EVIDENCE ON STUDENT-MANAGED FUNDS: A SURVEY OF U.S. UNIVERSITIES

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ABSTRACT

An analysis of student-managed funds' operations in 35 universities in the U.S. was conducted with the data collected through an Internet-based survey. The results indicate that CAPM is used in most SMFs as the means to estimate the required rate of return. Value Line and Wall Street Journal are the two most widely used information sources by SMFs. It is not common for a SMF to be equipped with its own trading room. The median value of the SMFs is $460,000, but the sampling distribution of the SMFs' market capitalizations is highly right-skewed. Most of the SMFs have the same asset allocation decision. In total, about 69% of the SMFs in our sample invest at least 90% of the capital in Equity.

JEL: G00; A29

KEYWORDS: Education, Finance

INTRODUCTION

The literature in financial education supports the premise that a student-managed fund class (SMF) contributes positively to students' learning experience and education. One line of research focuses on the history of the SMF in the U.S. and its development. Another line of research examines the operation and management of a SMF. This paper falls in the class of papers that examine the operation and management of a SMF.

Recently, Neely and Cooley (2004) conducted a SMF survey in the U.S. stressing qualitative aspects of an SMF. It appears that it would be a valuable addition to the literature by providing an update to this work and to examine additional qualitative aspects and quantitative aspects of SMF programs nationwide. In particular, we wanted to obtain information about SMFs, such as: 1. What databases are used? 2. Reilly and Norton (2006, P. 130) indicate, "about 90% of a fund's returns over time can be explained by its target asset allocation policy." As such, we would like to determine how a SMF's asset allocation decisions are made. 3. Is the CAPM used by a SMF? If so, how? 4. How is an expected return calculated if it is part of the security selection process? These and other questions are explored in the research presented here.

The results of the survey summarized in this paper indicate significant variations in the nature of SMFs and in the way SMFs are managed. These differences partly are based on the relative size of the funds. Some funds have less than $25,000 of assets while others have more than $10 million. The findings suggest inconsistencies between what is taught in classrooms and what is utilized by SMFs. These findings suggest that universities and instructors should re-examine the importance of various pedagogies. These results provide valuable insights for both experienced SMF instructors and universities as well as for universities and instructors aspiring to start an SMF.

The remainder of the paper is organized as follows. In the next section, the relevant literature is discussed. Our survey methodology is described in the following section. This is followed by a summary of the survey results. The paper closes with some concluding comments.

LITERATURE REVIEW

According to Lawrence (1990), one of the first student-managed funds in the U.S. was created at Gannon University in 1952. However, the concept of having a SMF on a college campus was not popular until the late 1990s. Since that time, a SMF has been used increasingly as a tool for teaching and learning finance among business schools nationwide. There were about 30 SMFs in the early 1990s per Lawrence (1994), but that number is more than 200 today, according to the Association of Student Managed Investment Programs at Stetson University.

Another line of research emphasizes the operation and management of a SMF. Block and French (1991) discuss the process of establishing and operating a SMF, while Bhattacharya and McClung (1994) describe in detail a special case in which the SMF was built on borrowed money from a local bank. While the SMF discussed in Bhattacharya and McClung (1994) is located in a relatively rural area, Kahl (1998) presents the challenges and opportunities of a SMF operated by a metropolitan university. Johnson *et al*. (1996) focus on the pedagogical approaches used in teaching a SMF, and they argue that using an electronic meeting system (EMS) in a SMF class is better than the traditional face-to-face student group meeting with verbal communications, because "an EMS facility can result in a higher level of participation by students (P. 101.)" In a similar vein of pedagogical exploration, Grinder *et al*. (1999) contend that a student investment club on campus should be a viable complement to a more formally structured SMF in the finance curriculum.

Recently, several new trends have emerged from the development of SMFs across the U.S. Worrell (2006) reports that one newer type of the SMF, a student-managed venture fund, would give preferential treatment to entrepreneurs who are alumni of the university; and one example cited in the article is the University Venture Fund that was formed by four universities: Brigham Young University, The University of Utah, Westminster College, and Wharton School of Business. Gullapalli (2006) reports that some school administrators would try to limit the growth of their SMFs in size due in part to the fact that some donors to the schools might not "be comfortable knowing that a large percentage of their money is managed by students." Both Alsop (2007) and Gullapalli (2006) describe the emerging trend that some SMFs would only invest in companies with good social responsibility records. One example cited is a SMF in Villanova University such that it would avoid investing in companies that make military weaponry – believing that such choice is not unpatriotic and against their church's values.

SURVEY METHODOLOGY

The survey was conducted by using Internet-based technologies, and the prospective survey respondents were either a current or a past SMF-teaching faculty. An email was sent to instructors of the SMFs included in the Association of Student Managed Investment Programs requesting their participation. There were a total of 205 emails sent, and we received a total of 35 usable responses (one obvious duplicate response and one with no university information were dropped.) Therefore, the overall response rate is approximately 17%. The survey was contained in a password-protected webpage. After taking/marking the survey, the faculty clicked the "Submit Survey" button at the bottom of the webpage, thereby returning the completed survey automatically. It does appear that surveys conducted through Internet-based technologies have certain merits as described in Peng *et al*. (2007) and differs from the survey methods used by Neely and Cooley (2004). The survey instrument is provided in the appendix.

SURVEY RESULTS

Although our sample size is relatively small, it covers a wide range of the quantitative characteristics of existing SMF programs in the U.S. For example, one SMF in our sample started in 1962, while the latest SMF started in 2005. In addition, geographic diversification is provided in our sample, such as Oregon,

New York, Missouri, Texas, California, and Florida. About 57% of the SMFs are offered by public universities. The market cap of the largest SMF has more than $16 million, while the smallest has about $21,000.

As shown in Table 1, more than 60% of the SMFs did not exist until the second half of the 1990s. The persistent bull stock market in the U.S. since that time may have contributed to the rapid growth of the SMFs. Individual Donations and University Endowments are the major resources for a SMF's origination. In addition, a number of the SMFs have had additional funds added to the initial fund balance. About thirty percent of the SMFs in our sample are equipped with their own technology room. Most SMFs are "dormant" during the summer, i.e., no classes would be offered at that time.

Table 1: Summary Statistics for Background Information for the SMFs in the Survey

Panel A		
The Fund Was Launched In	**Frequency**	**Percent**
1960 to 1969	1	2.86
1970 to 1979	2	5.71
1980 to 1989	6	17.14
1990 to 1994	3	8.59
1995 to 1999	11	31.43
2000 to 2009	12	34.29
Total	35	100
Panel B		
The Financial Resources of the Fund's Origination	**Frequency**	**Percent**
University Endowment	8	24.24
Corporate Donation	1	3.03
Individual Donation	13	39.39
Other	11	33.33
Total	33	100
Panel C		
Which of the following best describes the addition to the principal of the fund?	**Frequency**	**Percent**
No additional principal is added since the fund's inception	14	41.2
Additional funds are added periodically after the fund's inception	20	58.8
Panel D		
Question	**Yes**	**No**
Does the fund have its own trading room?	10 (29.4%)	24 (70.6%)
Is the class offered in the summer?	4 (12.1%)	29 (87.9%)
Is the university public?	19 (57.6%)	14 (42.4%)

Panel A summarizes when the fund was launched. Panel B summarizes the source of the funds. Panel C summarizes the policies for adding additional funds. Panel D summarizes whether there is a supporting trading room, whether the fund is active in the summer and whether the university is private or public.

Table 2 summarizes aspects of the decision-making authority in SMFs. Most commonly, the students have this authority. For the SMFs in the sample, 56% allowed students enrolled in the class to have full control of the investment-making decision. In seven cases, representing 20.6 percent of respondents the instructor had veto making authority. In an additional six cases, some other mechanism was used. It is noteworthy that no SMF operates as "The instructor makes the decisions." Thus, each SMF class is taught with the mode of faculty being the "guide on the side", rather than the "sage on the stage."

The databases and information sources that SMFs either subscribe to or have access to are reported in Table 3. Forty-eight percent had access to Bloomberg and 37 percent had access to Standard and Poor's Compustat Research Insight. Mergent, S&P Outlook and CRSP round out the resources utilized by more than 25 percent of SMFs. The most widely used information sources are Wall Street Journal and Value Line with 77.1% and 74.3% of the SMFs using or having access, respectively. *Value Line Investment Survey* is one of the most widely used investment advisory services, and our survey result appears to attest to it. Less than half of the SMFs use or have access to any one of the other sources. The careful reader

will notice that the Wall Street Journal is utilized by about five times as many SMF's than Investor's Business Daily.

Table 2: Summary of the responses to the question

Who makes the buy/sell decisions?	Frequency	Percent
Class makes the decision	19	55.9
Class and the instructor make the decisions	2	5.9
The instructor makes the decisions	0	0.0
The class makes the decisions, but the instructor has a veto.	7	20.6
Other	6	17.6

There was no significant association between whether the buy/sell decision was made by the class or by the class with instructor input , whether the fund was university endowment vs not a university endowment, an individual donation vs not being an individual donation, a corporate donation vs not a corporate donation, or the current value of the fund. Chi-Square tests based on the 2x2 table were performed for all except the current value of fund for which a two-sample t-test was performed.

Table 3: Information Sources for SMFs

Source or Database	Frequency	Percent
Wall Street Journal	27	77.1
Value Line	26	74.3
Bloomberg	17	48.6
Standard and Poor's Compustat Research Insight	13	37.1
Mergent	12	34.3
Standard and Poor's Outlook	10	28.6
CRSP	10	28.6
Investors Business Daily (IBD)	5	14.3
WRDS subscription	4	11.4
Datastream	2	5.7
Other	12	34.3

Investigation of which databases and information sources SMFs subscribe to or Have Access to based on responses in the survey. Respondents indicated whether they used or had access to each of the sources. The sources are ordered by most to least frequently that the fund had access and/or used.

The withdrawal policy of the SMFs is summarized in Table 4. About 40% of the funds allow both the principal and the interest/dividend to be withdrawn; while roughly the same proportion of the funds would not allow any withdrawal at all. About 18 percent of funds only allow the interest or dividend income to be withdrawn. Although it is not reported in the table, our correspondents indicate that the purpose of withdrawals, when allowed, is limited to academic use, i.e., for students' scholarships.

Table 4: Withdrawal Policy of the SMFs

Which of the following best describe the withdrawal policy of the fund?	Frequency	Percent
Both the principal and the interest/dividend can be withdrawn.	14	42.4
Only the interest/dividend can be withdrawn.	6	18.2
No withdrawal is allowed.	13	39.4

Summary of the responses to the question "Which of the following best describe the withdrawal policy of the fund?" in the survey.

Table 5 summarizes the current value of the funds in the sample. The sampling distribution of the market values of these 35 SMFs is highly right-skewed. The sample average and the standard deviation are $1.44 million and $3.07 million, respectively. However, the sample median is only $460,000. Thus, our result generally suggests that a new SMF may not be "capital intensive" to be established. One fund had more than $10 million and two additional funds had between $3 million and $10 Million. Eight additional funds had current values between $1 million and $3 million. The results indicate that only two of the funds have less than $25,000. Unfortunately, it is not possible, with the data available, to distinguish between original investment and accumulated earnings.

Table 5: Current Value of the Funds

Current Value of a SMF	Number of SMFs	Percentage of SMFs
≤ $25,000	2	6.06
between $25,000 and $100,000	4	12.12
between $100,000 and $200,000	5	15.15
between $200,000 and $500,000	7	21.21
between $500,000 and $1,000,000	4	12.12
between $1 million and $3 million	8	24.24
between $3 million and $10 million	2	6.06
> $10 million	1	3.03
Total	33	100

Summary of the current value of the fund for the 33 funds that provided a response to the question in the survey. The estimated average and standard deviation are $1.44 million and $3.07 million, respectively. However, the sample data is highly right-skewed with a median value of $460,000.

Table 6 summarizes the asset allocation and orientation used by the funds. Panel A addresses the proportion of capital invested in equity instruments. Seventeen funds invest their entire capital in equities. All of the funds invested at least sixty percent of their funds in equities with one exception. The one exception was a fund that invested none of its portfolio in equities. Panel B inquires about the extent to which the investment allocation changes between equities and fixed instruments by semester. In general, funds maintain a stable asset allocation strategy from semester to semester with only five funds indicating an asset allocation change.

Panel C of Table 6 examines the orientation of the fund. Based on a 95% one-way ANOVA test the mean current value for the "Other" portfolio orientation funds is significantly higher than the other groups. There is no significant difference in mean current value among the "Growth", "Value" or "Blend" portfolio orientation funds. Most of the SMFs in our sample have the same asset allocation decision with 49% of the funds allocating 100% of the capital to equity. In total, about 69% of the SMFs in our sample invest at least 90% of the capital in equity. One SMF invests 100% of the capital in fixed income. The reason for this strategy was stated as, "The original portfolio funded by the bank loan is for fixed income securities." For the rest of the funds, the proportion of the funds invested in Equity is at least 60%.

Table 6: Normal Asset Allocation and Orientation of SMFs

Panel A: Proportion of the Capital Invested in Equity			
Proportion in Equity	Number of SMFs	Percent of SMFs	Mean Current Value
100%	17	48.5	$1,568,390
Between 90% and 100%	7	20.0	$317,643
Between 80% and 90%	5	14.3	$4,037,125
Between 70% and 80%	4	11.4	$680,093
Between 60% and 70%	1	2.9	$775,000
0%	1	2.9	$600,000
Total	35	100	$1,441,261
Panel B: Alternating Allocation by Semester			
Does the class alternate from equities to fixed income and vice versa one semester to the next?	Number of SMFs	Percent of SMFs	
Yes	5	14.3	
No	30	85.7	
Panel C: Orientation			
Portfolio Orientation	Number of SMFs	Percent of SMFs	Mean Current Value
Growth	4	12.5%	$75,786
Value	5	15.6%	$636,700
Blend	21	65.6%	$1,263,695
Other	2	6.3%	$5,845,790

Investigation of the SMFs' normal asset allocation and orientation for the funds in the survey. The percentage of the capital invested in equity, the response to the question "Does the class alternate from equities to fixed income and vice versa one semester to the next?" and portfolio orientation (growth, value or blend) is summarized.

Table 7 reports the results regarding how the SMFs determine the required rate of return and the expected return. Over 68% of the funds (22 out of 32) use the CAPM for computing the required rate of returns. In the CAPM formula,

$$E(R_j) = R_{f1} + (R_m - R_{f2}) \times beta_j \quad (1)$$

some may prefer to use a different risk-free rate in the market risk premium calculation. In the survey, we asked how they would choose a proxy for the nominal risk-free return. Thirty six percent of the funds (8 out of 22 who answered the question) use the 10-year T-note return as the proxy for R_{f1}, while 45% (10 out of 22) indicated that they use $R_{f1} = R_{f2}$. The most commonly used proxy for the market return is the *S&P* 500, by 36% of the funds (8 out of 22 who answered the question). Value Line was the most common approach to obtaining beta, 48% (11 out of 23 who answered the question). It is interesting to note that about half of the funds surveyed in our sample would not ask every student enrolled in the SMF to compute an expected return of a stock in the security selection process. For those funds that do, about 46% (6 out of 13 who answered the question) use variations of a *DCF* model to obtain the intrinsic value of the stock. About 23% of the funds (3 out of 13 who answered the question) project the *EPS* for a number of years, i.e., five years, multiply this projected *EPS* with Value Line's projected *P/E*, plus dividends expected, then divide the sum by the current stock price and annualize the return. It is noteworthy that CAPM is not used by about one third of the SMFs in the survey.

Table 7: Use of CAPM, and Required Rate of Return and/or Expected Return

Question	Yes	No
Is the CAPM used by the class?	22 (68.8%)	10 (31.2%)
Is a required rate of return calculated for each stock?	19 (61.3%)	12 (38.7%)
Do members of the class calculate an expected return for each stock?	16 (48.5%)	17 (51.5%)

Summary of the use of CAPM, and whether a required rate of return and/or an expected return is calculated for the funds in the survey.

CONCLUSIONS

The literature in financial education supports the premise that a student-managed fund (SMF) contributes positively to students' learning experience and outcomes in finance classes. There have been some qualitative characteristics of SMFs reported in the literature, but little on the quantitative characteristics of these SMFs. The survey presented in this paper sheds some light on the quantitative aspects of SMFs' operations in the US. The survey includes information on 35 SMFs of varying age and size operating in both public and private universities. The source of the funds managed comes from both university endowments and donations earmarked for the SMF.

The results of this survey should be of interest to those who are considering starting a SMF as well as to an experienced SMF professor. Our results suggest that Wall Street Journal and Value Line are the two most widely used databases by SMFs. These data sources should be available in libraries of most universities. In addition, a SMF can be established with the amount of capital as low as $25,000. In the meantime, our result indicates that there is not much variation in asset allocation decisions among SMFs despite the fact that we usually emphasize its importance in our teaching. It is noteworthy that CAPM is not used by about one third of the SMFs in our sample. It is rare for the decisions of a SMF to be made by anyone other than the students. Approximately 30% have a technology room and they use a variety of databases and information sources. The validity of CAPM is still debated in the finance literature, but it is applied in the decision making process of many SMFs. Perhaps because SMF classes are offered in academia, *DCF* models are also often used to compute the expected return. This is quite different from how a practitioner would evaluate a stock; see Dukes, *et al.* (2006).

This survey included only US SMFs. In conclusion, we believe that a similar survey of those SMFs operated in overseas higher learning institutions would add value to the literature. We have seen the emergence of a few SMFs in universities in countries such as China, Mexico and Israel. It is our intention to provide additional updates on the state of the SMF programs in the U.S. as well as those offered overseas.

APPENDICES

List of Universities in Survey

University of Kentucky	Central Michigan University	Brigham Young University
University of Tulsa	University of Missouri - St. Louis	University of Illinois at Urbana-Champaign
Franklin & Marshall College	The University of Texas at Austin	Iona College
Texas Tech University	University of Houston	Ouachita Baptist University
Creighton University	Millsaps College	University of Missouri - St. Louis
Trinity University	University of Utah	West Texas A&M University
Oregon State University	John Carroll University	Ohio University
Washington State University	University of North Florida	Moravian College
Santa Clara University	Eastern Illinois University	Morehouse College
Portland State University	Illinois State University	Cameron University
Appalachian State University	Ashland University	University of Oklahoma
University of Iowa	Baylor University	

Survey Instrument

1. When did the fund start?

The name of the University is _____ Semester _____Year _____

2) What were the financial resources of the origination of the fund?

a. University Endowment b. Corporate Donation c. Individual Donation d. Other (please specify) _____

3) Which of the following best describes the addition to the principal of the fund?

a. No additional principal is added since the fund's inception
b. Additional funds are periodically added after the fund's inception

4) If you choose answer-choice b. in Question 3) above, what is the source of the funds? (Please skip this question if you did not choose the answer-choice.)

5) Does the fund have its own trading room?

a. Yes b. No

6) Who makes the buy/sell decisions?

a. Class makes the decision.
b. Class and the instructor make the decisions
c. The instructor makes the decisions
d. The class makes the decisions, but the instructor has a veto
e. Other (please specify) _____

7) Is the class offered in the summer?

a. Yes b. No

8) The university is _____.

a. Public b. Private

9) What databases and information sources does the fund subscribe to or have access? (Please check all of the following that are applicable.)

a. CRSP b. Standard and Poor's Compustat Research Insight c. WRDS subscription d. Datastream

e. Bloomberg f. Mergent g. Value Line h. Investors Business Daily (IBD)

i. Investors Business Daily (IBD) j. Sandard and Poor's Outlook k. Other (please specify) _____

10) Which of the following best describe the withdrawal policy of the fund?

a. Both the principal and the interest/dividend can be withdrawn
b. Only the interest/dividend can be withdrawn
c. No withdrawal is allowed

11) If money is allowed to be withdrawn from the fund, please describe the purpose of the withdrawals.

12) What is the current value of the fund?

$ _____ Note: If the fund has maintained a periodic, i.e., monthly, return file (since the inception of the fund), we would appreciate receiving it as an attachment at the following email address:

13) What is your normal Asset Allocation of the fund?

Equity _____%
Fixed Income _____%
Derivatives (Futures, Options and Other Derivatives) _____%
Others _____%

14) If you choose "Others" in Question 13) above, please explain. (Please skip this question if it is not applicable.)

15) Does the class alternate from equities to fixed income and vice versa one semester to the next?

a. Yes b. No c. Other (please specify) _____

16) Is the portfolio oriented to _____?

a. Growth b. Value c. Blend d. Other (please specify) _____

17) Is the CAPM used by the class? [$R_i = R_{f1} + (R_m - R_{f2}) \times beta$] a. Yes b. No

18) Refer to Question 17. If yes, what is the proxy for R_{f1}?

a. 1-mo. T-Bill b. 3-mo. T-Bill c. 6-mo. T-Bill d. 10-yr T-note e. 20-yr T-Bond f. Other (please specify) _____

19) Refer to Question 17. If yes, what is the proxy for R_{f2}?

a. The same as R_{f1} b. The current 3 mo T-Bill c. 10-yr T-Note, the same time period as R_m
d. 20-yr T-Bond, the same time period as R_m e. Other (please specify)

20) Refer to Question 17. If yes, what is the proxy for R_m?

a. Ibbotson data, arithmetic mean for large cap stocks from 1926 to date
b. Ibbotson data, geometric mean for large cap stocks from 1926 to date
c. Selected time period from Ibbotson's data, arithmetic mean
d. Selected time period from Ibbotson's data, geometric mean
e. Wilshire 5000, equity return for a specific time period
f. S&P 500 return
g. Other (please specify) _____

21) If you choose "S&P 500 return" in Question 20) above, what is the time-period used? (Please skip this question if it is not applicable.)
_____

22) Refer to Question 17. If yes, how is the coefficient of beta determined?

a. Calculated by the class from the data available
b. The beta estimate reported by the Value Line
c. The beta estimate reported by Standard and Poor's
d. Use brokerage house betas, i.e., from those reported by Merrill Lynch
e. Other (please specify) _____

23) Is a required rate of return calculated for each stock? a. Yes b. No

24) Refer to Question 23. If yes, how is the required return calculated?

a. By use of the CAPM b. Return greater than twice that of the 20-year T-bond yield
c. Return greater than twice that of the 10-year T-note yield d. Other (please specify) _____

25) If you choose "No" in Question 23) above, please explain. (Please skip this question if it is not applicable.)
_____

26) Do members of the class calculate an expected return for each stock?

a. Yes b. No c. Other (please specify) _____

27) Refer to Question 26. If yes, how is the expected return calculated?

a. Annualize the Holding Period Return (*HPR*) for 3 years
b. Annualize the Holding Period Return (*HPR*) for 5 years
c. Annualize the Holding Period Return (*HPR*) for more than 5 years
d. Project a price based on expected EPS growth plus dividends expected, then divide the sum by the current stock price and annualize the return.
e. Project the EPS for a number of years, i.e., five years, multiply this projected EPS with Value Line's projected P/E, plus dividends expected, then divide the sum by the current stock price and annualize the return.
f. Use of the constant growth model to obtain the price, plus dividends expected, then divide the sum by the current stock price and annualize the return.
g. Other (please specify) _____

28) If you choose "No" in Question 26 above, please explain. (Please skip this question if it is not applicable.)

REFERENCES

Alsop, R. (2007). Talking B-School: Hass takes new tack on investing; MBA students to run fund focusing on socially responsible firms, *The Wall Street Journal*, September 18, B8.

Bhattacharya, T. K., and McClung, J. J. (1994). Cameron University's Unique Student-Managed Investment Portfolios, *Financial Practice and Education*, Spring/Summer, 55 - 60.

Block, S. B., and French, D. W. (1991). The Student-Managed Investment Fund: A Special Opportunity in Learning, *Financial Practice and Education*, Spring, 35 - 40.

Dukes, William. P., Peng, Z., and English, P. (2006). How Do Practitioners Value Common Stock? *The Journal of Investing*, 15(3), 90-104.

Grinder, B., Cooper, D. W., and Britt, M. (1999). An integrative approach to using student investment clubs and student investment funds in the finance curriculum, *Financial Services Review*; 8(4), 211 - 221.

Gullapalli, D. (2006). They give it the old college try: Funds let students invest millions, *The Wall Street Journal*, July 14, C1.

Johnson, D. W., Alexander, J. F., and Allen, G. H. (1996). Student-Managed Investment Funds: A Comparison of Alternative Decision-Making Environments, *Financial Practice and Education,* Spring/Summer, 97 - 101.

Kahl, D. (1998). The challengers and opportunities of student-managed investment funds at metropolitan universities, *Financial Services Review*; 6(3), 197 - 200.

Lawrence, E. C. (1990). Learning Portfolio Management by Experience: University Student Investment Funds, *Financial Review*, February, 165 - 173.

Lawrence, E. C. (1994). Financial Innovation: The Case of Student Investment Funds at United States Universities, *Financial Practice and Education*, Spring/Summer, 47 - 53.

Neely, P., and Cooley, P. L. (2004). A survey of student managed funds, *Advances in Financial Education*, 2(1), 1 - 9.

Peng, Z. J., Dukes, W. P., and Bremer, R. (2007). The Impact of the Sarbanes-Oxley Act of 2002: A Perspective of CFOs. *The Financial Decisions*, 19(1).

Reilly, F. K., and Norton, E. A. (2006). *Investments*, 7th edition. Mason, Ohio: South-Western.

Worrell, D. (2006). School Ties, *Entrepreneur,* November, 88 - 90.

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