

# *Is your CFO Smarter than a Sophomore?: Applying Economics to Managerial University Decisions*

## How would your students evaluate these university policies?

The university quotes the ROTC program a \$10,000 fee to exchange round tables for long tables for their banquet.



University catering considers undercutting the market by 10% for internal clients. Is price the only factor in comparing catering services?



Student clubs and departments are required to purchase food and drinks from catering instead of outside vendors.



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## Abstract:

We teach our students the economic way of thinking in hope they will use economics to inform their everyday decisions. However, I find there is a disconnect between students' understanding of theoretical results and their ability to use it to solve real business problems. For example, my managerial students know that one should set transfer prices at marginal cost (MC) in perfectly competitive markets. But how one actually determines what is MC is a different matter. This is not that simple in the real world. In this exercise, students are forced to take theoretical concepts and apply them to circumstances when all other things are not held constant, as assumed in the theory. There are many business examples that one can use to illustrate transfer pricing. But students are quite familiar with the higher education industry and have a vested interest in having it run efficiently. Thus, this is an attractive industry to have students apply their theoretical knowledge and practice thinking like an economist.

## Using the catering example, students are expected to be able to:

- Estimate MC for catering service, including determining: What costs are fixed and variable? What is the shape of the cost curve? How does it vary over time?
- Once MC is estimated, determine at what price catering should sell their services to internal clients, i.e., at, above or below cost.
- Identify and evaluate factors that determine catering's ability to mark-up prices for external clients, including defining the market, determining market structure, and identifying implications for pricing and operation decisions.

## Economic concepts student must know:

\* Double marginalization      \* Economies of scope & scale      \* Market Definition      \* Opportunity cost      \* Transfer Pricing

## Assignment:

### Section I: Pricing of Services

- Suppose ROTC wants to hold their banquet in the cafeteria and has requested that the university exchange 100 round tables for 100 long tables. Assume the following: a) The round tables are stored in a building that requires a 20 minute roundtrip door to door. b) You have 10 workers. Calculate the cost of providing this service. (You will have to make assumptions. Specify them and explain why they are reasonable to make.)
- Suppose facilities management quotes ROTC, an internal client, a \$10,000 fee to exchange the tables. Should the CFO be concerned about this pricing policy? Explain.
- Explain why facilities management and the CFO would price goods and services differently.

### Section II: Setting Prices for Internal Client Sponsored Receptions

- How do you set the price for an internal client? Provide a more complex answer than set price at MC. Explain how you calculate it. (*The question is*

*open-ended so that students themselves think through the entire problem. If necessary, direct them to answer the following questions: What costs are fixed and variable? What is the shape of the cost curve? How does it vary over time?)*

- In what situations is catering's MC not constant? Provide at least two examples.

- Provide at least two economic reasons why we do not see prices tailored to reflect varying MC.

### Section III: Setting Prices for External Client Sponsored Receptions

- Define the market in which the university is competing for external customers. Explain why. Also, identify the range of competitors.
- What market structure best reflects competition in this market? Explain why. (Hint: first list the characteristics of different market structures and then identify real world illustrations in this market to determine relevant structure.)
- Now describe how you will determine the price to charge. (Hint: what piece of information is missing?

Be specific in how you will construct the data.)

### Section IV: Current and Proposed Food Policies

- For internal clients, the university is considering undercutting the market by 10% for its catering services. Evaluate this proposal.
- All food for student clubs and faculty meetings must be purchased from university catering. Evaluate this policy change.
- The university sells its own bottle water because it can save on paying profit to an outside vendor. Evaluate the merits of this rationale.
- Each university center (e.g., food service) must generate an X% margin in order to cover university wide fixed costs. Define the margin as (revenue - direct costs)/revenue. Assume the following: student dining will be provided even at a loss, and no new infrastructure for food service is needed for catering beyond what is needed for student dining. Given above, how do you calculate the profit margins on catering service?