the profound difference between quantitative and categorical characteristics. As an out-of-class exercise each student is required to sort all four sets of chips and produce a frequency distribution table for each set. They then use the math for grouped data to calculate the mean and standard deviation of the four populations.

Each student draws samples of size five from the first population and calculates the sample mean and standard deviation. The sample means from several hundred students are collated and returned to the students. The students then produce and plot relative frequency distribution polygons from these sample means and calculate the mean and standard deviation of these sample means. This important exercise allows the student to understand, at a visceral level, the difference between the distribution of some characteristic over a population and the corresponding sampling distribution. References in class to "sigma x-bar" now have direct meaning. This process is repeated by having students draw samples and finding the sample proportion defective. The resulting hundreds of p values are returned to the student and the p sampling distribution is created. The mean and standard deviation of this p distribution is calculated as above. Samples are drawn in a similar manner from two poker chip populations and the sampling distributions for Δ x-bar and Δ p are created by the student. Throughout the semester, as these sampling distributions are used in inferential statistics, students are reminded of this exercise and what these distributions mean in terms of their own experience with them.

The sets of "shafts" (or steaks) are used throughout the course to teach almost every topic. Students draw samples to estimate (already known) population means, variances and proportions. Differences in percent defectives or population means between two populations are estimated. Hypothesis testing can be used to test assumptions regarding differences in means or proportion-defectives between two populations. Two way analysis of variance on samples tests for differences in diameters among all four machines, among the three shifts, and possible interactions between machines and shifts and thus individual workers. After completing this exercise, students are asked whether they had thought through the assumptions underlying ANOVA. The better students think to use Levine's procedure to test for homoscedasticity. Chi square test of independence can be used to look for a relationship between defective shafts by machine and by shift.

In short, this experiential exercise not only can be used to teach many of the topics contained in the second course but, when doing any problem in the text, the student is brought back to what they know and understand by asking what a poker chip would represent in the problem under study.

Consistent with the objective of developing critical thinking skills, students are not told to use analysis of variance, chi-square, etc. in the poker-chop case study; it is their task to identify the appropriate statistical tool and at the appropriate time. Thus students again develop both the facility to think on their own and to bridge from class lectures to their application in a (simulated) workplace.

Running text case studies

The third experiential exercise is probably one used by many statistics instructors. Many statistics texts have end-of-chapter case studies. Some have running case studies: using the same companies throughout all chapters of the text. The author has found that students can approximate a real world experience by being told that they should imagine themselves as interns at one of these companies. With little or no input from the instructor, they work on each case study as the semester progresses and are required at the end of the semester to write a formal coherent and integrated "internship" report to the company management providing the insights gained from their analyses and corresponding recommendations. This "bridge" lacks the relevancy associated with applying statistics to the company where the student or their parent actually works, but it is a major improvement over the usual simple unrelated end-of-chapter problems.

FUTURE RESEARCH

In addition to providing students with a useful experience *within* their statistics sequence, the author is also concerned with breaking down the "functional silos" that exist *among* the course offerings within the business curriculum, wherein each business subject is taught as though it exists in isolation from the other business courses. Towards this end, the author is proposing that the second statistics course be coupled, and team-taught with, the required operations management course.

Operations management, as it is currently taught at York College, involves student teams that are assigned to corporate "mentors" at local manufacturing or service-sector businesses. In addition to the usual class lectures, students are provided with periodic plant tours in their assigned business and instruction by the mentor as to how principles taught in class play out in this actual company. The student teams must then prepare and present a major paper at the end of the semester describing operations management as it was used in the company observed.

The author is proposing that, as part of the student investigation of the company under study, teams identify problem areas having potential for analysis and resolution by use of statistics. Thus the structure will exist for tying the "bridging exercises" currently in place in the statistics class to the operational analysis currently being conducted in the operations management class. Mentors who are encountering actual problems within their (real) companies will be able to bring the problems to the attention of the student teams and thus gain access to the expertise of the College statistics instructors for problem resolution. The students will gain the enormous advantage of seeing the practical application of statistics in the workplace for solving real problems in addition to gaining experience in actually using statistics to solve real problems.

CONCLUSIONS

The author hopes that the course objectives outlined in the introduction seem reasonable. Indeed, they seem to have merit whatever the course being taught. The British-American philosopher Alfred North Whitehead, speaking on the need for knowledge to have relevancy, said "All ideas have relationships beyond themselves. Thus unapplied knowledge is shorn of its meaning...without our attending to its usefulness, our knowledge becomes inert, a mere burden on our memory." If the objectives are agreed to, the need for pedagogy which strives towards them becomes apparent. Faculty who are unaware of how little students retain of the topics taught are encouraged to follow example and give first-day quizzes in follow-on courses testing the retention of material retained from predecessor courses.

Student response has been remarkable. The author was concerned about the extensive amount of work imposed on the students by the poker chip exercise. Recognizing the possibility that three different bridging modalities in the same course might be excessive, and concerned with the amount of work associated with the poker chips, the author invited all sections of the class in Spring of 2003 to complain on their course evaluations about the chip exercises but then to give an honest assessment of its contribution to their understanding of statistics. The results were surprising: the students were consistent in their appreciation of the insight gained both from the poker-chip exercises and the bridging problems, but disliked the running textbook case studies. It is possible that the text case studies, if assigned by themselves and used in a different manner, may elicit a more favorable reception. They would certainly be recommended over doing no experiential exercises. Reacting to these outcomes assessments the author has decided to drop the textbook case study exercises while retaining the other two types of experiential learning in the near term.

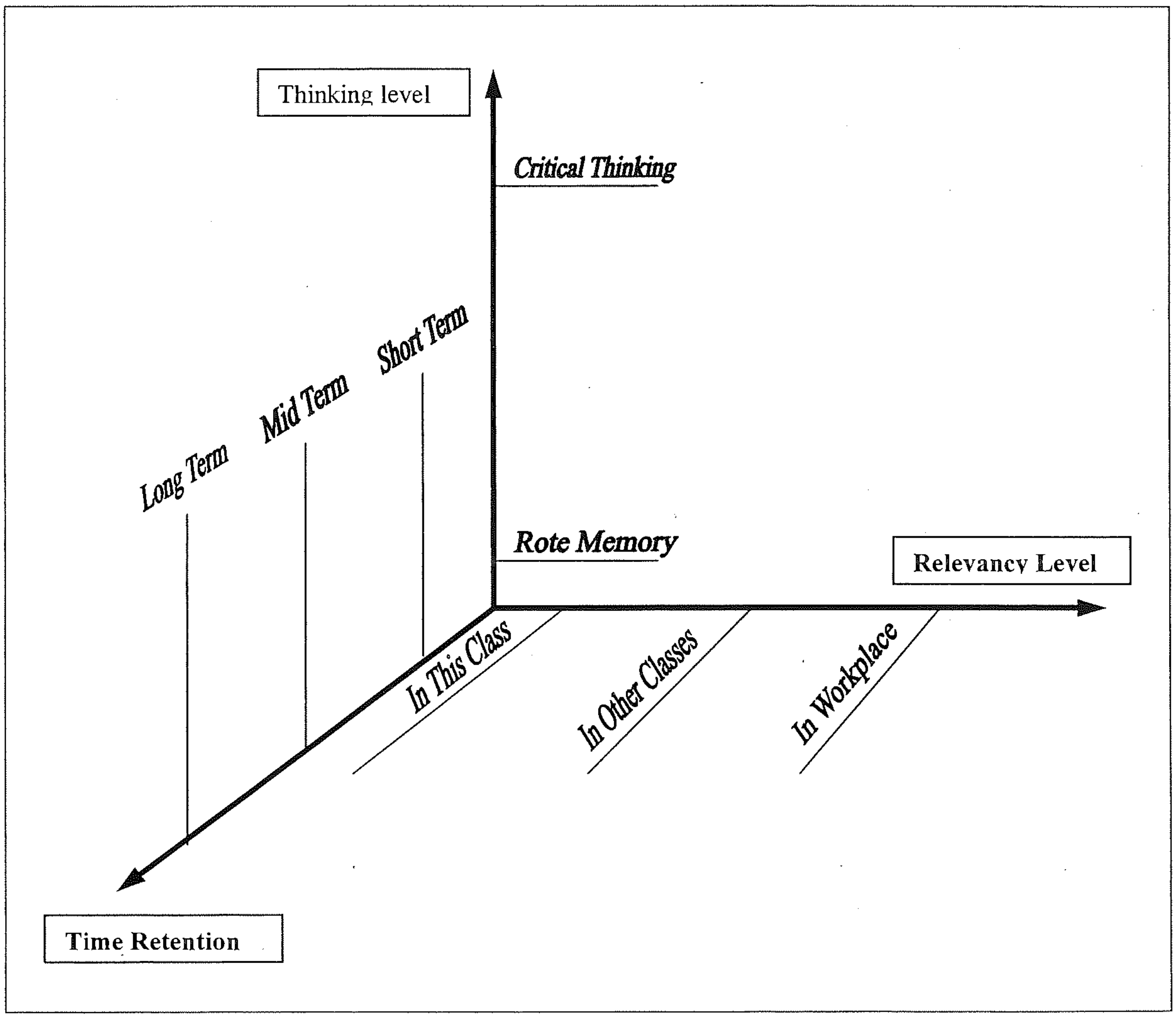

Figure 1 - Rigor/Relevance/Retention Matrix

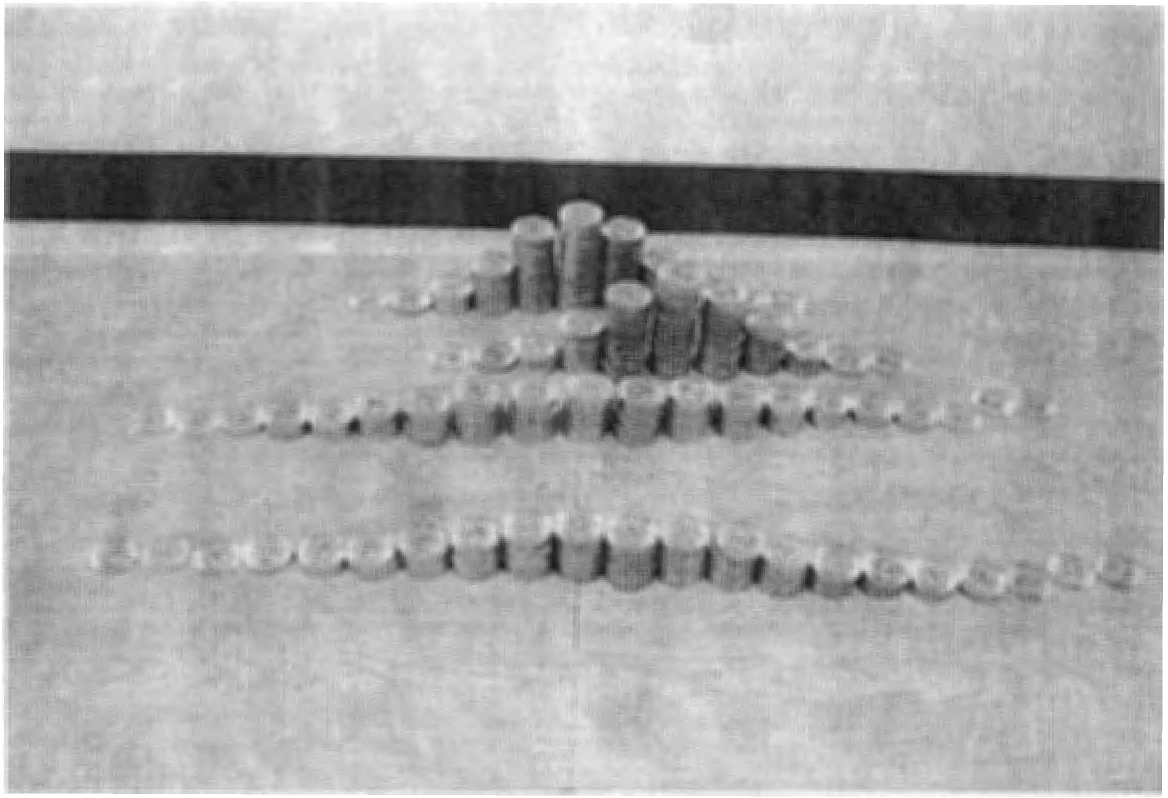

Figure 2 - Poker chips

PROMOTIONAL METHODS USED BY HOSPITALITY-RELATED FIRMS IN CLOSE PROXIMITY TO PENNSYLVANIA RAIL-TRAILS

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and
Jennifer Barr
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ABSTRACT

Rails-to-Trails Conservancy is a nonprofit organization that was established to facilitate the conversion of railroad beds into trails for recreational use. This study examines the promotional techniques used by hospitality-related firms located close to Pennsylvania rail-trails. Emphasis was placed on assessing the extent to which businesses choose to list their property in the Conservancy's guidebook and/or have a link through RTC's trail-link web site. Respondents to a mail survey generally felt that being located close to a rail-trail generates traffic and revenue and that it is valuable to list through RTC. Firms not listing though RTC cited a lack of awareness. Study participants indicated that the Internet and word of mouth are their top two promotional methods.

Key words: Promotion, Rail-trails, Tourism, Internet, Hospitality Marketing

INTRODUCTION

In a 1996 report, Rails-to-Trails Conservancy (RTC) estimated that 131 million Americans regularly bike, hike, skate, or jog for exercise, sport, or recreation (Howser, 1997). RTC, based in Washington, D.C., was established in 1987 to facilitate conversion of America's abandoned railroad beds into trails for public use. There are over 1,200 such trails in existence in the U.S. today and more are being planned.

Early on, landowners near the trails feared that rail-trails would lead to increased problems with vandalism and a subsequent decrease in property values. Those fears have not been substantiated. Trail users are generally friendly and responsible individuals who respect the rights of nearby property owners and appreciate the beauty of the natural surroundings (Howser, 1997). The trails also play an important role by contributing to the economic revitalization of many small and rural communities. Some established businesses that had previously been struggling have adjusted to meet the needs of trail users, and new establishments that offer trail-related services have developed and flourished.

Contributions from rail-trails lie primarily in the areas of increased tourism; specifically, new jobs, additional payroll and sales tax revenues for state and local governments, and health benefits for recreational users of the trails. Studies have also shown that rail-trails are a valuable amenity for both businesses considering relocation and families wishing to buy or build a new home (Howser, 1997).

Although investigations have been undertaken to determine the economic benefits of rail-trails, very little research has focused on the promotional techniques used by hospitality-related firms in close proximity to the trails. That was the primary purpose of this study. Of particular interest was the level of awareness and usage of RTC promotion vehicles by the businesses surveyed.

A variety of trail-related establishments (i.e., bed and breakfasts, bicycle shops, campgrounds, etc.) were surveyed to determine their primary promotional methods. A particular focus of the study was to determine why such businesses do (or do not) choose to list their facility in the *Pennsylvania Rail-Trails* user guidebook published by RTC's Northeast Regional Office which is located in Harrisburg, Pennsylvania.

This guidebook (Rails-to-Trails Conservancy, 2003) provides a description of each of the rail-trails in Pennsylvania along with information important to trail users such as where the trail and parking facilities can be accessed, the trail length and surface (i.e., asphalt, limestone, etc.), handicapped accessibility, and the types of activities permitted (i.e., hiking, biking, horseback riding, cross-country skiing, etc.). There is also a map which shows the roads leading to the trail and the trail itself. For a $100 fee (Tomes, 2004), businesses can choose to have their property listed so that the map will specify the location of each respective business along with its phone number. Additionally, all participating businesses are listed in alphabetical order at the back of the guidebook with all relevant contact information (i.e., address, phone, fax, e-mail). The guidebook is published every year.

Currently, the Pennsylvania office of RTC is the only one that actively solicits businesses to purchase a link from RTC's Trail-Link web site. This service is also available for a $100 fee. Given the burgeoning use of the Internet and the expectation of continued growth, it was deemed appropriate to assess usage of this promotional tool by the business establishments surveyed. Determining the extent to which respondents employed the Internet to reach potential customers, as well as their perceptions about the medium's ability to generate patron traffic and revenue, were of particular interest.

LITERATURE REVIEW

The research conducted to date on this topic has been sparse. Consequently, the literature on advertising methods used by bed and breakfasts, the advantages and disadvantages of Internet use in tourism marketing from the perspectives of both consumers and firms, and the estimated profitability from cyclist patronage was reviewed.

In October and November 1996 a survey was mailed to 198 B&B managers located throughout the US (Lubetkin, 1999). There were 92 respondents. A second survey was mailed to 300 B&B guests the following February and April (n=154). Respondents were asked to rate the usefulness of various forms of advertising. Owners/managers reported that word of mouth, brochures, Mobil and AAA guidebooks, Chambers of Commerce, B&B guidebooks, and the Internet (in order of importance) were the most useful. However, guests rated (in order of importance) word of mouth, B&B guidebooks, Mobile and AAA guidebooks, magazines and newspapers, the Internet and CD-ROMs, travel agencies, and Chambers of Commerce as being the most helpful. Those results suggest that B&B owners should find better ways to incorporate magazines, newspapers, and travel agencies into their promotional plans (Lubetkin, 1999). The author also stated that both the available literature and his own study suggest that it typically takes three years for a B&B to become profitable. It was also noted that it generally takes about three years to both garner listings in advertising and promotional vehicles (such as the AAA and Mobile guidebooks) and to develop enough past guests to generate sufficient word-of-mouth advertising. It was concluded that the challenge is for properties to acquire those advantages as soon as possible.

The Travel Industry Association of America reported that 92% of all Internet users took a trip of 100 miles or more in the preceding year and that 45% took five or more trips in the same time frame (Travel Industry Association of America, 1998). The 1998 survey also found that 6.7 million American adults had used the Internet to make travel arrangements in the previous year. Further, it was stated that 29 million travelers used the Internet for travel-related searches in 1996, and just two years later that number more than doubled to 70 million (Travel Industry Association of America, 1998). This is indicative of the Internet's rapid growth and tremendous potential for travel and hospitality-related businesses.

The advantages and disadvantages of marketing via the Internet have also been explored empirically. Firms benefit due to low-cost marketing, increased customer satisfaction as a result of a shift in control, easier entry into new markets, and the possibility of competing on dimensions other than price (Hoffman and Novak, 1996). However, according to Hoffman and Novak (1996) businesses were troubled over the actual execution of their web site and the lack of established criteria to assess effectiveness.

Benefits to consumers include easier access to information that lends itself to a more informed decision-making process, consumers being in control of when and what sort of information is desired, and 24/7 availability of needed information (Hoffman and Novak, 1996). Consumer concerns revolve around ease of use, privacy, and security (Graphic, Visualization, and Usability Center, 1997; Hoffman and Novak, 1996).

A research team from Michigan's Small Business Development Center (McCue, 1998) also evaluated the viability of the Internet for growing a business. The team recruited 15 firms, helped them develop web sites, and monitored their progress over the course of one year. Although many of the firms experienced frustration with maintaining and marketing their web sites, the firms were able to obtain new business, attract more customers, and penetrate new markets. McCue (1998) concluded that Internet advertising is valuable because it can reach a potentially larger and more targeted audience with greater cost effectiveness than traditional advertising methods.

Another study of 114 inns and B&Bs (82.5% in Canada and 17.5% in the US) found that there were fewer costs in the long run from marketing through the Internet (Lituchy and Rail, 2000). In particular, one respondent noted that costly brochures were eliminated, postage costs were substantially reduced, and information about new products and services could be disseminated quickly. Other participants liked the immediate access to information facilitated by the Internet and the ability to take reservations online and post updates frequently. The added benefits of customers knowing what to expect and international exposure were also noted (Lituchy and Rail, 2000). Disadvantages cited were the impersonal nature of the medium, the lack of adequate time to devote to their web page, and too much competition on the web.

The attractiveness of trail users as a target market should not be overlooked. Bicyclists have been found to be a profitable group. The manager for Oregon's Department of Transportation's Bicycle and Pedestrian Program stated that, because cyclists travel so light, they actually spend a lot of money eating out, buying food in markets, and staying in campgrounds and hotels (Steves, 2003). Estimates from economic data collected on Oregon's Coast Bike Route found that cyclists spend about $150 a day when staying in motels and eating out. Likewise, an analysis of the use of the Allegheny Trail Alliance system in Western Pennsylvania during the 2002 trail season found that the average expenditure on lodging for groups who stayed overnight was $21.36 per person per night (Farber et al., 2003). That study also found that the average spending on bikes and equipment was $117.47 per person per year. Forty-seven percent of that amount ($55) was estimated to have been directly attributable to spending along that trail system (Farber, et al., 2003).

METHODOLOGY

In October 2003, 92 surveys were mailed to business owners who have hospitality-related establishments located close to a Pennsylvania rail-trail. A second mailing was sent to non-respondents the following month. This process yielded 48 usable surveys and an overall response rate of 52%. Businesses selected for inclusion in the study were identified by examining the 6th, 7th, and 8th editions of the *Pennsylvania's Rail-Trails* guidebook and conducting an Internet search to identify hospitality-related firms located within 2-1/2 miles of a Pennsylvania rail-trail. In addition, a few informal interviews were conducted with several business owners.

RESULTS

The majority of respondents defined their business as either a bed and breakfast facility (38%) or a bike/outfitter's shop (35%). Other participants operated food service enterprises (4%), campgrounds (8%), hotels/cottages (4%), and general stores (2%). Fifty-two percent of the respondents indicated that the rail-trail either runs through (or along) the edge of their property or that it is a half mile or less from their establishment.

Approximately 47% of the participants provide one or more trail services. Of those who make such services available, 48% offer bike rentals, 35% have secure bike storage, 30% provide shuttle service to the trail, and 26% prepare box lunches and/or furnish bike tools and repair service. Other services that were available to a lesser extent included snacks and refreshments (17%), maps (13%), free bikes (9%), trailside assistance (4%), bike tours (4%), and camping/cross-country skiing rental and sales (4%).

According to survey respondents, 51% believe that having a rail-trail in the vicinity of their business is very important. The remaining participants conveyed that the trail is somewhat important (27%), important (16%), or not at all important (7%). Follow-up questions asked respondents to estimate the percentage of customers that come from the rail-trail as well as the annual revenue generated by this group. A somewhat surprising 57% estimated that 10% or less of their customer base is from the trail. Another 28% indicated that 11-33% of their customers come from the trail, followed by 8.5% who ascertained between one-third and one-half. Only a few respondents reported that more than half of their customers were the result of people visiting the trail. When asked to estimate the annual dollar value of revenue generated from trail users, 23% put this figure at less than $500; 35% stated $500-4,999; 23% reported $5,000-19,999; and 14% estimated over $20,000. The remaining 5% were unsure.

Study participants were also asked to comment on any advantages or disadvantages associated with having their business located close to a rail-trail. The 30 advantages listed tended to center around the following themes: (1) provides guests with another tourism option in a given area thereby increasing traffic/exposure, (2) offers a safe recreational area, (3) creates more revenue throughout the season, (4) attracts a more upscale group and more of the family-type customers desired, and (5) gets non-cyclists to ride (selling a lot of bikes to people who would not ride otherwise). It is noteworthy that, when asked to identify disadvantages, over 80% of the respondents left this area blank or specifically stated "none." The few disadvantages reported (only one respondent each) were muddy feet and clothes, a small amount of vandalism and trash, horses on the trail presenting problems, discourteous motorists who demand that cyclists remain only on the paths and off the road, hunters who resent recreational use by non-hunters, and a bike shop owner who reported selling more bikes, but the less expensive ones since the trail is flat and non-technical.

When asked, "Have you ever listed your property in the Pennsylvania (PA) guidebook published by the Rails-to-Trails Conservancy (RTC)?" just over 70% of the respondents said they had. This relatively high percent was expected given the location of the properties. Of those that had listed, 72% had done so two to three times and the remaining 28% had listed four or more times (the guidebook has been published eight times to date). When asked, "To what extent does a listing in RTC's PA guidebook build traffic at your property?," 64% reported slight to moderate impact, 12% responded that it had no impact, and 3% reported great impact. The remaining 21% simply "didn't know." When asked if they would recommend that other businesses located close to a trail advertise in the book, 69% indicated they would, while the remainder (31%) stated they were unsure.

Survey participants who had never listed their businesses in the PA guidebook were asked to choose (from a provided list) as many reasons as were applicable for not subscribing. Fifty-seven percent were not aware of the option, 21% were either not interested or were never asked, 14% felt it was not cost effective, 14% reported they couldn't afford a listing, and 7% weren't aware of the cost. An encouraging finding was that 46% of the businesses not listed previously indicated a willingness to do so in the next year or two. Another 11% said "maybe," 8% said it would depend upon the cost, 4% wanted more information, and the remaining 31% were a definite "no."

A similar series of questions were asked regarding whether the business ever had a link for its property on RTC's Trail-Link web site. As previously mentioned, Pennsylvania was the chosen state for this study because at the present time it is the only office that actively solicits businesses to have their web site linked to RTC's Trail-Link web site. Thirty-two percent of the respondents did report having such a link. Of those, 59% felt it had a slight to moderate impact on building traffic at their respective facility, 27% reported a great impact, and 14% believed the link had no impact whatsoever. Fifty-two percent reported a willingness to recommend this link to other businesses located close to a trail, 40% were unsure, and the remaining 8% would not.

Of the 68% of respondents who do not have a link, the reasons given were that they weren't aware of the option (41%), it is not cost effective (18%), they can't afford it (18%), their business doesn't have a web site or it is currently under construction (9%), they aren't aware of the cost (6%), they're not interested (6%), or that they're not sure if they'd want a link (9%). However, 43% of the respondents who have never had a link indicated that they anticipate having one in the next year or two.

When all respondents were asked if they anticipate advertising via RTC next year, 45% reported they plan to promote their business in the PA guidebook and on the Trail-Link web site, 26% expect to use the guidebook only, and 5% intend to employ the Trail-Link web site only. The remaining respondents did not plan to advertise through either vehicle (10%), were unsure (12%), or required information on costs (2%).

As noted earlier, a key area of interest was learning more about the promotional methods used by the hospitality-related firms in the study. When asked to list in order of importance the most cost effective ways to promote their property, an Internet web site was mentioned as the #1 or #2 method by 20 respondents. The importance of the Internet was also confirmed in a telephone interview with the owner of a B&B. She communicated that she acquires most of her business from online sales and that she had listings through the Latrobe and Pittsburgh Chambers of Commerce (Libertini, 2003). Word of mouth was a close second (n=19). None of the other promotional methods mentioned was listed as either a first or second choice by more than ten respondents. The importance of the Web was further demonstrated by the fact that 72% of survey respondents were linked to at least one other tourism web site (other than the RTC Trail-Link site).

Respondents were also directed to specify commonly used promotion vehicles through a checklist question. The prevalent methods included a business web site (78%), brochures at tourism bureaus (63%), word of mouth (44%), newspaper advertising (39%), Internet/web/e-mail advertising (30%), direct mail (28%), magazines (24%), travel agencies (22%), radio (22%), billboards (17%), TV (15%), and brochures distributed through local businesses (13%). Other techniques mentioned by less than 10% of the sample included visitors' and convention bureaus, bed and breakfast associations, and sales promotion.

In terms of monies spent annually for advertising, 43% budgeted between $100 and $999; 26% reported $1,000 to $4,999; 12% invested $5,000 to $9,999; and 19% stated $10,000 or more.

DISCUSSION & RECOMMENDATIONS

The findings suggest that hospitality-related businesses located close to a Pennsylvania rail-trail recognize the benefit of having a trail nearby. Over 93% of the respondents believed location was important. It also appears to build revenue for non-hospitality firms near a trail like the Stereo Shop located in Greensburg. That business is mentioned in the Pennsylvania guidebook as a directional marker to help visitors find the Five-Star Trail. A personal interview with some of the employees revealed that the Stereo Shop doesn't do much advertising with RTC because it's difficult for someone to carry a 65 inch TV on a bike. However, one of the employees mentioned that the GPS systems sold by the store are in demand by hikers and bikers (Stereo Shop, 2003).

Other important insights were gleaned from the research. For instance, 30% of the study participants communicated that the trail generates $5,000 or more in annual revenue for them. Two-thirds of the participants who listed their property in the Pennsylvania guidebook reported it had an impact on generating traffic and, indeed, all of the businesses that had done so listed for more than one year. Subsequent inclusions in the guidebook appear to reflect the viewpoint that a listing is beneficial in building traffic and also the notion that consistency and reinforcement are important elements of advertising.

Further, the survey results clearly indicate that business owners are well aware of the growing role the Internet plays in tourism marketing. Almost 72% of the respondents had their properties linked to a tourism web site other than RTC's. The Internet was also cited most often as one of the top two most cost effective ways to promote the business.

Almost 32% of the respondents were linked currently to RTC's Trail-Link web site and this percentage is expected to grow in upcoming years. While 46% of the respondents plan to have both a guidebook listing and a link with RTC in the near future, 5% expect to only employ the Trail-Link web site. So it appears that if respondents follow through with their stated plans, fully 50% will have a web site link through RTC. When one of the authors asked the Program Coordinator at RTC's Harrisburg office whether she thought the web link would eventually replace the guidebook, her response was "no" (Tomes, 2004). It is her belief that trail users wish to carry the guidebook with them because it maps out the trails and various points of interest along the way.

A primary reason businesses do not list in the Pennsylvania guidebook is a lack of awareness concerning that option (57%). While cost appeared to be troublesome for some (14%), this did not seem to be a major issue and some participants reported not knowing the cost or never having been asked to list their business. Likewise, lack of awareness (41%) appeared to be a factor in limiting the number of businesses having a link to RTC's Trail-Link web site. Again, while cost was a consideration for some (18%), other respondents did not know the cost or simply needed to construct a web site.

A key recommendation is for the Pennsylvania RTC office to penetrate the marketplace more fully by increasing awareness of the benefits of rail-trails, in general, and its guidebook and Trail-Link web site, in particular. Word of mouth is a powerful promotional mechanism. It is suggested that an attempt be made to have a major newspaper (i.e., *The New York Times*) develop a feature article on the subject. Rail trails as health-oriented tourist attractions (in a natural setting) should be emphasized. This topic is timely given recent sociocultural concerns about obesity in general, diabetes in children, escalating heart disease among women and the low carb phenomenon sweeping the country.

RTC can increase awareness and usage of its guidebook and Trail-Link web site in a variety of ways. A cost effective method would likely be e-mail solicitations to hospitality-related businesses located close to the trails followed up by personal telephone calls. Another cost effective technique would be the mailing of a letter and/or brochure addressing the benefits and costs of advertising through RTC. Small businesses that are operating on a limited promotions budget might respond to a package deal that offers both the guidebook and web link at a reduced combined rate or a package that offers a discount for signing up for two or more years at once with payment for subsequent years due at a later date. Providing incentives to current users to solicit new patrons (e.g., offer a 10% discount for each new listing) is another option.

Although the study did not address the costs and benefits of RTC providing the Pennsylvania Trail-Link option, given the continued growth in the use of the Internet by travelers planning trips, it seems prudent for RTC to examine the pros and cons of soliciting trail-side businesses in other US states. The travel market is increasingly using the Web to plan trips and individuals who are interested in hiking and biking opportunities do need information about places to stay, restaurants where they are welcome to eat, and facilities that can render assistance in the event of a bicycle-related problem. Hospitality-related businesses stand to gain from this momentum, provided that interested customers will know where to find them.

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THE PREDICTIVE POWER OF THE SPF PROBABILITY FORECASTS

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ABSTRACT

The probability forecast of decline in real GDP from the Survey of Professional Forecasters (SPF) has long been used by the various users in the public and private sectors as the predictor of the cyclical movement of the economy. However, its predictive power and forecasting performance have not yet been properly evaluated in literature. In this paper, the PT Predictive Power Test and the Kuipers Score are applied to assess the usefulness of the SPF's probability of decline in real GDP as the indicator of the future path of the economy.

INTRODUCTION

Cyclical movement in real GDP has long been the focus of business cycle researchers and business practitioners. As witnessed for the past decades, cyclical movement of real GDP tremendously impacted the economy, and early detection of the phase change could provide enormous values for corporations, individuals and government policy makers. For this purpose, professional forecasts from a variety of forecasting entities using different techniques were conducted with the intention to supply government and business decision makers, as well as general public, with some reliable and timely guidance for the future path of the economy. Among them, the probability forecast of decline in real GDP from the Survey of Professional Forecasters (SPF) is a one that was being constantly monitored and frequently used by various end users in both public and private sectors.

However, given the critical role of the prediction of the future movement of real GDP in influencing business decisions, one important issue in business cycle research is the quality of the forecasts. While high quality forecast can provide its end users with a useful "leading indicator" for their business references, poor performed forecast could be a "misleading indicator" for its users in terms of direction, timing, and magnitude of the future changes in the economy. Therefore, any professional forecasts, including the probability forecasts of decline in real GDP, without associated evaluations should be considered a mission incomplete, and used with extra caution.

The purpose of this paper is intended to evaluate the SPF by assessing the forecasting performance of the probability of decline in real GDP with different forecasting horizons, which have been widely used by users in public and private sectors, but have not yet been analyzed and evaluated in literature with the appropriate evaluation methodologies. It is hoped that the evaluation for the forecasting performance of the probability of decline in GDP in this paper will provide its current and potential users with a needed assessment for its usefulness as a predictor of the cyclical movement of real GDP.

The structure of the paper is as follows. Section II presents the descriptions and empirical data of the SPF probability forecasts. Section III assesses the predictive power of the SPF forecasts. Section IV analyzes the forecasts in terms of balance of the missing signals and the false alarms. Finally, Section V ends the article with some concluding remarks.

THE SPF PROBABILITY FORECAST ON DECLINE IN REAL GDP

As one of the oldest business surveys in the US, since 1968, the American Statistical Association and the National Bureau of Economic Research (ASA/NBER) routinely conducted the quarterly surveys by mailing some questionnaires to professional forecasters and collecting their forecasts for the future economy. The questionnaires are mailed out when the forecasters typically review and update their predictions, and the responses are received by the middle of the second month of the quarter. The number of the responses to the questionnaires usually arrange from about 20 to 150. The survey was commonly referred to as the ASA-NBER Survey in previous literature, and the name was changed to the Survey of Professional Forecasters (SPF) when the Federal Reserve Bank of Philadelphia took over the responsibility for the survey in June 1990.

The SPF generally covers the current quarter, the subsequent four quarters, as well as the current year and next year. The variables to be predicted include GDP related measures, the unemployment rate, the probability of a decline in GDP, and other important macro-economic variables that are closely watched by government and business decision makers as well as the general public.

The graphs of the mean probability of decline in real GDP in the current and the following quarters from Quarter 4 1968 to Quarter 2 2004 are depicted in the Chart 1-5. The lines in each chart display the probability of decline in real GDP in different quarters as the professional forecasters made the predictions over time, and the real time real GDP growth rate, respectively.

The real time real GDP growth rate could be calculated in two different ways. First, calculating the real time real GDP growth rate uses each quarterly release of the real GDP at real time since Quarter 4 of 1968 when the SPF was first time being conducted. At the beginning of each quarter, the Bureau of Economic Analysis of US Department of Commerce issues the preliminary real GDP data for the previous quarter and revises the data for all other previous quarters, if needed. The changes in the revision for the previous quarterly data could be caused by incompletion of the previous data, statistic error, structure changes, measure changes (from GNP to GDP, for example), and any other issues that may call for the revisions. As the consequence, different quarterly releases for the same quarter real GDP could be quite different. It is interesting to note that the real time real GDP growth calculated in such way only shows one quarter negative growth for the most recent recession in 2001.

Second, calculating real time real GDP growth rate uses the July release of each year. It is well known that the July version of the real GDP release is a relatively complete one in each year. It may not be as "real time" as the one calculated using the first approach, but it caught all major consecutively negative growths of the real GDP, which is certainly a better reflection of the cyclical movement of real GDP in reality. But in either case, the real time real GDP and revised real GDP could differ significantly either in terms of magnitude or even in the directions of the changes.

Considering that SPF forecasts were based on the real GDP data available to the SPF respondents at real time, the real time real GDP is used as the target to evaluate the performance of SPF forecasts, and make the comparison on an apple to apple basis. More specifically, we use the real time real GDP growth rate calculated by the July version of each year. As mentioned above, it could be different from the most recently revised data, such as Q3 2004 release for the data up to Q2 2004, but it is probably much closer to what was available to SPF forecasters when they made their predictions in real time.

From the charts 1-5, several notable phenomenon can be observed. First, the mean probabilities generated by the professional forecasters fluctuate over time in a certain pattern. The value of mean probability varies from as high as in 80% range to as low as less than 5%. Second, the fluctuation of ups and downs in mean probability seems coincident with the fluctuations in real GDP growth. That is, around the time with the negative growth rate of real GDP or the recessionary periods, the probabilities suddenly rise up; and in the time associated with the positive growth rate or the expansionary periods, they remain relatively low. Third, for different forecasting horizons, sudden increases or decreases in the probability either precede or follow the cyclical movement of real GDP with different time leads or lags. Finally, the high end of the mean probability tends to decrease as the forecasting horizon increases. As shown in the charts, the high end probability decreases from an 80% range for current quarter to a 70% range for the one quarter ahead, to a 50% range for two quarters ahead, and to a 30% range for three and four quarters ahead.

All these observations indicate that the probability forecasts for the decline in real GDP contain tremendous information about the phase changes of the real GDP and business cycles. Consequently, some proper evaluations need to be conducted for these series for their forecasting ability as the predictors.

PREDICTIVE POWER OF SPF FORECASTS

The predictive power of the SPF probability forecasts is first being examined in this section. Given the binary nature of the event, the Pesaran and Timmermann (PT) test (Pesaran and Timmermann, 1992) is used to assess the predictive power of the SPF probability forecasts in their abilities to predict the future path of the real GDP.

The PT test was designed to testing the prediction of the directional changes such as an occurrence or a non-occurrence of an event (for example, the decline in real GDP or non-decline in real GDP for the current quarter or for the future quarters). However, the SPF forecasts are the probabilities that real GDP will decline in different forecasting horizons. They are not directly event variables that take value of 1 or 0. Therefore, applying the PT test needs to first translate the SPF probability into an event variable.

One possible way of translation is the traditional naïve approach. That is, a value 1 will be assigned if the forecasting probability for the occurrence of the event is above 50%; a value 0 will be assigned, otherwise. Another possible way of translation is to select the probability that is associated with the critical value that makes difference in the PT test results. For example, given the confidence level of 90% for normal distribution, the SPF probability that is associated with the critical value of 1.645 is 5%; then, use the 5% as the threshold to translate the probability into an event variable. In this way, not only can we test the prediction performance, but also we are able to know how low (or high) the threshold needs to be set up to identify the predictive power of forecasts on the occurrence of the event.

For the PT test, the forecast evaluation is conducted by calculating the difference between the portion of the times that the event is predicted correctly and the mean of the underlying binomial distribution (theoretical portion of the times of the occurrence of the event) under the null hypothesis of independence between the forecast and the occurrence of the event for the 2x2 case. The test statistic is as follows:

$$S_n = (\hat{P} - \hat{P}_*)/(Var(\hat{P}) - Var(\hat{P}_*))^{1/2} \quad (1)$$

where $\hat{P}$ is the portion of the times that the event is predicted correctly,

$\hat{P}_* = P_y P_x + (1-P_y)(1-P_x)$, the mean of the binomial distribution under the null hypothesis,

P_y and P_x are the probability of the occurrence of the event and the forecasted probability of the occurrence of the event, respectively. When the theoretic P_y and P_x are unknown, P_y and P_x can be efficiently estimated by

$$\hat{P}_y = \sum_{t=1}^{N} Y_t / N$$

$$\hat{P}_x = \sum_{t-1}^{N} X_t / N$$

respectively, under the null; where Y_t is the occurrence of the event, and X_t is the prediction of the occurrence of the event.

$Var(\hat{P}) = \hat{P}(1-\hat{P}_*)/N$, is the variance of $\hat{P}$,

$$Var(\hat{P}_*) = (2\hat{P}_y - 1)^2 \hat{P}_x(1-\hat{P}_x)/N$$
$$+ (2\hat{P}_x - 1)^2 \hat{P}_y(1-\hat{P}_y)/N + 4\hat{P}_y \hat{P}_x(1-\hat{P}_y)(1-\hat{P}_x)/N^2$$

is the variance of $\hat{P}_*$.

Under the null hypothesis of independence between the SPF probability forecasts and the occurrence of the event, the difference between the percentage of the correct forecasts made by SPF ($\hat{P}$) and the percentage of the occurrence of the event ($\hat{P}_*$) should be insignificant as measured by the test statistic S_n in (1) which follows $N(0,1)$ under the null. Reversely, if test fails at any acceptable level of significance, a dependent relationship between the two series will be considered. Then, the existence of the predictive power of the forecast on the occurrence of the event will be supported by the test.

Given the directional nature of the PT test and the density function nature of the SPF forecast, as discussed above, we use two thresholds as the directional indicator for the SPF forecast series: (a) using the naïve approach with 50% as the threshold. The SPF probability of decline in real GDP above 50% is considered a direction change (down), otherwise, it is considered a non-down prediction; (b) using the probability that is associated with the critical value of the normal distribution with the confidence level of 90% as the thresholds. In either case, the PT test was performed using real time real GDP with all forecasting horizons. The test results are displayed in Table 1.

As it turns out, for the naïve approach, all test results for current and next quarter forecast (2 quarter and above forecasts are not applicable, because no forecast probability is above 50%) uniformly reject the independence hypothesis with any commonly used acceptable level, indicating strongly the existence of the predictable relationship between the SPF forecasts and the actual decline in real GDP. In other words, the SPF forecast is not a groundless predictor for the occurrence of the decline in real GDP in the current and the following quarters. Instead, the SPF contains useful information about the target being predicted, and, thus, is an important source for watching the phase changes of the real GDP cyclical movement.

Similar results were revealed for the critical value approach. Given the way of selecting the threshold, the test statistic with the probability above the critical value is expected to reject the null. The interesting result is that the threshold probability, the one that is needed to reject the null hypothesis, is very low, between 1.5% and 8.5%, depending upon the forecasting horizons. The result, once again but in a different way, strongly supports the existence of the predictive power of the SPF forecast on the occurrence of the decline in real GDP.

BALANCING MISSING SIGNALS AND FALSE ALARMS

The second measure of evaluating the SPF probability forecasts is the balance of the missing signals and the false alarms. As in any probability forecast area, the trade-off between the missing signals and the false alarms always exists. In general, a decision rule based on the forecast probability that tends to decrease the missing signals or increase the "hit rate" will tend to increase the false alarms. So the balance of these "type I" and "type II" error is an important measure for the evaluation of the forecasts. In this regard, the SPF forecasts can be assessed using Kuipers Performance Index or Kuipers Score (Granger and Paseran, 2000) with the contingency matrix calculated using the event variable translated from the SPF with the naïve and the threshold methodologies as discussed above. Kuipers Score (KS) was originally proposed by Pierce (1884), and used widely in evaluating the forecasting performance in metrology. KS is defined as the difference between the "hit rate" (H) and the "false alarm rate" (F) as follows:

$$KS = H - F \qquad (2)$$

Where
$$H = T_{by} / (T_{by} + T_{bn})$$
$$F = T_{gy} / (T_{gy} + T_{gn})$$

T_{by} is the number of times that the event occurred (the subscript "*b*" stands for bad thing (event) happened) and the forecaster predicted it correctly ("*y*" for "yes" answer given by forecaster). T_{bn} is the number of times that the event occurred but the forecaster failed to predict it (with "no" answer). So the ratio *H*, then, is the "hit ratio" that measures the portion of the times that the forecasters predict correctly when the event indeed occurred.

Similarly, T_{gy} is the number of times that the event didn't occur, but the forecasters mistakenly predicted it. T_{gn} is the number of times that the event didn't occur and the forecasters correctly said no. So the ratio *F* is the "false alarm ratio" that measures the portion of times that the forecasters generated false signals for the occurrence of the event when it actually didn't happen. By definition of the *T's*, the total number of the observations (*T*) is the sum of all *T's*. That is:

$$T = T_{by} + T_{bn} + T_{gy} + T_{gn}$$

Naturally, higher the value of KS with a positive score, better the forecasting performance, with the balance of the missed events and the false alarms. Higher the KS, higher the hit rate with the relatively low false alarm rate. Reversely, the lower KS, or even the negative KS, indicates the higher false alarm rate relative to the hit rate. Obviously, if a forecaster always predicts the occurrence of the event systematically, then KS will be equal to 0 with 100% hit rate and 100% false alarm rate. Similarly, if a forecaster always predicts the non-occurrence of the event systematically, then, the KS will also be equal to 0, but with 0% false alarm rate and 0% hit rate as well.

The Contingency Matrix and the KS for both the naïve approach and the threshold approach with different forecasting horizons are displayed in Table 2. The numbers in the first, second, third and fourth quadrants correspond to $T_{by}, T_{gy}, T_{gn}, T_{bn}$, for each forecasting horizon, respectively.

As the Table 2 shows, compared with two approaches, the threshold approach, with its low threshold (<10%), generated high hit rate (100%), but with high false alarm rate (>90%) as well. In contrast, the naïve approach, with its relatively higher dividing line (50%), generated low false alarm rate (< 5%), but also relatively low hit rate (60% and < 60%, compared to above 90%). It should be noted that, in the threshold case, the KS appears extremely low, the KS ranges only from 0.024 to 0.065. In contrast, the KS for the naïve approach is much higher, especially for the current quarter and the next quarter, with the KS equal to 0.6012 and 0.2593, respectively. The results indicate that the SPF forecast using the naïve approach can generate much balanced predictions with the considerations of both the hit rate and the false alarm rate. On the other hand, the SPF using the threshold approach can only help determine the critical values that help identify the predictive power of the SPF, but can't be used as the actual threshold to translate the probability into an event variable. Given the low threshold, it systematically generates high hit rates, but meanwhile, it systematically generates high false alarm rates as well. As the results, it produces a low Kuipers Score.

CONCLUDING REMARKS

In this paper, I used the PT predictive power test and the Kuipers Score to evaluate the forecast performance of the SPF probability forecasts for the decline in real GDP with the different forecasting horizons for their usefulness as the guidance of the future path of the economy. In summary, I would like to conclude the paper as follows:

First, the SPF probability forecasts for the decline in real GDP in the current quarter and near future contain tremendous amounts of information about the regime switching of the cyclical movement in real GDP. They are indubitably the important sources for exploring and identifying the possible signals of the forthcoming of the cyclical phase changes.

Second, the PT predictive power test reveals strong evidence for the existence of the dependent relationship between the forecasts and the event being forecasted in various forecasting horizons, as indicated by the rejection of the null hypothesis of independence. That means: the SPF probability forecasts are the predictions for the future real GDP movement with the needed predictive power.

Third, similar to the issue of balancing "Type I" and "Type II" error, a high hit rate needs to be achieved with the balancing of a low false alarm rate. Applying the Kuipers Score to the SPF probability forecasts with different direction translation approaches shows much balanced performance using the naïve way of translation.

Finally, it should be mentioned that the SPF probability forecasts for the decline in real GDP, especially for the longer forecasting horizons, seem conservative, as observed by the relatively low probabilities assigned by the forecasters to the possibility of decline in real GDP, even when the real GDP decline was almost on the corner or already occurred. Therefore, the SPF probability for the decline in real GDP does contain correct direction information for the real GDP, but need to be used with some "corrections" or amplifications.

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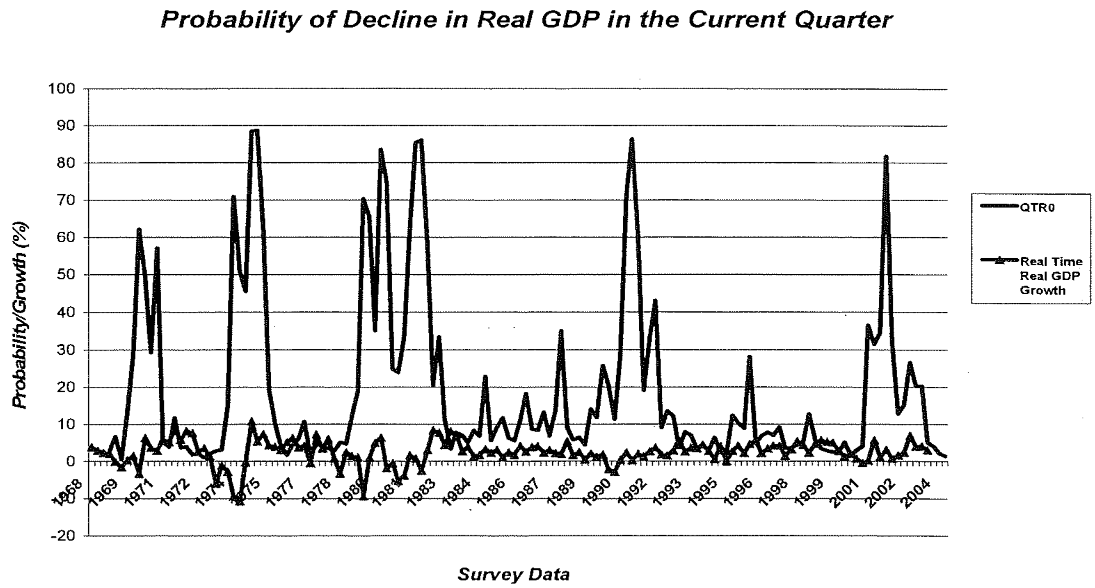
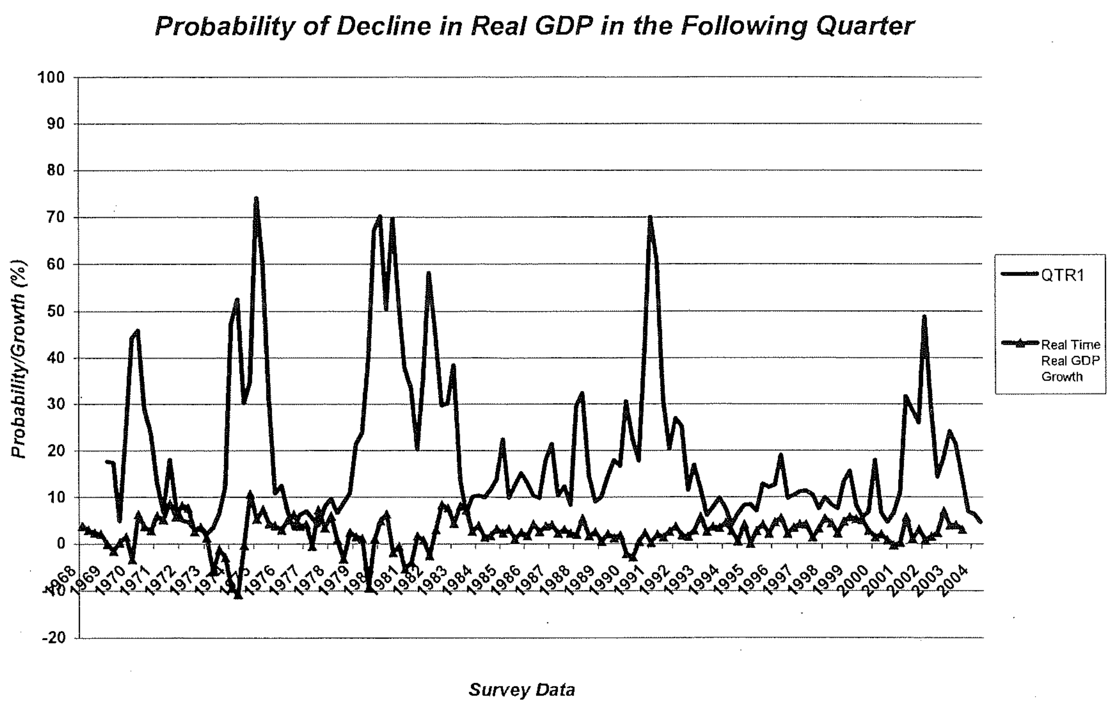


Probability of Decline in Real GDP in the Current Quarter
Probability/Growth (%)
100
90
80
70
60
50
40
30
20
10
0
-20
1968
1969
1971
1972
1974
1975
1977
1978
1980
1981
1983
1984
1986
1987
1989
1990
1992
1993
1995
1996
1998
1999
2001
2002
2004
QTR0
Real Time Real GDP Growth
Survey Data



Probability of Decline in Real GDP in the Following Quarter
Probability/Growth (%)
100
90
80
70
60
50
40
30
20
10
0
-20
1968
1969
1970
1971
1972
1973
1976
1977
1978
1979
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
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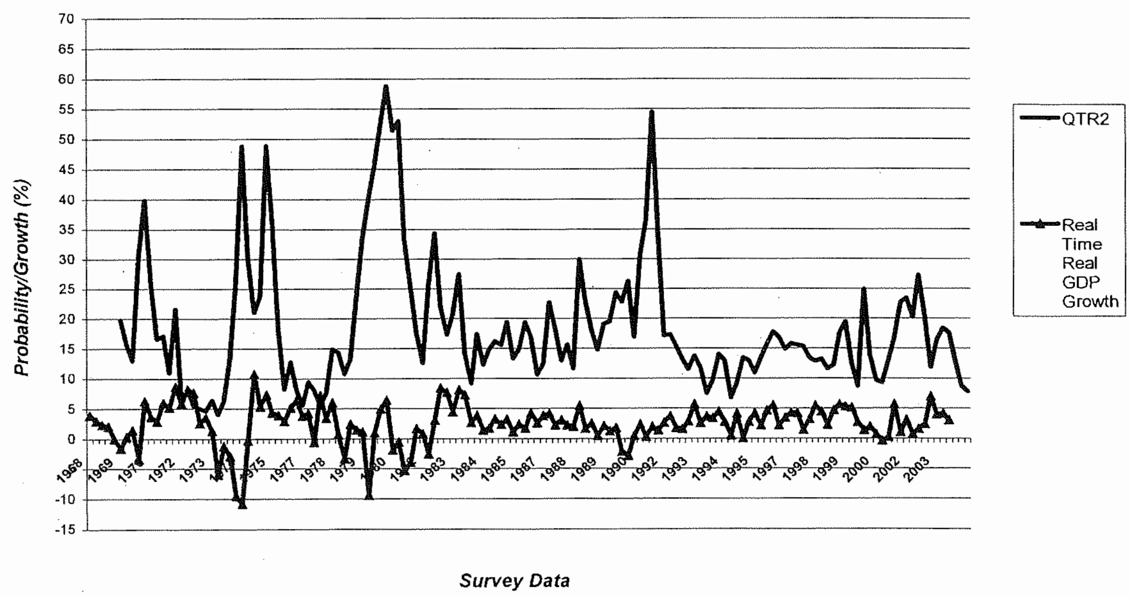
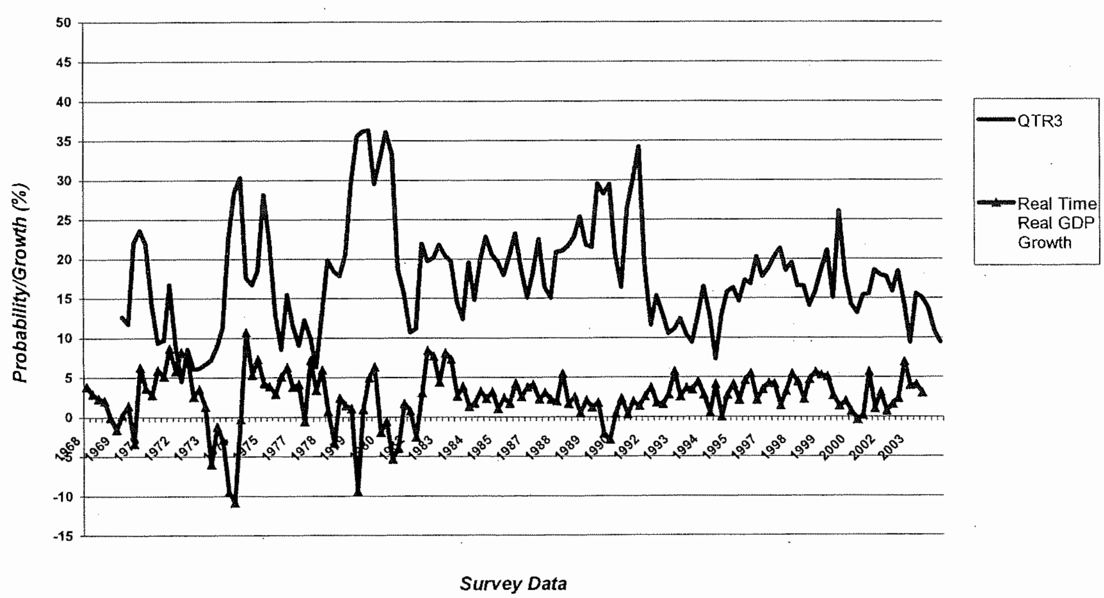
2001
2002
2003
2004
QTR1
Real Time Real GDP Growth
Survey Data

Probability of Decline in Real GDP in Second Following Quarter



Probability of Decline in Real GDP in Third Following Quarter



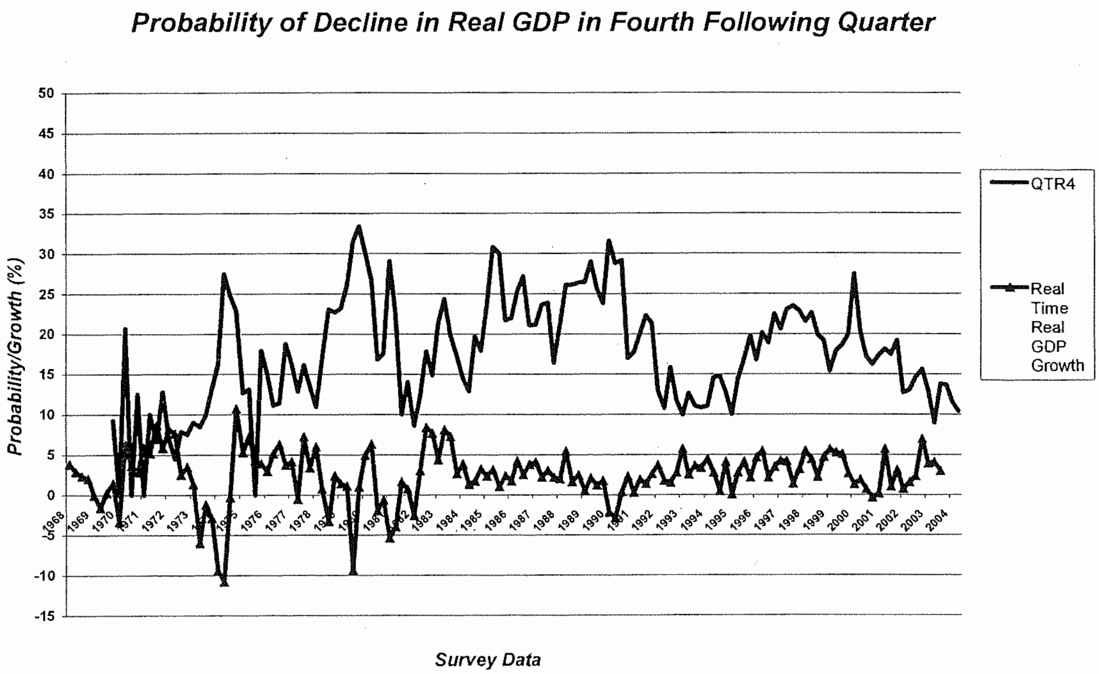


Table 1: PT Predictive Power Test

Horizon	Threshold Probability	Threshold Value	Naïve
Q0	0.015	-1.82	-34.33
Q1	0.035	-1.82	-49.52
Q2	0.050	-3.03	N/A
Q3	0.083	-1.86	N/A
Q4	0.070	-1.86	N/A

Note: (1) Threshold probability indicates the probability that makes difference for the PT test results.
(2) Threshold value is the value of the PT test that is calculated using (1) as the threshold.
(3) Naïve is the value of the PT test that is calculated using naïve translation approach.

Table 2: Contingency Matrix (Threshold)

		Realization (Zt)	
Horizon	**Forecasts/Actions**	**Bad (Zt = 1)**	**Good (Zt = 0)**
Q0	Yes	20	120
Q1		20	120
Q2		20	120
Q3		20	115
Q4		19	117
Q0	No	0	3
Q1		0	3
Q2		0	3
Q3		0	8
Q4		0	3

Note: (1) Bad (Zt = 1) represents the occurrence of the event
(2) Good (Zt = 0) represents the non-occurrence of the event
(3) Total observations are 143 quarters from Q4 1968 to Q2 2004.

Contingency Matrix (Naive)

		Realization (Zt)	
Horizon	**Forecasts/Actions**	**Bad (Zt = 1)**	**Good (Zt = 0)**
Q0	Yes	13	6
Q1		6	5
Q2		1	4
Q3		0	0
Q4		0	0
Q0	No	7	117
Q1		14	118
Q2		19	119
Q3		20	123
Q4		19	120

Kuipers Score

	Q0	Q1	Q2	Q3	Q4
Threshold	0.0244	0.0244	0.0244	0.0650	0.0250
Naïve	0.6012	0.2593	0.0175	0.0000	0.0000

THE SELECTION PROCESS FOR ENTRY-LEVEL FOODSERVICE MANAGERS

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ABSTRACT

According to the National Restaurant Association (2003), turnover rates for employees in the foodservice industries are more than 200% in several areas. One approach to understanding the short retention of entry-level management across the foodservice industry is to consider the interviewing techniques and desired attributes commonly used to hire managers and determine their effectiveness. This paper represents a qualitative longitudinal study among several major foodservice companies comparing interview responses to the selection process for entry-level foodservice managers in 1992 with answers to the same questions by the same companies in 2002.

INTRODUCTION

According to the National Restaurant Association (2003), turnover rates for employees in the foodservice industry are more than 200% in some areas (www.HospitalityTechnology.com). This rate is only slightly lower for foodservice managers. Retention of qualified management in the foodservice industry is becoming more and more critical as the workforce continues to shrink (Chomka, S., 2003). There are many factors influencing the retention of entry-level managers. One approach to understanding the short retention of entry-level management may be to consider the interviewing techniques and the desired personal attributes for applicants commonly used by the foodservice industry. Interviewing techniques refers to the process of screening potential management candidates to consider a candidate's ability to successfully fill a position within a given organization. There are many different attributes used in the interview process to aid in the selection of these candidates.

RESEARCH QUESTIONS

What are the determinants in the selection of entry-level foodservice managers among several major foodservice companies and how specifically have those desired requirements changed from 1992 to 2002?

Into what categories of the foodservice industry did the interviewed companies fall?

Among the categories of the foodservice industry, what specific items were key in the selection of entry-level foodservice managers?

What are the most effective sources for recruitment among foodservice companies?

What are the desired attributes for entry-level management candidates during the interview process?

REVIEW OF THE LITERATURE

Initially

The study (Scales, 1992) focused on the hiring of entry-level foodservice managers and contained some time-honored, general principles for recruiting hospitality managers industry in general. In an earlier study, Dr. David Ley (1978), had developed correlates of management effectiveness using a structured observation approach. Since that time others have used the structured observation approach: Crandall, W., Emenheiser,D.A.; Parnell, J.A. & Jones, C.A. (1996); Pavesic, D.C. & Brymer, R.A. (1989); and have applied these same principles to examining the stress and pressures on young hospitality managers. These entry-level managers must operate in constantly changing environments, coping with events and situations that are most often turbulent and unpredictable. High turnover is the norm. Dr. Ley has in fact concluded across research over the past 15 years that the role of the hospitality manager is at any given time influenced by four situational variables:

1. The hotel, restaurant or foodservice organization itself.
2. The level of the managerial job within the particular organization.
3. The impact of individual personality and management style.

4. Job variations attributed to seasonality or temporary emergencies.

Currently

Literature in the form of recent articles seem to indicate that little has changed from the initial study of the selection process of new managers among foodservice companies in 1992. In a Wall Street Journal article by B. Wysocki (2001), his efforts at finding and creating a management team for his Golden Corral franchise in Kentucky is fraught with "undesirables." Undesirable job characteristics including long hours, lower pay, and weekend work. It is essential to develop recruitment and interviewing strategies that will more closely match the successful entry-level manager to this field of work. In a 2001 study, Professors R. Ghiselli and J. LoLopa surveyed entry-level foodservice managers, graduates of Purdue University, in terms of the issues that were driving them to quit jobs, or to leave the industry, or both. There are indeed many quality of life issues involved for the entry-level foodservice manager. In yet another story in Nations Restaurant News (2000), Milford Prewitt presents study findings that show that it is the operators/owners of foodservice companies that are causing their own turnover problems with new managers. Quality of life issues surface again and again in the retention of entry-level foodservice managers. In yet another issue (Allen R.L., 2000), Robin Lee Allen addresses things that owners/management of foodservice companies can do to end turnover and thus alleviate the intense labor shortages among entry-level managers in the foodservice industry. Employee benefit initiatives and better marketing strategies that can make companies more attractive to the perspective entry-level manager candidates are outlined. Dr. Ley's research that first identified these situational variables (1978), is still true today.

The literature research has been organized to portray the foodservice industry, the role of the foodservice manager and the information with regards to the selection processes for entry-level managers in the foodservice industry. Also investigated are the available recruitment resources used in the selection process of these foodservice managers.

METHODOLOGY

Personal Interview

Personal interviews have been conducted with those responsible for the hiring of entry-level foodservice managers using the same interviewer positions, ten years apart.

A comparison of the results of these interviews, a decade later, was made to determine if there are similarities between the work style preferences exhibited by successful entry-level foodservice management candidates in 1992 and the work style preferences that are most desirable to the corporate foodservice recruiters today.

In order to compare the personal characteristics of management candidates that are desirable to foodservice recruiters, as much information as possible has been gleaned from the interviews. The nature of these interviews is to research the selection process of foodservice managers among several well-known foodservice companies. From the questions posed, this study compares responses on several factors: who among these foodservice companies is currently responsible for interviewing management candidates, what selection methods are used in the hiring decision, what are the most effective resources used in recruiting foodservice managers, and most importantly what are the desired attributes in recruiting entry-level foodservice management candidates.

Gathering data for this research was key to accuracy. The research method selected for this process was personal structured interviews. Personal interviews allowed the researcher to obtain in-depth answers to the interview questions by probing. Probing refers to interviewers asking for clarification on expansion of answers to standardized questions (Bogdan and Biklin, 2003). Personal interviews were also employed, in order to provide the identity of the respondent and control all aspects of the sample (Bogdan and Biklin, 2003).

It was extremely important to control the distribution of the sample. All subjects had to be currently employed in the foodservice industry and all must have been in a position that required them to hire entry-level management in foodservices. The personal interview enabled the researcher to be aware of the subject's identity and current position in order to provide accurate data throughout the interview process. The 1992 questions to the foodservice company professionals utilized a structured interview approach as well. This study replicates the approach, the questions, and the structured interviews.

Corporate Changes

As would be expected, there have been changes that have occurred among the fifteen companies interviewed after a decade. One of the companies in the original study no longer exists, two of the companies have been consolidated into one company and one of the original companies would not respond for an interview.

Findings

During this study, the selection process was discussed in three separate entities. First, the recruiting stage, this is the process of attracting potential managers to an organization. Secondly, the interview process which consists of verbal communication between potential management candidates and the organization. All other tools and techniques used in the selection process have been considered to be selection systems or methods. This paper examines the tools and techniques used by foodservice recruiters in an attempt to establish what traits recruiters are looking for in selecting entry-level management candidates, and how these traits hold up over time. Recommendations from the original 1992 study suggested a replicate study across time to see how the findings of the original study would be different or change. Were the responses to interview questions among foodservice companies the same ten years later? Have the desired traits/attributes for entry-level managers in the foodservice industry changed in the last decade?

Question One

What are the selection process requirements for entry-level foodservice managers among several major foodservice companies? How specifically have the requirements changed from 1992-2002 (TABLE 1)?

Although the spectrum of responses was much larger in 1992, the top response cited as most important has remained the same. Relevant work experience is the single most important determinant for hiring entry-level foodservice managers. In 1992, education and job stability ranked two and three respectively in their level of importance to foodservice companies in the selection of entry-level foodservice managers. In 2002, matching corporate qualifications for the job and professionalism respectively, have taken the place of education in importance to recruiters. The second most important determinant is a red flag to hospitality higher education programs. The change in response from 1992 to 2002 gives cause for concern in this decade of information systems and technology management. A myriad of other items that did appear as selection methods in the1992 study do not reoccur in 2002 (TABLE 1).

Question Two

Into what categories of the foodservice industry did the interviewed companies fall?

In 1992, four were hotel companies, five were restaurants, and six were contract foodservice or managed service companies. In 2002, four were hotels, three were restaurants and four were contract foodservice or managed service companies (TABLE 2).

Question Three

Among the categories of the foodservices industry, what items were key in the selection of entry-level foodservice managers?

Once again across all segments of the foodservice industry, work experience was the single most important item in the selection of entry-level foodservice managers (TABLE 3). What changed in 2002 over 1992 is that education in 1992 has been replaced in level of importance for the selection of entry-level foodservice managers with professionalism (TABLE 3). The third level of importance in the selection process of entry-level foodservice managers has changed from job stability in employment in 1992 to personality in 2002. It is only after these three items in the selection process have been identified that companies recognize the value of education. The value of education was fourth in 2002 as compared to second in 1992. Other items of importance for selection methods appear in TABLE 3.

Question Four

What are the most effective sources for recruitment among foodservice companies?

Most effective across all foodservice companies interviewed for the recruiting of entry-level managers is still the classified advertising section of newspapers. Second in effectiveness in 1992 was college and university recruiting. In 2002, the second most effective method of recruiting entry-level managers among these companies is promotions from within (TABLE 4).

Cited as the third most effective measure of recruitment in 2002 for entry-level foodservice managers are college and university recruiting and equally, referrals from other employees. The only other change since 1992 is the addition of online recruitment practices (TABLE 4).

Question Five

What are the desired attributes of entry-level management candidates during the interview process?

The most desired attributes for interviewees across all foodservice companies have remained the same over the last decade. First in importance is still professionalism/ professional dress (TABLE 5). The second most important item during an interview is still honesty. In 2002, the third most important item for an entry-level candidate is to "be yourself" (TABLE 5).

RECOMMENDATIONS

The first recommendation for study is to develop a broad-spectrum quantitative questionnaire and solicit responses from corporate Human Resource Departments across the top 200 foodservice companies of the world.

The second most interesting area of study is to expand the current study from that of specifically the foodservice industry to other segments of the hospitality industry, i.e., hotels, casinos, leisure and recreation.

The conclusions arrived at in 1992, with the exception of education as a priority among entry-level foodservice manager recruitment have proven to still be true, a decade later. Little, if anything has changed in the selection process for entry-level foodservice managers or for continuing their retention within a company.

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TABLE 1
DETERMINANTS IN HIRING DECISIONS FOR FOODSERVICE MANAGERS

	Number of Responses	
	1992	2002
Work Experience (Relevant)	13	8
Education (Relevant)	6	1
Job Stability	3	1
Communication Skills	3	0
Honesty/Straight Forwardness	3	0
Matching Qualifications	3	3
Professionalism	2	3
Enthusiasm/Eagerness	2	1
Good References	2	1
Good Ideas	2	0
Realistic Views	2	1
Decision Making Ability	2	0
Good Supervisory Skills	2	0
Good Customer Relations Skills	1	1
Understanding the Expectations of the Job	1	0
Professional Appearance	1	0
Manners	1	0
Compensation Requirements	1	0
Highly Recommended	0	1
Personality	0	1
Flexibility	1	0
Positive Attitude	1	0
Work Ethic	1	0
Energetic	1	0
Interpersonal Skills	1	0
Technical Skills	1	0
Confidence	1	0
Committed to Industry	1	0
Personal Goals	1	0

TABLE 2
SECTORS - CATEGORIES OF FOODSERVICE COMPANIES

	1992	2002
Hotels	4	4
Restaurants	5	3
Foodservices	6	4

TABLE 3
DETERMINANTS IN HIRING DECISIONS FOR FOODSERVICE MANAGERS CATEGORIZED BY SECTORS OF THE INDUSTRY

	Number of Responses							
	Total		Hotel		Restaurant		Foodservice	
	1992	2002	1992	2002	1992	2002	1992	2002
Work Experience (Relevant)	13	5	4	1	3	1	6	3
Education (Relevant)	6	1	0	0	3	1	3	0
Job Stability	3	1	2	1	0	0	1	0
Communication Skills	3	0	3	0	0	0	0	0
Honesty/Straight Forwardness	3	0	2	0	0	0	1	0
Matching Qualifications	3	1	1	0	1	0	1	1
Professionalism	2	3	1	1	0	2	1	0
Enthusiasm/Eagerness	2	1	2	1	0	0	0	0
Good References	2	0	1	0	0	1	1	0
Good Ideas	2	0	1	0	0	0	1	0
Realistic Views	2	0	1	0	0	0	1	0
Decision Making Ability	2	0	0	0	2	0	0	0
Good Supervisory Skills	2	0	2	0	0	0	0	0
Good Customer Relations Skills	1	1	1	1	0	0	0	0
Understanding the Expectations of the Job	1	0	1	0	0	0	0	0
Professional Appearance	1	0	1	0	0	0	0	0
Manners	1	0	1	0	0	0	0	0
Compensation Requirements	1	0	0	0	0	0	1	0
Flexibility	1	0	1	0	0	0	0	0
Positive Attitude	1	0	1	0	0	0	0	0
Personality	0	2	0	0	0	1	0	1
Work Ethic	1	0	0	0	1	0	0	0
Energetic	1	0	0	0	0	0	1	0
Interpersonal Skills	1	0	0	0	0	0	1	0
Technical Skills	1	0	0	0	0	0	1	0
Confidence	1	0	0	0	1	0	0	0
Committed to Industry	1	0	0	0	1	0	0	0
Personal Goals	1	0	0	0	1	0	0	0

TABLE 4
THE BEST RECRUITING METHODS FOR ENTRY-LEVEL FOODSERVICE MANAGERS

Source	Number of Responses 1992	2002
Classified Ad	12	7
College and Universities	5	2
Referrals	3	2
"Headhunters"/Employment Agencies	3	0
Promotions from Within	3	5
Professional Organizations	1	0
Other Foodservice Organizations	1	1
Career Fairs	0	1
Online	0	1

TABLE 5
RECOMMENDATIONS FOR POTENTIAL FOODSERVICE MANAGERS DURING THE INTERVIEW PROCESS

	Number of Responses 1992	2002
Professional/Appropriate Dress	8	7
Honesty	6	5
Knowledge of Yourself	4	1
Be Prepared	3	1
Knowledge of the Organization	3	1
Be Prompt/Punctual	3	0
Have Realistic Goals	3	0
Have a Well Prepared Resume'	3	0
Be Realistic Towards Position	3	0
Be Well Groomed	3	0
Be Professional	3	0
Show Enthusiasm	2	1
Make Eye Contact	2	0
Have Prepared Questions	2	0
Be Confident	2	0
Be Yourself	2	2
Have Good Communication Skills	2	0
Show Commitment to the Industry	1	0
Be Able to Communicate Personal Goals	1	0
Be Outgoing	1	0
Be Friendly	1	1
Have a Positive Attitude	1	0
Be Specific	0	1
Take Notes	1	0
Be at Ease	1	0
Think Questions Through	1	0
Sell Yourself	1	0
Be Willing to Speak	1	0

Association of Pennsylvania University Business And Economic Faculty (APUBEF)

27th Annual Meeting
September 30 - October 1, 2004

Days Inn
240 South Pugh St.
State College, PA 16801
(814) 238 - 8454

Thursday

AM
Registration/Breakfast: 7:30 am to 9 am

8:00 am to 9:00 am
Developing a New Paradigm for Teaching in Universities to Deal with the Problem of Grade Inflation
Louise B. Burkey, Indiana University of Pennsylvania
P. Ronald Tarullo, California University of Pennsylvania
Raymond F. Pisney, President, Aurora Group International

9:00 am to 10:20 am
Factors Which Affect Chief Executive Officer Salaries: Is Executive Compensation Mostly Determined by Firm Profits?
Brent Carothers, Shippensburg University of Pennsylvania

Simultaneous Realization of Environmental Sustainability and Economic Growth
Germaine H. Saad, Widener Unviersity

Demographic Relationships to Lottery Sales
James E. Miller, Gannon University

Student Perceptions of a Good Internship
Margaretha Hsu, Shippensburg University of Pennsylvania

**** Coffee Break 10:20 to 10:35**

10:35 am to 11:35 am
Building Bridges in Experiential Statistics
Dale G. Sauers, York College of Pennsylvania

How the Fed Causes Chaotic Business Cycles
James Michael Haley, Point Park University

Design and Development of an Introductory Information Systems Security Course for Colleges of Business
Al Fundaburk, Bloomsburg University of Pennsylvania

11:35 am to 12:35 am
Locating an Outfitters Type Business along the Schuylkill River Heritage Area
Roger Hibbs, Kutztown University of Pennsylvania

Promotional Methods Used by Hospitality-Related Firms in Close Proximity to Pennsylvania Rail-Trails
Karen L. Stewart and Jennifer Barr, The Richard Stockton College of New Jersey

Accounting Ethics: Legislating Ethical Behavior
Scott E. Miller, Gannon University

Lunch/Executive Board Meeting 12:45 pm to 2:00 pm

PM Sessions – Thursday

2:00 pm to 3:00 pm
Power, Ethics and Leadership: The Role Modeling and Experiential Learning of Moral Leadership
John J. Ryan and Joseph S. Falchek, King's College

Cultural Variations of Leadership
Dean F. Frear, Wilkes University

Entrepreneurship: Encouraged and Enabled but not Taught
James R. Donaldson, Juniata College

3:00 pm to 4:00 pm
Two Methods to Assess Out-of-Class Groupwork
Leon Markowicz, Lebanon Valley College

How Anxious is the Anxious Index?
Jiazhuo G. Wang, City University of New York – Staten Island
Kajal Lahiri, State University of New York at Albany

The Use of Satisfaction Profiles In Establishing Credit Union Product/Service Strategies
Kevin J. Roth, Clarion University of Pennsylvania

Refreshment Break 4:00 to 4:15

4:15 to 5:15pm

An Historical Examination of the Tax Simplification Act of 1986 and Its Impact On Realestate and the Savings and Loan Industry

Jerry Belloit, Clarion University of Pennsylvania

Managing Transitions in an Aging Society: What Should Business Students Know?

Eric Brucker, Widener University

The Environmental Degradation of the Toll Collection Process During Peak Travel Periods: Evidence from the Garden State Parkway

Jonathan Peters, City University of New York - Staten Island
Jonathan K. Kramer, Kutztown University of Pennsylvania

5:15 pm to 6:15 pm

Preparing Accounting Students for Careers with Small Closely-held Companies

Kindra Walker, Kutztown University of Pennsylvania

The Effects of Malpractice Tort Reform on Defensive Medicine

Heather M. O'Neill and Katherine Hennesy, Usinus College

The Selection Process for Entry-level Foodservice Managers in the Hospital Industry

Clifford Whithem and Michael Scales, The Richard Stockton College of New Jersey

6:20 pm - 7:30 pm	**APUBEF Social Hour I****

7:30 pm	**Dinner**

8:30 pm - ??	**APUBEF Social Hour II****

Friday, October 1st

Registration – Breakfast: 7:30 am to 9:00 am

8:00 am to 9:00 am
Strategy vs. Tactics – Marketing Business in the Lehigh Valley
Gary Kaskowitz, Moravian College

Owner/Employees and Unemployment Compensation Inequities
Jerry Kline, Indiana University of Pennylvania

Reengineering the Business Curriculum
Paul Sable, Kutztown University of Pennsylvania

9:00 am to 10:00 am
The Perception of Quality Distance Education Courses vs. Traditional Courses
Mary D. Myers, Shippensburg University of Pennsylvania

Electronic Portfolios: Has Their Time Arrived?
Carole Anderson, Clarion University of Pennsylvania

Bias in Hedge Fund Data
Nandita Das, Bloomsburg University of Pennsylvania
David L. Muething, Lehigh University

**** Coffee Break and Hotel Checkout: 10:00 am to 10:30 am**

**** APUBEF Business Meeting/Election of Officers: 10:30 am to 11:00 am**

11:00 am to 12:00 pm
Goal-Based Scenarios in Teaching Accounting
Gayle Bolinger and Edward Sullivan, Lebanon Valley College

Trends in Consumer Acculturation Studies
Denise T. Ogden, Pennsylvania State University – Lehigh Valley

Is Market Value Added Equal to the Present Value of Future EVAs?
Jonathan K. Kramer, Kutztown University of Pennsylvania
Jonathan R. Peters, City University of New York – Staten Island

12:00 pm to 1:00 pm

Links Between Organizational Culture and Strategy in a Not for Profit Community Hospital

Michael Fratantuono and David Sarcone, Dickinson College

Portrait of Business Technology in a Typical American Town

Christine J. Rhoads, Kutztown University of Pennsylvania

The European Union Expansion and Turkey's Desire for Membership

Okan Akay, Kutztown University of Pennsylvania

Concluding Remarks: 1:00 pm to 1:15 pm

Lunch: 1:15 pm