

# Managerial economics assignment

[Profession](#), [Manager](#)



Students are introduced to functional forms of supply and demand curves in this chapter and students with less extensive economics backgrounds might not be familiar with this analysis. However, this concept is not one that causes difficulty for most students. Instructors can use the Managerial Applications to generate class discussion, particularly for the non-quantitative topics such as property rights.

The final sections of the chapter are particularly relevant to the material presented in the rest of the text since they focus on the creation and use of knowledge and how it is used to make decisions by individuals in markets and within firms. 3-2 There are numerous problems that can be assigned to determine how well students understand the material. The Self-Evaluation Problems review the quantitative tools presented in the chapter. The Review Questions review both the graphical and quantitative analyses presented in the chapter.

These questions can be used in class to review the major concepts of the chapter in place of extensive lecturing depending on the background of the students and the instructor's goal for the course. There are five Analyzing Managerial Decisions scenarios presented in the chapter. The first, [? Comparative Advantage in the Workplace], asks students to determine each employee's comparative advantage and to determine how work activities can be reassigned to be more productive.

The second scenario, [? Ethanol and Pork Prices], asks students to conduct a graphical analysis of how government legislation will likely affect the supply and demand in two markets. The third scenario, [? Nobel Prize- Winner F. A.

Hayes on the ‘Miracle’ of the Price System], asks students to consider the difference between decentralization economic decision making in a market and centralizing it in a firm. What is different about a firm that can make the link between decentralization and efficiency less clear?

The fourth scenario, ‘Property Right Security in Russian Deprivation’s is a more comprehensive scenario that asks students to consider how deprivations will likely affect a variety of economic actors and why a policy to deprivations might be adopted. The Tindal scenario, ‘Shareholder Value and Market Efficiency], is located at the end of the chapter after the appendix. This scenario reviews the concepts and quantitative tools presented in the appendix. See the Solutions Manual for the answers to these problems).

REVIEW QUESTIONS 3-1 . What is Parent efficiency?

Why do economists use this criterion for comparing alternative economic systems? An allocation of resources is Parent efficient when there is no alternative that keeps all individuals at least as well off, but makes at least one person better off. One reason that economists use this criterion for comparing economic systems is that it is relatively uncontroversial. Stronger criteria are likely to be met with more disagreement. 3-2. What is a property right? What role do property rights play in a market economy? A property right is a socially-enforced right to select the uses of an economic good.

A property right is private when it is assigned to a specific person. Property rights are alienable when they can be transferred (sold or given) to other individuals. Since owners bear the wealth effects of their actions, there are strong incentives to rearrange property rights in market transactions to

increase efficiency and value. 3-3 3-3. Twin brothers, Tom and Bill, constantly fight over toys. For instance, Tom will argue it his turn to play with a toy, while Bill argues it is his turn. Their parents frequently eave to intervene in these disputes. Their mom has conceived an idea that might reduce these conflicts.

In particular, every toy in the house would be “ owned” by one of the boys. The owner would have complete authority over the use of the toy. The mom reasons that ownership would cut down on disputes. Any time, there is an argument over a toy, the owner gets the final and immediate say. The boys’ dad is concerned that this idea will prevent the boys from learning to ? share. ] He envisions that under the new system, Tom will not allow Bill to play with his toys and Bill will not allow Tom to play with his toys. The current system forces them to figure out a way to share the toys.

Do you think that their dad’s concerns are valid? Explain. The dad does not foresee that the boys are likely to find it in their self interest to share. Bill will allow Tom to play with some of his toys, so that he can play with some of Tom’s toys (there are gains from trade). The mom is likely to be right that ownership will cut down on the number of disputes and will reduce the parents’ role in intervening in disputes. The parents, however, will be charged with helping to enforce the property rights. 3-4. Many economists favor free trade between nations.

They argue that free trade will increase total world output and make people to trading nations better tot . Discuss how this argument relates to concepts presented in this chapter. Free trade allows countries to concentrate on

producing goods and services for which they have a comparative advantage. This specialization increases the total production of goods in the global economy. Thus, each nation can be better off with free trade than if they individually tried to be self sufficient. (Free trade increases the size of the total pie; thus allowing all countries to have a bigger piece. ) 3-5.

What do you think will happen to the price and quantity of DVD players if: a. The availability of good movies to play on DVD players increases? An increase in good movies is likely to increase the demand for DVD players and thus their quantity and price. B. Personal income increases? An increase in personal income is likely to increase the demand for DVD players and thus their quantity and price. C. The price of inputs used to produce DVD players decreases? 3-4 The decrease in input prices is likely to increase the supply of DVD players and thus quantity is likely to increase, while price is likely to decrease. Ticket prices at local movie theaters decline substantially? The decline in movie ticket prices might reduce the demand for DVD players and thus the quantity and price are likely to decrease. 3-6. Suppose that the U. S. Government caps the price of milk at \$1. 00/gallon. Prior to the cap milk sold for \$1. 00/gallon. Picture the effects of the price cap using a supply and demand graph. Explain how the cap affects consumers and producers. P Price As pictured in the graph, the price cap (assuming it is below the equilibrium price) creates a shortage where the quantity demanded is greater than the quantity applied.

Total surplus is reduced by the price cap. The lost total surplus is pictured by triangle b (lost consumer surplus) and triangle d (lost producer surplus). The

lost surplus reflects the forgone gains from trade due to the cap (consumers in this region are willing to pay more for the milk than what it costs for producers to make it, but trade does not take place because of the price cap). There is also a transfer from producers to consumers as pictured by rectangle c. Thus, some consumers are potentially made better off by the price cap since they are able to buy milk at below the free market price.

However, they may have to incur costs to get the regulation passed. 3-7. A.

What is an externalities? An externalities is when one party's action affects the utility or profits of another party. Externalities might be positive or

negative. B. Why might externalities lead a firm to discharge too much

pollution into a river? Some of the costs of the pollution are borne by others

(there is an externalities), and so the firm does not consider these costs in its decision making (unless the costs are low for negotiating with the harmed

parties in which case the firm faces an opportunity cost of not being paid to

lower the pollution level). -5 Congress has passed a law that limits the level

of cotton dust within textile factories. Why might a textile firm allow too

much cotton dust within its workplace? Since the firm must hire the workers

who would be exposed to the air pollution within the factory, there is no

externalities. Lower air quality makes the job less attractive and thus raises

the wage the firm has to pay its employees. Thus, there are private

incentives for the firm to choose the efficient level of air quality within the

factory. What is the difference between general and specific knowledge?

How can specific knowledge motivate the use of decentralized decision

making? General knowledge is inexpensive to transfer, while specific

knowledge is expensive to transfer. If individuals have important specific knowledge, it can be efficient to grant them decision rights so that they can act on this information. Prices or information from administrators can be used to coordinate the actions of these decentralized decision makers. As discussed in more detail in subsequent chapters, however, it is also important to consider incentives.

Decentralized decision makers require proper incentives to motivate them to make productive use of their specific information. 3-9. Evaluate the following statement: Using free markets and the price system always results in a more efficient resource allocation than central planning. Just look at what happened in Eastern Europe. The demise of many centrally-planned economies suggests that central government planning in a large economy is likely to be inefficient. Nevertheless, the observation does not suggest that all central planning is bad.

Sometimes it can reduce transaction costs relative to the use of markets. This argument provides an explanation for the existence of firms where there is often central economic planning. (But in a market economy, these firms constantly face competition from markets and other firms as alternate methods of organizing production; this ongoing competition provides powerful incentives to maintain efficient markets. ) What are contracting costs? Contracting costs include search and information costs, bargaining and decision costs, and policing and enforcement costs. . Give a few examples of contracting costs? 3-6 Examples include the search and negotiation of prices in a market, legal disputes over contracts, monitoring

employees, and so on. C. What effect does the existence of contracting costs have on market economies? Contracting costs imply that markets are not always the best way to organize economic activities. Sometimes the creation of firms can lower contracting costs. Therefore, in most market economies, you see both market transactions as well as marketed transactions that occur within firms.

Sometimes contracting costs are reduced by organizing transactions within firms. 3-11. If markets are so wonderful, why do firms exist? Firms exist because of the contracting costs associated with markets. For example, the presence of firms can reduce the number of transactions between customers and factors of production from  $n \times m$  to  $n + m$ . Another example is the contracting cost associated with firm-specific assets. Including the asset in a firm can be preferable to outsourcing (using the market) to reduce hold-up costs. 3-12. In certain professional sports, team owners “own” the players.

Owners can sell or trade players to another team. However, players are not free to negotiate with other team owners on their own behalf. The team owners initially obtain the rights to players through an annual draft hat is used to allocate new players among the teams in the league. They can also obtain the rights to players by purchasing them from another team. Players do not like this process and often argue that they should be free to negotiate with all teams in the sporting league. In this case, they would be free to play for the team that offers the most desirable contract.

Owners argue that this change in rights would have a negative effect on the distribution of talent across teams. In particular, they argue that all the good



players would end up on rich, media-center teams such as New York or Los Angeles (because these teams could afford to pay higher salaries). The inequity of players across teams would make the sport less interesting to fans and thus destroy the league. Do you think the owners' argument is correct? Explain. 3-7 Absent contracting costs, the assignment to players to teams is not likely to be greatly influenced by who has the property right to decide where the player plays (the Coase theorem).

Rather both the owners and the players will have incentives to have players play at locations where they create the most value. For instance, suppose the Minnesota team has the right to a player who is more highly valued in Los Angeles. The owner of the Minnesota team will have the incentive to sell the player to Los Angeles. If the player can decide where to play, he is likely to go to Los Angeles because they will offer him more money. What does vary between the two ownership systems is the distribution of wealth. The owners are better off under the current system and thus have incentives to argue on its behalf.

New York and Los Angeles are likely to have strong teams under either system. However, the argument that they will get "all the good players" is unlikely to be valid. Once these teams have a sufficient number of stars, the marginal value of additional stars is likely to be lower for the big-market teams than for small-market teams which have fewer star players. 3-13. The guide at the Washington Monument tells your 10-year-old nephew, "Enjoy the monument. As a citizen you are one of its owners." Your nephew asks you if that is true. What do you say?

The nephew owns the monument only in a very limited sense. He does not have a private property right that allows him to decide on the use of the monument. Also he cannot sell his claim. 3-14. Locust Hill Golf Club is a private country club. It charges an initiation fee of \$23, 000. When members quit the club, they receive no refund on their initiation fees. They simply lose their membership. Salt Lake Country Club is also a private golf course. At this club, members join by buying a membership certificate from a member who is leaving the club.

The price of the membership is determined by supply and demand. Suppose that both clubs are considering installing a watering system. In each case, the watering system is expected to enhance the quality of the golf course significantly. To finance these systems, members would pay a special assessment of \$2, 000 per year for the next 3 years. The proposals will be voted on by the memberships. Do you think that the membership is more likely to vote in favor of the proposal at Locust Hill or for the one at Salt Lake Country Club? Explain. 3-8 At Locust Hill the members do not have an alienable property right.

If they pay for the improvement they must play the course to get any benefits. Members who expect to leave the club in the near future (older members and people who are more likely to be transferred in their jobs) are less likely to support the proposal. They bear the full costs (assuming they will be there three years) and receive limited benefits. At the Salt Lake club, members leaving the club can sell their memberships. They will favor the

new investment as long as the increase in the value of the membership is greater than the investment costs (it is a positive net present value project).

Thus the members ATT e alt n S Lake Country Club are more likely to approve the proposal. 3-15. Critically evaluate the advice of the Providence Consulting Group, which recommended to your company: ? That you analyze all the business divisions in your company. Rank them on growth potential. Sell all the low-growth units and invest the money in the high-growth units. Make sure not to sell the high-growth units. ] This advice does not make economic sense. Basic economics says that you should sell if and only if the unit is more valuable to someone else than to you (I. E. They are willing to pay a higher price than it is worth to you). Selling low growth units will decrease value if the price is lower than the value to your firm. Value is also wasted if you keep high-growth units that are more valuable to some other firm. As I discussed in class, this was a major conceptual problem with strategic planning in the asses. -16. Suppose that the U. S. Government begins charging a \$1 sales tax to all consumers for each dress shirt they buy. A. What is likely to happen to the price (not including the tax) and quantity demanded of dress shirts? Show using supply and demand graphs. -9 The price is likely to fall and the quantity demanded is likely to decrease: What is likely to happen to the demand for sport shirts (not taxed) and undershirts (which are worn primarily with dress shirts)? Explain. The demand for sports shirts is likely to increase since they are likely to be a substitute for dress shirts. Recall that if he price of a substitute increases the demand for the product increases (positive cross elasticity). The demand for undershirts,

however, is likely to decline since they are a complement to dress shirts (negative cross elasticity). 3-17.

Title-loan firms offer high-interest loans (the interest rate can exceed 200 percent per year) to high-risk customers. The title of a car is often used as collateral. If the borrower defaults on the loan, the company can repossess the car. Recently, the financial press has reported stories of poor people who have had their cars repossessed by title lending companies. Legislation is being proposed in some states to make this lending practice illegal. A proponent of the law made the following argument. ? The market for loans is very competitive given all of the banks, savings and loans, and finance companies.

Outlawing title lending will make poor people better off. It will motivate the lending companies to provide loans with less onerous terms. Thus low income people and people with bad credit histories will be able to obtain credit on more favorable terms. L Do you agree with this argument? Explain. The person's statement does not make sense. If the market for loans is competitive as en states), loan companies would not be making abnormal profits on loans. T if the high interest rate loans are disallowed companies are unlikely to offer loans to the high-risk customers.

Assuming these people know what is in their own best interest they will be worse off because they won't be able to borrow money that they otherwise would borrow. 3-10 3-18. Two men, Robinson Crusoe and Friday, have been marooned separately on the same deserted island. There are two activities each man can undertake to obtain food: fishing and gathering coconuts.

Robinson Crusoe can catch 40 fish per hour or gather 10 coconuts per hour.

Friday can catch 10 fish per hour or gather 1 coconut per hour. Answer the following questions: a. Who is more efficient in each activity?

Could either or both of them benefit from meeting and deciding to form a trading relationship? Explain intuitively. Robinson is more efficient in both activities – he has an absolute advantage in each case. However, Friday has a comparative advantage in producing coconuts and Robinson has a comparative advantage in producing fish. Robinson has to trade 4 fish for each coconut if he produces alone, but Friday only has to trade 1.25 fish for each coconut. If each specializes in the product where he has the comparative advantage, they should both be able to benefit.

If they trade at a rate somewhere between 1.25 and 4 fish per coconut, they should be able to make themselves better off because they each get a better effective price for the commodity produced by the other than if they had to produce it themselves. B. Robinson and Friday have not yet met. Robinson is working 2 hours a day and producing (and consuming) 40 fish and 2 coconuts (note: the fish are very small). Friday is also working 2 hours a day, but he is producing and consuming 10 fish and 1 coconut. Now assume that Robinson and Friday meet and develop a trading relationship.

Come up with a production and trading scheme such that they can each work the same amount per day as before, but each is better off than before. Provide specific numbers to show how they are better off. One specific example is as follows. Say Robinson produces only fish and Friday produces only coconuts. There will be a total of 80 fish and 16 coconuts. Now suppose

they set a price of 2 fish per coconut and Robinson buys 10 coconuts (for a price equal to 20 fish). Then Robinson ensures 60 fish and 10 coconuts and Friday consumes 20 fish and 6 coconuts.