Finance Experts versus Students: Policies, Comparative Return and Risk of Investments in a Student-Directed Investment Portfolio

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Recognizing that traditional textbook and lecture presentations are insufficient, many universities have adopted student-managed investment funds. For five years, the author taught the course taken by students managing the student-directed Spellman Portfolio, at the University of Wisconsin-La Crosse. This was not a student-managed investment portfolio in the tradition sense, because investment decisions were filtered through the CBA Investment Advisory Board (IAB). This group of professional financial managers had ultimate decision-making authority, making a unique study of expert decision making possible. This report presents the investment policy employed and findings of this investigation and the incremental benefits of expert advice.

INTRODUCTION

This report shares the author's experiences with a student-directed portfolio at the University of Wisconsin-La Crosse. Readers wanting to create their own student-directed portfolio will find the Investment Policy Statement in the Appendix. This statement was first conceived in the spring of 2005, with the assistance of Dean William Colclough, and updated substantially in the 2008, with the assistance of Andew Temte, owner of Schweser Study Programs. The Investment Policy Statement is made available to the CBA Investment Advisory Board (IAB) and reviewed between student presentations. A literature review outlining the development of student-managed investment funds is presented below. Details regarding the University of Wisconsin-La Crosse's Spellman Portfolio precede reporting of the investigation's results. The analysis compares the annualized returns of approved companies, unapproved companies, and two market indexes. Finally, a conclusion is presented.

LITERATURE REVIEW

Origin of the Student Investment Fund Concept

Student-managed investment vehicles have taken many forms in higher education since Gannon University started the first such venture in 1952 (Kahl, 1997; Lawrence 1994). Relatively little growth occurred through 1980, when only 14 universities had student-managed investment programs. However, by 2007 there were over 400 such programs. (Mallett, Belcher, and Boyd, 2009).

The finance literature has several articles related to the creation of student investment funds. Lawrence (1994) asserts that the most difficult aspect of the creation of a student-directed investment fund is obtaining initial capital. A student investment fund is generally dependent upon finding a major donor willing to specify that the donation be managed by students, or convincing university endowment administrators to allocate a portion of the university's endowment for student management. A survey of the initial funding of student investment funds found that thirty-four percent of the initial funding came from individual and families, while twenty-four percent of the money came from university endowments (Neely and Cooley, 2003). The Spellman Portfolio is the result of a merging of money from both sources.

Student Investment Fund Formats

One of the more interesting reports on student investment funds is the integration of student investment clubs and student investment funds presented by Grinder, Cooper, and Britt (1999). Their proposal involves students across their entire university career, with a personal finance class taken by freshmen and sophomores, which serves as a gatekeeper to an investment club, with members in their last three semesters managing the investment fund. The Spellman Portfolio program has consists of a two course sequence, one at the junior level and one at the senior level.

Another way to analyze the student-managed investment fund format is in terms of investment policies and objectives. For instance, some socially-responsible funds exclude companies that receive revenue from certain products (i.e., tobacco, gambling) and services (i.e., abortion) (Statman, 2006). Sanders (2008) finds that student-managed portfolios at church-related universities are more likely to exclude alcohol producers from their portfolios. The Spellman Portfolio does not have these limitations.

Student Investment Fund Performance

Analysis of performance of student-managed investment funds is "spotty at best," according to Mallett, Belcher, and Boyd (2009). One exception is a study of the Tennessee Valley Authority Investment Challenge Program. In total, twenty-six universities received $300,000 from the decommissioning of the TVA's nuclear power program to manage as outside managers for the TVA. Thirteen schools, or exactly half had returns that were better than the S&P 500. The same benchmark is used by the Spellman Portfolio.

Mallet, Belcher, and Boyd (2009) attribute the poor student-directed portfolio performance to the portfolio turnover caused by frequent turnover of student managers. With graduating seniors being replaced by underclassmen annually, Haddad and Redman (2006) feel it is difficult to maintain consistency in management style or investment portfolio. The addition of the CBA Investment Advisory Board (IAB) at the University of Wisconsin-La Crosse was expected to add a sense of stability and a longer-run perspective. Applying comments recently made by Nussbaum (2011), the Spellman Portfolio's performance will be compared to market performance and the performance of other securities not purchased. A detailed analysis of student and the IAB's success follows the description of the Spellman Portfolio given next.

The Spellman Portfolio

Origination and Funding

Mr. Kevin Spellman, III donated $20,000 to the University of Wisconsin-La Crosse in the spring of 2005 for the creation of a student-directed portfolio. The portfolio "serves as an opportunity for students interested in securities markets to learn through practical experience" (Investment Policy Statement for the Gordon Spellman Investments Portfolio, p. 4). It is a special feature of the Investment Analysis and Portfolio Management course (FIN 475/575) course. Students in this class must have completed a Fundamentals of Investments (FIN 380) course or be enrolled in the graduate student (FIN 575) component of the course.

The portfolio was named in honor of Mr. Kevin Spellman's grandfather, Kevin Spellman I, and has commonly referred to as the "Spellman Portfolio." Mr. Spellman was a student in the author's Investments and Portfolio Management classes in the early 1990s, went on to the University of Wisconsin's Applied Financial Management master's program. From there he went on to a distinguished career in portfolio management and education. In 2010, he received his doctorate in Behavioral Finance from the London School of Business.

Over the Fall 2005 through Fall 2010 semesters, the Portfolio Management course was taught eight times. During the Spring 2006 semester, students in a small CFA preparation course also made recommendations regarding additions to the Spellman Portfolio. Throughout the period, the Spellman Portfolio was under the control and direction of the University of Wisconsin-La Crosse Foundation and the University of Wisconsin-La Crosse's College of Business.

CBA Investment Advisory Board

Due to the University of Wisconsin-La Crosse's fiduciary role, the CBA's Investment Advisory Board (IAB) was established in the summer of 2005, for the purpose of overseeing the administration of the Spellman Portfolio. Board members were originally University of Wisconsin-La Crosse alumni. Over time, however, others have joined the IAB. All members have careers in the financial sector, and are primarily from the investment advisory industry. Although they are geographically concentrated in a band from Chicago to Minneapolis, both coasts of the United States have been represented on the IAB.

Other key administrative aspects include the role played by the University of Wisconsin-La Crosse's Department of Finance and investment consultant. During the two weeks prior to the formal presentations before the IAB, students practice presentations before a minimum of two members of the Finance Department. These members provide feedback regarding the form and content of the presentation, without providing any input regarding the appropriateness of the students' choices. Trust Point (formerly North Central Trust), of La Crosse, Wisconsin, is used as the portfolio's investment consultant, and provides information on firm performance. All data used in this report was verified with the Trust Point investment manager. As part of the University of Wisconsin-La Crosse Foundation, the Spellman Portfolio is a private, not-for-profit organization according to Internal Revenue Code 501(c)(3). Accordingly, the income and earnings of the portfolio's assets are tax-exempt. As of December 2010, 79.7% of the Spellman Portfolio was held in equity, while 20.3% was being held in cash and equivalents.

Student Teams

Self-selected students teams of approximately three students make a single recommendation for addition to the Spellman Portfolio. Early each semester, the author shared information regarding the Spellman Portfolio's holdings and performance with students. Student teams write an initial "Identification Report" outlining the basis of their reasons for selection of a given company. On the basis of their preference and preferences of IAB members, mentors are identified for each team. An initial draft of final report is turned in three weeks prior to the formal presentations before the IAB. Final reports are due the day prior to the formal presentation. All three written assignments and the oral presentation are graded and constituted approximately one-third of the total points available in the FIN 475/575 course.

Other Administrative Details

Market orders are issued for all approved securities. There initially was a delay until the following semester, giving members of the IAB additional time to make comments regarding the students' choices. A lack of desire on the part of non-attending IAB members to provide recommendations when they had not attended the presentations, moved the investment up significantly. Since December 1997, attending IAB members have until Wednesday of the week following to vote on the acceptability of the investment (plus, submit comments concerning the presentation, which is shared with each student team). A market order to buy is sent to Trust Point by Friday, one week following the formal presentations, for any investment receiving an approval rating by at least two-thirds of the IAB. Sales are suggested by the Investments class, with final decision-making authority resting with the IAB.

RESEARCH FINDINGS

Presentations, Purchases, and Sales

The names of the companies presented for investment consideration by Portfolio Management students since the origination of the Spellman Portfolio are presented in Table 1. Out of eighty-four proposed firms, twenty-six companies have been approved by the IAB, resulting in an acceptance rate of thirty-one percent. This acceptance rate is biased upward by the high acceptance rate following the first presentations, when the Spellman Portfolio was first being organized, in order to create some diversity. Since then the acceptance rate has been twenty-five percent.

Across time, ten firms have been culled from the Spellman Portfolio by the IAB at the urging of the Investments class. American Standard (ASD) spun off WABCO Holdings Inc., which was sold in 2007. The other portion of American Standard, which was bought by Ingersoll-Rand, was sold in 2010. A detailed analysis of Spellman Portfolio sales will follow analysis of purchases.

Comparative Return Performance: Purchases

Panel A of Table 2 presents the relative ranking of the 26 chosen companies compared to market benchmarks, from the date of investment to the date of sale or December 31, 2010, for those investments in the Spellman Portfolio at the end of the sample period. Ten times the chosen company did better than the DJIA and SP500. None of the companies ever fell between the market indexes. Sixty-one percent of the time (16 out of 26), the chosen company performed worse than both market measures.

Panel B of Table 2 provides return statistics, including the fact that the mean annualized return was a loss of 1.78%. This is over five percent below the annualized return on the DJIA and over seven percent below the SP500's return, over matching periods of investment. Although the relative rankings of the DJIA and SP500 switch when considering median returns, only approved companies post a negative annualized return median.

The maximum annualized return of the approved companies, at 47.27% is much higher than the maximum annual return of the market surrogates. However, the annualized loss is a large negative value. As a consequence of the extremes in chosen company performance, it is not surprising to see that the firms in the Spellman Portfolio had a much higher standard deviation than the market surrogates. Although it appears as though the Spellman Portfolio would have been better served if it had naively invested in either reported market surrogate, the mean returns are not statistically different at the 0.10 level.

Comparative Return Performance: Sales

Perhaps the sales decisions of the Investment Advisor Board were better. In order to assess this possibility, the annualized returns of the Spellman Portfolio companies sold by the IAB were analyzed, by computing the subsequent return to December 31, 2010. A low subsequent return for these firms relative to the market would be an indication of stock selling skill. In fact, a negative subsequent rate of return would be preferred, because it would represent the fact that the investment was sold before the investment price declined. The implication of negative values is that the IAB sold before the decline occurred.

The annualized rate of return for one of the sale choices was an astounding 188.3 percent, which across ten sales would have added 18.83 percent to the mean value. Even without this outlier's impact, the median returns on the DJIA and SP500 are only about half of that earned on a portfolio of companies sold by the IAB. The only statistic favorably reflecting on the IAB's effort is the minimum annualized rate of return, which is the lowest for one of the firms the IAB decided to sell. Given the wide range of returns, it is not surprising that the large standard deviation of annualized returns for the sold firms is four times that of the highest market benchmark. Despite the large standard deviation, the difference in returns between the sold firms and the DJIA, though not the SP500, is significant at the 0.10 level.

IAB members are free to sell whichever firm(s) they believe will not be living up to the goal of long-term capital gains. Nonetheless, they may be biased by the recommendations coming from the students. In order to investigate this explanation for poor selling decisions, the sales recommendations of the Investment (FIN 380) class were investigated. Every week, different student teams in this class make a sell recommendation. Given approximately twelve sale recommendations in a semester, across typically two sections of FIN 380, all firms in the Spellman Portfolio could be chosen at least once for elimination. In some semesters, as many as nine firms were identified as those that should be eliminated. However, if a firm is identified only once as being a sale candidate, it would appear as though a majority of the students did not want to eliminate it.

Therefore, identification of “proposed sale” candidates was limited to the three top candidates for sale in any semester and included in the list of “proposed sale” candidates if at least four teams urged students to sell the identified firm. Across the 2006 to 2010 period, twenty-one firms were identified as good sale candidates by students. As shown in the first row of Table 3, the IAB agreed with recommendation five times, rejected it sixteen times, and chose another investment for sale five times.

Market excess returns were identified for the twenty-one “proposed sale” companies, the average of which was 7.18%. However, given the low number of observations, it is possible that the mean could be skewed upward by a few outliers. This appears to be the case, because the median annualized market-excess rate of return on the companies proposed for sale was a negative 3.64%.

Looking across the rows, we can see that the five companies on which the IAB agreed with the student recommendations went in the opposite direction, increasing instead of declining. In fact, they rose at an annualized rate of 43.08% on average. And, the median annualized market-excess return was a positive 41.82%. The former number would be impacted by the firm earning 169%, but that outlier would not have as much of an impact on the calculation of the median return. One of the firms the IAB thought should be sold subsequently lost 31.13% on an annualized basis. Again, there is a wide variation in the performance of firms sold by the IAB.

The third column exhibits the subsequent price behavior of the sixteen sale recommendations that were not taken by the IAB. These values are the most in line with the anticipated performance of an investor that had some stock sales insight. The mean and median annualized market-excess returns are both negative. Among those companies for whom the sale recommendations were not adopted, the absolute value of the biggest stock price drop exceeded the largest stock price gain. Given the relatively low range in numbers, this column has the lowest standard deviation. However, due to the limited sample size, the seemingly large differences in mean annualized market-excess returns are not statistically significant at the 0.10 level.

Performance statistics for the five sales undertaken by the Board without input from the students is presented in the last column of Table 3. Although one would expect these companies to underperform the market, such is not the case. In fact, one of the sales choices earned 61% on an annualized basis, in excess of the market’s performance. Arguably the worst performance was a market-adjusted loss of only eight percent, which is much below the minimum performance of the stock for which approval to sell was not given. Spellman Portfolio performance would have been better if the IAB had limited its selling to firms proposed by the Investments class.

Consideration of Systematic Risk

Systematic risk estimates were obtained from finance.yahoo.com at the end of the end of 2010. The betas of the approved and unapproved companies are only different by 0.08. However, the median of the unapproved companies is less than one (i.e., 0.98) while the median beta of the approved companies is much higher (i.e., 1.13). Much more interesting is the systematic risk measure for the ten firms which the IAB sold. Their mean beta was a very aggressive 1.50. The difference between the mean betas of unapproved sales and sales decisions of the IAB is significant at the 0.05 level. It appears as though the CBA Investment Advisory Board was attempting to rid the Spellman Portfolio of the systematic risk of the high beta securities! However, as the economy recovered from the 2008 recession, some of these companies had very good performance. Although it would not have required selling specific assets, it should be noted that the rebalancing rules rules regulating the Spellman Portfolio, which are given in Section VI of the appendix, require the IAB to sell high-beta securities if the portfolio beta exceeds 1.30.

CONCLUSION

A wide number of non-monetary advantages exist through the presence of the Spellman Portfolio. It has adds a dimension of visibility to the Finance Department and attracts students that might not have other wise chosen finance as a major. Through their mentorship and presentation attendance, the Investments Advisory Board made an invaluable contribution to the students. However, it appears as though the same cannot be said for their investment decision-making ability. Further analysis at other universities, perhaps with the use of the Investment Policy Guidelines presented in the Appendix, will provide insight to the robustness of these results.

REFERENCES

Grinder, B., Cooper, D.W., & Britt, M. (1999). An Interactive Approach to Using Student Investment Clubs and Student Investment Funds in the Finance Curriculum. *Financial Services Review,* 8, Fourth Quarter, 211-221.

Haddad, M., & Redman, L. (2006). Students as Fiduciaries: An Examination of the Performance of Student-managed Portfolios. *Journal of the Academy of Business Education,* 7, January, 87-98.

Kahl, D. (1997). The Challenges and Opportunities of Student-managed Investment Funds at Metropolitan Universities. *Financial Services Review* 6, Third Quarter, 197-201.

Lawrence E.C. (1994). Financial Innovation: The Case of Student Investment Funds at United States Universities. *Financial Practice and Education*, 4, Spring-Summer, 47-53.

Mallett, J., Belcher, L.J., & Boyd, G.M. (2009). Experiment no More: The Long-term Effectiveness of a Student-managed Investments Program. Stetson University Working Paper Series, #90311.

Nussbaum, P. (2011). Measuring Investment Portfolio Performance. *Banking* 100, January, 14-15.

Neely, W. P. & Cooley, P.L. (2003). A Survey of Student Managed Funds. *Advances in Financial Education*, 2, Spring, 1-9.

Sanders, K.T. (2008). Student-managed Investment Funds in Religiously Affiliated and Independent Colleges and Universities. *Christian Business Academy Review*, 3, Spring, 26-34.

Statman, M. (2006). Socially Responsible Indexes. *Journal of Portfolio Management,* 32, Spring, 100-109.

TABLE 1
SPELLMAN PORTFOLIO PRESENTATIONS, APPROVALS, and SELL DECISIONS

Investment Date	Approved Companies	Unapproved Companies	Companies Sold
February 14,2006	American Standard, BP, Dell, Prudential, Saint Joe Company, Signet, Toyota	Southwest Airlines Apple	
8/25/2006	General Electric	Allegheny Technologies American Beverage	Dell
2/13/2007	Procter & Gamble Johnson & Johnson Kohl's	Associated Bank, Disney Marten Transportation, Paychex, Pepsi Bottling Group Pfizer, Target	ASD–WABCO Holdings
12/19/2007	Ameriprise Financial CVS Kohl's Lockheed Martin	Actuant, China Mobile Coca-Cola, CROCS MasterCard MEMC Electronic Materials Oshkosh Truck Rockwell Automation Sears Holdings	St. Joe Company Kohl's
12/17/2008	Energy Transfer Partners Google Intel	Dell, General Mills McDonalds, Sony Target, Yum Brands	Ameriprise Financial Signet
5/13/2009	Mosaic	Apollo Group Campbell's Soup Forrest, Hewlett-Packard Lorillard, Molson Coors, Omega Healthcare Panera Bread Wells Fargo	
12/16/2009	Qualcomm Urban Outfitters	Cabela's, Citigroup, Coca-Cola, Harley-Davidson Hercules Technology Jet Blue, M&I Bank Neenah Paper Polo Ralph Lauren VMware	
5/13/2010	Coca-Cola JP Morgan	Apple, Baxter International, Capella Education, Coinstar, Joy Global, Sigma Aldrich, Vale, Whole Foods	BP Mosaic
12/14/2010	Apple Reynolds American Union Pacific	Clorox, DuPont Ferro, Ford General Mills Netflix	ASD–Ingersoll Rand Lockheed Martin

TABLE 2
ANNUALIZED RETURN PERFORMANCE OF APPROVED COMPANIES

Date of Addition to 12/31/2010

N = 26

	Approved Companies	DJIA	S&P 500
Panel A: Rankings			
Best	10	9	7
Middle	0	12	14
Worst	16	5	5
Panel B: Return Statistics			
Mean	- 1.78%	4.52%	5.31%
Median	- 2.79%	5.03%	1.57%
Maximum	47.27%	27.69%	28.32%
Minimum	-60.20%	-35.36%	-40.31%
Standard Deviation	24.88%	13.14%	15.76%

TABLE 3
MARKET-EXCESS ANNUALIZED RETURN
PERFORMANCE OF PROPOSED SALES AND ACTUAL SALES

Date of Potential Addition to 12/31/2010

Criteria for selecting proposed sales firms: A maximum of three sales per semester with at least four student teams voting for sale of given firm.

	Companies Meeting Sale Criteria	Sale Agreement	Sale Disagreement	Independent Sales
N	21	5	16	5
Mean	7.18%	43.08%	-4.01%	23.39%
Median	-3.64%	41.82%	-3.94%	12.09%
Maximum	169.26%	169.26%	58.23%	61.06%
Minimum	-58.84%	-31.13%	-58.84%	-8.00%
Standard Deviation	47.25%	80.43%	26.27%	29.57%

APPENDIX

Investment Policy Statement
For The
Gordon Spellman Investments Portfolio

Reviewed by the CBA Investment Advisory Board
over dinner at each student presentation

Last Update: December 2010

Table of Content

I. Introduction

Purpose of this Policy Statement

This policy statement outlines the goals and investment objectives for the Gordon Spellman Investments Portfolio (these assets referred to in this investment policy as the "Portfolio"). Since this document is intended to provide investment guidelines for managing the Portfolio, this document outlines certain specific investment policies that will govern how the Portfolio's goals are expected to be achieved. This statement:

- Describes an appropriate risk posture for the investment of the Portfolio's assets;
- Establishes investment guidelines regarding permissible securities and diversification of assets;
- Specifies the criteria for evaluating the performance of the Spellman Portfolio as a whole; and
- Defines the responsibilities of the Investment Advisory Board and other parties responsible for the management of the Portfolio's assets.

The Investment Advisory Board believes that the investment policies described in this statement should be dynamic. These policies should reflect the financial needs and circumstances of the Portfolio, the time horizon available for investment, and the Investment Advisory Board's duties and investment philosophy regarding the investment of these assets. These policies will be reviewed and revised periodically to ensure they adequately reflect changes related to the Portfolio, the Investment Advisory Board's tolerance for risk, and the capital markets.

Investment Objectives

The Portfolio's assets shall be invested in accordance with sound investment practices that emphasize long-term investment fundamentals. In establishing the investment objectives of the Portfolio, the Investment Advisory Board has taken into account the time horizon available for investment, the nature of the Portfolio's cash flows and liabilities, and other factors that affect the Investment Advisory Board's risk tolerance. Accordingly, the Investment Advisory Board has adopted an investment objective of total return for the Portfolio. This investment objective implies the Spellman Portfolio will be managed according to the following underlying principles:

- An approach that emphasizes capital appreciation over the long-term while allowing the Spellman Portfolio to take advantage of any opportunities for substantial current income which market conditions may reveal;
- A willingness to risk considerable declines in value over the short-term, so long as the Spellman Portfolio is positioned to generate long-term growth and take advantage of current income opportunities;
- An expectation to earn long-term returns sufficient to keep pace with the rate of inflation over most market cycles (net of spending and investment and administrative expenses), but may lag inflation in some environments;
- Diversifies the Spellman Portfolio in order to provide opportunities for long-term growth and to reduce the potential for large losses that could occur from holding concentrated positions.

This portfolio is expected to earn long-term return that compare favorably to appropriate market indexes. It is expected that these objectives can be obtained through a well-diversified portfolio structure in a manner consistent with this investment policy. This investment policy is intended to be a summary of an investment philosophy that provides guidance for the Investment Advisory Board and other parties interested in the management of the Portfolio. The guidance and limitations set forth in this statement are intended to provide the Investment Advisory Board with a clear understanding of the investment policies and objectives of the Portfolio. It is the intent of this investment policy statement to provide a meaningful framework for the investment objectives of the Spellman Portfolio and that these policies will not be overly restrictive given changing economic, business, and capital market conditions. It is understood that there can be no guarantees about the attainment of the goals or investment objectives outlined here.

II. Information About the Portfolio

Contact Information

The Gordon Spellman Investments Portfolio
North Central Trust Company Headquarters
230 Front St N
La Crosse, WI 54602
608-782-1148, 800-658-9474
Contact Person: Randy Vanrooyen

Purpose and Scope of the Portfolio

The Gordon Spellman Investments Portfolio was established with an endowment of twenty thousand dollars by Kevin Spellman to serve as an opportunity for students interested in securities markets to learn through practical experience.

The Portfolio offers students a unique opportunity to achieve real-world experience as investment analysts and portfolio managers. The Portfolio is under the control and direction of the University of Wisconsin-La Crosse Foundation and University of Wisconsin-La Crosse College of Business. It is a special feature of the Investment Analysis and Portfolio Management (FI 475/575) course. Students must have completed Fundamentals of Investments (FIN 380) or be enrolled as a graduate student.

The assets in the Portfolio are to be broadly diversified by asset class, number of issues, issue type, and other factors consistent with the investment objectives established for the Portfolio. The Portfolio is to be invested with prudent levels of risk and with the expectation that long-term total returns (yield plus capital appreciation) will increase the purchasing value of the Portfolio, net of all disbursements.

Participation in the Portfolio's management will educate students on how to participate in actual financial markets through security analysis and portfolio management. Understanding and utilization of information and technology to provide a complete security analysis will also be enhanced.

Students will gain practical experience in current financial markets and learn to balance emotional reaction to current news with long-term objectives. In the process students will establish a strategic outlook in order to analyze current and future economic conditions and their impact on the Portfolio.

Analytical and decision-making skills, on both an individual and group basis, will be improved. Students will evaluate each sector's outlook to facilitate and better determine the portfolio's target sector allocation. The ability to identify and justify investments, by sector and individual asset, will be improved.

Students will also further develop oral and written communication skills. They will develop a SWOT (Strengths, Weaknesses, Opportunities, and Threats) and other background information when making other presentations to the faculty and Investment Advisory Board.

Cash Flows and Liquidity Needs

The Investment Advisory Board is responsible for monitoring and allocating contributions and disbursements from the Portfolio. Contributions to the Portfolio are gifts and bequests, permanently restricted donor contributions and Investment Advisory Board designated funds. The timing and magnitude of contributions to the Portfolio is unknown.

To meet liquidity standards, equities must be traded on either the NASDAQ or NYSE. Furthermore, to be eligible, equities must have an average daily trading volume of more than 400,000 shares, and the bid/ask spread may not exceed 5% of the bid price.

Tax/Regulatory Status
As part of the University of Wisconsin - La Crosse Foundation, the Portfolio is a private, not-for-profit organization according to Internal Revenue Code Section 501(c)(3). Accordingly, the income and earnings of the Portfolio's assets are tax-exempt.

III. Responsibilities of the Portfolio Representatives
Investment Advisory Board
The Investment Advisory Board has the following responsibilities:

- Developing a long-term strategic investment plan for the Portfolio. This includes evaluating their risk tolerance and establishing a long-term asset allocation policy consistent with the long-term investment objectives, financial needs and circumstances of the Portfolio;
- To monitor and evaluate the performance of the Portfolio's assets as a whole;
- The selection or termination of investment consultants, if so desired, and a custodian for the Portfolio;
- Such other duties as may be described in this policy or as required by applicable laws and regulations.

Investment Consultant
The Investment Consultant retained by the Investment Advisory Board shall have the following responsibilities:

- To assist the Investment Advisory Board in strategic investment planning for the Portfolio. This includes providing assistance in developing an investment policy and asset allocation strategy;
- To provide to the Investment Advisory Board quarterly performance measurement reports for the Portfolio and to assist the Investment Advisory Board in interpreting the results; and
- Such other duties as may be mutually agreed to.

IV. Responsibilities of the Student Investment Managers
Students are grouped into teams of approximately two to four, depending on class size. These students will initially assess the current holdings and performance of the Portfolio and make an oral and written report to the class prior to midterm which will include any recommendations for portfolio rebalancing. The class as a whole will determine the nature of the rebalancing to take place and each group will select and research one investment vehicle consistent with that philosophy to present to the Investment Advisory Board for inclusion in the Portfolio near the end of the semester.

Students will present information regarding:

- Fundamental analysis of the investment's health, competitive advantages, competitors, and markets;
- Technical analysis of price trends over the past year, and five-year period;
- Equity or debt risk analysis, including market sensitivity and an estimation of the required rate of return;
- Ratio analysis where appropriate
- Forecast price targets for coming three, twelve, and 36-month periods, with justification; and
- Recommendations for any trigger (stop/limit order) or profit-taking criteria to be implemented.

While the Portfolio Management (FIN 475/575) class is responsible for investment decisions, the Investment class (FIN 380) is responsible for sale recommendations. Sale recommendations will be compiled by the instructor and shared with the Investment Advisory Board at the next meeting, which coincides with the next presentations by the Portfolio Management students. The Investment Advisory Board is not required to sell any of the companies identified by the Investment students.

Fiduciary Responsibilities
Each student investment group is expected to select their investment in a manner consistent with the investment objectives, guidelines, and constraints outlined in this statement and in accordance with applicable laws. This would include discharging their responsibilities with respect to the Portfolio consistent with "Prudent Investor" standards, and all other fiduciary responsibility provisions and regulations. This refers to the legal standard of care governing the fiduciary responsibilities of the investment manager that traces back to *Harvard College v. Amory* which found that trustees should "…observe how men of prudence, discretion and intelligence manage their own affairs, not in regard to speculation, but in regard to the permanent disposition of their choices, considering the probable income, as well as the probable safety of the capital to be invested."

Security Selection/Asset Allocation
Except as noted below, each student investment group shall have the discretion to determine their individual security selections.

The Portfolio is expected to operate within an overall asset allocation strategy defining the Portfolio's mix of asset classes. This strategy, described below, sets a long-term percentage target for the amount of the Portfolio's market value that is to be invested in any one asset class. The allocation strategy also defines the allowable investment shifts between the asset classes, above and below the target allocations.

The asset allocation strategy for each semester's students can deviate from the overall Portfolio's asset allocation, however, the Investment Advisory Board is responsible for monitoring the aggregate asset allocation, and may re-balance to the target allocation on a periodic basis.

Proxy Voting
The Investment Advisory Board is responsible and empowered to exercise all rights, including voting rights, as are acquired through the purchase of securities, where practical. The Investment Advisory Board is also responsible for voting any proxies received from Investment Companies retained and for any other "Trustee Directed" investments, if applicable. The Investment Advisory Board shall vote the proxies according to the best long-term interests of the Portfolio.

V. Asset Allocation Strategy
In line with the return objectives and risk parameters of the Portfolio, the mix of assets for the Portfolio should be generally maintained as follows (percentages are of the market value of the Portfolio):

Asset Class	Minimum	Target	Maximum
Domestic Large/Medium Cap Stocks	20%	40%	60%
Domestic Small/Medium Cap Stocks	10%	20%	30%
Total Domestic Equity	40%	60%	80%
International Stocks	10%	20%	30%
Total Equity	60%	80%	95%
Investment Grade Fixed Income	0%	5%	10%
Alternative Investments	0%	5%	10%
Cash and Equivalents	0%	NA	15%

Deviations from this asset mix guideline may be authorized by the Investment Advisory Board, which may determine if the aggregate deviation constitutes a material departure from the spirit of the target allocation. The maximum percentage designated for the "Cash and Cash Equivalents" category is intended to apply after the initial start-up of any one portfolio in the Portfolio. The Investment Advisory

Board recognizes that this initial start-up period to become fully invested could be as long as three months after the initiation of a portfolio.

The following constraints also apply to the Portfolio's overall asset allocation:

- Investments in any one individual security should not exceed 8% of the market value of the Portfolio;
- Holdings of any single issue in the Portfolio should not exceed more than 5% of the market value of the total outstanding common stock of any one company;
- The maximum allocation to any single economic sector in a portfolio should not exceed the 15% of the market value of the Portfolio; and
- At any given time, the Portfolio should contain investment vehicles from at least seven of the following eleven economic sectors: basic materials, capital goods, conglomerates, consumer goods, energy, financial, health care, services, technology, transportation, and utilities.

Rebalancing Procedures

The allocation to each asset class and to investment styles within asset classes is expected to remain stable over most market cycles. Since capital appreciation (depreciation) and trading activity in each individual semester can result in a deviation from the overall asset allocation, the aggregate asset allocation will be monitored and the Investment Advisory Board may review the asset allocation structure at least annually. However, primary responsibility for portfolio rebalancing resides with the students at the start of each semester. Should an allowable range for an asset class be violated, the Investment Advisory Board must rebalance the existing assets to the target asset mix within three months of the time when the deviation is discovered, unless that three month time would encompass one of the student review periods. If portfolio beta exceeds 1.3, the highest return security (over the last year) will be sold proportionately until the required beta is achieved. In addition, the Investment Advisory Board shall review the actual asset allocation periodically in order to ensure conformity with the adopted strategic allocation.

To achieve the rebalancing of the Portfolio, the Investment Advisory Board may redirect contributions and disbursements from individual investments as appropriate, in addition to shifting assets from one investment to another. The Investment Advisory Board shall coordinate all rebalancing actions with the Investment Consultant.

The Investment Advisory Board recognizes the importance of maintaining a long-term strategic asset mix for the Portfolio and does not intend to engage in any tactical asset allocation or market timing asset mix shifts.

VI. Risk Tolerance

Investment theory and historical capital market return data suggests that, over long periods of time, there is a relationship between the level of risk assumed and the level of return that can be expected in an investment program. In general, higher risk (*i.e.* volatility of return) is associated with higher return.

The equity portion of the portfolio should have a weighted average beta of **1.3** or less. The beta of the portfolio will be defined as the covariance of the portfolio relative to the S&P 500 divided by the variance of the portfolio (which is defined as have a beta of 1).

Given this relationship between risk and return, a fundamental step in determining the investment policy for the Portfolio is the determination of an appropriate risk tolerance. The Investment Advisory Board examined two important factors that affect their risk tolerance:

- **Financial Ability** to accept risk within the investment program and,
- **Willingness** to accept return volatility.

Positive factors that contribute to a higher risk tolerance are:
- The long-term time horizon available for investment, thus providing the opportunity to benefit from growth that may accrue to a patient investment strategy;
- The Investment Advisory Board's willingness to accept short-term fluctuations in the market value of the Portfolio, so long as the Portfolio is positioned for long-term growth; and
- The Portfolio is an educational tool without need to support any ongoing operations or recurring operating expenses.

Offsetting these factors is:
- The difficulty of replenishing assets in the event of large losses.

VII. Performance Objectives
The students will monitor the performance of the Portfolio each semester. As part of their rebalancing exercise, they will evaluate each investment's contribution toward meeting the investment objectives outlined below over a three, twelve and 36-month time period, unless otherwise noted, and report their findings to the Investment Advisory Board in their end of semester presentation.

Benchmark
It is desired that the Portfolio earn a return higher than the "market," as represented by the S&P500 index. The Portfolio is expected to exceed the average annual return of this benchmark on a risk-adjusted basis over a three, twelve and 36-month time period.

Secondary Performance Targets:
- The real return goal (return after adjusting for inflation) for the Portfolio's assets is 6%. Inflation shall be measured by the U.S. All Urban Consumers Price Index ("CPI"). This 6% was found by taking the historic return of the stock market (about 9%), minus 3% for inflation;
- The Portfolio is expected to outpace the benchmark index return and real return target, each measured on a compound average annual return basis after the deduction of investment management fees and annualized over a three, twelve and 36-month time period; and
- Performance will be compared to that of other portfolios and foundations.

VIII. Investment Guidelines
Investment activity must be consistent within the requirements of this policy and applicable laws. In addition, the following guidelines will apply:

A. Asset Allocation
Each student investment group has been delegated responsibility for maintaining and presenting according to the asset allocation strategy for the Portfolio.

B. Permitted Securities
Domestic Securities
The securities purchased shall be registered with the Securities and Exchange Commission, and traded on a recognized U.S. stock exchange or over-the-counter-market.

Equity securities include: common stocks and securities convertible into common stock of U.S.-based companies and Exchanged traded funds.

Convertible securities include: securities that are convertible into the common stock of U.S. or non-U.S. based companies. This would include convertible bonds, convertible preferred stock, and mandatory convertible securities. All convertible securities purchased must be U.S. dollar denominated securities. Individual convertible securities should be rated "B" (or its equivalent) or higher at the time of purchase by a nationally recognized statistical rating agency. For the purposes of asset allocation, convertible securities shall be considered equities.

As an additional requirement, at least 10% of the Portfolio's assets will be invested in domestic securities of firms headquartered within 250 miles of La Crosse.

Fixed Income Securities
Domestic fixed and variable rate bonds and notes issued by the U.S. Government and its Agencies, U.S. corporations, Yankee bonds and notes (bonds or notes issued by non-U.S. based corporations and governments but traded in the U.S.), securitized mortgages (e.g. GNMA's, FNMA's, FHLMC's), taxable municipal bonds, and preferred stock).

International Securities
Allowable international securities are sponsored and unsponsored American Depositary Receipts (ADR's) or American Depositary Shares (ADS's) or other depositary securities of non-U.S. based companies traded in the U.S. and closed-end country funds. Equities of foreign domiciled companies that are traded in the U.S. may also be purchased so long as the securities are registered (or filed) with the Securities and Exchange Commission and traded on a recognized national exchange or over-the-counter market.

C. Diversification Requirements
To minimize the risk of large losses, each student investment group shall maintain the adequate diversification of the Portfolio. Subject to the constraints outlined in this investment policy each student investment group shall have the discretion to determine their individual security selection. Potential holdings of the Portfolio are classified as follows:

Large/Medium Capitalization U.S. Stocks
- The market capitalization at the time of purchase is greater than $1 billion.

Small/Medium Capitalization U.S. Stocks
- The market capitalization of is between $100 million and $8 billion at the time of purchase.

International Equities
Subject to the usual standards of fiduciary prudence, the student investment group shall have the discretion to determine their investment's country of origin. However, the country allocations and structure of the Portfolio should conform to these guidelines:
- Currency hedging is not permitted;
- No more than three investments in securities of companies domiciled in emerging market countries. For the purposes of this restriction, this is to be interpreted to mean investments in countries not represented in the MSCI World ex-U.S. Index; and
- Investments in non-US dollar denominated securities are not permitted.

Fixed Income Securities
- Fixed income securities (except for those listed below) shall be rated investment grade or higher ("BBB-"[*] or its equivalent) at the time of purchase by a nationally recognized statistical rating agency. The minimum dollar-weighted average credit quality rating of the fund is "AA".
- The maximum effective maturity of any single security should not exceed 30 years. The dollar

weighted average duration of the Portfolio should be within ±25% of the dollar weighted average duration of the fixed income style index;

- No more than 20% of the market value of the Portfolio may be invested in zero coupon bonds;

Cash and Equivalents

It is generally expected that the Portfolio will remain fully invested in equity and/or fixed income securities; however, it is recognized that cash reserves may be utilized from time to time to provide liquidity or to implement some types of investment strategies. Cash reserves shall be held in the custodian's money market fund, short-term maturity Treasury securities, or high quality money market instruments.

D. Exclusions

The Portfolio's assets may not be used for the following purposes:

- collateralized mortgage obligations, asset-backed securities (other than government sponsored CMO and ABS)
- mortgage REITs
- Private placement "144A" issues are not permitted.
- CMO or mortgage-related securities REITs
- Purchases of letter stock, private placements, or direct payments;
- Leveraged transactions;
- Commodities transactions;
- Puts, calls, straddles, or other option strategies;
- Purchases of real estate, oil and gas properties, or other natural resources related properties
- Investments in limited partnerships
- Hedged, future, private equity, real estate, or leveraged buy out funds

Student investment group recommendations that cause a deviation from these policy guidelines may be authorized by the Investment Advisory Board, which can then determine if the deviation constitutes a material departure from the spirit of this policy. Any other security transaction not specifically authorized in this policy statement is prohibited.

IX. Investment Transactions

Trading for the Portfolio is directed by and is the responsibility of the Investment Advisory. They are generally obligated to effect transactions with or through those brokers or dealers that in their view are capable of providing best price and execution of client orders.

X. Meetings and Communications

- By midterm each semester, each student investment group shall provide the Investment Advisory Board a hardcopy of their strategy for rebalancing the Portfolio;
- Near the end of each semester, each student investment group shall prepare and present a written and oral presentation on their recommendations for investment vehicles to add to the Portfolio.
- The custodian shall provide quarterly statements of assets and transactions.

XI. Approval

It is understood that this investment policy is to be reviewed periodically by the Investment Advisory Board to determine if any revisions are warranted by changing circumstances including, but not limited to, changes in financial status, risk tolerance, or changes involving the investment managers. Should the Investment Advisory Board permit a deviation from this policy or implement an approved change in policy, the circumstances and rationale for the change shall be documented and attached to this investment policy.

The Investment Advisory Board understands and agrees that the provisions of this document are subject to any relevant investment advisory agreement and to the extent of any conflict, the terms of the investment advisory agreement controls. The Investment Advisory Board further understands that this investment policy statement does not provide any additional rights other than those that are described in any investment advisory agreement.

Chairperson, Investment Advisory Board **Date**