

yields these results:

The net present value is \$1,805,549 and the internal rate of return is 40.67%.

Be sure to leave a blank space within the text if that is desired.

While it is straightforward to use concatenation, it takes a bit of practice to get comfortable with the text function to specify desired format. The following tips should facilitate use of the text function for formatting.

- The text format must be entered in quotes
- # means to show a number only if there is a number (other than zero)
- 0 means show a number and if there is no number show zero
- Use a comma in the text format if you want a "thousands" separator
- Use "\$" or "%" if you want that displayed

For example:

If the number is	To display as	Set up as
1234.555667	\$1,234.6	=TEXT(C113,"\$#,000.0")
234.5556667	\$0,234.56	=TEXT(C114,"\$0,000.00")
1234.555667	1234.56	=TEXT(C115,"#000.00")
1234.555667	1235	=TEXT(C116,"#000")
23.4567%	23.46%	TEXT(C117,"0.00%")
0.56%	0.6%	=TEXT(C118,"0.0%")
0.56%	1%	=TEXT(C118,"0%")
0.56%	.6%	=TEXT(C118,".0%")

You can also use the concatenate function to achieve the same results.

The formula:

=CONCATENATE("The net present value is ",C82," and the internal rate of return is ",C83)

Yields:

The net present value is 1805549.38574101 and the internal rate of return is 0.406744551557681

Here the text and cell references all appear within the concatenate function separated by commas.

To "clean up" the results, wrap the cell reference numbers in the text function.

To get this result:

The net present value is \$1,805,549 and the internal rate of return is 40.67%.

Use this formula:

=CONCATENATE("The net present value is ",TEXT(C82,"\$#,000")," and the internal rate of return is ",TEXT(C83,"0.00%"))

CONCLUSION

The Microsoft Excel program contains many features useful for financial analysis. This paper demonstrates how five functions can be applied. The features are: the *choose* function to create scenarios, *data validation* to restrict selections, *data tables* for sensitivity analysis, *conditional formatting* to highlight key results and scenarios under consideration and *concatenation* to string together text and formula results. Interested users may access the accompanying excel file by emailing me at lyonsb@sacredheart.edu.

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Creating Depth of Knowledge Using Team-Based Research Projects in Money and Banking and Financial Markets Courses

Bradley Hobbs and Daniel J. Borgia

Many undergraduate programs enroll students in a Money and Banking or Financial Markets course just after completing the principles of economics or an introductory financial management course. As professors who have taught Money and Banking and Financial Markets courses over a number of years, we have often faced a conundrum. Students note in their evaluations and comments that the course content tends to be "a bit dry" when compared to their experience in introductory courses. As a result, in developing our financial markets course, we have incorporated a project that has helped to engage students. Student responses indicate success in making the material more pertinent, engaging, and accessible.

Our "Financial Markets Project" requires students to produce a comprehensive, structured analysis of a specific financial market instrument or, alternatively, some institutional aspect of financial markets. After completing the project, students are required to present their findings to the class. This project helps students to develop skills they will need in their subsequent academic and working lives, such as: organizing and conducting research; collecting, sorting and analyzing data; writing and editing their findings; and publicly presenting their results to a peer audience. The entire project is carried out

using the Microsoft Office® Suite so students also develop technical proficiency with spreadsheets, presentation software, and simple statistical techniques. Analytical prowess is required in developing the statistical relationships and in presenting and explaining statistical results. This project is important for students because it helps them to develop complex critical thinking and writing skills along with vital presentation and public speaking competencies.

THE FINANCIAL MARKETS PROJECT

The *Financial Markets Project* begins by organizing students into randomly selected teams of three to five people. Each team then picks from a list of topics focusing on either financial market instruments or institutions (see Exhibit 1.) Each team is allocated 100 points and can assign these points to any single topic or to any set of topics as they wish. The bids are then submitted in a closed-bid bidding process, rank-ordered and the team bidding the highest number of points “wins” that topic. The process is repeated until all topics are covered and all teams have an assigned topic.

The basic goal of the project is for students to familiarize themselves with modern financial market instruments and financial institutions. In the past, students have produced reports analyzing and discussing U.S. Treasury bills, repurchase agreements, federal funds, commercial paper, federal agency securities, banker’s acceptances, Eurodollar deposits, municipal bonds, treasury bonds, corporate bonds, options, hedge funds, convertible bonds, and basic foreign exchange markets. In some cases, similar financial instruments are grouped together. On the institutional side, topics have included the Sarbanes-Oxley Act, savings and loans, credit unions, pension plans, insurance and reinsurance, hedge funds and venture capital firms. The format of the institution papers is less structured allowing for more variation in the format and presentation of materials to the class. This allows students who like more structure to develop a financial instrument paper and those who prefer less structure to develop a financial institutions paper. Both types of papers employ the same grading rubric and process: the difference is in the structured outline provided for financial instruments.

Where students choose a financial instrument topic, we provide them with the Financial Instrument Report Assignment (Exhibit 2.) Regardless of topic, students are required to write a written report and to construct and present a Microsoft PowerPoint® presentation to the class. Each presentation is limited to 25 minutes, including questions. A presentation grading rubric (Exhibit 3) is completed during the presentation and the presenting teams meets with the professor, in office, just after the end of the class for concise and immediate feedback [We have also experimented with peer feedback allowing students to “grade” peer presentations. This allows students to think more critically about presentation skills and pitfalls.]. Presentations are graded and account for 25 percent of the project’s grade. This presentation develops and reinforces communication and PowerPoint® skills. Over the years we have incorporated some basic rules for these presentations. The major suggestions for students are as follows: limit the number of topics per slide, make sure the slide is readable from the back of the room, and avoid, at all costs, reading the slides to your audience. For a teaching professor, and for many students, two excellent criticisms of Power Point to draw upon are available

from Edward Tufte:

(<http://www.edwardtufte.com/tufte/powerpoint>)

and Peter Norvig

(<http://www.norvig.com/lancet.html>).

Both are provided for students via links on our web pages.

Students are also required to produce a written report. This written-paper requirement has evolved, we believe, to provide an improved experience for students and professors. For instance, poor writing quality - combined with our own consternation regarding the pedagogical value of meticulously-graded papers languishing in boxes in our offices - spurred us to adopt a formative three-stage writing process. This provides the professor the opportunity to have periodic feedback loops. Another change has been to have each team choose a student to act as “Team Editor”. This has helped to reduce repetition and provide a more unified tone and tenor for the paper.

As noted, the three-stage writing process gives us the opportunity to “coach” students at various stages of the project. An extensive paper grading rubric is provided for each team (Exhibit 4.) Stage I requires the students provide either a thesis statement or short paragraph defining their topic succinctly, and provide a bibliography in MLA format with a minimum of eight to ten resources. This allows us to assess topic definition and the quality and appropriateness of references at about two weeks into the project.

Stage II begins occurring about six weeks into the project with an in-class presentation and the Stage II paper. Presentation dates follow the topic outline and are provided at the time the topics are assigned. The paper each team hands in is “required” to be the group’s “Best Final Draft.” The paper is then thoroughly marked and edited for course content and writing, with specific suggestions for improvements, editing, and questions written by the professor on the draft. The paper is then returned to the team *without an assigned grade*. Students do receive the feedback on the paper itself and also a completed grading rubric for Stage II. Once the edited paper is returned, each team must decide whether they will respond and resubmit, or simply turn in a clean copy of the paper, as is, for their final grade.

One potential pitfall is that students might hand in “rough” drafts expecting the professor to do their editing work for them. We address this by explaining that meaningful feedback can be given only to meaningful work. Students are told prior to submitting Stage II papers that the instructor has the option to stop reading and providing editorial feedback, after reading two pages of the paper if the attempt is clearly not a strong one. Periodically, students have tested this policy. It is our experience that once a professor follows through and returns a poor paper or rough draft without comment and feedback, the student grapevine provides an amazingly efficient signaling mechanism. In short, consistently using this approach has minimized poor Stage II submissions. Students are also instructed that for Stage III grading simply addressing Stage II feedback is a necessary condition, but not a sufficient one and will not necessarily guarantee a high final grade. We have found, not surprisingly, that conscientious responses to Stage II feedback do tend to increase grades overall on this assignment.

Students have one week from return of Stage II papers to produce their Stage III or final paper. These are justifiably held to high standards: flow, cohesiveness and clarity are crucial. The final paper itself is read but not marked. We read these papers as a holistic piece without reference to Stage II feedback, and then we complete the Stage III grading rubric and assign a final grade. This approach reduces the amount of grading time and allows the professor to read the piece without the interruptions of marking the paper itself.

The inevitable free-rider problem is dealt with in a forthright fashion: we require all students to assess the work of fellow team members. Students are instructed to: 1) identify the three major tasks they were assigned in the project, and 2) to “grade” the contributions of their fellow team members. This peer feedback is handed in a sealed envelope with the Stage III paper. The Peer Evaluation Grading Rubric (Exhibit 5) provides space for each student identify the major tasks that they were responsible for and then to assign points indicating the contribution of their peers in the overall project. The total point allocation available is calculated as $[(100 \text{ points}) \times (\text{the number of team members} - 1)]$. Students can assign the total points in any way they choose among their fellow team members. For example, if there are four team members there are 300 total points to assign $[(100 \text{ points}) \times (4 - 1) = 300]$. If the student judges that all team members contributed equally then she could assign 100 points to each team member. If, on the other hand, there was problem student, his or her team member can assign a value lower than 100 and add those points to those who contributed more. Students are instructed to assign points as they see fit and we have found them to be quite forthright and conscientious in the peer evaluation process. Peer grades are used to adjust the project score down if a major problem is identified in this process. It is important to clearly state these processes in the syllabus. It has been our experience that this process not only identifies free-riders, but also allows us to adjust the grades of free riders with explicit feedback from peers once the project is completed.

The *Financial Markets Project* format we have developed helps us to emphasize writing and research as a *process*. Students’ come to the realization that writing is an iterative craft requiring multiple drafts and ongoing editing. Stage I and Stage II feedback give them the opportunity to improve this specific work and to simultaneously improve their writing, communication and presentation skills more generally. It has also been our experience that final papers have improved significantly. At the margin, the work for the professor is not significantly changed. Simply grading final papers requires the same intense feedback as Stage II papers but provides neither an opportunity for students to address criticisms nor a chance to employ an iterative process designed to actually improve their work. While we do read the paper twice we have reduced grading time by moving from individual papers to group papers. The use of presentations also reduces lecture time and provides a more interactive, active-learning format for about one-third of the course. It is our experience that overall workload is actually reduced when compared to individual papers without student presentations. A sample student project is included as Exhibit 6. The accompanying student project PowerPoint presentation can be downloaded at the JITF website.

Finally, student feedback has been, on the whole, positive. Group work is often cited as the major downfall so students are reminded that in their future employment it is highly

unlikely that they will be able to choose their own team mates and that they may, one day, be in a position to judge the works of peers as a supervisor or in some 360-degree evaluation process. A selected group of comments follows: “The presentations really made us learn the material.”; “I also enjoyed the group project, it taught me a lot about my topic and I enjoyed interacting with my classmates.”; “I wish I could have picked my own group for the project, but that is not the real world! I like your method for picking topics for the presentation.”; “The feedback was great and helped us to EARN a better grade!”; “I feel the project was a huge learning opportunity and encourage you to continue with it.”; and finally, “Although I tend not to like group projects, I had an excellent experience with my group in this course. I was actually able to benefit from having team members which was a great experience for me. Also, the project helped me to learn more about our topic.”

CONCLUSION

The impetus for the initial development of the *Financial Markets Project* was to engage students more deeply in the course material and to improve group work, writing and presentation skills. After more than a decade of using these methods, we find that the number of problems has been relatively few and we have observed a marked improvement in the final Stage III papers. Student evaluation comments on the project are generally positive. We suggest explaining the reasons for requiring group work, presentations and an iterative writing process to students to increase their awareness of the project’s purposes. The *Financial Markets Project* brings together many of the traditional and technological skills that are part of a university education while developing research, writing, presentation and software skills necessary for a 21st century professional career.

The following exhibits, available at www.jfcr.org/jitf, provide the topics list, report assignment, presentation and grading rubric, and a sample paper referred to in the article:

List of Exhibits

*Exhibit 1. Financial Markets Instruments
or Institutions – Topics List*

Exhibit 2. Financial Instrument Report Assignment

Exhibit 3. Presentation - Grading Rubric

Exhibit 4. Paper - Grading Rubric

Exhibit 5. Peer Evaluation - Grading Rubric

Exhibit 6. Sample Paper

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