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Introduction

Business education programs taught at universities are sometimes criticized for being too theoretical and impractical. However, the finance discipline is on the forefront of encouraging students to integrate theory with practice in investments and portfolio management. The innovative program of establishing a student investment fund, one where university students have discretion over the management of a real dollar portfolio, is a definite movement toward using actual money to make the learning experience more realistic. The Investment Management Program at Shippensburg is one of only a few undergraduate programs in the United States which provides unique hands-on educational experience in investments. Students in the class make all the decisions involving the management of the investment portfolio. They also analyze holdings in the portfolio and propose changes based on objectives that they set. Students are required to perform substantial presentations and research investment opportunities, the economy, and securities on an expectation and predictive basis.

Mission Statement

The Investment Management Program is aimed at providing students with the skills, theories, and concepts needed to become portfolio managers through a pro-active educational environment. The IMP fund’s goal is to achieve a risk-adjusted return greater than that of the benchmark, which is composed of 80% equity and 20% fixed income securities.

Program Objectives

The main purpose of the IMP portfolio management is to enhance the students’ academic program with an opportunity to participate in the actual practice of investment portfolio management. Specific objectives include:

Educational Objectives

- To educate students on how to participate in financial markets through security analysis and portfolio management
- To enhance the understanding of present technology and utilization of relevant information in order to complete a thorough security analysis
- To develop an understanding of how to develop and utilize economic forecasts in portfolio allocation strategies
• To learn the proper channels a portfolio manager must go through to obtain information and reports, place brokerage orders, and interact with investment professionals
• To learn effective forms of small group interaction and teamwork
• To establish investment criteria, research individual stocks and industries, and present buy or sell recommendations based on research
• To develop risk-reduction techniques and safeguards
• To develop skills applicable in general business settings, such as management techniques, presentation skills, etc.

Steps to Achieve Objectives

In order to achieve the investment and educational objectives, the class of the Investment Management Program adopted a dynamic portfolio management process complete with feedback loops, monitoring, and adjustment. The process is comprised of the following steps:

• Identify and evaluate the constraints and preferences
• Formulate appropriate investment strategies and implement them based on a set of selection criteria
• Create a diverse portfolio consisting of undervalued securities
• Monitor related input factors as well as economic and market factors
• Adjust the portfolio when necessary to reflect significant change in any of the relevant variables

Benefits

Benefits to Students:

1. Students gain practical experience investing in securities.
2. Build team-working skills.
3. Students apply coursework to further develop their own knowledge and gain a further understanding of skills.
4. The abilities honed-in this program are transferable to business settings

Benefits to Donors:

Donors make contributions to the Investment Management Program with the intent of having their funds support the student-based learning program for perpetuity. The benefactors support the academic goals and benefits for the students participating in the Investment
Management Program. It is their wish that their gifts will help insure these students gain the experiences that this program offers. Secondly, the donors support the underlying goal for the IMP Portfolio – to fund a scholarship for the College of Business. By contributing to the Investment Management Program, donors are able to directly observe the positive contribution they have made to the educational experience at Shippensburg University. Also, all donations made can be used as a tax write-off.

**IMP History**

In the summer of 1993, a discussion took place between the finance faculty at Shippensburg University and a potential donor, who suggested that funds held by the Shippensburg University Foundation could provide a training opportunity for selected students of finance. This discussion, coordinated by the SU Foundation, centered on the idea that a portion of the Foundation funds should be managed by students as a regular part of the finance curriculum.

The remainder of 1993 found the finance faculty, together with the administration of the John Grove College of Business in discussions on how to meet this challenge. It was decided that, since students would manage the funds, students should design the managerial system to do so, and that this was to be the first phase of the project. To that end, a section of Special Topics in Finance was scheduled for the spring semester of 1994. Admission to this class was severely restricted, since the responsibilities would be great and the class format would be unstructured, at least in the beginning. The senior class in finance was invited to apply for admission, with the finance faculty serving as the admissions board. Eleven finance majors were selected on the basis of attributes such as dependability, leadership, special skills, and of course, academic record.

This first class was held as a seminar, with the finance faculty voluntarily attending, even though only one would serve as the "professor of record" for the course. This "professor of record" would be rotated among the finance faculty as the class was held in successive years, but the guidance of all finance professors would be available for each class. In fact, successive classes would find it necessary to seek expertise from the wider academic community. The basic assignment given these first students was to design the academic system within which a significant dollar amount from the SU Foundation could be managed with students acting as fiduciary. This design had to include the manner in which future classes would organize themselves, come to decisions, and make presentations to various segments of Shippensburg University; including the Board of Trustees of the SU Foundation, which would hold final responsibility for oversight of the funds. No text was found appropriate, but the end product might resemble a text or manual for operations of future classes. Assignments were to be
determined by the class on an as needed basis, where research or analysis was found necessary in
a given area.

This first seminar resulted in the establishment of a seminar known as the Investment
Management Program (hereafter IMP).¹ A select group of about fifteen students are invited to
take this course as a finance elective, with the finance faculty voluntarily attending, even though
only one would serve as the "professor of record" for the course. The class used a basic internal
structure having four specific groups, including Portfolio, Administrative, Information and
Accounting, and Marketing groups.

The first IMP class met during the spring of 1995. Initially, $15,000 was allocated to the
class by the dean of the John L. Grove College of Business as “seed money,” with the
understanding that it must be returned at a later date. The first IMP class invested these funds in
a portfolio of securities that, by January 1996, (the beginning of the next class) had a market
value of $17,943.21.

In the spring of 1996, a donation of $14,846 in stock shares was made, which this new
class had to research and make recommendations about, along with the investments made by the
1996 class. The portfolio was, therefore, growing because of increased contributions as well as
market forces. As a result, there began to appear a need to determine how much of the growth in
the size of the portfolio was due to investing skill and how much was due to added contributions.
This, together with the desire that each class expressed to measure their investment performance
in relationship to other classes, produced questions for further study. These questions continue
to prompt debate among both students and faculty.²

The spring 1998 class began with a market value of $52,897; and during the year
received in the neighborhood of $5000 in donations. The bull market continued to roll on, so
that the spring 1999 class was managing $71,280 in market value. Also, the portfolio separated
out the original $15,000 seed money to support the Study Abroad Program, which will be
presented in a later section of this handbook.

In the fall of 2002, the class revamped and updated the IMP Handbook. We added the
president as a permanent position to oversee and guide the class. The class separated the two
portfolios. The IMP portfolio will continue to follow a value strategy and the GBEP was
transformed into a more aggressive growth portfolio. The separation forced us to come up with
new objectives, strategies, and criteria for the two portfolios. The portfolios continued to slide
over the summer, so we began to sell off holdings that did not meet our new criteria and
purchased new stocks that better suited our objectives.
In the spring of 2003, the class reconstructed the two portfolios. We also added the economic group, which was to continually follow the U.S. economy and update the class with any major information. This year the class was able to attend the Global Asset Management Education (G.A.M.E.) Forum which is hosted by Quinnipiac University in New York City. The program brings a group of top financial professionals together for a variety of discussions and question and answer sessions.

The following few classes did not update this portion of the handbook, making it a bit difficult to reconstruct what exactly happened in their classes. In Fall of 2006, the current class received a portfolio which was largely comprised of cash. This was the result of the prior class placing stop margins on all the stocks in the portfolio, which we do not advise future classes to do. Over the summer of 2006, the stock market fell greatly, which was not because the stocks were overpriced or not worth holding – it was just a market action which later corrected itself. The fund had stop losses placed widely, meaning that the stocks went down quite a bit before selling, and the cash was placed in a money market for the IMP’s funds. The class then missed a rather large run up because we were trying to design how we wanted the fund to function – our value methods, criteria, etc. If there is another situation where a class inherits a large amount of money, we suggest putting it into an ETF fund such as a spider fund to match the S&P 500, since that is the benchmark we have. The class did not begin presenting new securities until it reevaluated the holdings it still had left from previous years, and our performance for the year was affected as a result. The year saw a loss of around 3%, compared to a 13% return for the S&P 500. This was largely a result of the summer months. In spring 2007, the class again attended G.A.M.E., placing 11th. At the close of the current semester, the class was above its benchmark.

The economic downturn of 2008 and 2009 had a great impact on the portfolio, taking its value from $74,430.25 at the end of 2007 to just $47,188.79 by December 31, 2008. As a result of the devastation to the market throughout this time frame, the class had to reevaluate its positions and exit from any investment that did not hold up to the class’s original investment hypotheses. After selling out of a number of positions in 2009 and finding new securities to purchase, the class felt that it was on the right path. As the market recovered, the portfolio flourished. By the end of 2014, the portfolio had reached a value of $140,948.97. At this point the portfolio was deemed large enough to be able to sustain scholarship payments; the spring 2015 class saw the first withdrawal for the scholarship, setting aside $5,000 for this cause.

The result has been a completely student-run seminar, with the basic design and internal structure having been developed by the students in the original seminar. Originally, the class was only held during the spring semester. However, the need for continuous portfolio management throughout the academic year has led to the creation of a three-credit course held during the fall as well as the spring. The objective is to give students the opportunity to apply
the tools they have learned in other courses, and where necessary, determine what additional expertise they need to manage a portfolio. The finance professors remain ready to help where necessary, but refrain from directing the class, as a general rule.

Class Organization

There are many tasks, in and out of class, involved in managing the IMP portfolio. In order to make sure these tasks are accomplished, tasks are assigned to certain groups within the class. These positions include the portfolio group, president, facilitator, secretary, and subgroups.

**Portfolio group** – This group involves the entire IMP class. The main duties of this group include:

- Set up the portfolio in accordance with its respective investment objectives and strategies.
- Monitor all investments to ensure compliance with pre-set constraints and strategies (i.e., Investment Policy Statement).
- Conduct the decision-making process for buying and selling securities for the portfolio
- Discuss and vote on amendments to the handbook and/or the structure of the class
- Advise disbursements of proceeds from the portfolio

The main duties for individuals of this group include:

- Research securities and present sector/industry and security analyses to the entire class
- Monitor the portfolio’s holdings
- Present relevant information pertaining to the economy, industries, and stocks to the class

**President** – A class elected position, usually for the full year. The president’s responsibilities include:

- Preserve the ritual of the IMP class
- Advise the IMP class to ensure proper voting procedures
- Act as an active liaison between sub-groups in order to ensure compliance and compatibility between groups and each group’s objectives.
- Organize meetings with the new IMP classes in order to prepare them for the upcoming year.
- Meet with the college dean and other faculty as required.
**Facilitator** – The facilitator rotates weekly and performs the following duties:
- Facilitate discussions based on the weekly agenda
- Prepares the agenda for the next class

**Secretary** – The secretary rotates weekly and performs the following duties:
- Record, type, and distribute the minutes

**Sub-groups** – The class can divide itself among four groups: administration, information and accounting, public relations and G.A.M.E. The number of persons in each group is at the discretion of the class. Each subgroup may elect a coordinator that oversees the group.

I. **Administrative Group** – The main duties of the managers within this group include:
- Record amendments to the structure of the class for the benefit of future classes
- Keep the handbook updated in order to benefit future classes
- Keep the file cabinet orderly and updated
- Prepare for semi-annual and annual reports

II. **Information and Accounting Group** – The main duties of this group include:
- Maintain trade records and update the portfolio statement
- Monitor safeguards
- Track all disbursements and payments
- Prepare portfolio progress reports
- Update portfolio value of the fund on a monthly basis
- Execute the trades

III. **Marketing, Public Relations, Webmaster, Slate Liaison** – The duties of this group include:
- Give outside presentations to interested individuals
- Keep track of student-managed investment programs from other schools
- Publicize the presence of speakers to the entire University
- Maintain a close relationship with the Foundation
- Keep the IMP display case updated.
- Keep the IMP website updated.

IV. **G.A.M.E. Taskforce Group**
- Organize the yearly trip to the G.A.M.E. Forum
- Prepare a budget for attending the G.A.M.E. competition and seek funding
- Register for G.A.M.E.’s portfolio competition
First Class of the Semester

The first meeting of each semester is normally marked by much uncertainty among the new managers in the IMP class. It is not uncommon for new managers to wonder where to begin. Though it is the first of many meetings in the semester, it is important in that it gets the class going. Here is a list of possible items that might be addressed during this important meeting.

• Establish the rotation schedule for the facilitator and secretary
• Decide the members of each sub-group
• Elect the president and decide the coordinators for sub-groups
• Identify any tasks, in addition to those listed in the duties for each sub-group, that need to be addressed during the semester

Also, a party at the beginning of a semester is usually a good idea. The party provides an opportunity for new managers to know one another better.

Class Operations

In order to help make each class period run smoothly, the class should create and distribute an agenda prior to each meeting. Agendas should include topics that will be discussed as well as the amount of time that should be spent on each topic. If a certain topic runs over the allotted time, do not try to force an end to the discussion. If it is an important decision, the class should take extra time if needed.

Decision Making Process

In the program’s early days, the IMP class has made use of a consensus-based structure. Consensus means that everyone in the class is satisfied with the decision. With consensus, a vote is never taken; the class will continue to discuss a particular topic until every manager can accept the decision. More recently, the IMP class has begun to use a voting decision process. In order for a vote to take place, quorum must be present at the meeting. Quorum is defined as two-thirds of the class. If quorum is present, 75% of the votes present must be in favor of a motion for it to pass.

Portfolio Management

As managers in the IMP class, you are in charge of one portfolio – the IMP Fund. The S.U. Foundation, a non-profit organization that is independent from Shippensburg University,
holds the portfolio. They have delegated the responsibility for investing the money in the portfolio to the IMP class, but retain the fiduciary responsibility to examine and approve or disapprove your decisions regarding the portfolio. Many of the constraints and limitations on the types and methods of investment that may be used by the class are a result of the S.U. Foundation’s fiduciary responsibilities.

**Constraints for Purchases**

1) S.U. Foundation:
   a. No short selling
   b. No margin trading
   c. Abide by the prudent-man regulations
2) Class (can be changed from class to class):
   a. No more than 10% of the portfolio may be invested in one particular stock
   b. No more than 25% of the portfolio may be invested in one sector

**The IMP Portfolio**

**Investment Objective:**

To achieve a return higher than the benchmark, which includes 80% of the S&P 500 index and 20% of the Barclays US Aggregate Bond Index.

**Investment Strategy**

**Equity:**

The portfolio managers strive to invest in stocks of good-quality companies that meet the following characteristics:

- **Firm Fundamentals:** We select companies that have proper business plans and strategies. A good company should possess unique products and services, negotiation power against suppliers, a growing customer base, and competitive advantages.

- **Undervaluation:** The class focuses on stocks that are traded at a significant discount to our intrinsic value estimate. Highly undervalued stocks tend to have more room for the price to appreciate, and thus will contribute the most value to a portfolio.

- **Strong Financials:** We select companies that demonstrate sound financial fundamentals. These aspects are essential for a company to generate positive cash flows.
**Valuation Analysis:**

We consider a stock as undervalued if our intrinsic value estimate is significantly larger than the market price. We use the following valuation methods and resources to estimate intrinsic value of a stock.

- Analysts use discounted cash flow models to estimate intrinsic value of a stock. It is the discretion of an analyst to decide an appropriate model (i.e., free cash flow to equity discount models or dividend discount models) to use.

- For input parameters of the models (e.g., future EPS growth rate), we rely on financial analyst estimates from various resources such as Yahoo!Finance, the Bloomberg Terminal, and Morningstar.

To determine whether a stock is undervalued, we also examine the following valuation ratios:
- Price/Earnings
- PEG
- Price/Book
- Price/Sales
- Price/Free Cash Flow

**In the event that the class determines that a specific sector is underweight and it is determined that a broad diversification in the sector should be employed in our portfolio, the class may invest in a sector ETF to achieve this objective.**

**Fixed Income Security:**

For fixed-income securities, we evaluate credit risk and duration:

- **Credit Risk:** We only invest in bonds with an investment grade rating by both Moody’s and Standard & Poor’s.

- **Duration:** Since we expect that interest rates will rise in the future, we invest in bonds with shorter duration than that of our benchmark.
Investment Criteria

As a team, we consider investing in undervalued stocks of good companies that have sound business and financial fundamentals. Our investment considerations include the following:

- Qualitative analysis suggests that the company has a sound business strategy.
  We conduct a SWOT analysis to explain a company’s internal strengths and weakness and their external opportunities and threats.

- Company Fundamentals
  We examine a firm’s key financial ratios over the past several years and compare them to their competitors to determine whether the company has sound financial fundamentals. The financial analysis is based on, but not limited to, the following financial ratios:
  - Financial Health Ratios
    - Current Ratio
    - Long-term Debt to Equity
    - Debt to Equity
  - Efficiency Ratios
    - Receivable Turnover
    - Inventory Turnover
    - Asset Turnover
  - Profitability Ratios
    - Net Profit Margin
    - Return on Assets
    - Return on Equity
  - Growth Rates
    - EPS Growth Rate

Sales Growth Rate
The investment must meet all of the above criteria. If the investment does not meet all of the criteria, supportive reasoning is necessary to explain why IMP should still consider the investment.

Ratios compared to the industry average are also analyzed for positive trends from quarter to quarter.

NOTE: All of the ratios are calculated by Reuters.

Sell Criteria Process
We monitor our portfolio’s holdings on a constant basis. Each class member is assigned to one or more stocks and that individual is responsible for keeping track of the assigned companies throughout the semester as well as over breaks. Students are also responsible for monitoring the
sectors in which their stocks conduct business. A detailed reevaluation is needed if the following signals incur:

- Fundamentals of the company are deteriorating. The fundamentals of a company include, but are not limited to the following: competitive position within an industry, product innovation, operating efficiency (refer to Efficiency and Profitability Ratios and changes in operating cash flow), pricing (leader or follower), any patents, the quality of management, mergers, mission statement, and public relations.
- Better investment alternative is found
- If a stock’s return is not exceeding the S&P 500’s return for two or three years
- Decline in quarterly revenue and earnings year over year (e.g., 10%)
- Stock drops over 15% from purchase price and we do not expect fundamentals to recover
- Reason for purchase no longer exists (investment criteria)
- Stock becomes overvalued.
- Recent company news (e.g., mergers/acquisitions, new products by competitors)

**Suggestions for Future Classes**

We hope later classes can take advantage of what we have learned. Therefore, we have attached these suggestions in hopes that future classes would not have to repeat our mistakes.

**Agendas** – We found setting an agenda for the semester, as well as for each meeting, helped keep us on track. The agenda for the semester included various duties that we hoped to complete. Of course, this agenda kept being amended because it is difficult to set an agenda like that at the beginning of the semester. We felt that agendas for each meeting were very important. This not only helped keep us on track but also if they were dispersed to all the managers prior to the meeting, managers could come to the meeting prepared. This helped us come to decisions without sacrificing too much time.

**Meeting structure** – We chose to rotate the facilitators throughout the semester - one facilitator for each class. This helped make our meetings a little more diverse. We also chose to rotate our secretary, with the secretary becoming the facilitator the following class. The facilitator should also act as a timekeeper for each meeting. Included on our agendas were specific time slots for each topic that we were to be covered in that meeting. The facilitator is to keep track of the time and make sure we did not run over our allotted time. Of course, do not necessarily cut your discussion short just because you are over your time limit. Certain discussions may need more time.

**Decision Making** – Rather than using a voting system, past classes have used a consensus-based structure. Consensus means that everyone in the class is satisfied with the
decision. With consensus, a vote is never taken; the class continues to discuss a particular topic until every manager can accept the decision. Our class decided against the consensus-based decision structure and implemented the democratic system. With our democratic system, there were certain guidelines that needed to be followed. First, in order to take a decision to a vote, quorum must be present at the meeting. Quorum is defined as two-thirds of the class. If quorum was present, in order for a motion to pass, 75% of the present votes were necessary. When you are deciding your decision making process, keep in mind that you don’t need to use it for every decision that you make. For example, we only took a vote on the more important decisions such as the buying/selling of stocks.

**Security Research** – Once you have chosen your objectives, strategies, and criteria for your portfolios, the next step is research. We suggest that you begin with the stocks you already own. It is important that you follow the objectives, strategies, and criteria that you have set.

We suggest that you find a good way to divide up your currently owned stocks. We suggest that members be responsible for one of the 10 separate S&P sectors. Once their research is done, managers should begin presenting their stocks to the class. Keep in mind that copies of past presentations are in the file cabinet and on the S: Drive. These may help you determine why we or any other class may have purchased a particular security. We recommend that once a stock is presented, the entire class should discuss the particular stock. This way any information that was left out of the presentation can be brought to the class’s attention. When everyone feels that they are satisfied with the information presented, a decision of buy/hold/sell should be made. Once you have completed your research on those stocks, then you can start bringing in your own stocks.

As far as the presenters of stocks, we suggest that you prepare a well thought-out presentation via power point or Microsoft Word. This presentation should not be tedious to read but rather summarize the important information. The covering analyst should be able to further elaborate on the data and answer any pertinent questions that the class may have.

**Our website** – To increase interest in the IMP, a website was developed. It includes general information about the class, including our portfolio holdings and other basic information as well. Due to changes in the portfolio’s content and returns, the page will need to be updated periodically. The address for the home page is [http://www.ship.edu/business/imp/](http://www.ship.edu/business/imp/).