

# **AN EMPIRICAL EXAMINATION OF THE DIFFERENCES IN THE RATES OF RETURN BETWEEN THE SUPERIOR CLASS AND THE RESTRICTED CLASS OF CORPORATIONS WITH MULTIPLE CLASSES OF COMMON STOCK**

Karen L. Randall, Ursinus College  
Henry F. Check, Jr., Kutztown University of Pennsylvania

---

## **ABSTRACT**

Corporations which have issued dual-classes or multiple-classes of common stock offer several interesting avenues for research. Naively, one might conclude that, since the value of equity is derived from the earning power of a corporation's assets and the corporation's financial structure, the rate of return on all classes of a corporation's common stock should be the same. However, since the differing characteristics of the classes of common stock lead to differing cash flows to the holders of that common stock, the rates of return should differ.

Prior work has focused on demonstrating that the prices or the price-earnings ratios of the classes differ, and has depended largely on NASDAQ or Canadian market data. Further, prior work has examined the effects of the creation of a second class of common stock on the incumbent shareholders. Apparently, little work has been done in examining the long-term differences in the rates of return or attempting to justify / quantify the origin of those differences.

Relatively recent procedural changes in equity markets assist in this examination. A change in the bylaws of the New York Stock Exchange (NYSE) to allow the listing of corporations with dual-classes of common stock and the switch to decimal pricing has reduced the difficulties previously caused by low trading volumes, discontinuous pricing, and the bid-asked spread.

This paper examines a sample of eighteen (18) NYSE-listed corporations with dual-classes of common equity. It is found that while the difference in the mean rates of return between the superior class and the restricted class is not statistically significant, the difference is economically significant and interesting to investors. It is demonstrated that the difference is not adequately explained by the Capital Asset Pricing Model.

A model is presented which attempts to quantify the contributions to the difference in the mean rates of return between the superior class and the restricted class of such factors as; number of votes per share, liquidity, percentage of the Board of Directors elected, preference in the receipt of cash dividends, preferences in liquidation, latent options, and coattail.

---

## **INTRODUCTION**

Corporations which have issued dual-classes or multiple-classes of common stock offer several interesting avenues for research. Naively, one might conclude that, since the value of equity is derived from the earning power of a corporation's assets and the corporation's financial structure, the rate of return on all classes of a corporation's common stock should be the same. However, since the differing characteristics of the classes of common stock lead to differing cash flows to the holders of that common stock, the rates of return should differ.

Prior work has focused on demonstrating that the prices or the price-earnings ratios of the classes differ, and has depended largely on NASDAQ

or Canadian market data. Further, prior work has examined the effects of the creation of a second class of common stock on the incumbent shareholders. Apparently, little work has been done in examining the long-term differences in the rates of return or attempting to justify / quantify the origin of those differences.

Relatively recent procedural changes in equity markets assist in this examination. A change in the bylaws of the New York Stock Exchange (NYSE) to allow the listing of corporations with dual-classes of common stock and the switch to decimal pricing has reduced the difficulties previously caused by low trading volumes, discontinuous pricing, and the bid-asked spread.

This paper examines a sample of eighteen (18) NYSE-listed corporations with dual-classes of common equity. It is found that while the difference in the mean rates of return between the superior class and the restricted class is not statistically significant, the difference is economically significant and interesting to investors. It is demonstrated that the difference is not adequately explained by the Capital Asset Pricing Model.

A model is presented which attempts to quantify the contributions to the difference in the mean rates of return between the superior class and the restricted class of such factors as; number of votes per share, liquidity, percentage of the Board of Directors elected, preference in the receipt of cash dividends, preferences in liquidation, latent options, and coattail.

### Some Terminology

A review of some of the terminology used in this paper and comparable literature may be useful.

**Dual-Class (Multiple-Class) Capital Structure** - a firm may have more than one type of common stock in their capital structure; classes may differ in voting rights, dividend rates, rights in liquidation, conversion privileges, or other characteristics.

**Superior Class** - the class of stock which has the greater influence on the control of the firm; the superior class need not have the higher price or the higher rate of return.

**Restricted Class(es)** - the class or classes of stock which have less influence on the control of the firm; the restricted class need not have the lower price or the lower rate of return.

**Recapitalization** - the process of switching from a single class to a dual-class capital structure.

**Unification** - the process of switching from a dual-class to a single class capital structure.

**Rate of Return** - the total return earned by an investor; this consists of cash dividends and stock price appreciation, and in our data is measured monthly.

**Excess Return** - the Rate of Return minus the risk-free rate. We used the rate of return on ten-year Treasury Bonds as our measure of the risk-free rate.

**Abnormal Return** - the Rate of Return minus the risk-free rate and minus the risk premium as specified by the Capital Asset Pricing Model.

### Motivations

Many reasons have been advanced to explain why a firm might have more than one class of common stock. Some of the more relevant explanations include:

**Raising capital without diluting control** - the traditional function of preferred stock in closely-held corporations; management sells single-vote shares to raise capital while owning super-voting shares maintain control. Using common stock for this purpose avoids the seniority issues imposed by selling preferred stock.

**Maintaining control while long-term projects mature** - by holding the super-voting shares, managers are free to embark on projects which will temporarily depress earnings but are value enhancing.

**Anti-takeover defense** - by holding the super-voting shares, managers are able to resist takeover attempts.

**Ensuring editorial freedom** - since several media-related corporations have dual-class capital structures, this has been cited as a potential benefit.

**To lower the cost of capital** - if some shareholders have a preference for voting rights and other shareholders prefer dividends, selling different classes of common stock to each would lower the firm's cost of capital.

### PRIOR RESEARCH

Since we believed this area of research to be interesting, relevant, and fertile, we were surprised to find relatively little prior research. Accordingly, we conducted a lengthy, extensive, and thorough literature review.

Prior research in this field has concentrated on examining whether differences exist between dual-class shares in price, return and control. Academic interest in dual-class shares began in the 1980s. Using Israeli data, Levy (1983) found a significant price premium for superior voting rights (SVRs), which increased as the percentage of ownership was concentrated in the SVR shares. A study that same year by Lease, McConnell and

Mikkelson had similar findings using U.S. data. The authors suspected that the premium was tied to takeover avoidance.

This suspicion, combined with a flurry of takeover activity in the early 1980s, prompted a number of studies that attempted to tie price premium to control issues. DeAngelo and DeAngelo (1985) showed that not only were there price differences between classes of stock, there were significant liquidity differences as well. The authors argued that classes of stock might be exhibiting a clientele-like effect. In their study of 45 firms, they found that the majority of voting rights (56.9%) were held by officers and family members. Rather than seeing any drawback to this, they felt that allowing the concentration of voting power provided benefits to both classes of stock. The SVR shareholders would not have to worry about fending off potential buyers, but instead could concentrate on investing in capital projects that would benefit the long-term financial health of the company, thereby providing maximum benefits to the shareholders with the regular or lesser voting rights (RVRs). The lower price demanded for the RVR shares would be offset by increased liquidity and future appreciation.

Partch (1987), Jarrell and Poulsen (1988), and Cornett and Vetsuypens (1989) extended the idea of both sets of shareholders benefiting from the dual-class organization by conducting event studies around the announcement of a second class of common stock. Partch, using the same data set as DeAngelo and DeAngelo, found mixed results. While the overall price response was positive and significant, the median response was negative, and the proportion of positive responses was only about fifty percent. Overall, she felt that shareholder wealth was unaffected by the creation of reduced-voting shares. The Jarrell and Poulsen study of 89 firms found significant *negative* returns at announcement, but again the results varied widely. Cornett and Vetsuypens had similar inconclusive results when looking at price movements around announcement date. That study also examined companies where the different classes of stock enjoyed different cash flows, i.e. preferences in dividends, and calculated the returns to each class. When the returns proved to be statistically the same for both classes, the authors posited a clientele effect; the shareholder gets what they want, superior votes or cash flows, but the returns will be the same.

The mid-to-late 1980s saw increased recapitalization activity, as prior poison pill defenses were ruled illegal, and the NYSE allowed for the

listing of dual-class firms. Research in the 1990s tried to prove once and for all that the clientele effect was real, or that the price premium on SVR shares was simply tied to the avoidance of a takeover. Megginson (1990) examined 152 firms from the U.K., and while finding a price premium, could not explain that premium in terms of any likelihood of takeover. Amoako-Adu, Smith and Schnabel (1990) tried to explain the premium as possibly a difference in the risk of the different classes, however their research showed stable betas between stock classes, and returns that were statistically the same between classes of stock. Fisher and Porter (1993) and Shum (1995) also examined returns to the classes of stock, and could find no statistical significance.

Event studies in the late 90s, such as Maynes (1996) and Bacon, Cornett and Davidson (1997) looked at changes in legislation and characteristics of the board of directors to try and nail down the causes of the price premium. The Bacon, Cornett and Davidson article concluded that there is not one reason for a second class of stock, but three, all of which could explain a price premium. The clientele/optimal recontracting argument recognizes that sometimes different shareholders want different characteristics in their holdings, i.e. control or liquidity. Sometimes the concentration of voting power in SVR shares is critical in avoiding a takeover. And finally, sometimes companies create another class of common to raise equity without dilution of votes. A firm chooses the dual-class option based on their particular situation.

Twenty years of research into prices and risk and returns on dual-class common stock have yielded interesting stories, but few conclusions. As this form of capitalization continues to be utilized, we are curious as to why. Is there really any importance to the investor? Is there really a significant benefit to the firm?

## THE EMPIRICAL PROCESS

We began gathering data by searching through the daily closing price stock listings in the *Wall Street Journal*. We identified thirty (30) NYSE-traded corporations with dual-class common equity. Twelve (12) firms were later eliminated because one class traded infrequently. We obtained monthly price and volume data on-line from *Yahoo! Finance* for eighteen (18) of the above firms beginning with June 1996 and ending with May 2005; one hundred and eight (108) months of data. June 1996 was chosen as a starting point because Berkshire Hathaway first issued Class B shares in May 1996. We then

obtained company-specific information from the *Mergent Manuals* for the eighteen corporations. These manuals provide extensive information for 30,000 public companies worldwide including history, chronology, acquisitions, mergers, spin offs, properties, joint ventures, subsidiaries, officers and directors, consolidated income statements and balance sheets for three and two years, respectively, long term debt, options, and etc. The eighteen firms and their industry / business appear in Table 1 below.

**Table 1**  
**Our Data Set**

Company	Industry / Business
Aaron Rents, Inc.	Rental and Leasing Services
Bandag, Incorporated	Rubber and Plastics
Brown-Forman Corporation	Alcoholic Beverages and Consumer Durables
Berkshire Hathaway	Property and Casualty Insurance
Constellation Brands, Inc.	Beverages - Wineries and Distillers
Crawford & Company	Insurance Services
Curtiss-Wright Corporation	Aerospace/Defense Products and Services
Gray Television, Inc.	Broadcasting - TV
Greif Inc.	Packaging and Containers
Haverty Furniture Companies, Inc.	Home Furnishing Stores
HEICO Corporation	Aerospace/Defense Products and Services
Hubbell Incorporated	Electrical and Power Systems
Lennar Corporation	Residential Construction
Moog Inc.	Aerospace/Defense Products and Services
Neiman Marcus Group	Retailing Women's and Men's Clothing
Playboy Enterprises, Inc.	Entertainment
Sequa Corporation	Aerospace/Defense - Major Diversified
Urstadt Biddle Properties Inc.	REIT - Residential

In addition, we obtained the monthly S & P 500 Index and monthly 10-year Treasury Bond returns from *Yahoo! Finance* for use as our measure of the market return and risk-free rate over our period of interest.

## Testing Share Prices

We first tested the data for differences in the class mean share prices. While there is no reason to expect the classes to sell for the same price, and in many cases a definite expectation that the share prices will differ, this test follows the process of previous research. This required calculating the mean prices for each firm-class pair and the corresponding pooled sample standard deviation.

Formally, our null hypothesis, alternative hypothesis, and test statistic are;

$$H_0: \bar{P}_S - \bar{P}_R = 0$$

$$H_1: \bar{P}_S - \bar{P}_R \neq 0$$

$$z = \frac{(\bar{P}_S - \bar{P}_R) - 0}{\sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}}}$$

where;

$\bar{P}_S, \bar{P}_R =$  the means of the share prices for the superior class and the restricted class, respectively

$\sigma_1^2, \sigma_2^2 =$  the standard deviations of the share prices for the superior class and the restricted class, respectively

$n_1, n_2 =$  the number of observations of the share prices for the superior class and the restricted class, respectively

The results of this test are presented in Table 2 at the end of the paper. In summary, ten (10) of the firms exhibited statistically different class mean share prices.

## Testing Rates of Return

A more meaningful search is for differences in the class mean rates of return. If the cash flows to the two classes of stock differ in magnitude, risk, or timing the class mean rates of return should differ as well. This required calculating the mean returns for each firm-class pair and the corresponding pooled sample standard deviation.

Formally, our null hypothesis, alternative hypothesis, and test statistic are;

$$H_0: \overline{R}_S - \overline{R}_R = 0$$

$$H_1: \overline{R}_S - \overline{R}_R \neq 0$$

$$z = \frac{(\overline{R}_S - \overline{R}_R) - 0}{\sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}}}$$

where;

$\overline{R}_S, \overline{R}_R =$  the means of the rates of return for the superior class and the restricted class, respectively

$\sigma_1^2, \sigma_2^2 =$  the standard deviations of the rates of return for the superior class and the restricted class, respectively

$n_1, n_2 =$  the number of observations of the rates of return for the superior class and the restricted class, respectively

The results of this test are presented in Table 3 at the end of the paper. In summary, none of the firms exhibited statistically different class mean rates of return. However, while not statistically different, there are differences in the rates of return which would be significant to an investor. Remembering that these are monthly rates of return, the 216 basis point difference between the classes of Moog Inc., for instance, would attract the attention of an investor. This is further discussed below.

### Testing Systematic Risk

A third empirical test involves the betas (systematic risk) of the two classes. Calculating beta involves regressing the monthly excess returns (monthly return minus the monthly risk-free rate of interest) of each class versus the monthly excess return of the market (monthly S & P 500 index return minus the monthly risk-free rate of interest). Our measure of the monthly risk-free rate of interest is the return on ten-year Treasury bonds. The slope of the resulting regression is a measure of a security's risk with the market's risk a benchmark of 1.0.

The Capital Asset Pricing Model (CAPM) posits that, in equilibrium, beta is the sole determinate of a security's excess return. Therefore, statistically significantly different betas from two classes of stock would require different rates of return from the two classes of stock. The test involved is a Chow Test. Essentially the Chow Test determines whether two data sets are subsets of a

larger data set. The process requires running regressions to determine the betas of each class of stock and noting the squared sum of errors (SSE) from each regression. Then the data is pooled and a third regression is run for each firm, again noting the SSE.

Formally, our null hypothesis, alternative hypothesis, and test statistic are;

$$H_0: \beta_s - \beta_r = 0$$

$$H_1: \beta_s - \beta_r \neq 0$$

$$F = \frac{(SSE_1 - SSE_2 - SSE_3) / k}{(SSE_2 + SSE_3) / (n_1 + n_2 - 2k)}$$

where;

$\beta_s, \beta_r =$  the betas of the superior class and the restricted class, respectively

$SSE_1 =$  the sum of squared errors of the combined regression

$SSE_2 =$  the sum of squared errors of the first class's regression

$SSE_3 =$  the sum of squared errors of the second class's regression

$k =$  the number of regression coefficients

$n_1 =$  the number of data points in the first class's regression

$n_2 =$  the number of data points in the second class's regression

The results of this test are presented in Table 4 at the end of the paper. In summary, none of the class betas are statistically significantly different, or remotely close to being statistically significantly different, but there are differences that are nonetheless interesting. Gray Television's two class betas differ by 1.05 (= 1.27 - 0.22). So while not statistically significantly different, an investor would be interested in the difference. This is further discussed below.

### Calculating Abnormal Returns

Our fourth test is not a statistic test at all but rather a comparison of the actual return of each class of stock versus the required return as specified by CAPM. The actual returns are the means previously calculated. The required returns are determined by using the Security Market Line equation;

$$E(R_i) = R_{RF} + (R_M - R_{RF})\beta_i$$

where;

- $R_{RF}$  = the risk-free rate of interest represented by the rate of return on 10-year Treasury Notes  
 $R_M$  = the average rate of return on the equity market as a whole represented by the rate of return on the S & P 500 index  
 $\beta_i$  = the beta of the security under consideration

The results of this comparison are presented in Table 5 at the end of the paper. While not a statistical test, the results are again interesting in that thirty-three (33) of the thirty-six (36) actual returns exceed the required return. That indicates that those securities are under priced and an investor would have wanted to buy those securities. The remaining three (3) equities had actual returns less than their required returns, indicating that they were overpriced, and an investor would have wanted to sell those securities short. Remembering that these are monthly returns, had an investor bought all the under priced securities and sold all the overpriced securities they would have earned an abnormal return of 1.34% per month, which compounds to 321% over the nine-year period under consideration. So while these return differences may not be statistically significant, further consideration appears warranted.

**A Model of Return Differences**

Finally, we propose a model to explain the differences in the rates of return between the two classes of common equity. This is a tenuous undertaking since we have previously demonstrated that the differences are not statistically different. However the results are enlightening. We regressed the difference in mean return between the superior class and the restricted class versus three explanatory variables: *Votes*, the ratio of restricted votes per share to superior votes per share; *Liquidity*, the ratio of restricted shares outstanding to superior votes outstanding; and *Favor*, a subjective ranking of remaining differences between the classes, five favors the superior class, three is neutral, and one favors the restricted class.

The regression results are presented in Table 6 below;

**Table 6  
Our Valuation Model**

$R_S - R_R$	Intercept	Votes	Liquidity	Favor
Coefficient	- 1.36	- 0.01%	- 0.25%	+ 0.57%
Standard Error	1.1398	0.0050	0.2788	0.3092
t Statistic	- 1.20	- 1.12	- 0.88	1.85
P value	.25	.28	.39	.08

where;

- Votes* = the ratio of restricted votes per share to superior votes per share  
*Liquidity* = the ratio of restricted shares outstanding to superior shares outstanding  
*Favor* = a subjective ranking of remaining differences between the classes, five favors the superior class, three is neutral, and one favors the restricted class.

**Regression Results**

As expected (feared), none of the regression coefficients is statistically significant but the signs of the coefficients are correct and the magnitudes of the coefficients are reasonable.

The regression coefficients are slopes or rates of change and their interpretations follow. The *Votes* coefficient says that increasing the voting power of the restricted shares would reduce the difference in the returns of the two classes. Specifically, if the ratio of restricted votes per share to superior votes per share were increased by one-hundred percent, the difference in the rates of return would narrow by 0.01% or one basis point. For example, if the restricted class was single-vote shares and the superior class was ten-vote shares, change the ratio to two-to-ten (or one-to-five) would decrease the difference in the returns of the two classes by one basis point. Apparently, the market places a low value on the voting rights of these shares.

The *Liquidity* coefficient says that increasing the number of restricted shares outstanding while holding the number of superior

shares constant would reduce the difference in the returns of the two classes. Specifically, if the number of restricted shares relative to superior shares was increased by one-hundred percent, the difference in the rates of return would narrow by 0.25% or twenty-five basis points. For example, if there were currently 100 shares of the restricted class and 50 shares of the superior class (a ratio of 2), and the number of restricted class shares was increased by 50 shares while holding constant the number of superior class shares (the ratio would now be 3), the difference in the returns of the two classes would decrease by twenty-five basis points.

The *Favor* coefficient says that increasing the any of the remaining differences sufficiently to change the subjective ranking by one unit would increase the difference in the returns of the two classes. Specifically, if the *Favor* variable is increased by one unit, the difference in the rates of return would increase by 0.57% or fifty-seven basis points.

### CONCLUSIONS

Our results are disappointing from an Econometric perspective but satisfying from the perspective of Finance. The observed differences in rates of return between a firm's classes of common equity offer an opportunity for investors to increase their portfolio returns, and an opportunity for corporations to reduce their cost of capital. Given the market capitalizations of these firms, the economic impact would be significant. Our work suggests that there may be knowledge still to be gleaned from further research.

We plan to attempt to increase our sample size and attempt to identify sub-samples of firms which have common characteristics. A challenge will be identifying a sufficient number of firms with similar characteristics to make statistical testing meaningful. If we can find firms which have less diversity in the differences between the classes of common, potentially the differences in the returns will be statistically significantly different, as well as the coefficients of a differences in rates of return model.

We have, however, come to understand why so many talented researchers have abandoned this apparently promising area of research.

### REFERENCES

- Amoako-Adu, B., B. Smith and J. Schnabel, (1990), The Risk of Dual Classes of Shares: Are There Differences?, *Journal of Economics and Business*, 42, 39-50.
- Bacon, C., M. Cornett and W. Davidson, (1997), The Board of Directors and Dual-Class Recapitalizations, *Financial Management*, 26, 5-23.
- Cornett, M. and M. Vetsuypens, (1989), Voting Rights and Shareholder Wealth: The Issuance of Limited Voting Common Stock, *Managerial and Decision Economics*, 9, 175-188.
- DeAngelo, H. and L. DeAngelo, (1985), Managerial Ownership of Voting Rights: A Study of Public Corporations with Dual Classes of Common Stock, *Journal of Financial Economics*, 14, 33-69.
- Foerster, S. and D. Porter, (1992), The Disappearing Size Effect: Evidence from Dual Class Shares, *Quarterly Journal of Business and Economics*, 31, 80-92.
- Foerster, S. and D. Porter, (1993), Dual Class Shares: Are There Return Differences?, *Journal of Business Finance and Accounting*, 20, 893-903.
- Jarrell, G. and A. Poulsen, (1988), Dual-class Recapitalizations as Antitakeover Mechanisms: the Recent Evidence, *Journal of Financial Economics*, 20, 129-152.
- Lease, R., J. McConnell and W. Mikkelson, (1983), The Market Value of Control in Publicly Traded Corporations, *Journal of Financial Economics*, 11, 439-472.
- Lease, R., J. McConnell and W. Mikkelson, (1984), The Market Value of Differential Voting Rights in Closely Held Corporations, *Journal of Business*, 57, 443-467.
- Levy, H. (1983), Economic Evaluation of Voting Power of Common Stock, *Journal of Finance*, 38, 79-93.
- Maynes, E. (1996), Takeover Rights and the Value of Restricted Shares, *Journal of Financial Research*, 19, 157-174.
- Meggison, W. (1990), Restricted Voting Stock, Acquisition Premiums, and the Market Value of Corporate Control, *Financial Review*, 25, 175-198.

Partch, M. (1987), The Creation of a Class of Limited Voting Common Stock and Shareholder Wealth, *Journal of Financial Economics*, 18, 313-339.

Shum, C., W. Davidson and J. Glascock, (1995), Voting Rights and Market Reaction to Dual Class

Common Stock Issues, *The Financial Review*, 30, 275-288.

Smith, B. and B. Amoako-Adu, (1995), Relative Prices of Dual Class Shares, *Journal of Financial and Quantitative Analysis*, 30, 223-239.

**Dr. Karen L. Randall** is a visiting assistant professor of business and economics at Ursinus College. She received her PhD in Business and Economics from Lehigh University. Her other research interests are public pension plan performance, microfinance, and environmental economics.

**Henry F. Check, Jr.** is an instructor of accounting and finance at Kutztown University of Pennsylvania. He received masters degrees in Business Administration, and in Economics from Lehigh University. His other research interests are the effect of the adoption of activity based costing on profitability, public pension plan performance, and decision-maker impact on the use of internet technologies.



**Table 2**  
**Differences in Class Share Prices**

<b>Company</b>	<b>Class</b>	<b>Count</b>	<b>Mean</b>	<b>Std Dev</b>	<b>z Score</b>	<b>Result at 5%</b>
Aaron Rents, Inc.	A	105	9.34	4.56	-0.87	Not Significant
	B	108	9.92	5.17		
Bandag, Incorporated	B	108	32.55	7.69	0.45	Not Significant
	A	106	32.04	8.84		
Brown-Forman Corporation	A	106	31.47	10.03	-0.12	Not Significant
	B	106	31.63	9.25		
Berkshire Hathaway	A	108	65,563.38	16,132.23	40.81	Significant
	B	108	2,173.69	537.95		
Constellation Brands, Inc.	A	108	20.67	12.07	0.12	Not Significant
	B	105	20.48	12.25		
Crawford & Company	A	106	9.15	3.63	-2.10	Significant
	B	106	10.21	3.78		
Curtiss-Wright Corporation	A	106	25.85	13.84	-5.78	Significant
	B	43	38.55	11.46		
Gray Television, Inc.	B	33	12.53	1.90	-4.46	Significant
	A	108	14.38	2.58		
Greif Inc.	A	108	29.67	10.20	-3.04	Significant
	B	30	37.80	13.62		
Haverty Furniture Companies, Inc.	B	108	11.96	4.76	-0.67	Not Significant
	A	101	12.39	4.66		
HEICO Corporation	B	108	13.66	4.55	12.09	Significant
	A	84	5.72	4.49		
Hubbell Incorporated	A	106	32.68	7.28	-1.59	Not Significant
	B	106	34.35	8.07		
Lennar Corporation	A	108	20.72	15.10	-10.69	Significant
	B	26	42.52	7.30		
Moog Inc.	A	106	13.05	6.59	-0.46	Not Significant
	B	104	13.46	6.57		
Neiman Marcus Group	A	106	36.20	15.10	-1.03	Not Significant
	B	66	38.81	16.72		
Playboy Enterprises, Inc.	A	108	22.19	13.31	6.59	Significant
	B	106	13.39	3.95		
Sequa Corporation	A	106	50.91	10.05	-4.64	Significant
	B	105	57.97	12.00		
Urstadt Biddle Properties Inc.	A	82	8.95	3.85	2.45	Significant
	B	108	7.53	4.04		

**Table 3**  
**Differences in Class Rates of Return**

<b>Company</b>	<b>Class</b>	<b>Count</b>	<b>Mean</b>	<b>Std Dev</b>	<b>z Score</b>	<b>Result at 5%</b>
Aaron Rents, Inc.	A	104	3.09%	22.16%	0.54	Not Significant
	B	107	1.82%	9.60%		
Bandag, Incorporated	B	107	0.70%	9.04%	0.30	Not Significant
	A	105	0.33%	8.74%		
Brown-Forman Corporation	A	105	1.30%	5.95%	0.01	Not Significant
	B	105	1.29%	6.50%		
Berkshire Hathaway	A	107	1.16%	6.68%	0.03	Not Significant
	B	107	1.13%	6.35%		
Constellation Brands, Inc.	A	107	2.96%	16.59%	-0.42	Not Significant
	B	104	4.15%	23.68%		
Crawford & Company	A	105	0.66%	13.94%	0.12	Not Significant
	B	105	0.44%	12.56%		
Curtiss-Wright Corporation	A	105	1.88%	7.66%	-0.71	Not Significant
	B	42	3.01%	9.16%		
Gray Television, Inc.	B	32	1.09%	9.81%	0.43	Not Significant
	A	107	0.25%	9.36%		
Greif Inc.	A	107	1.38%	8.89%	-1.46	Not Significant
	B	29	3.44%	6.07%		
Haverty Furniture Companies, Inc.	B	107	1.93%	12.02%	-0.46	Not Significant
	A	100	3.03%	20.59%		
HEICO Corporation	B	107	1.97%	15.52%	-0.40	Not Significant
	A	83	3.28%	26.80%		
Hubbell Incorporated	A	105	0.64%	6.87%	-0.05	Not Significant
	B	105	0.70%	7.49%		
Lennar Corporation	A	107	2.41%	12.32%	-0.26	Not Significant
	B	25	3.01%	9.68%		
Moog Inc.	A	105	1.99%	11.63%	-0.73	Not Significant
	B	103	4.15%	27.79%		
Neiman Marcus Group	A	105	1.79%	10.69%	-0.64	Not Significant
	B	65	2.86%	10.47%		
Playboy Enterprises, Inc.	A	107	0.26%	14.15%	-0.21	Not Significant
	B	105	0.67%	13.69%		
Sequa Corporation	A	105	0.82%	10.71%	-0.53	Not Significant
	B	104	2.08%	21.96%		
Urstadt Biddle Properties Inc.	A	81	1.56%	4.74%	-0.45	Not Significant
	B	107	1.89%	5.20%		

**Table 4**  
**Differences in Class Betas (Chow Test)**

<b>Company</b>	<b>Beta</b>	<b>SSE<sub>1</sub></b>	<b>SSE<sub>2</sub></b>	<b>SSE<sub>3</sub></b>	<b>F<sub>calc</sub></b>	<b>F<sub>crit</sub></b>	<b>Result at 5%</b>
Aaron Rents, Inc.	0.08	6.1053	5.1108	0.9860	0.15	3.04	Not Significant
	0.50						
Bandag, Incorporated	0.70	1.6787	0.8755	0.8025	0.04	3.04	Not Significant
	0.28						
Brown-Forman Corporation	0.18	0.8163	0.3723	0.4440	0.00	3.04	Not Significant
	0.18						
Berkshire Hathaway	0.58	0.9074	0.4764	0.4310	0.00	3.04	Not Significant
	0.56						
Constellation Brands, Inc.	0.43	8.7865	2.9439	5.8351	0.09	3.04	Not Significant
	-0.36						
Crawford & Company	-0.17	3.6966	2.0417	1.6546	0.01	3.04	Not Significant
	0.09						
Curtiss-Wright Corporation	0.02	0.9839	0.6278	0.3518	0.34	3.06	Not Significant
	0.20						
Gray Television, Inc.	1.27	1.2467	0.3077	0.9369	0.12	3.06	Not Significant
	0.22						
Greif Inc.	0.73	0.9633	0.8463	0.1065	0.77	3.06	Not Significant
	0.93						
Haverty Furniture Companies, Inc.	0.80	5.7966	1.5469	4.2434	0.11	3.04	Not Significant
	0.65						
HEICO Corporation	0.75	8.5518	2.5782	5.9652	0.10	3.04	Not Significant
	-0.17						
Hubbell Incorporated	0.27	1.0857	0.4963	0.5894	0.00	3.04	Not Significant
	0.35						
Lennar Corporation	1.02	1.8614	1.6254	0.2350	0.03	3.07	Not Significant
	1.71						
Moog Inc.	-0.11	9.4015	1.4209	7.9564	0.27	3.04	Not Significant
	-0.06						
Neiman Marcus Group	-0.13	1.9164	1.1992	0.7124	0.22	3.05	Not Significant
	0.21						
Playboy Enterprises, Inc.	0.85	4.1163	2.1462	1.9692	0.02	3.04	Not Significant
	0.32						
Sequa Corporation	-0.02	6.2275	1.2035	5.0157	0.14	3.04	Not Significant
	-0.36						
Urstadt Biddle Properties Inc.	0.02	0.4727	0.1828	0.2895	0.09	3.05	Not Significant
	0.21						

**Table 5**  
**Actual Return versus Required Return**

<b>Company</b>	<b>Class</b>	<b>Actual Return</b>	<b>Beta</b>	<b>Required Return</b>	<b>Hindsight Investment Strategy</b>
Aaron Rents, Inc.	A	3.09%	0.08	0.45%	buy
	B	1.82%	0.50	0.54%	buy
Bandag, Incorporated	B	0.70%	0.70	0.58%	buy
	A	0.33%	0.28	0.49%	sell
Brown-Forman Corporation	A	1.30%	0.18	0.47%	buy
	B	1.29%	0.18	0.47%	buy
Berkshire Hathaway	A	1.16%	0.58	0.56%	buy
	B	1.13%	0.56	0.55%	buy
Constellation Brands, Inc.	A	2.96%	0.43	0.52%	buy
	B	4.15%	-0.36	0.35%	buy
Crawford & Company	A	0.66%	-0.17	0.39%	buy
	B	0.44%	0.09	0.45%	sell
Curtiss-Wright Corporation	A	1.88%	0.02	0.43%	buy
	B	3.01%	0.20	0.48%	buy
Gray Television, Inc.	B	1.09%	1.27	0.71%	sell
	A	0.25%	0.22	0.48%	buy
Greif Inc.	A	1.38%	0.73	0.59%	buy
	B	3.44%	0.93	0.64%	buy
Haverty Furniture Companies, Inc.	B	1.93%	0.80	0.61%	buy
	A	3.03%	0.65	0.57%	buy
HEICO Corporation	B	1.97%	0.75	0.60%	buy
	A	3.28%	-0.17	0.39%	buy
Hubbell Incorporated	A	0.64%	0.27	0.49%	buy
	B	0.70%	0.35	0.51%	buy
Lennar Corporation	A	2.41%	1.02	0.65%	buy
	B	3.01%	1.71	0.81%	buy
Moog Inc.	A	1.99%	-0.11	0.41%	buy
	B	4.15%	-0.06	0.42%	buy
Neiman Marcus Group	A	1.79%	-0.13	0.40%	buy
	B	2.86%	0.21	0.48%	buy
Playboy Enterprises, Inc.	A	0.26%	0.85	0.62%	sell
	B	0.67%	0.32	0.50%	buy
Sequa Corporation	A	0.82%	-0.02	0.43%	buy
	B	2.08%	-0.36	0.35%	buy
Urstadt Biddle Properties Inc.	A	1.56%	0.02	0.43%	buy
	B	1.89%	0.21	0.48%	buy