

Advanced Critical Thinking

Chapter 1

Suppose your university decides to lower the cost of parking on campus by reducing the price of a parking permit from €100 per semester to €5 per semester.

1. What do you think would happen to the number of students desiring to park their cars on campus?
2. What do you think would happen to the amount of time it would take to find a parking place?
3. Thinking in terms of opportunity cost, would the lower price of a parking permit necessarily lower the true cost of parking?
4. Would the opportunity cost of parking be the same for students with no outside employment and students with jobs earning €15 per hour?

Chapter 2

Suppose you are watching a news programme on television. During the programme there is a discussion of the pros and cons of free trade. For balance, there are two economists present - one in support of free trade and one opposed. Your flatmate says, "Those economists have no idea what's going on. They can't agree on anything. One says free trade makes us rich. The other says it will drive us into poverty. If the experts don't know, how is the average person ever going to know whether free trade is best?"

1. Can you give your roommate any insight into why economists might disagree on this issue?
2. Suppose you later discover that 93 percent of economists believe that free trade is generally best. Could you now give a more precise answer as to why economists might disagree on this issue?
3. What if you later discovered that the economist opposed to free trade worked for a trade union. Would that help you explain why there appears to be a difference of opinion on this issue?

Chapter 3

Suppose you are watching a news programme on television. It's reported that some European politicians have been arguing in favour of quotas to limit imports of textiles into the EU.

1. Is it likely that the EU will be better off if textile imports are limited by quotas? Explain.
2. Will anyone in the EU be better off if textile imports are limited? Explain.

3. In the real world, does every person in a country gain when restrictions on imports are reduced? Explain.

Chapter 4

Suppose you are chatting to a friend in Brazil on the internet. Your friend tells you that the weather is forecast to be really cold in the next few weeks and the frost that's expected will damage the coffee crop. Your friend says, "If there are going to be fewer coffee beans available, I'll bet that coffee bean prices will rise. We should buy enormous quantities of coffee beans now and put them in storage. Later we will sell them and make a huge profit."

1. If this information about the weather is publicly available so that all buyers and sellers in the coffee bean market expect the price of coffee beans to rise in the future, what will happen immediately to the supply and demand for coffee beans and the equilibrium price and quantity of apples?

2. Can you "beat the market" with public information? That is, can you use publicly available information to help you buy something cheap and quickly sell it at a higher price? Why or why not?

3. Suppose the expected frost in Brazil is not reported outside of Brazil. Can you "beat the market" with inside information? Why?

Chapter 5

In order to reduce smoking, the government places an additional tax of £2 per pack on cigarettes. After one month, while the price to the consumer has increased a great deal, the quantity demanded of cigarettes has been reduced only slightly.

1. Is the demand for cigarettes over the period of one month price elastic or price inelastic?

2. Suppose you are in charge of pricing for a tobacco firm. The chief executive of your firm suggests that the evidence received over the last month demonstrates that the cigarette industry should get together and raise the price of cigarettes further because total revenue to the tobacco industry will certainly rise. Is the president of your firm correct? Why?

3. As an alternative, suppose the chief executive of your tobacco firm suggests that your firm should raise the price of your cigarettes independent of the other tobacco firms because the evidence clearly shows that smokers are insensitive to changes in the price of cigarettes. Is the president of your firm correct if it is his/her desire to maximize total revenue? Why?

Chapter 6

Suppose that the government needs to raise tax revenue. A politician suggests that the government place a tax on food because everyone must eat and, thus, a food tax would surely raise a great deal of tax revenue. However, since the poor spend a large proportion

of their income on food, the tax should be collected only from the sellers of food (grocery stores) and not from the buyers of food. The politician argues that this type of tax would place the burden of the tax on corporate grocery store chains and not on poor consumers.

1. Can the government legislate that the burden of a food tax will fall only on the sellers of food? Why or why not?
2. Do you think the burden of a food tax will tend to fall on the sellers of food or the buyers of food? Why?

Chapter 7

Suppose you are having an argument with your flatmate about whether the EU should subsidize the production of food. Your roommate argues that since food is something that is unambiguously good (unlike alcohol and tobacco) we simply cannot have too much of it. That is, since food is clearly good, having more of it must always improve our economic well-being.

1. Is it true that you cannot have too much of a good thing? Conversely, is it possible to overproduce unambiguously good things such as food, clothing, and shelter? Why?
2. In Exhibit 5, demonstrate your answer to question (1) above with a supply and demand graph for food by showing the impact on economic well-being of producing quantities in excess of the equilibrium quantity.

Chapter 8

Suppose you live in a country whose government has a budget deficit of €100 million. Since the government currently collects exactly €100 million from its 5 percent sales tax, your flatmate says, "I can tell them how to fix their deficit. They should simply double the sales tax to 10 percent. That will double their tax revenue from €100 million to €200 million and provide the needed €100 million."

1. Is it true that doubling a tax will always double tax revenue? Why?
2. Will doubling the sales tax affect the tax revenue and the deadweight loss in all markets to the same degree? Explain?

Chapter 9

You are watching the nightly news during an election campaign in which trade policy has been a big issue. A member of the public being interviewed says, "I'm for free trade, but it must be fair trade. If our foreign competitors will not raise their environmental regulations, reduce subsidies to their export industries, and lower tariffs on their imports of our goods, we should retaliate with tariffs and import quotas on their goods to show them that we won't be played for fools!"

1. If a foreign country artificially lowers the cost of production for its producers with lax environmental regulations and direct subsidies and then exports the products to us, who gains and who loses in our country, producers or consumers?

2. Continuing from question 1 above, does our country gain or lose? Why?
3. If a foreign country subsidizes the production of a good exported to our country, who bears the burden of their mistaken policy?
4. What happens to our overall economic well-being if we restrict trade with a country that subsidizes its export industries? Explain.
5. Is there any difference in the analysis of our importation of a good sold at the cost of production or sold at a subsidized price? Why?
6. Is it a good policy to threaten trade restrictions in the hope that foreign governments will reduce their trade restrictions? Explain.

Chapter 10

Suppose you are at home for a semester break. A letter in your local newspaper catches your attention. The letter is about a deduction in local property tax that can be claimed by a property owner if he or she has done anything to beautify his/her property. The property owner can deduct 50 per cent of any expenditure on things such as landscaping from his/her property taxes. For example, if your parents spent €2000 on landscaping their garden, they can reduce their tax bill by $0.50 \times €2000 = €1000$ so that the effective cost of the landscaping would be only €1000. The letter in the newspaper claims: "This an outrage. If someone wants to improve their house, it is no one's business but their own. I remember some of my college economics and I know that taxes and subsidies are always inefficient."

1. What is the local government trying to subsidize with this tax break?
2. What is the externality that this subsidy is trying to internalize?
3. While taxes and subsidies usually create inefficiencies, are taxes and subsidies always inefficient? Why?

Chapter 11

Broadcast television and broadcast radio send out signals that can be received by an infinite number of receivers without reducing the quality of the reception of other consumers of the signal and it is not possible to charge any of the consumers of the signal.

1. What type of good (private, public, common resource, produced by a natural monopoly) is a broadcast television or broadcast radio signal? Explain.
2. Are goods of this type normally provided by private industry? Why?

3. Private companies have been providing broadcast radio television and radio since the invention of the medium. How do they make it profitable if they cannot charge the recipient of the signal?

4. What are the "recent" alternatives to traditional commercial television and commercial radio?

Chapter 12

You are having a political debate with a friend. The discussion centres on taxation. You show your friend some data from your economics textbook that suggests that the average citizen paid about €10,000 in tax in 2005. Your friend says, "If €10,000 per person is what it takes to run this country, then I think that it would be much simpler if we just billed each citizen €10,000 and eliminated the complex tax system."

1. What type of tax is your friend suggesting? What is its appeal?

2. Is this type of tax supported by the "benefits principle" of tax equity? Explain.

3. Is this type of tax supported by the "ability-to-pay" principle of tax equity? Is it vertically equitable? Is it horizontally equitable?

4. Since your friend agrees that the tax she suggested is not equitable, she now suggests that we simply tax rich corporations since they can clearly afford it and then people wouldn't have to pay any taxes. Is she correct? Who would actually pay the taxes? Explain how she mistakenly employed the flypaper theory of taxation.

Chapter 13

Your friend has a large garden and grows fresh fruit and vegetables to be sold at a local "farmer's market." Your friend comments, "I hired a college student who was on summer vacation to help me this summer and my production more than doubled. Next summer, I think I'll hire two or maybe three helpers and my output should go up more than three- or fourfold."

1. If all production processes eventually exhibit diminishing marginal product of the variable inputs, could it be true that your friend hired a helper (doubled the labour) and more than doubled his production? Why?

2. Is it likely that he could hire more workers and continue to reap greater than proportional increases in production? Why?

3. In the long run, what must your friend do to the scale of his operation if he wants to continue to hire workers and have those workers generate proportional increases in production? Explain. Even in the long run, could your friend expand his scale of operation forever and continue to keep average total costs at a minimum? Explain.

Chapter 14

In some places it is common for large supermarkets to stay open 24 hours a day.

1. Suppose you walk into a large supermarket at 2 am with a friend to buy some blank CD-Rs. Your friend says, "I can't believe that these stores stay open all night. Only one out of fifteen checkout lines is open. There can't be more than ten shoppers in this store. It just doesn't make any sense for this store to be open all night." Explain to your friend what conditions must be true for it to be to the advantage of the supermarket to stay open all night.
2. Are the costs of rent, equipment, fixtures, salaries of management, and so on, relevant when the supermarket makes the decision whether to stay open at night? Why?
3. If the supermarket had the same number of customers during its daytime hours as you observed during its nighttime hours, do you think it would continue to operate? Explain.

Chapter 15

Suppose you are watching a television business programme. A consumer advocate is discussing the airline industry. He says, "There are so many rates offered by airlines that it is technically possible for a 747 to be carrying a full load of passengers where no two of them paid the same price for their tickets. This is clearly unfair and inefficient." He continues, "In addition, the profits of the airlines have doubled in the last few years since they began this practice and these additional profits are clearly a social burden. We need legislation that requires airlines to charge all passengers on an airplane the same price for their travel."

1. List some of the ways airlines divide their customers according to their willingness to pay.
2. Is it necessarily inefficient for airlines to charge different prices to different customers? Why?
3. Is the increase in profits generated by this type of price discrimination a social cost? Explain.

Chapter 16

Suppose you are reading your local newspaper. An advertisement says in large letters: "Come on down to Warehouse Electronics. We've got deals so great you won't believe it! National brand 13-inch colour television sets for €99. The price is so low that we can't tell you the name of the manufacturer!"

1. Why would Warehouse Electronics be unable to reveal the name of the manufacturer when it advertises its television sets for an unusually low price?
2. Although this activity appears like price fixing, is the objective of this practice to reduce competition? Why?
3. Why would the manufacturer place this type of restriction on the retailers that sell its products?

Chapter 17

Suppose you are watching a sporting event on television. An advertisement featuring Tiger Woods (a famous golfer) is broadcast during a commercial break. In the advertisement, Tiger Woods does nothing but hit golf balls. He never speaks. There is no written copy. At the end of the advertisement, the Nike "swoosh" appears on the screen along with the words "Nike Golf." A short time earlier, you read in a newspaper that Tiger Woods received \$40 million to be the spokesperson for Nike golf equipment.

1. A friend watches the Nike advertisement with you and says, "What a waste of society's resources. I didn't learn anything about Nike golf equipment from that ad. I think there should be government regulations requiring ads to be informative in some way." Explain to your friend what you did learn from Tiger Wood's presence in this advertisement.
2. Did the use of the Nike name and Nike "swoosh" provide any information? Explain.
3. In general, does advertising tend to decrease competition and raise prices to consumers or increase competition and reduce prices to consumers? Why?

Chapter 18

Suppose you are watching a debate about immigration on television with a friend. The participants represent two camps – trade unions and corporate industry. The trade union representative argues against increased immigration while the industry representative argues in favour. Your friend says, "I can't believe that these two groups can't get together on this issue. Both firms and workers join forces to produce our industrial output. I would think that their interests would be similar. Maybe a better arbitrator could help these groups find a position on immigration that would satisfy both groups."

1. If there were increased immigration, what would happen to the value of the marginal product of labour and the wage?
2. If there were open immigration, what would happen to the value of the marginal product of capital and land and their rental rates?
3. Are the positions that each group takes on immigration consistent with their interests? Explain. Is there likely to be a solution that satisfies both?

Chapter 19

Suppose you are at a political rally. A speaker states that working women earn about 60 cents for each euro that working men earn. The speaker says, "This is clearly evidence of employers' discrimination against women. This gap between the earnings of men and women will never close because the professions women tend to choose are traditionally low paying and the professions men choose are traditionally high paying. I demand that the government create a panel to decide what jobs should pay so that people of similar skills and education earn the same amount."

1. Suppose a secretary and a truck driver are judged to require the same level of education and skills, yet a secretary earns €30,000 while a truck driver earns €40,000. What would happen to the quantities supplied and demanded in the market for secretaries and truck drivers if the wage for these professions were set by law at €35,000?
2. What would happen to the level of effort and natural ability of the workers available in each market? What would happen to the quality of work generated in each market?
3. Suppose it is true that the skills and education required to do each job are, in fact, nearly identical. What explanation would an economist likely propose to explain why the equilibrium wage differs by €10,000 across these markets?

Chapter 20

Suppose a friend comments to you, "I think welfare recipients are simply lazy spendthrifts. I have a friend who receives Temporary Benefit for Needy Families and when she was offered a part-time job, she turned it down."

1. What tends to happen to a benefit recipient's benefits if they increase their earnings?
2. What is the effective tax rate on their additional income if they were to lose €1 in benefits for each euro of additional income?
3. How does this system affect a benefit recipient's incentive to work? Is a benefit recipient necessarily lazy if they turn down a part-time job?

Chapter 21

Suppose Marc and Nathalie both buy only two goods: food and wine. Consider what happens to their purchasing behaviour when the price of food falls.

1. It is observed that if the price of food falls, then Marc buys more food and more wine? Explain why this happens.
2. It is observed that if the price of food falls, then Nathalie buys more wine but less food? Explain why this happens.

Chapter 22

When you buy motor insurance the policy will generally stipulate that the policyholder is responsible for the first part of any claim; for example, you might have to pay the first €250 or €1,000 of any claim and the insurance company would pay the rest. The amount you would have to pay is called the deductible.

1. How does this arrangement help to deal with the problem of moral hazard?
2. How does this arrangement help to deal with the problem of adverse selection?

Chapter 23

Suppose you are watching a news report with a friend. The news report points out that a certain African nation generates a GDP per capita of only \$1,300 per year. Since your friend knows that UK GDP per capita is approximately \$26,000, he suggests that Britons are materially 20 times better off than the people of the African nation.

1. Is your friend's statement accurate?
2. What general category of production is not captured by GDP in both the United Kingdom and the African nation?
3. Provide some examples of this type of activity.
4. Why would the exclusion of this type of production affect the measurement of African output more than UK output?
5. Does this mean that residents of the African nation are actually as well off materially as residents in the United Kingdom?

Chapter 24

Suppose you've been talking to a friend's father who told you that he gave up smoking cigarettes in 1995. When you asked him why he quit, you got a surprising answer. Instead of reciting the health benefits of quitting smoking, he said, "I quit because it was just getting too expensive. I started smoking in 1965 and cigarettes were only 45 cents a pack. The last pack I bought was €2.00 and I just couldn't justify spending more than four times as much on cigarettes as I used to."

1. In 1965, the CPI was 31.5. In 1995 the CPI was 152.4. While it is commendable that your friend's father quit smoking, what is wrong with his explanation?
2. What is the equivalent cost of a 1965 pack of cigarettes measured in 1995 prices?
3. What is the equivalent cost of a 1995 pack of cigarettes measured in 1965 prices?
4. Do both methods give you the same conclusion?
5. The preceding example demonstrates what economists refer to as "money illusion." Why do you think economists might choose the phrase "money illusion" to describe this behaviour?

Chapter 25

You are having a discussion with some friends. The conversation turns to a supposed lack of growth and opportunity in the Europe when compared to some Asian countries such as Japan, South Korea, Taiwan, and Singapore. One of your friends says, "These Asian countries must have cheated somehow. That's the only way they could have possibly grown so quickly."

1. Have you learned anything in this chapter that would make you question your friend's assertion?
2. The phenomenal growth rate of Japan since World War II has often been referred to as the "Japanese miracle." Is it a miracle or is it explainable?
3. Are the high growth rates found in these Asian countries without cost?

Chapter 26

Suppose you are listening to an opposition party spokesperson being interviewed on radio during an election campaign. When questioned about their position on economic growth, the spokesperson says, "We need to get this country growing again. We need to use tax incentives to stimulate saving and investment, and we need to get the budget deficit down so that the government stops absorbing our nation's savings."

1. If the opposition party's spending plans remain unchanged from current government spending, what inconsistency is implied by the spokesperson's statement?
2. If the opposition party truly wishes to decrease taxes and decrease the budget deficit, what has the spokesperson implied about his party's plans for government spending?
3. If policy makers want to increase growth, and if policy makers have to choose between tax incentives to stimulate saving and tax incentives to stimulate investment, what might they want to know about supply and demand in the loanable funds market before making their decision? Explain.

Chapter 27

Suppose you are about to graduate with a first class degree in economics. Your boy/girlfriend's parents are visiting. When they arrive they find you throwing darts at the share price pages of the Financial Times, which you have pinned to your notice board on the wall. You inform them that you received a generous signing-on bonus from the company for which you agreed to work after graduation. You are now in the process of picking the shares in which you plan to invest. Your visitors are horrified. Your boy/girlfriend's father says, "There's got to be a better way to choose shares. I can give you the phone number of my stockbroker, or you could at least buy a well-known, well-managed unit trust or investment fund."

1. What is the stock valuation method to which your father is referring, and what is its goal?
2. Explain the efficient markets hypothesis to your visitors. If the efficient markets hypothesis is true, can your boy/girlfriend's father's method for picking stocks achieve its goal?

3. If the efficient markets hypothesis is true, what is the only goal of your dart throwing exercise? Explain.
4. If the efficient markets hypothesis is true, which will likely provide the greater return in the long run: your dart throwing exercise or an actively managed mutual fund? Why?

Chapter 28

Suppose you are watching the national news with your flatmate. The newsreader says, "Official unemployment statistics released today show an increase in unemployment from 6.1 percent to 6.2 percent. This is the third month in a row where the unemployment rate has increased." Your flatmate says, "Every month there are fewer and fewer people with jobs. I don't know how much longer the country can continue like this."

1. Can your roommate's statement be deduced from the unemployment rate statistic? Why?
2. What information would you need to determine whether there are really fewer people with jobs?

Chapter 29

Suppose you are a personal friend of the governor of the UK central bank, the Bank of England. He comes over to your house for lunch and notices your sofa. The governor is so struck by the beauty and comfort of your sofa that he says he simply must have it for his office. The governor buys it from you for £1,000 and, since it is for his office, pays you with a cheque drawn on the Bank of England.

1. Are there more pounds in the economy than before? Why?
2. Why do you suppose that the Bank of England doesn't buy and sell sofas, cars, and so on, instead of government bonds when it wishes to change the money supply?
3. If the Bank of England doesn't want the money supply to rise when it purchases new furniture, what might it do to offset the purchase?

Chapter 30

Suppose you explain the concept of an "inflation tax" to a friend. You correctly tell them, "When a government prints money to cover its expenditures instead of taxing or borrowing, it causes inflation. An inflation tax is simply the erosion of the value of money from this inflation. Therefore, the burden of the tax lands on those who hold money." Your friend responds, "What's so bad about that? Rich people have all the money so an inflation tax seems fair to me. Maybe the government should finance all of its expenditures by printing money."

1. Is it true that rich people hold more money than poor people?
2. Do rich people hold a higher percent of their income as money than poor people?

3. Compared to an income tax, does an inflation tax place a greater or lesser burden on the poor?
4. Are there any other reasons why engaging in an inflation tax is not good policy?

Chapter 31

Suppose you are having breakfast with your parents one Sunday. Your father is reading the paper and comments on a report that the exchange rate for the pound has just hit its lowest value in a decade. He reads on and then exclaims that JCB, a heavy equipment manufacturer, has reported that sales of their earth moving equipment have hit an all time high. Your parents are shocked by the report's positive view of the low value of the pound. They've recently abandoned plans to visit Australia because of the pound's low value.

1. Why might JCB and your parents have different opinions about the value of the dollar?
2. JCB imports many parts and raw materials for their manufacturing processes and they sell many finished products abroad. If they are happy about a low pound, what must be true about the ratio of JCB's imports and exports?
3. If someone argues that a strong pound is "good for the UK" because UK residents are able to exchange some of their GDP for a greater amount of foreign GDP, is it true that a strong pound is good for every UK resident? Why?

Chapter 32

Hong Kong has a capitalistic economic system. It was leased from China by Great Britain for 100 years. In 1997, it was returned to China, a socialist republic.

1. What do you think this event might have done to the net capital outflow of Hong Kong? Why?
2. If the residents of Hong Kong chose Canada as a place to move some of their business activity, what impact do you suppose this will have on the value of the Canadian interest rate and exchange rate? Why?
3. Which Canadian industries, those engaged in importing or exporting, are likely to be pleased with Hong Kong's investment in Canada? Why?
4. What impact will Hong Kong's return to China have on the growth rate of Canada?

Chapter 33

Suppose you are watching the evening news on television. The newsreader reports that union wage demands are much higher this year because the workers anticipate an increase in the rate of inflation. Your flatmate says, "Inflation is a self-fulfilling prophecy. If workers think there are going to be higher prices, they demand higher wages. This increases the cost of production and firms raise their prices. Expecting higher prices simply causes higher prices."

1. Is this true in the short run? Explain.
2. If policymakers do nothing and allow the economy to adjust to the natural rate of output on its own, does expecting higher prices cause higher prices in the long run? Explain.
3. If policymakers accommodate the adverse supply shock, does the expectation of higher prices cause higher prices in the long run? Explain.

Chapter 34

Suppose you are watching the news on television during a general election campaign. The opening report is a story about today's announcement that the Bank of England has raised interest rates by a quarter of a percent today to head off future inflation. The report then moves to an interview with a politician from the governing party with a marginal constituency in an industrial area. She says, "The Consumer Price Index has not increased, yet the Bank of England is restricting growth in the economy, supposedly to fight inflation. My constituents will want to know why they are going to have to pay more for their mortgages, and why their jobs are being put at risk, and I don't have a good answer. I think this is an outrage!"

1. What interest rate did the Bank of England actually raise?
2. State the Bank of England's policy in terms of the money supply.
3. Why might the Bank of England raise interest rates before the CPI starts to rise?
4. Use the politician's statement to explain why most economists believe that the central banks need to be independent of politics?

Chapter 35

Suppose a worldwide drought has reduced food production. Inflation has increased; unemployment has risen above the natural rate. Americans are frustrated with their government. Your flatmate says, "This economic mess has got to be the government's fault. A year ago, both inflation and unemployment were lower. We need to vote in a new government that knows how to get rid of this inflation and unemployment."

1. Whose fault is the stagflation that is present in the economy?
2. Are the current inflation and unemployment choices facing the economy better or worse than before the supply shock? What has happened to the short-run Phillips curve?
3. If policymakers increase aggregate demand in response to the supply shock, in what direction will the economy move along the new short-run Phillips curve? What will happen to inflation and unemployment?
4. If policymakers decrease aggregate demand in response to the supply shock, in what direction will the economy move along the new short-run Phillips curve? What will happen to inflation and unemployment?

5. Is there a policy that can immediately reduce both inflation and unemployment? Explain.

Chapter 36

Suppose you are discussing with a friend the pros and cons of the UK adopting the euro to replace the pound. You explain, correctly, that one of the criteria for judging whether a group of countries is an optimum currency area (OCA) is their degree of trade integration. And you caution that it may be wise for the to wait until there are clear plans for fiscal federalism in Euroland before joining.

1. What would you say to your friend when she points out that the UK's trade with eurozone countries represents a rather low proportion of UK GDP, and claims that therefore the UK should not adopt the euro?
2. Your friend is shocked by your apparent enthusiasm for fiscal federalism. Explain the argument in its favour.

Chapter 37

Those opposed to government budget deficits argue, among other things, that budget deficits redistribute wealth across generations by allowing the current generation to enjoy the benefits of government spending while future generations must pay for it.

1. Under which of the following cases would you argue that there is a greater intergenerational transfer of wealth? Why?
 - a. The government increases spending on social programs by buying apples and oranges for the poor but refuses to raise taxes and instead increases the budget deficit.
 - b. The government increases spending on bridges, roads, and buildings but refuses to raise taxes and instead increases the budget deficit.
2. Does the preceding example provide a method by which we might judge when a government budget deficit is fair to each generation and when it is not? Explain.
3. Why might this method be difficult to enforce in practice?