# The Niagara University Monteagle Fund, a Student Managed Investment Portfolio

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#### INTRODUCTION

Active learning theory states that students learn best by having the opportunity to engage in realistic experiences beyond the textbook or lecture. In many fields, active learning is "learning by doing," through internships, clinics, or cooperative experiences. Numerous academic studies have confirmed that having the chance to put learning into practice results in students that are more motivated, better educated, and better prepared for their careers (Hawtrey, 2007; Wingfield and Black, 2005).

The study of finance focuses on the management of money. Active learning opportunities in finance should be based on the idea of managing money, similar to what a student hired to work in banking or investment management would be expected to do (Abraham and Karns, 2009). The closer the active learning experience is to the future employment experience, the more the student is expected to benefit (McCarthy and McCarthy, 2006). There are numerous impediments to a financial learning experience based on managing money, including the possibility of having investment values decline, such as happened most recently in the 2007–2008 financial crisis.

In 2008, Niagara University became one of a small number of business schools that allow students to manage a portion of the university endowment. The ability to manage actual investment funds, subject to the same responsibilities and requirements as the other professional money managers used by the university, has provided students with an outstanding active learning experience.

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To provide experience managing money, Niagara University developed a class in the spring semester of 2008 to let their students manage money by investing a portion of the university's endowment. Referred to as the Monteagle Fund, named for the ridge on which Niagara University is located, the Fund is a student managed investment fund. Managed by a class in the Niagara MBA program, the Fund realistically conveys to students the challenges of managing an investment portfolio on behalf of a client. The Fund requires students to work in small groups to analyze potential investments, convince their classmates to make the investment, and then to monitor the performance of the fund going forward. In as many ways as possible, the Fund is operated as a professional money management firm would.

In this case report, we review the challenges involved in setting up this type of class, the difficulty of investing during the financial crisis that began in 2007, and the effect that participation in the class had on students and their choice of careers. As part of the class requirements, students prepared a self-assessment journal, discussing their changing views on the investment research process, the experience of working as an industry research team, and their career plans. This paper discusses those journals created during the most recent class, held during the spring semester of 2010.

## STRUCTURE OF STUDENT MANAGED INVESTMENT FUNDS

There are many models used by colleges and universities to establish student-managed investment funds. One approach is to develop an investment pool of funds on behalf of outside investors, often alumni or those otherwise connected with the educational institution. (Alexander Jr, et al., 2001)This structure is similar to a mutual fund. While very realistic, this approach is often difficult and expensive to maintain, since in addition to selecting and managing investment funds, the students are also responsible for a very complicated set of investment reporting and tax accounting requirements.

Other schools create their funds after receiving an outright monetary gift from a donor. In this case, the investment fund directly owns the

assets, and there are many fewer reporting requirements. For tax reasons, there are limitations on how the profits of the fund can be used because the fund is usually set up as a nonprofit foundation (Nawrocki, 2005). A third model, and the one chosen by Niagara University, is to allocate a portion of the college's endowment to be managed by the students. The Fund then acts as an investment manager to this allocated portion, making the investment decisions but avoiding the tax reporting, which continues to be done by the endowment managers.

Endowments are an essential element of higher educational funding. In addition to revenue from tuition, grants and fees, colleges and universities rely on income from their endowment funds. The institution withdraws a portion of the endowment to pay for scholarships, salaries and capital construction. In order for the endowment to be self-sustaining, the institution must earn a rate of return on its endowment greater than or equal to the fund withdrawals, plus inflation. For example, with a withdrawal rate of 5%, and inflation of 3% per year, the fund needs to earn at least an 8% annual return.

To manage the funds to achieve this rate of return, universities employ professional investment managers to select and monitor the investment choices of their endowment. These investment managers are selected for their expertise in a particular class of investments, such as stocks, bonds, or alternative investments such as real estate or venture capital. Typically the Board of Trustees has an Investment Committee which selects the investment managers and evaluates their performance. Investment manager's performance is usually measured against a market benchmark, such as the Standard and Poor's 500 Index (S&P 500) for stocks.

Investing an endowment has many special restrictions imposed by legal, tax and regulatory authorities. Endowments may have restrictions on the types of investments they can make, such as gambling or tobacco stocks. Endowments are usually structured as nonprofit foundations, and do not pay taxes.

## **NIAGARA UNIVERSITY MONTEAGLE FUND**

In 2006, Niagara University built Bisgrove Hall, the new home for the College of Business Administration. One of the cornerstones of Bisgrove Hall was the creation of a first-floor Financial Services Laboratory. Consisting of a 28-workstation main laboratory and classroom, and a 7-workstation clinic room, the laboratory features state of the art software for analyzing and managing investments. Software packages and subscriptions available include Thomson Reuters, Standard & Poor's Capital IQ, and Morningstar, the same software analysis tools available to a professional money manager.

With the construction of the Financial Services Lab, Niagara began to integrate the capabilities of the lab into the finance curriculum (Bale, 2008; Holowczak, 2005). In addition, the College of Business sought to provide a new active-learning component to the curriculum by creating a student-managed investment fund, to be known as the Niagara University Monteagle Fund (Maier, 2002).

Prior to establishing the Fund, it was necessary to establish a set of by-laws detailing how the fund would be operated, including how investments would be selected, monitored and sold, and to have this approved by the Board of Trustees. Not surprisingly, university trustees are very careful about how their investment funds are managed. To gain trustee approval, strict limits on the type of securities that could be purchased were needed. Niagara has a detailed Investment Policy statement that all of its investment managers must follow, including the Monteagle Fund. The policy statement, for example limits the investment in any one security to no more than 5% of the total fund balance, while no industry can exceed 15% of the total. Further restrictions were added for the Monteagle Fund; stocks would be restricted to those listed on the S&P 500 Index; the Fund could only invest "long" (the Fund would own the shares, profitable if the share price rises, as opposed to selling "short," which makes money if share prices fall) and the Fund would not be allowed to utilize any derivative strategies, such as using options or futures.

One issue that arises in a student-managed fund is how to manage the portfolio during times when school is not in session, such as over breaks and during the summer. Initially, the fund was required to sell the stocks in the fund at the end of each semester and hold the funds in an S&P 500 Index fund, until the next semester's class began. Final approval was given by the Trustees in October of 2007, and the Niagara University Monteagle Fund was scheduled to begin operation in the Spring Semester of 2008.

## CLASS STRUCTURE

Niagara, like most good business schools, seeks to develop in its students not just the ability to conduct analysis but also to work well in a team environment and to be able to persuasively communicate the results. For these reasons, the class was structured in small teams of 3–4 students. Each team was responsible for an industry sector, and sought attractive investment opportunities within their assigned sectors. With a class of 28, a total of seven, four-person teams were created. Because Standard & Poor's has 10 defined industry sectors, some consolidation of industries was done to create 7 Industry teams; Health Care, Financials, Information Technology and Telecommunications, Industrials, Energy and Materials, Consumer Durables and Consumer Discretionary. Each Industry team then had a group of about 70-75 stocks (out of the 500 stocks in the S&P 500) that they could potentially invest in. With a semester of about 15 weeks, each group would be expected to make up to 4 investment recommendations.

Because investing requires a thorough knowledge of current economic and political developments, each group was also responsible for producing a "Weekly Report," a newsletter and presentation to the class at the beginning of the week. The Weekly Report discussed factors that would be expected to affect the stock markets in the upcoming week, and as stocks were added to the fund's portfolio, it was expanded to include a review of the performance of the Fund.

# **STOCK RESEARCH & SELECTION**

Because the agreement between the Monteagle Fund and the University set the S&P 500 as the benchmark, the task to each industry group was to find stocks in those sectors that were expected to give a return in excess of 8% during the following year. The expected return was based on a withdrawal rate of 5% and expected inflation of 3% annually.

Each team began their search by screening stocks that were within their industry. Professional money managers generally use two approaches to selecting stocks, known as the top-down and bottom-up approaches. In the bottom-up approach, investors search the available stocks for those that have outstanding characteristics, such as a record of increasing earnings per share, or dividend increases. The software available in the Financial Services Lab, particularly Capital IQ, is widely used by investment professionals to conduct searches, or screens, which identify these outstanding stocks. With this software, students in the class built screens based on their results. Out of the 70-80 companies they were assigned, each team developed a "watch list" of 10-12 stocks they felt had outstanding characteristics and would be good candidates for potential investment. An added benefit was that the students became very proficient in using the software, an important advantage to them in the job market.

The second approach is the top-down approach. The top-down approach is based on analyzing factors in the economy, such as changes in energy prices, currency trends, and demographic changes, and identifying stocks that would be expected to benefit the most from these developments. This style of investing requires an awareness of what is happening in the outside world. In their teams, the students had to develop the habit of closely reading newspapers, such as the *Wall Street Journal*, to look for these trends.

Having determined a watch list based on fundamental factors, and analysis of the current macroeconomic situation, teams ranked the stocks within their industry. Their ranking then combined the bottom-up and top-down styles of stock selection. Teams then selected a stock to analyze and present at their next "buy" presentation, and used another database, Thompson Reuters Investment Management, to read all the third-party research already published on the company. Through this database, they had access to the research reports done by other investment analysts, such as those at Wall Street investment firms. Students were often surprised at the divergence of opinion by professional analysts of the same company; there could be several with a buy recommendation, and several with a sell recommendation, and others neutral on the stock. Reconciling these different analyst opinions became a topic of vigorous discussion within the teams.

In previous investment classes, the students had learned about the importance of forecasted earnings and the effect it has on stock prices. The databases gave the earnings forecasts by several other analysts, and the analysts' prediction for the stock price in one year. Reconciling their fundamental research, macroeconomic analysis, and the views of the other analysts, the teams prepared their own research report on the stock. The research report contained an analysis of the financial heath and prospects of the company, its past stock performance, and the students' own forecast of earnings, dividends and future stock price. By comparing their future stock price with the price the stock was currently trading at, they were able to forecast a potential one-year return. At a minimum, based on the Fund objectives, the stock had to have an expected target return of at least 8%.

## **BUY PRESENTATIONS**

After writing their report, the student groups presented their recommended stock to the other students to get their approval to purchase. This was an unusual and instructive experience for them since all of their presentations in the past had been directed towards an instructor. Typically, there would be a team of 4 presenting, and 24 in the audience. In the week prior to their scheduled presentation, the students uploaded their research report to the class website, containing their recommendations about which stock to buy and how many shares.

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The buy presentation began with the students reviewing the stock and the basis for their recommendation. Having seen the written report the previous week, the class was prepared with a set of questions for the presenting group. Initially, the students in the class were hesitant to ask tough questions of the presenting group, partly out of a sense of loyalty to their fellow students, and because they knew they would be presenting their own recommendations in a future class. Students were not to say whether or not they supported the recommendations during the question periods. This was done in order to avoid a bandwagon effect (the concern that after the first students said they were in favor or opposed the others would stop critically considering the proposition and go along with the rest). Instead, a vote was conducted after the first round of questions to determine whether the class felt they had enough information to commit to purchasing the stock. This usually resulted in a no vote; this led to a second round of questions, with generally much more in-depth questioning.

When it was time to vote, the class was given three voting choices: buy, don't buy and not prepared to decide. In order to buy, the presenting team needed a two-thirds positive vote, i.e., in a class of 28, not including themselves, they needed 16 "buy" votes. The pattern of approvals was fairly consistent over the semesters; during the first half only about a third were accepted. In order to provide feedback on each team's presentations, the rest of the class filled out an online evaluation, rating the team's presentations and what they could do to improve their analysis. The three most common reasons for rejecting a buy recommendation were:

- 1. The team had not justified their future price targets for the stock;
- 2. The stock was felt to be too risky given current economic conditions; or
- 3. The stock was not appropriate for the fund based on the investment guidelines.

A debriefing session was conducted with those teams whose recommendations were rejected. The students were genuinely disappointed,

and anxious to review their evaluations. Initially, these were difficult for many students, since they were uncomfortable having this level of feedback from other students instead of an instructor. A common tactic early in the semester was for teams to portion out the work among the team members. When a recommendation was rejected, their tendency was to place blame on the member they felt hadn't "pulled their weight." As the semester progressed, however, there was more acceptance of shared responsibility, and the quality of the written reports and presentations improved.

## ASSESSMENT

The overall goal of the students in the class was to choose equity securities that would provide an overall rate of return over the next year in excess of the S&P 500 index, which was the chosen benchmark. The reality of the semester format only gave 15 weeks of class time, so it was not possible to measure and grade students based on the stocks' one-year performance. In fact, to base assessment on the semester price appreciation would have been against one of the themes of the course, which was to teach the long-term investment view. Instead, assessment was based on the how well the students performed as analysts.

The skills needed by an investment analyst include being able to follow a consistent research process, work well within a team and be able to communicate recommendations. To measure how well the students did in the class, three different tools were used:

- 1. Student evaluation of the presentations After a team presented, the other class members completed an online survey, grading the presentation and the research process that was followed;
- 2. Peer evaluations at the midpoint of the semester, the students were reassigned to different industry teams. Each student had to complete an assessment of the contributions that the other members of the team made to the overall group effort. These results were shared with each of the students;

3. A personal journal was kept by each student; students were required to assess how they contributed to the class, to their group, and to the client's success.

As the semester progressed, the grading scheme became more accepted. Students spent a considerable amount of time in their critique of the group presentations; and many very useful suggestions were given on how the presentations could be improved.

## MONITORING AND REPORTING FUND PERFORMANCE

After the class made the decision to buy, an order was placed through a brokerage firm. Because the market was closed by the time the class was over for the day, the order was to buy at the opening of the next day, usually using a limit order in case the price changed significantly overnight.

Once the stock was added to the fund, the industry team had responsibility for monitoring how well it was performing. Using the data feeds, the teams set up automatic monitors so they would get notifications of any important developments in their stocks, such as dividend or management changes. The class also went through the performance report at the beginning of each week. Several times during the semester, if a stock had been performing poorly or if there were negative developments, the team that had initially recommended it had to lead an assessment of whether it should be kept in the portfolio or sold.

One problem was how to manage the portfolio over semester breaks. One strategy used was to place limit sell orders, or "stop-loss" orders, that automatically sell the stock if the price falls below a certain price (usually the original purchase price). While this worked well in most cases, it could also limit gains on volatile stocks. In one instance, a stock fell sharply during the semester break, causing an automatic sell. In the following trading sessions, the stock rose by 20%. When the students returned from break, they were dismayed to find out they lost out on the gain.

Since the students were purchasing the stocks over the course of a 15-week semester, each stock had a different amount of time in the portfolio; some may have been recently purchased and others present from the beginning of the semester. The teams struggled with an acceptable way to account for these different holding periods, especially when comparing with the benchmark date.

Some of the most vigorous class discussion centered on whether to sell a stock in the portfolio that had a gain. During the time period, there was a great deal of volatility in stock prices; the Dow hit a low of 6,600 in March 2009 and then rose to over 10,000 by the end of the year. Teams that made buys during the March lows saw their stocks rise by 10% or more within a month. Since they had a goal of 5% return over the inflation rate (then less than 2% per year), a debate raged over whether to sell immediately and take the gain, or let the investment continue, even though the gain might be lost. After much discussion, the class went back to the reasons they accepted for buying it originally; since that had not changed, they decided to retain their investments.

Niagara University has an Investment Subcommittee of its Board of Trustees. Along with the other investment managers, the students had to prepare a performance report and present it to the trustees. This report also had to include the performance against the S&P 500 Benchmark.

During the spring semester 2010 class, the fund had maintained a return well above the S&P 500 benchmark for nearly the entire semester. The fund bylaws require that the performance reporting be done at the last trading day of April. Unfortunately, a temporary decline in one of the fund stocks in the last week of April lowered the fund results enough so that it eliminated the performance advantages over the S&P benchmark. When the stock's price recovered in the following week, the students felt the frustration, shared by all professional money managers, of timing effects!

# THE FINANCIAL CRISIS

Beginning in March of 2007, the world's economy has gone through the most severe recession since the Great Depression of the 1930's. Stock investments went through periods of unprecedented volatility; markets crashed, banks failed and huge government bailouts were necessary. The class was first scheduled to be offered in the spring of 2008, one of the most challenging times of the crisis. Our timing couldn't have been worse.

In the first several weeks of the class, the student teams conducted research and selected stocks based on the syllabus. During the class, all the students had to closely follow the financial and economic news, which has since been described as a "panic." As the markets fell dramatically, the class discussed what the best course would be. They thought very carefully about whether investing at that time was reasonable. The class thoroughly reviewed the Code of Ethics for a Chartered Financial Analyst (CFA), which established the duty of an investment professional to always put their client's interests ahead of their own self- interest. Several professional money managers were invited as guest speakers, and the students asked perceptive questions about how they were reacting to the crisis. Finally, the class made the decision to continue the investment research process, and to select a list of stocks to recommend for the next year's class. Although this was a difficult decision for many classmates, in hindsight, it was a good decision, as the overall markets declined by 47% during 2008.

Active-learning classes are difficult and challenging to teach because of their unpredictability. Often conditions can change so dramatically that the best solution is to throw out the carefully planned schedule, and react to the conditions that present themselves. Although the students didn't have the class outcome they expected, they did learn an important ethical lesson.

# STUDENT EXPERIENCE

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During the semester, students kept a record of their learning experiences and contributions to the group, as well as an evalual tion of their strengths and weaknesses. Highlights from several of these journals are given below.

"My personal growth in this class has been incalculable. I have found that although I started out with a weakness in interpreting numbers, I was able to learn from working with the other members of my team and by watching the other presentations. I was surprised to learn that I am a pretty good public speaker and that has carried over into my other classes. I also learned how to ask better questions of the other teams, since I didn't feel I could honestly vote to buy without understanding the stock they were presenting."

Since most students in the class were in their final semester, and would soon be entering the job market, basing the class structure as a money management firm was considered very valuable-

"Not only did I enjoy coming to class, but I have learned more than in any other class I've taken. Most other classes are lectures, tests and papers, which I found didn't require much effort to do well. However this class helped me to actually understand and apply the concepts that were taught. The fact that we acted as professional money managers in every way made this class like a real job, not just a classroom."

A goal of the class was to show that in the business world, it's important to accept responsibilities for your team's performance, even if you didn't have direct responsibility for that aspect of the project -

"Our presentation for General Mills was not as strong as it should have been, and we had made a mistake in the slides that lowered our credibility with the class. The class rejected our ideas as a result. I accept responsibility for not checking over the numbers myself, since the rejection hurt our whole team, not just the team member who did the slides. We shouldn't blame the weakness of the presentation on any one person's shoulders, since we all played a part in it."

The impact of active learning on student motivation was mentioned very often. Students learned from their mistakes and used it to improve their next presentation-

"During our first buy presentation, our team pitched Chevron. We weren't prepared for some of the valuation questions we were asked, and the class ended up rejecting our recommendation. This was very disappointing for us, since we had put so much time into the research.

After watching some of the other teams present, we could see that they did a much better job on the valuation analysis than we had. Our next presentation was for Exxon, and we made sure that we had all the numbers right this time, and used the models from the other teams. We felt we could answer any question, and it showed. We received a unanimous approval, and we bought the stock."

## CONCLUSION

Participating in a student-managed investment fund carried risk to the student, the instructor and to the educational institution. One of the first principles taught in finance is that markets are uncertain; they cannot be predicted. In fact, many investments must carry the warning that "past results are not a guarantee of future performance"; just because an investment strategy has worked in the past doesn't mean it will continue to be successful. Students learned that they have to be constantly challenging the strategies they are relying on, while always being aware of changing conditions.

For students, and teachers, a traditional class structure doesn't carry much risk. The students know the routine of lectures, homework and exams, and are well practiced, and comfortable, by the time they are ready to graduate. The instructor has the comfort of a syllabus, Power Point slides, and a textbook with all the answers printed in it, and has usually taught the same course many times before. Students know what to expect; instructors know what is expected.

In the real business world, the traditional classroom model just doesn't apply. Conditions change when you least expect them to; opportunities can arise that have to be acted on without hesitation, and a crisis can occur that can disrupt any plan, no matter how well conceived. The transition from the classroom to the business world is often difficult for even the best business students.

Herein lies much of the benefit of a well executed active learning experience, such as the Niagara University Monteagle Fund. By giving the students exposure to this real world business situation, the students

experienced the same challenges of a professional money manager, made even more difficult by the conditions of the financial market crisis. Niagara may not have gone forward with a student-managed investment fund if it knew that one of the most severe crashes in investment history was about to occur, but when it did, the students handled their investment responsibilities in a safe and responsible manner.

If uncertainty is the first principal of finance, then the risk return tradeoff is the second. Safe investments, and safe classes, usually bring lower returns. From the student evaluations, to the self assessment journals, and from conversations with students after graduation, many consider this class the most impactful one they had ever taken-

"This class was by far the best experience I ever had at Niagara University. The experience that I had helped me build confidence in myself, my presentation and research skills, and especially my desire to build a career in the financial world."

Over the coming semester's, we plan on several improvements to the operation of the Monteagle Fund. An expansion is planned to provide for both fall and spring semester operation, with a limited maintenance role for students over the summer. Additional student activities, such as an audit/compliance team and a marketing/communications team, are being implemented. These additional active learning experiences will allow other majors, such as marketing, management and accounting to benefit from the active learning experience of the Monteagle Fund.

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