

Cases in Financial Management

NON-DIRECTED VERSIONS

EUGENE F. BRIGHAM

LOUIS C. GAPENSKI

Cases in Financial Management

Non-Directed Versions

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Financial Management



Financial management can be a fascinating, exciting subject, yet students often regard it as being either too mechanical or too theoretical. However, one can overcome this misconception and demonstrate the inherent richness of finance by relating the various topics to practices in the real world. Years ago we found that if we illustrated a point by referring to an actual situation, our students' curiosity intensified, their powers of concentration sharpened, and we were able to impart more knowledge than if we dealt strictly with abstractions or hypothetical situations.

We then began using cases in our courses, primarily Harvard cases, but the experience was not satisfactory, at least not in our intermediate level undergraduate and introductory MBA courses, where we use a combination of lectures and case discussions. To be most effective, we needed a set of cases (1) which deal with the major principles and analytical techniques that are covered in the current mainline texts and which, in consequence, reinforce and illustrate the concepts that are covered in those texts, (2) which contain both numerical and conceptual questions designed to stimulate discussion, (3) which can be worked (generally) in 3 to 5 hours, and (4) which serve to illustrate how computers can be used in financial analysis.

Alternative Versions of the Casebook

Although our cases served our needs well, we and others concluded that we needed somewhat different versions of the cases, and different numbers of cases, in different situations. Accordingly, we have developed several alternatives as discussed below.

The Directed Casebook. The directed casebook, which is a direct descendent of our original casebook, has been renamed Cases in Financial Management, Directed Versions. We use the word "directed" in the title to signify that these cases have end-of-case questions. To create this casebook, we reviewed and screened all the cases we had developed over the years. Overall, after years of use, we have been satisfied with the original cases (at least for some purposes as we explain later), so we decided it would be best not to try to fix something that wasn't broken. Therefore, the changes in the directed casebook are generally minor—we updated, revised, and improved the cases, and we changed some data in almost every case so that student "solution banks" developed for the first casebook could not be easily used with this casebook. However, the general "look and feel" of the 41 cases in the directed casebook is similar to our earlier casebook.

The Nondirected Casebook. Even though we were generally satisfied with the format of the cases in our first casebook, at times we wished we had cases that were less directed. The end-of-case questions provide guidance to students and help keep them on the right track, but these questions have a serious drawback—students do not have to develop a strategy for solving the case, which is perhaps the most important skill in real world problem solving. Therefore, we wanted to have some cases that do not lead students by the hand but, at the same time, do not leave them in such a quandary that they can't get started.

We believed that the solution to our problem lay in a new type of case—one which replaces the end-of-case questions with one or two paragraphs of executive guidance. These cases would require students to develop their own approach to the case solution, but students would receive some guidance, just as managers typically receive some guidance from senior executives.

We chose 20 of our most-used cases and recast them into new "nondirected" cases. First, we moved any essential data that appeared in the questions to the body of the case. Then, we replaced the questions with one or two "executive guidance paragraphs." The end result is a set of 20 cases that require students to develop their own approaches to solving the case, but which still provide sufficent guidance to point them in the right direction. This new casebook is titled *Cases in Financial Management, Nondirected Versions*.

The BY REQUEST System. When we first developed the nondirected cases, we thought we would use them in our MBA courses while using the directed cases in our undergraduate courses. Our rationale here was that

graduate students are better able to structure case solutions, and hence require less guidance. However, the advent of the BY REQUEST system has caused us to change our minds. BY REQUEST is a system that permits instructors to create a customized casebook consisting of any number of cases selected from the entire set of 61 directed and nondirected cases.

The BY REQUEST system thus allows instructors to create a casebook that includes a mix of directed and nondirected cases. Now that an easy, cost-effective way exists to use both directed and nondirected cases in a single course, we plan to use both types of cases in our courses. We will start with some directed cases to give students an idea of what a good case solution looks like, and then end the course with some nondirected cases, to give students experience in crafting solution strategies. In that way, we can have the best of both worlds, and our students will gain the most value from the course.

Use of the Nondirected Cases

We have used the nondirected cases primarily in the advanced MBA course, although we have also used them in both the introductory MBA and advanced undergraduate finance courses. In the future, we will likely use a mix of directed and nondirected cases in all courses. For both types of cases, we generally require each student to work the case, although we do encourage them to work in groups. Often we have students, in groups of 3 to 4, make presentations, and we and the other students serve as the "Board of Directors," asking questions much as a real board would do. We also require students to write up and hand in a number of the cases, primarily because we feel that they need practice writing, but also to ensure that they are working the cases.

We, and others, have found that using cases makes it much easier to motivate our students, majors and nonmajors alike, undergraduates or MBAs. Students can see the importance of finance in actual business decisions, and, for many students, the cases have transformed finance from a sterile, mechanical, and overly "theoretical" subject into an interesting, pragmatic one. Also, by demonstrating why it is important to master theory, the cases actually cause students to learn more of the abstract, theoretical material than they would otherwise.

Lotus 1-2-3 Models

Lotus 1-2-3 and similar computer spreadsheet programs have become extremely important in all aspects of finance, and especially in financial management. Further, students are becoming increasingly computer literate, and more and more of them know at least the basics of 1-2-3 or a similar spreadsheet program when they come into the course. important that those students who have learned something about computers be given the opportunity to hone their skills, and this suggests that they be allowed (or required) to use spreadsheet programs to help If students are not familiar with spreadsheets, it is analyze cases. perhaps even more important that they be exposed to them, because "functional literacy" in finance today means at least some knowledge of spreadsheet analysis. These points motivated us to make Lotus 1-2-3, which is the dominant spreadsheet program and is also compatible with virtually all the other programs, an integral part of the cases, although they can be worked using only a calculator.

As we wrote the cases, we developed well-structured, user-friendly Lotus models for most of the cases that analyze the problems presented. These analyses could, of course, be done with a calculator, but the 1-2-3 models are far more efficient, especially if students are expected to perform sensitivity and scenario analyses. The next question was, "Should we provide the models to the students, should we make students do all the Lotus programming themselves, or should we provide them with partially completed models?" We experimented with this issue over the approximately three years it took us to write the original casebook, and our conclusions were (1) that it would take our students far too long to do all the modeling, but (2) that if we gave them the completed model, they would simply use it as a black box to generate answers. Thus, the only practical solution was to provide them with partially completed models.

Unfortunately, there is no such thing as an optimal partially completed student model—the optimal amount of completion depends on what the instructor wants to accomplish and on the backgrounds of the students. If students are relatively proficient with *Lotus*, and if an instructor wants to emphasize financial modeling, then most of the cells should be erased, and students should be required to develop most (or even all) of the formulas for themselves. On the other hand, if the students do not have a very good background with *Lotus*, and if the instructor is more interested in having students see what spreadsheets

can do than in having them do the actual modeling, then only the minimum number of cells should be erased. We solved this dilemma in the following way. A diskette with the completed instructor versions of the models is available to adopting instructors. However, the completed models contain three macros that permit instructors to create student versions of the models in three levels of difficulty—easy, medium, and difficult, with the easy models having relatively few cells erased. Thus, instructors can choose the type of model they want to make available to students on the basis of their students' *Lotus* skills and time constraints, for what is optimal for one group of students may not be so for another group.

At Florida, our students have widely varying backgrounds—some are quite good with *Lotus*, while others have managed to learn almost nothing about it prior to working the cases. Our students with better *Lotus* skills can generally complete the easy student models in about a half hour (less for some models, slightly more for others), although they often get interested in the structure of the models and spend quite a bit of time going over them. The less computer-oriented students have to spend more time, at least early in the term. To force those students with only rudimentary *Lotus* skills to learn more, we typically start the course by making the easy student models available, then progress to medium, and finally end the course with one or two difficult models, where students must do most of the modeling.

To help those students that are using this casebook in conjunction with our finance textbook *Intermediate Financial Management*, we have included a spreadsheet tutorial (Appendix A) in the text. Also, a technology supplement that includes a spreadsheet tutorial is available to instructors who adopt *Financial Management: Theory and Practice*. This supplement can be copied and distributed to students. For students with very limited, or no *Lotus* skills that do not have access to a spreadsheet tutorial, we recommend that they purchase *Finance with Lotus 1-2-3: Text and Models*, by Brigham, Aberwald, and Gapenski (Dryden Press, 1992). This book, which is a complete self-study course in spreadsheet basics and applications, is specifically designed to be used as a supplement in courses where *Lotus* cases are used.

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The field of finance continues to undergo significant changes and advances. It is stimulating to participate in these developments, and we sincerely hope that these cases will help to communicate the important issues in finance to future generations of students.

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