

Reporting and Managing on the Cheap: Using Blackboard in a Student-Managed Investments Program

Scott A. Adams
Taylor University

Lawrence J. Belcher
Stetson University

The growth in student-managed investments programs in the last twenty years has been phenomenal. As a curricular device it has matured, but they still have their quirks. Summer fund management and communication and reporting are often difficult. We show how Blackboard, in conjunction with other on-line sites and self-made tools in Microsoft Excel, can be used to facilitate a university's student managed investment program. Blackboard has the capability to permit many activities necessary for the running of a student managed fund. It also allows links to the World Wide Web for easy student access, a place to store Excel and Word files, and discussion boards. This can solve many communication problems. In addition, its wide adoption means that even smaller funds can use it with near zero marginal cost.

INTRODUCTION

Many Universities now have or are developing student managed investment programs (SMIP's). These are stock and bond portfolios managed by a group of students, along with a faculty advisor, who are given the opportunity to manage real money for the University or other groups. While a variety of organizational structures exist, a common problem involves how the fund is managed in the summer (or other "off" semesters) and how the transitions between managers in different cohorts are handled. Another issue involves the preparation and dissemination of trading details, minutes, annual reports, or other communication documents. While many universities' programs are large and able to provide major funding for the operation of this type of program, others are small and lack these resources. Since many universities are now using Blackboard as a platform for educational activities, there are almost no additional costs to using it for an additional purpose such as the operation of a student managed investments program. This allows universities with limited resources an option for starting and maintaining a student managed endowment fund. This paper will explore some of the operational issues present in student-managed investment programs and then explore how Blackboard can be used as a low cost method for reporting and managing purposes.

ORGANIZATIONAL FORMS AND CHALLENGES

In several seminal surveys, Lawrence (1990, 1994, 2008) tracked the growth of student managed investment programs (SMIP's). In the last survey (2008), he found that there were over 300 funds

worldwide that were managing (at that time) combined assets of over \$400 million. The majority of the growth had come in the last 20 years, so this has been a relatively recent addition to schools' finance curricula. In terms of organizational forms, Authors A, B and C (2010) identify three basic structures that the majority of schools employ. These are:

- 1) Outside Manager of the university endowment: The students here are given a piece of the University's endowment to manage like any other outside fund manager. They typically operate under the University Investment Policy Statement, which often dictates reporting requirements. They may also make presentations to a Board of Advisors or Board of Trustees as well.
- 2) Private Endowment/foundation managers: Here the students act as a manager for a fund established by an entity outside of the University or for a dedicated endowment within the University. Similar reporting and presentation requirements exist here, with the foundation Board usually being who they report to.
- 3) Investment Clubs: These may be formally organized or less formally organized than others. Often times, they involve a much more diverse group of students than others and so communication and reporting are different. They may also not face the size constraints that other SMIP forms have, and so the groups may be quite large.

Another point emphasized here was that the legal structure of the fund should dictate communication and reporting requirements. These often involve minutes or trade lists as well as Annual Reports, newsletters, or other communication vehicles. These documents may be developed using any number of software platforms, and often dissemination is difficult among a variety of constituent groups like students, faculty, University administrators, or outside Advisory Board members.

While the SMIP has emerged and matured as a curricular tool, it is not without its own operational quirks. Two of these are summer semesters (or other "off" semesters) and the changeover of the student cohorts on a semester-to semester or year-to-year basis. In summers, universities take a variety of measures to keep the funds operating. These include:

- 1) Selling off the entire portfolio at the end of the year and going "all cash". For smaller funds, this may be easy to do. However, a fund like Ohio State, with \$50 million under management, is unlikely to do this. Funds with significant fixed income positions are also unlikely to do this because of costs.
- 2) Using "in absentia" portfolio management tools like stop/loss orders. Students can put these in place and leave for the summer. If something undesirable happens, they revert to cash. This does give up the possibility of a rebound in the asset's price after the order is executed, however.
- 3) Letting the fund ride. In this case, it lies dormant over the summer and the students take whatever happens and re-engage with a new class in the fall.
- 4) Active management of the fund. In this case, students still actively manage the fund, either on or off-site via internet. This keeps the management in place but requires a well-developed communication protocol to succeed.

Another quirk in the operation of a SMIP is the transition between semesters or academic years between different groups of fund managers. Most programs have classes or cohorts that participate for either a semester or a full academic year. After that, they may hold over but more likely they will graduate. This means that there has to be some form of transition to a new cohort. Some programs have a "feeder" system in that freshmen or sophomores participate in lesser roles and then become a part of the SMIP as juniors or seniors. In some cases, an investment club might be the feeder for the SMIP (Nawrocki, 2007). Absent such a process, the transition usually results in big changes in the following year's portfolio, often causing return volatility. Haddad and Redman (2006) surmised that a lot of the volatility they saw in the TVA Challenge funds' earnings over their sample period was from changeover in fund managers every year.

These two curricular issues present problems for many SMIP's. One over-riding associated issue is the one of documentation and communication. This is one way in which web-based technology has

helped. Discussion boards or electronic bulletin boards can facilitate communication or serve as repositories for documents or spreadsheets that might be a part of an SMIP. Other portfolio management packages have reporting capabilities as well. Even though the growth in SMIP's has trended with cheaper and more available hardware and software, many of the packages are still very expensive. This means that small funds might not be able to afford things like Baseline or Bloomberg. One solution, though, may be right under the noses of faculty advisors for SMIP's: Blackboard. In conjunction with other on-line sites and self-made tools in Microsoft Excel, Blackboard can be used to facilitate a university's student managed investment program. Blackboard has the capability to permit many activities necessary for the running of a student endowment. It also allows links to the World Wide Web for easy student access, a place to store Excel and Word files, and discussion boards. All of these are necessary elements for a successful education program in portfolio management. Thus, Blackboard is an option to help facilitate the running of a student managed endowment program, and it may have little cost to implement.

USING BLACKBOARD IN A SMIP

The first key advantage Blackboard provides is 24-hour, 7-day-a-week access from any computer that is connected to the World Wide Web. Blackboard is one of the primary tools used in on-line and other alternatively delivered educational programs. A student managed investment program is unique from typical university classes in that it is necessary to have it operational in some form year round and not just when school is in session. There are several times during a calendar year when students are not on campus because of breaks and holidays. However, investment portfolios need to be managed on a day-to-day basis. Thus, first and foremost Blackboard helps facilitate a class that needs to run year round on a schedule that can be different than the rest of the university.

Blackboard can be set up with unique start and stop dates and all previous information on the site can be easily uploaded into a new Blackboard course. It is a simple process to start a new class each semester, for example, and load the previous work for new students to see and use. This can very easily solve the student manager transition problem that SMIP's face. Thus, the students and faculty advisor can access Blackboard from about anywhere in the world and acquire the information that is needed and do the work that is necessary for the management of an investment portfolio.

Countless tools can also be placed on Blackboard that can be used from any location. Since the portfolio is managed year round, the likelihood exists that a quarterly report will need to be completed when school is not in session. This is very likely to occur during the summer, for example. It is typical for the Board of Trustees of the university or foundation to want a quarterly report within two weeks of the completion of a fiscal quarter. All of the spreadsheets and templates can be maintained on Blackboard and individual students can work together from anywhere in the world to complete the report (See Appendix, Figure 1).

A folder can be made under the documents tab titled "Annual Report Tools" (See Appendix, Figure 2). If desired, students can be given facilitator status in Blackboard allowing them access to the control panel. This allows them to upload edited documents directly back from where they downloaded them. This can lessen the load on the faculty advisor and keep information more up-to-date. If members of the student management team are only given student access then the faculty advisor will need to upload all items once edited. Either approach is workable.

Since student managed accounts are designed to promote learning, individual spreadsheets and templates can be placed on Blackboard not only as tools but to aid in the learning process. Typical spreadsheets should include calculating internal rate of return (See Appendix, Figure 3), position summaries, industry weightings (Figure 4), risk calculations, etc.

Students can simply download the template they need and insert the new information and place it in the Annual Report document. Learning outcomes would include calculating internal rate of return using Excel, working with weighted averages, and calculator risk management benchmarks such as the Sharp Ratio or Treynor Index. (See Appendix, Figure 4)

Another folder that should be under the documents tab is one to store all operational criteria for the fund. Key documents to be maintained under this tab include buy and sell criteria and investment policy statements, and asset allocation guidelines can be stored here providing easy access for students (See Appendix, Figure 5). Also, under the documents tab an “Analysis Tools Folder” should be maintained. This would contain spreadsheets, etc. for keeping track of stocks or bonds that are meeting certain buy criteria. For example, if stocks require a certain minimum revenue growth rate to be candidates for the portfolio the information can be maintained on a spreadsheet.

Under the documents tabs, a folder should be kept that stores all quarterly and annual reports for easy access (See Appendix, Figure 6).

Finally, a folder should be set up to keep track of all research on individual stocks and bonds. Since these are student managed funds no one person, other than the faculty advisor, generally stays on the actual management team for more than one year. Thus, new students would have a place to find the research on current positions so that they know why they were originally purchased. Once again, this history makes the transition between cohorts much easier.

In addition to storing research on current and older positions under the documents tab, the Blackboard discussion board can also be used at any time for discussion about buying, selling, or maintaining positions. Blackboard is widely used in on-line education programs and has discussion boards as part of its platform. This allows students to discuss when away from campus buying or selling of a position or any other issues that need addressed relating to the portfolio. An important advantage of this is that the record of discussions is stored and later students can learn why positions were established. Again, student portfolio teams tend to turn over often because of graduation. The record in the discussion board and the saving of research work on Blackboard allows students to access the original reasons why a stock was purchased and such discussion could help in a reevaluation process. Further, it provides a solid record of why things were purchased and sold if ever needed for a board meeting, etc.

Another advantage of Blackboard is the external links platform (See Appendix, Figure 7). The first link that needs to be established is to the portfolio itself. It is usually not recommended that students be given access to the actual brokerage account. However, it is simple to establish the current portfolio in any on-line platform such as MSN.com or Yahoo.com. The position can be bought or sold in this account for students to monitor and occasionally this would just need to be double checked against the brokerage account to make sure money market account balances are the same, etc. Students can then see the value of the portfolio from anywhere and are able to monitor day-to-day account activity. Other important information such as cost basis and purchase dates can be stored on these on-line sites such as MSN.com.

Links can also be established for any information that needs to be easily found. These links should open in a separate window for ease. Examples are a link to general market data so that students can see how the S&P500, Dow Jones Industrial Average, or NASDAQ are performing. Also, links to general market news and specific stock news of the day can be established. Many portfolios are benchmarked against specific indexes such as the Russell Value or Russell Growth and a link can be easily established to those indexes. Further, links can be provided for tools that the students use. Thus, a link can be established for a charting site such as stockcharts.com. If technical analysis is used by students, then they have a simple link to develop the charts necessary to make an investment decision. A link to stock betas is helpful since most portfolios will need to monitor the risk associated with a portfolio. Also, links to fundamental analysis tools such as Edgar should be established for easily access to companies’ annual reports.

CONCLUSION

Blackboard can be an excellent tool for universities to use for the operation of a student managed endowment account. It is accessible 24 hours a day from anywhere in the world from which a computer can be connected to the World Wide Web. The ability to store documents and tools for the management of funds makes the Blackboard platform ideal. Further, the discussion boards allows for a record of why stock positions were established originally and communications when students are not on campus.

Finally, the ability to link to other sites on the World Wide Web makes Blackboard a centerpiece for getting students to the information they need. Therefore, Blackboard provides a platform that is already in place at most universities and there are no major costs to begin or maintain a student managed endowment account. Communication and transition can be simplified, and the benefit is a low marginal cost of implementation.

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APPENDIX

FIGURE 1

The screenshot displays a Blackboard LMS interface. At the top, the Taylor University logo is visible alongside navigation links: Home, Help, and Logout. Below this, a secondary navigation bar includes My Blackboard, Courses, and Scholar. The main content area is titled 'FIN450-1-DIRECTED RESEARCH-SPRING 2011 (U201120-FIN450-1-32785) > DOCUMENTS' and features an 'EDIT VIEW' link. The 'Documents' section lists five folders, each with a description:

- Management Policy & Buy and Sell Criteria**: This folder contains documents with all buy and sell criteria used by the student managed endowment and Taylor University.
- Tools for Annual Report**: Tools for determining risk, return, etc.
- Research**: This folder contains research material on individual investments.
- Domestic Fund Quarterly and Annual Reports**: Every annual and quarterly report from the history of the managed endowment can be found here.
- International Quarterly and Annual Reports**
- Application**: Information on the needed qualifications to be part of this team and an application can be found here. Also, current applications are stored here as well as for those under consideration.

A left sidebar provides additional navigation options: Announcements, Syllabus, Support Services, Documents, Assignments, External Links, Staff Information, Course Information, and Documents. Below these are 'Tools' including Communication, Course Tools, Control Panel, Refresh, and Detail View. The browser address bar at the bottom shows the URL: https://courses.taylor.edu/webapps/blackboard/content/listContent.jsp?course_id=_45699_1&content_id=_918583_1&mode=reset.

FIGURE 2

The screenshot displays a Blackboard LMS interface for Taylor University. The top navigation bar includes 'My Blackboard', 'Courses', and 'Scholar' tabs, along with 'Home', 'Help', and 'Logout' links. The left sidebar contains navigation links: Announcements, Syllabus, Support Services, Documents, Assignments, External Links, Staff Information, Course Information, and Documents. The main content area is titled 'Tools for Annual Report' and lists various documents and spreadsheets for download:

- Risk/Return Spreadsheet**: Updated [RISK.xls](#) (25.5 Kb). This is used to determine risk and return for quarterly and other reports. It includes the Treynor Index.
- Portfolio Growth**: [portfolio.growth.doc](#) (131.5 Kb). This page will allow you to draw the pie chart showing the growth of the assets in a portfolio.
- Holding Page**: [First quarter 2006 position summary.doc](#) (55.5 Kb). This page will allow updating of holdings, weights, gains, etc.
- Prototype Quarterly Report**: [firstquarter06.doc](#) (203.5 Kb). This document can be used to cut and paste all of the individual items to make the final annual or quarterly report. Also, changes can be made to this document to finalize the report.
- IRR**: [irrannual2006.xls](#) (71.5 Kb) and [irrannual2008.xls](#) (85 Kb).
- 2006 Return Sheet**: [2006 Return Sheet.xls](#) (17.5 Kb).
- International Risk**: [internationalrisk.xls](#) (23 Kb).
- Global Industry Pie Chart**: [international pie chart.xls](#) (21 Kb).
- Global Allocation Pie Chart**: [globalallocationpiechart.xls](#) (15 Kb).
- Board Presentation Sample**: [Annual Report 2007.ppt](#) (1.207 Mb). We gave this presentation to the board of Trustees in 2007. This can be used as an example for future meetings.
- 2008 Domestic Quarterly Report Documents**: A folder containing documents for the 2008 domestic quarterly report.
- 2008 International Quarterly Report Documents**: A folder containing documents for the 2008 international quarterly report.

The bottom of the screen shows a Windows taskbar with the Internet Explorer browser icon and a 100% zoom level.

FIGURE 3

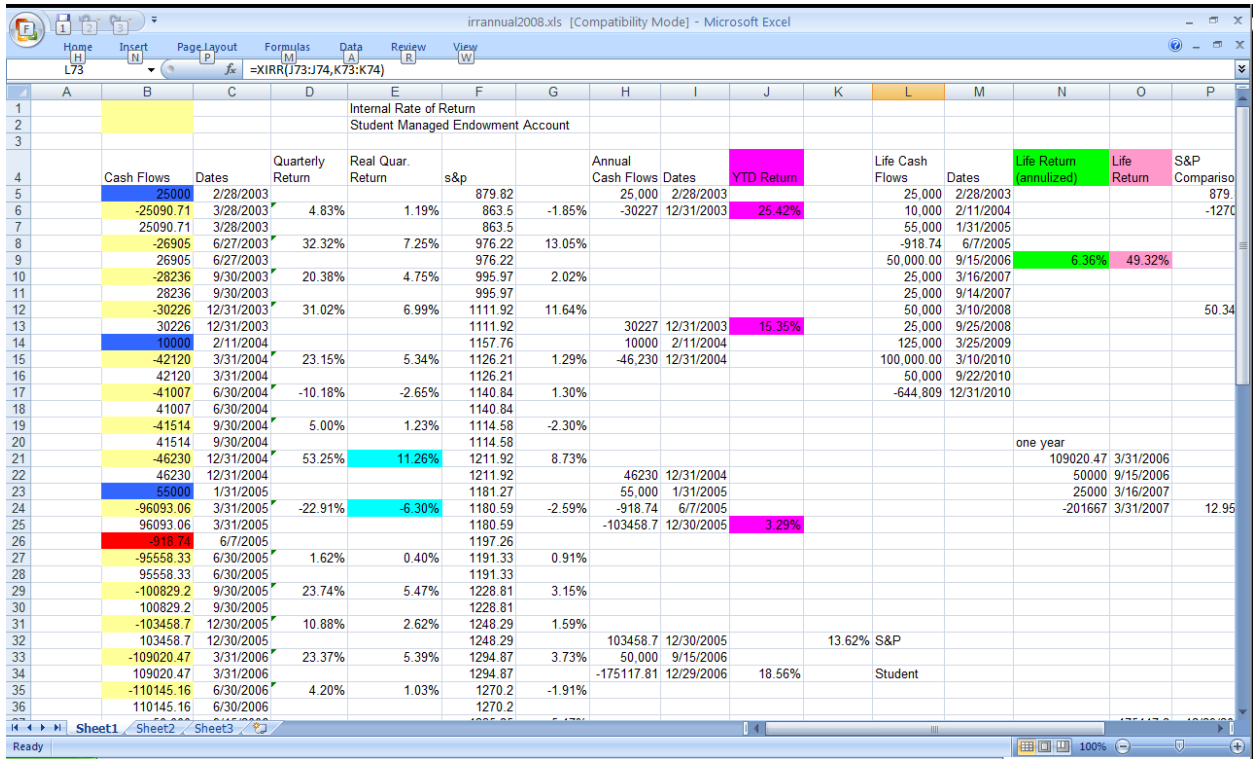


FIGURE 4

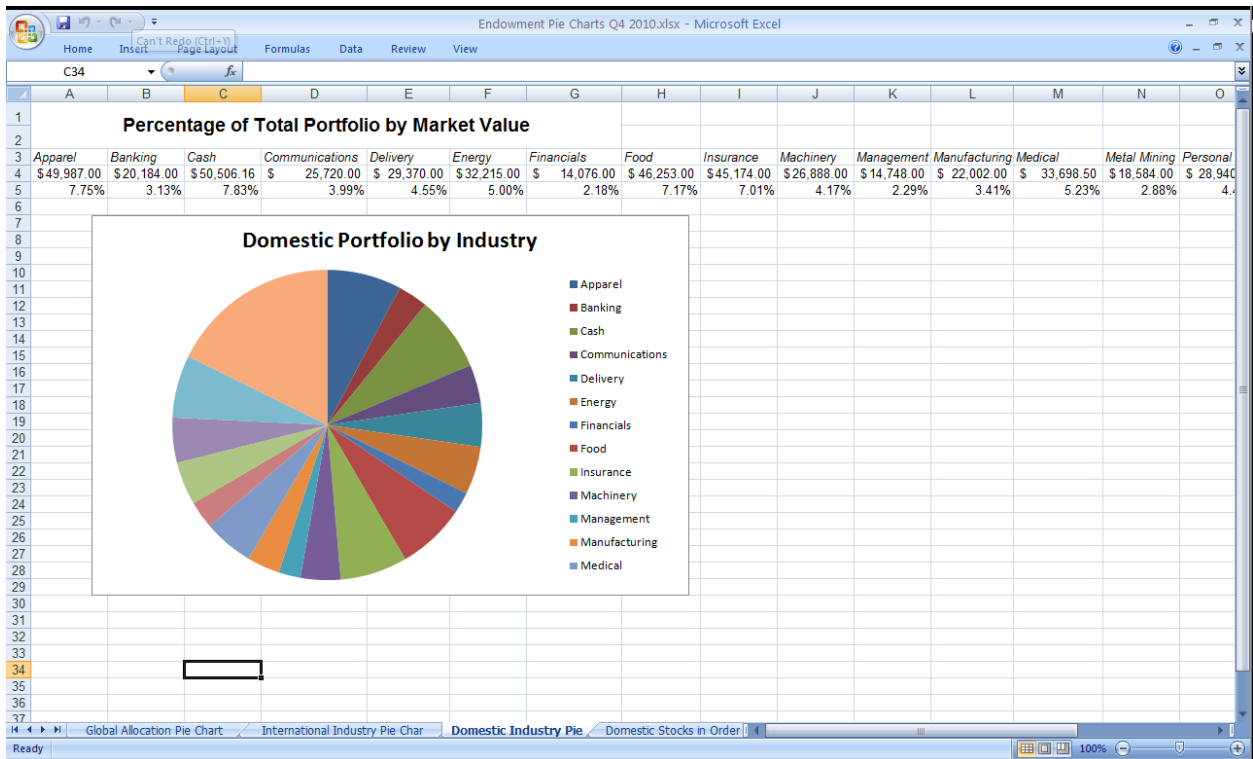


FIGURE 5

The screenshot displays a Blackboard LMS interface for Taylor University. The top navigation bar includes the university logo, navigation links (Home, Help, Logout), and tabs for My Blackboard, Courses, and Scholar. The left sidebar contains a list of navigation links: Announcements, Syllabus, Support Services, Documents, Assignments, External Links, Staff Information, Course Information, and Documents. Below these are tool links: Tools, Communication, Course Tools, Control Panel, Refresh, and Detail View. The main content area shows a document page titled 'Management Policy & Buy and Sell Criteria'. The breadcrumb trail indicates the path: FIN450-1-DIRECTED RESEARCH-SPRING 2011 (U201120-FIN450-1-32735) > DOCUMENTS > MANAGEMENT POLICY & BUY AND SELL CRITERIA. The page lists four documents, each with a download icon and a link to the document:

- Buy Criteria**: [Buy Criteria.doc](#) (46.5 Kb)
- Sell Criteria**: [Sell Criteria.doc](#) (45.5 Kb)
- Charter for Student Account**: [Charter for Student acct.doc](#) (41.5 Kb)
This is the founding document and charter for the Student Managed Endowment Account.
- Student Management Policy**: [Student Management Policy.doc](#) (23 Kb)
This document contains the policies for the Student Managed Endowment Account.
- Taylor University Investment Policies**: [TU Investment Policy.doc](#) (126 Kb)
This is Taylor University's policies for management of University funds.

An 'OK' button is located at the bottom right of the document list. The footer shows a status bar with 'Done', 'Internet', and '100%'.

FIGURE 6

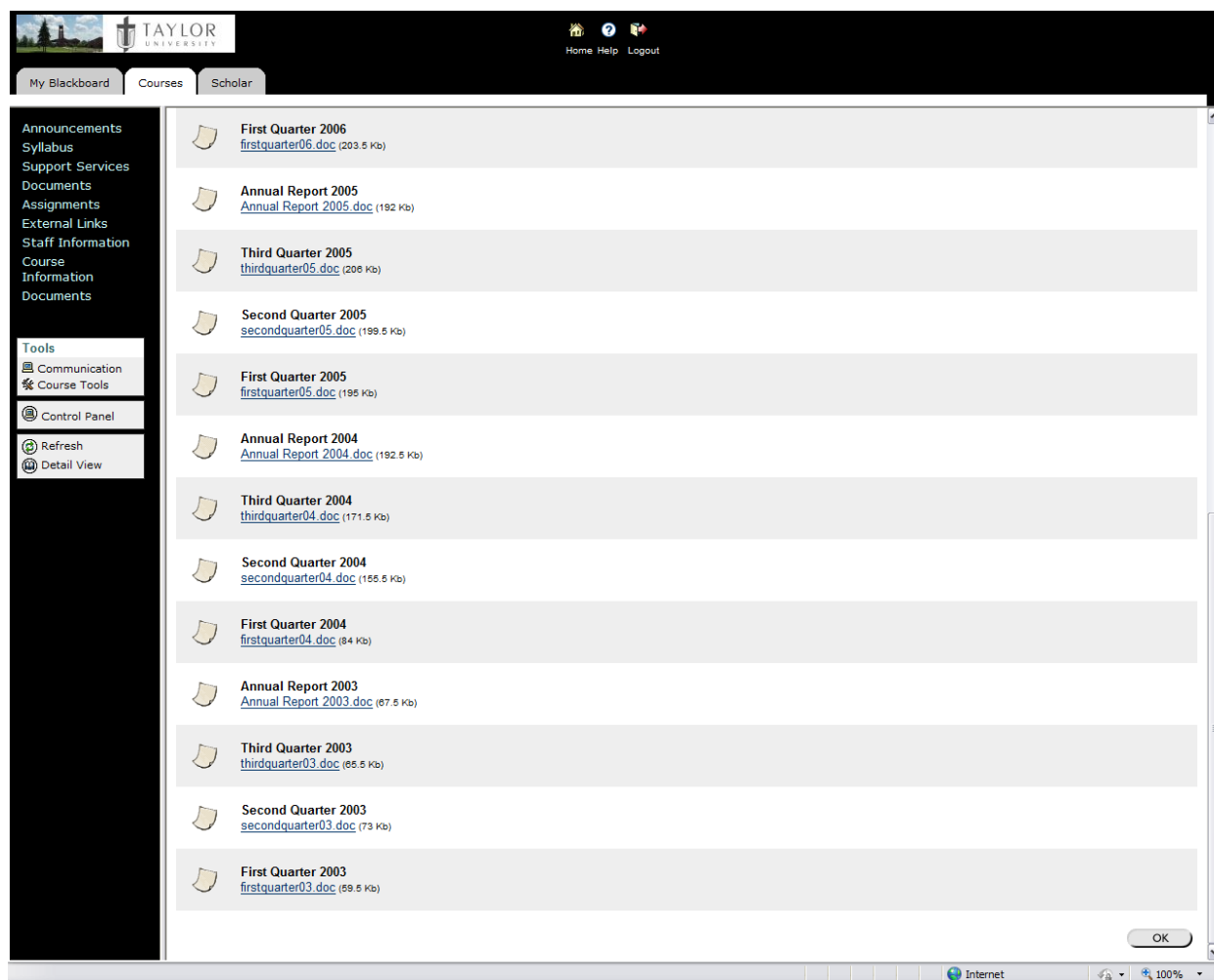


FIGURE 7

The screenshot displays a Blackboard LMS interface. At the top, the Taylor University logo is on the left, and navigation links (Home, Help, Logout) are on the right. Below the header, a breadcrumb trail reads: [FIN450-1-DIRECTED RESEARCH-SPRING 2011 \(U201120-FIN450-1-32785\)](#) > [EXTERNAL LINKS](#). The main content area is titled "External Links" and contains a list of links, each with a globe icon and a description:

- [Current Portfolio](#)**
This will link to MSN and allow you to see the current portfolio and information about the holdings and current performance. You will need to enter a password to get to this page.
- [Charting](#)**
This is a good place to find technical analysis tools.
- [General Market Data](#)**
This will let you see how the market is doing today and a look at the market news.
- [BETA](#)**
This is a quick link to find a company's beta
- [Financial Reports](#)**
This link will take you to the Edgar and SEC page to find company financial reports

The left sidebar contains a list of navigation links: Announcements, Syllabus, Support Services, Documents, Assignments, External Links, Staff Information, Course Information, and Documents. Below these are "Tools" including Communication, Course Tools, Control Panel, Refresh, and Detail View. At the bottom of the page, a status bar shows "Internet" and a security warning: "Double-click to change security settings".