Goals of Case Analysis

I have taken this material from a text I wrote on financial statement analysis. Thus, the examples focus on things like interpreting ratios. However, the basic ideas apply to any case analysis. It also assumes that you are working from an instructor-supplied case. In your case, your "case" contains the materials you develop from the firm's annual report and from your review of the business press and Internet.

The primary goal of case analysis is to develop a series of logical arguments that support your answers to the discussion questions. The key to developing a logical argument is understanding deductive reasoning. Deduction is reasoning from known facts with proven rules to reach conclusions that you know are true. Facts can be either things that are directly stated in the case, assumptions you are making in the absence of explicit facts, or conclusions you have previously reached based on other deductive processes. If the facts are known to be true and the rules applied to those facts are also known to produce true conclusions, then the conclusions must be true. The rules take the form of "if set of facts A is true, then set of conclusions B must be true."

The primary challenge of deductive reasoning is coming up with the true facts and rules in the first place, since both are hard to establish for sure. Often facts need to be assumed because the case data are incomplete. Also, too often the rules are really opinions about how things should be. In developing logical arguments, you should think about the points you are making and explicitly state your assumptions or facts and the rules of inference you are applying in reaching your conclusions. Simply stated, "why" is as important as "what."

"Why" is as important as "what" because there will rarely be one clear-cut right answer to any given discussion question. Life just does not work that way. When reviewing cases, always try to ask yourself what the weaknesses of your position are, what alternative assumptions could be made, and what alternative conclusions could be reached. The main advantage to developing good deductive reasoning skills is the ability to apply basic principles to new problems.

Tools for Case Analysis

Left unsaid in the above discussion is how you decide what rule to apply and which data to consider. Your problem statement will establish the nature of the conclusions you will be trying to support but will not give you the conclusions. You will need to determine from your problem statement which principles are relevant and then look for the facts that the principles need. There is little systematic guidance that anyone can give you on how to solve problems but the following are some useful tools.

Establish your problem statement. You should design your problem statement to focus the reader of your analysis on a specific point.

Decompose the problem into parts. Typically, your problem statement will focus on a large, complex problem the firm needs to solve. They are complex and you need to try to sort out some pieces to work on independently from other pieces. For example, evaluating a firm's operating performance involves several key operating activities like the profit margins and sales volume as well as how those factors related to the amount of the owner's investment and the size of the firm's asset base. The principles presented in the chapters should help you determine productive ways to decompose problems.

Classifying the problem into general categories can assist decomposition. Try to sort out the basic topics involved, and this will narrow your search for the appropriate principles. However, cases assigned in one section of the course often include issues that are related to topic areas previously covered in the course. Therefore, do not just focus on principles in the current reading.

Refer to similar cases you have solved. Analogical reasoning also can facilitate problem solving. That is, by asking how the current case is similar to other cases or situations with which you are familiar. Determining analogies involves determining what characteristics of the current case are similar to, or different from, previous cases and then using those similarities and differences to modify the solution path for the previous case to fit the current case.

How to Structure Key Deductive Conclusions

In performing your case analysis, you will have to draw conclusions and make recommendations. The following discussion lists the components of classes of conclusions you will need to address in most case write-ups. Some examples are included in italics.

Descriptive

Descriptive questions ask you to characterize something about the firm in the case in some way. Does the firm have any long-term debt? A good answer would include:

1. Statement of your characterization. *The firm has $1.5 billion in long-term debt.*
2. Facts from the case that support your characterization. *Long-term debt is shown in the liability section of the Balance Sheet and*

the firm shows $1.5 billion in the long-term liability section of the Balance Sheet.

3. Discussion of how each fact supports your characterization. The long-term liability section of the Balance Sheet is the only place where long-term debt is reported and that section includes all of the firm's long-term debt.

Recommendations for action

Recommendations ask you to review a firm's situation and recommend what action they should take. Sometimes the question will include a list of alternatives, but frequently you will have to generate your own alternatives. A good answer would include:

1. Your recommendation. Your recommendation should be specific to the case, solve the problem you have identified, and take a stand. You should recommend a specific action, not a set of possible actions. The firm should stop producing product A.

2. A description of the problem your recommendation is supposed to solve, if this has not been described in the question. Since gross profit is falling, and pricing changes and production cost reductions are not options, some changes in the product line are needed.

3. Reasons that support your recommendation. That is, how your recommendation will solve the problem you have identified. Supporting reasons should have two components: a fact or set of facts from the case and a decision rule. A decision rule is a principle from the text that shows how you can draw a specific conclusion from a set of facts. In the following example, the first sentence is the set of facts and the second is the decision rule. The contribution margin for product A is negative. Unless there are compelling reasons for keeping a product in the product line, products that do not contribute to overhead should be dropped.

4. Drawbacks to your recommendation. No recommendation is ever perfect. There are always some problems. You should identify major problems to show that you have considered them. Customers expect to have product A available from firms of this type. However, product B is a close substitute and is much more profitable than A.

Evaluation Questions

Evaluation questions ask you to rate a firm on some attribute or set of attributes. Evaluate the financial position of the firm. A good answer would include:

1. Your evaluation. Typically, good, bad or in-between. The firm's short-term financial position is quite good.

2. Criteria used. A statement of principles from the course that apply to your evaluation decision. The current ratio shows the relationship between current assets and the current liabilities that will need to be paid with those assets. The rule of thumb is that the current ratio should be at least 2 to 1.

3. Evidence from the case that supports your evaluation. Here you will need to include the data, why the data are relevant to your evaluation, and the basis of comparison. Their current ratio is 3.5 and stable for the last five years. A current ratio of 3.5 to 1 is substantially above the benchmark of 2 to 1.

4. A discussion of any counter evidence from the case using the same three components (data, relevance, and benchmark). Their days' receivables have been steadily increasing over the last five years. Accounts receivable is a current asset and, therefore, increases in accounts receivable increase the current ratio. However, the increase in collection period may create cash flow problems and reduce the firm's ability to promptly pay short-term debt if the increase continues.

Diagnosis

Diagnostic questions ask you to determine the cause of some set of problems the firm is having. What is causing the firm's cash flow problems? Answers to diagnostic questions draw on an understanding of the causal factors that influence aspects of a firm's performance. Your answer should include:

1. A statement of the problem, if it is not included in the question. The firm has a minimal cash balance and low current and quick ratios.

2. A statement of the cause. The main thing to consider is that your stated cause could actually cause the problem in the case. Included in this is some sense of magnitude. The cause you cite should be significant enough to cause (or at least be a major contributing factor to) a problem of the magnitude described in the case. They are using short-term sources of funds to purchase equipment.

3. Evidence in the case that shows the cause exists. Their only major source of financing cash flows is a short term line-of-credit. As

shown in the cash flow statement, this financing source accounted for 75% of the cash flows for investment, which were used for equipment purchases.

4. A decision rule or principle that shows how the cause can cause the problem. Long-term assets should be financed with long-term funds instead of short-term funds. Short-term funds are needed to meet short-term liabilities as they fall due. By using short term funds for capital purchase, the firm is running the risk that they will not have sufficient cash to finance their cash conversion cycle.

5. A discussion of any counter evidence in the case. The case states that management thinks increased personnel training costs associated with expansion of their operations is the cause, but the cash flows from operations are positive and growing during the period. If operating costs, like training costs, were the problem, operating cash flow would be declining accordingly.

Prediction

Predictive questions are related to both diagnostic and evaluation questions in that they also rely on the causal relationships within the firm to produce answers, but the answers tend to be evaluative. Causal relationships and trends in the causal factors are what will determine the future level of some indicator of a firm's performance. How good will the firm's short-term financial position be next year? Your answer should include:

1. A statement of the causal factors that will influence the prediction. The main thing to consider is that your stated cause could actually cause the problem in the case and that you include all major causes. Their short-term financial position will be determined by trends in their current assets and liabilities as well as trends in their operating cash flows.

2. Evidence in the case that shows the trends in the causal factors. They have been generating strong, positive operating cash flows for the last five years and have been limiting dividends, which has generated a large, growing cash balance.

3. A discussion of any counter evidence in the case. They have not been reinvesting in property, plant, and equipment and may have to do so shortly, which would drain their cash reserves.