

# Grading Case Courses in Finance

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*This paper summarizes the comments made during a panel discussion on grading case courses in finance that was held on September 20, 2018, at the Financial Education Association/Academy of Business Education 2018 Conference, San Antonio, Texas.*

## GEORGE KESTER

One of the challenges in teaching case courses in finance is grading. Grading written case analyses, individually or group prepared, and case examinations can be challenging as well as time consuming. Not only is grading subjective, but there is also usually no single correct answer. Less emphasis is placed on the numbers and greater emphasis is placed on what students do with the numbers which are simply a means to an end - a financial decision.

When grading case analyses, instructors must determine if the analysis performed is appropriate and based on assumptions that are reasonable and consistent with case facts and data. Does it demonstrate an identification and understanding of the appropriate criteria for evaluating alternatives and whether the recommendations logically follow from the analysis? Have uncertainties in their assumptions been recognized and effectively explored different scenarios and outcomes? How well have the analysis and recommendations been articulated?

The case method involves active student participation in the learning process and its success is directly related to the amount of student preparation and involvement. Case instructors face the challenge of insuring that students come to class well prepared and willing to actively participate in class discussions. This poses a challenge for many students who have been conditioned to be passive listeners in a more traditional textbook/lecture environment. There is an initial reluctance to speak in class, a problem that is compounded by the general level of discomfort due to the unstructured nature of cases.

Although we would hope that the course subject matter and learning experience should be sufficient to ensure a high level of classroom participation, most case instructors recognize that part of the course grade should be based on classroom participation. This helps motivate students to prepare cases and participate in classroom discussions. However, grading classroom participation is a challenge. Many instructors find it difficult to grade classroom participation, which is inherently subjective. Others express the concern that there are students who have an excellent understanding of finance, but are not comfortable participating in class, a concern that is especially relevant in some international teaching settings.

These and other challenges of grading case courses along with recommended approaches based on our teaching experience are the topics of this panel discussion.

## ALVA BUTCHER

I would like to focus on the issue of grading a case that has been assigned to all students. As has been mentioned, grading classroom participation is necessarily subjective. Grading written cases is time consuming and there is usually no unique correct answer. However, I want students to be individually responsible for the case analysis. My objective has been to provide some guidance for the discussion so that all can participate. There is a written assignment, usually a short one-to-two-page typed report. The report must begin with an introduction to the issues under consideration. This is followed by the analysis and conclusion. It cannot be drafted as a series of questions and answers. The grade for the report depends not only on the financial analysis, but also on the correct usage of grammar, spelling, sentence structure, logical flow, and clarity. If the assignment also requires some analysis in Excel, I require a hard copy as well as a digital copy on Moodle. To receive credit for the Excel analysis, I must be able to see the logic behind their results. Numbers cannot just be hard coded in. In the following discussion, I outline how I have used cases in my introductory finance course.

In my introductory finance course, the first project is a financial forecasting case. First, it is necessary to conduct a review of financial statements and financial ratios. I frequently use the following two cases:

1. Case of the Unidentified Industries
2. A classic financial forecasting case that comes in several versions:
  - Butler Lumber
  - Clarkson Lumber
  - Cartwright Lumber Company
  - Jones Electrical

### *Case of the Unidentified Industries*

This "Case of the Unidentified" is designed to help students recognize the range of distinctive patterns in financial statements for different industries. For example, different industries will have different inventory turnover rates, different asset structures (high versus low levels of plant

property and equipment), different collection periods for accounts receivable etc. The balance sheets in the case are common size balance sheets. Students are asked to play the financial detective, and to use selected financial data to identify companies in five out of the fourteen industries.

I provide a few clues to get them started. For example, I note that there are four service providers in the unidentified industries. Service providers will not have inventory. How can they distinguish among the service providers? Another clue is that the list of unidentified firms includes six retailers. Students are asked to identify the six retailers. How would they distinguish among the retailers based on such clues as the accounts receivable collection period, or the inventory turnover period?

Assessment is based on discussion and a one-page typed memo. Since it is early in the semester, I group students in teams of three to four at the beginning of class session and give them ten minutes to share their results with their teammates. I then open it up to discussion and ask each team to propose its first identification and its rationale. Early in the discussion, it is not unusual to have several teams identify the same industry. But as we work our way down the list, there is much more variety in the responses. This is a great icebreaker early in the semester and it also provides a platform for me to learn the names of the students. Students are more willing to share from the comfort zone of a team, yet each is responsible for individual analysis. The discussion is always lively.

Each student is also responsible for a one-page memo in which he/she identifies five industries and explain the rationale. That is, each must explain the key screening devices or key clues that were used to identify a particular industry. This is relatively easy to grade since it is only for a subset of the industries in the case.

### ***Classic Financial Forecasting Case***

This set of four cases allows me to use the basic financial forecasting situation without always using the same case. Also, each semester I vary some of the underlying assumptions behind the forecast so that the calculations are different.

This is a short case: four pages. The situation involves a sole proprietor who bought out his partner several years ago. Sales have been growing rapidly and he has been relying on trade credit and a line of credit to finance his needs. He has exceeded the credit line of his current lender and is working with another bank to secure a new and larger line of credit. Students are asked to play the role of the new banker and to analyze the firm's historical financial performance over the past three years, forecast the line of credit needed for next year, and determine whether they would extend the new line of credit.

For assessment, I break this case analysis into two parts: Part 1 – An examination of historical financial data, and Part 2 – Financial Forecast and Written Report.

In Part 1, students are asked to calculate certain items on the Balance Sheet and Income Statement as a percentage of sales over the prior three years. They are also asked to calculate ratios over the prior three years, such as the quick

ratio, profit margin on sales, days in accounts payable, days in accounts receivable, days in inventory, and annual growth rates in sales. These calculations are submitted in hard copy and digital form on Moodle and can be quickly graded.

In the class discussion this historical data is used to analyze the financial strengths and weaknesses of the firm. Since profit margins have been very low, how has the firm financed its growth? How effective has the firm been in managing its assets? The historical data also provides a platform on determining assumptions that will be used in the financial forecast of the balance sheet and income statement for the next year.

In part 2 the students are asked to prepare a financial forecast under two scenarios: 1. the firm does not take the trade discount and pays accounts payable within thirty days and 2. The firm does take the trade discount and pays accounts payable in ten days. Other assumptions are also provided for the financial forecasts. Some of these assumptions are consistent with historical data. Others are ones that have been suggested during the discussion in Part 1. For example, students might note that the firm's credit policy is too lax, and that days in accounts receivable should be lower than the historical level. In any case, since students are using the same set of assumptions in their financial forecasts, it is easier to assess their financial forecasts in Excel.

In the class discussion, each student must report on a variable in the financial forecast. In order to avoid a cold-call, the volunteer rate for the discussion is very high. At the end of the class each student must explain whether or not the line of credit would be extended by the bank and the rationale behind that decision. An interesting conclusion to the discussion is to raise the issue of sustainable growth. The notion that the objective of the firm is not growth in sales is rarely expressed by the students.

The final assessment piece is the written report. And as noted above, that is based on financial analysis as well as the quality of the written expression.

### **BEN NUNNALLY**

In a finance course, as in any academic setting, the objective is to help students learn. Moreover, in a finance course even at the introductory level, the objective is to make sure that student learning is aimed toward informed decision-making. That is the desired outcome of business study. I have not yet mentioned the word 'teaching' because in business courses it is secondary to student learning. Put differently, in a business case course the process of teaching is implicit, and the learning process is explicit. As we will see here, this difference is especially important in the evaluation of the students' work in the course.

For example, when students are faced with a case course the 'atmosphere' that is established by the instructor is critically important. This is especially true if it is an undergraduate course, which may mean it is the first case course for the students. This atmosphere involves the following sequence: a) why are cases being used in the course? Here the instructor should reemphasize or point out

the reason for learning the finance theory from the introductory course, or the earlier part of the case course: that material introduces the tools necessary for decision-making in finance. b) Cases illustrate situations wherein financial decisions must be made, often with too little or too much information. Therefore, it is the students' task to make a decision by use of the tools learned in the introductory course, while understanding that there may not be one 'correct' answer. However, the instructor must make clear that even with the possibility of such ambiguity in the case data and information, there is a correct path toward a decision based upon the case information and data. c) Finally, and perhaps most important, the instructor must insist upon respect for each person's opinion as the discussion of each case proceeds. Attack the ideas presented in class, if such is warranted, but not the person offering the ideas!

The foregoing assumes that the instructor has chosen cases appropriate for the level of the course and background of the students. (This is where the 'implicit' nature of case teaching comes in.) The instructor's skill at conducting a useful case course begins before the initial contact with the students. The instructor must have the course objective clearly in mind when selecting the cases for the course. If this selection is done in a thoughtful and careful manner then the 'explicit' nature of what the instructor hopes to accomplish, student learning beyond the exposure to the tools of finance, will quickly show itself. Students will begin to broaden and deepen their understanding of financial decision-making.

Now the day-to-day of case use can get underway with some degree of comfort and clarity for the students, and a demonstrably high degree of classroom management skill for the instructor. "For example, class participation is a logical and beneficial part of the case method." (Bruner, et al, 1999). Within this important context the instructor's role should be made clear. In the undergraduate course particularly, Gitman, et al (1987) describe the instructor as 'coach', taking a "---more active part in the case and assumes more responsibility for the conduct of the class but still allows students to play their own game."

In this setting it is critically important for the instructor to keep a running record of the class participation of each student. (The students must be made aware of this, they also must be given clarity on what constitutes 'good' class participation, and what portion of the course grade will be made up of class participation.) What constitutes beneficial class participation are those questions and comments that move the discussion forward. Therefore, the instructor must learn the name of each student as quickly as possible. This not only greatly facilitates an accurate accounting of the class participation of each student, but the more reticent students may be gently drawn out by calling on them by name, particularly when there is a relatively straight-forward question on the floor. (It is very useful to provide an assessment of each student's class participation grade mid-way through the course. In this way everyone is clear on progress and expectations!)

Based upon the foregoing, grading each student's performance in the case course should occur without undue

debate and distress. The classroom environment was made clear at the outset, the selection of the cases, and the day-to-day management of the classroom setting have instilled confidence in the instructor. Now the grading can proceed based upon those factors. Debate concerning course grade and/ or class participation grade will undoubtedly occur. However, the procedures and steps outlined above will go a long way in keeping the debate rational and thereby producing an outcome that each can regard as equitable.

### **ROBERT STRETCHER**

Grading casework is one of the greatest challenges of my teaching career. Case courses give great insight to actual business scenarios, but reality often does not fit in our 'textbook' models very well. Appropriate adjustments, augmentation, and interpretation (not just analytical processes) are often the outcome targeted, and indeed, the most challenging to grade given their subjective nature. It is also true that giving individual case assignments to students is not only challenging in terms of resources, but it also omits another valuable element of case analysis: working effectively with others in a team setting. In groups, students can learn about group dynamics, leadership, followship, communication, and even some negative experiences such as free ridership (still valuable experience, though)!

So, my focus in the past fifteen or so years has been group case assignments and structured groups to emulate the corporate environment. Based on feedback from former students, their professional environments largely handle tasks with a task force; a leader is assigned by upper management, and they in turn contact the team members electronically to set up face-to-face meetings. The leader's responsibilities are very different than the team members' responsibilities. I am also told that there is almost always present an informal conduit of information flow from someone in the group to upper management, a 'mole' of sorts, unknown to the team, but serving an 'auditing' function, to put it nicely. The interrelationships are not always productive ones, either.

To deal with the group dynamics, I use a structured groups model. It was accepted well at meetings where I presented it, so I came up with a name for it, "Corporate Mole," and wrote it up in detail so that others could use it if they wished (Stretcher, 2009). In terms of grading, I have had the most success with structured groups using the following grading strategy.

First, I use randomly generated numbers in Excel to assign groups and the leader and mole positions. The mole is unknown to anyone else in the group, and it is in their best interest to blend in and participate in the case analysis since, if someone else discovers they are the mole, it negatively affects their grade for the assignment. The leader is informed that they are responsible for all communication, organization, and leadership of the group, and the rest of the group serve the analysis function. After the deliverable for the case is turned in and/or presented, each group member is graded according to the guide in table 1.

**Table 1: Grading Criteria.**

	Score weights	Criteria
<b>LEADER:</b>	50% Professor Evaluation	Review of Communication, Observation of In-Class Leadership
	50% Group Survey	Student survey ratings of the leader's leadership, communication, organization
	Report Quality Adjustment, up or down	Organization, writing, analysis, and report quality
<b>ANALYSTS:</b>	50% Report/Presentation Quality	Organization, writing, analysis, and report quality
	50% Group Survey	Student survey ratings of all other analysts' contributions to the group's work
<b>THE MOLE:</b>	100% Emailed Mole Reports	Effectiveness of reporting the group's activities, dynamics, and problems if any
	Report/Presentation Quality Adjustment, up or down	Organization, writing, analysis, and report quality

The group survey is a simple document, distributed to students and then collected, summarized, and documented. It indicates each student's perception of the distribution of the work and the effectiveness of the leadership of the group leader. This, together with the leader and mole reports, consistently identifies, and penalizes free riders. By the second half of a semester, those penalized realize the negative effect free riding will have on their grade, regardless of the report/presentation grade, and usually change their behavior. It also provides documentation of why grade adjustments occurred (see figure 1).

**Figure 1. Group Survey.**

Your Name: \_\_\_\_\_ Your Leader's Name: \_\_\_\_\_

**EVALUATION OF GROUP LEADER: (circle your response)**

My group's leader consistently communicated frequently and effectively.  
a. strongly agree    b. agree    c. disagree    d. strongly disagree

My group's leader coordinated activities and delegated tasks effectively.  
a. strongly agree    b. agree    c. disagree    d. strongly disagree

Please rate your leader's leadership during the case analysis:  
a. could not have been better  
b. did a good job  
c. did an average job compared to how others would have done  
d. did a below average job  
e. not a good leader; ineffective  
f. terrible leader; did not show up, lead or coordinate at all

If you circled "a" or "f" please provide further justification:

**EVALUATION OF GROUP MEMBERS:**

My group members were all up to speed on how to evaluate marginal projects at the beginning of the analysis.  
a. strongly agree    b. agree    c. disagree    d. strongly disagree

My group members all participated enthusiastically and contributed adequately to the project's tasks.  
a. strongly agree    b. agree    c. disagree    d. strongly disagree

If you did not say "strongly agree" please rate each person's contributions individually (including yourself if you were an analyst):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Grading is, of course, inherently subjective, since there are often multiple approaches to real-world solutions, and analysis and conclusions are rarely carried out, reported, and presented the same from group to group. This grading strategy seems to work well as a quasi-rubric, though. For a full description of the strategy, see Stretcher (2009).

## REFERENCES

- Bruner, R. F. et al "Teaching with Cases to Graduate and Undergraduate Students. Financial Practice and Education, fall/winter 1999. pp. 111-119.
- Gitman, L. J. "An Approach for Assessing, Selecting, and Using Finance Cases." Journal of Financial Education, 16, fall 1987. pp. 56-64.
- Stretcher, R. "Corporate Mole: A Grouping Strategy for Minimizing the Free Rider Problem in a Managerial Finance Course." Journal of Instructional Techniques in Finance, 1(1), Spring 2009, pp. 15-19.

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