WHAT IS ECONOMICS?

1

# LEARNING OBJECTIVES:

### By the end of this chapter, students should understand:

* that economics is about the allocation of scarce resources.
* that individuals face trade-offs.
* the meaning of opportunity cost.
* how to use marginal reasoning when making decisions.
* how incentives affect people’s behaviour.
* why trade among people or nations can be good for everyone.
* why markets are a good, but not perfect, way to allocate resources.
* that governments can improve market outcomes.
* the difference between macroeconomics and microeconomics.
* that an economy’s standard of living is related to its ability to produce goods and services.
* that prices rise when governments print too much money.

# CONTEXT AND PURPOSE:

Chapter 1 is the first chapter in a two-chapter section that serves as the introduction to the text. Chapter 1 introduces the fundamental principles on which the study of economics is based. In a broad sense, the rest of the text is an elaboration on these principles. Chapter 2 will develop how economists approach problems.

The purpose of Chapter 1 is to lay out the economic principles that will serve as building blocks for the rest of the text. The principles can be grouped into three categories: how people make decisions, how people interact, and how the economy works as a whole. Throughout the text, references will be made repeatedly to these principles.

# KEY POINTS:

* Key issues arising in individual decision-making are that people face trade-offs among alternative goals, that the cost of any action is measured in terms of foregone opportunities, that rational people make decisions by comparing marginal costs and marginal benefits, and that people change their behaviour in response to the incentives they face.
* When economic agents interact with each other, the resulting trade can be mutually beneficial.
* In capitalist economic systems, the market mechanism is the primary way in which the questions of what to produce, how much to produce and who should get the resulting output are answered.
* Markets do not always result in outcomes that are efficient or equitable and in such circumstances governments can potentially improve market outcomes.
* The field of economics is divided into two subfields: microeconomics and macroeconomics.
* Microeconomists study decision-making by households and firms and the interaction among households and firms in the marketplace. Macroeconomists study the forces and trends that affect the economy as a whole.
* The fundamental lessons about the economy as a whole are that productivity is a key source of living standards and that money growth can be a primary source of inflation.

**CHAPTER OUTLINE:**

1. The Economy and Economic Systems



Begin by pointing out that economics is a subject that students must confront in their everyday lives. Point out that they already spend a great deal of their time thinking about economic issues: prices, buying decisions, use of their time, etc.

* 1. In the economy we are faced with many decisions many involving an exchange sometimes using money as the medium.
     1. Households purchase final goods and services for final consumption and also provide the inputs into production – land, labour and capital
     2. The organisations which buy these factors and use them to produce goods and services are referred to collectively as firms.
  2. The amount of interaction between households and firms – the amount of buying and selling which takes place, represents the level of economic activity.
     1. Households and firms in a particular geographic region is referred to as the economy.
     2. Definition of **economic activity:** how much buying and selling goes on in the economy over a period of time
     3. Definition of **the economy:** all the production and exchange activities that take place every day

C. The Economic Problem

1. Three questions: What should be produced, how and who should get the goods and services produced
2. Resources to produce goods and services can be classified into land, labour or capital
   * + 1. **land** all the natural resources of the earth
       2. **labour** the human effort both mental and physical that goes in to production
       3. **capital** the equipment and structures used to produce goods and services

D. Scarcity and Choice

* 1. Our demand for wants and needs is generally greater than our ability to satisfy them.
  2. Definition of **scarcity:** the limited nature of society’s resources.

### Definition of economics: the study of how society manages its scarce resources.



As you discuss the ten principles, make sure that students realize that it is okay if they do not grasp each of the concepts completely or find each of the arguments fully convincing. These ideas will be explored more completely throughout the text.



Because most beginning students of economics have limited experiences with viewing the social/economic world from a cause-and-effect perspective, do not underestimate how challenging these principles will be for the student.

1. How People Make Decisions
   1. The economy refers to all the production and exchange activities that take place every day whether we are talking about a local area, one country or a group of countries such as the European Union.
   2. People Face Trade-offs
      1. Households and firms are faced with making choices and in doing so have to consider the benefits gained from choosing one course of action.
      2. Definition of **trade-off:** the loss of the benefits from a decision to forego or sacrifice one option balanced against the benefits incurred from the choice made.
      3. Examples include how a student spends their time, study, work or leisure, or how a firm decides to best allocate investment to gain maximum returns or how a society decides the trade-off between a clean environment or higher incomes.
      4. A special example of a trade-off is the trade-off between efficiency and equity.

### Efficiency is how society gets the most it can from its scarce resources.

1. Definition of **equity:** the property of distributing economic prosperity fairly among the members of society.
2. Equity and fairness is about opinions and therefore value judgments. Some argue that increasing fairness reduces efficiency and others argue that you can have a bigger slice of the cake believing an improvement in equality improves efficiency.
3. Recognizing that trade-offs exist does not indicate what decisions should be made. People have different opinions and belief sets.
   1. Opportunity Cost
      1. Making decisions requires individuals to consider the benefits and costs of some action.
      2. What are the benefits and costs of going to university?
4. Benefits include the intellectual enrichment and a lifetime of better employment opportunities.
5. For costs we count tuition fees, but cannot count room and board (at least not all of the cost) because students would have to pay for food and shelter even if they were not in university.
6. We would want to count the value of the students’ time since they could be working for pay instead of attending classes and studying.

### Definition of opportunity cost: whatever must be given up to obtain some item.

### Calculating opportunity cost

### We can consider the opportunity cost as a ratio expressed as the sacrifice in one good in terms of the gain in the other.



One of the hardest ideas for students to grasp is that “free” things are not truly free. Thus, you will need to provide students with numerous examples of such “free” things with hidden costs, especially the value of time.

* 1. Thinking at the Margin
     1. Many decisions in life involve incremental decisions: Should I remain in school this semester? Should I take another course this semester? Should I study an additional hour for tomorrow’s exam?

### Definition of marginal changes: small incremental adjustments to a plan of action.

### Definition of economic agents: an individual, firm or organization that has an impact in some way on an economy.

### Definition rational: the assumption that decision-makers can make consistent choices between alternatives.

* 1. People Respond to Incentives
     1. Since rational people make rational decisions by weighing costs and benefits, their decisions may change in response to changes in costs and benefits.

1. When the price of a good rises, consumers will buy less of it because its cost has risen.
2. When the price of a good rises, producers will allocate more resources to the production of the good because the benefit from producing the good has risen.
   * 1. Therefore, public policies can create incentives or disincentives that alter behaviour.

a. For example: Putting a price on plastic bags in supermarkets aims to encourage people to reuse bags.

* + 1. Sometimes policymakers fail to understand how policies may alter incentives and behaviour.

a. For example: You would think a fine on picking up your children late from day-care centres would reduce the number of late pickups.

b. However, a study in Israel showed such action had unintended consequences as parents were willing to pay the fine to have longer time in work.



If you include any incentive-based criteria on your syllabus, discuss it now. For example, if you reward class attendance (or penalize students who do not attend class), explain to students how this change in the marginal benefit of attending class can be expected to alter their behaviour.

1. How People Interact
   1. Trade Can Make Everyone Better Off
      1. Trade is not like a sports competition where one side gains and the other side loses.
      2. Trade allows individuals, firms and countries to specialize in the activities they do best. With the income that they receive from specializing they can trade with others who are also specializing and can improve their standard of living as a result.
      3. Households in developing countries gain from being able to import cheaper goods and services as a result of production going overseas. However, some workers who have lost their jobs from this relocation of production may not have alternative skills and the place where they live may not attract enough new investment for them to find suitable alternative employment.

**Activity 1—Getting Dressed in the Global Economy**

**Type:** In-class assignment

**Topics:** Specialization, interdependence, self-interest, consumer choice, international trade

**Materials needed:** None **Time:** 20 minutes **Class limitations:** Works in any class size

### Purpose

The advantages of specialization and division of labour are very clear in this example. The worldwide links of the modern economy are also illustrated. We depend on thousands of people we don’t know, won’t see, and don’t think of in order to get dressed each morning. Self-interest follows naturally from interdependence. Wages, profits, and rents give people the incentive to perform these varied tasks. We depend on them to clothe us and they depend on our purchases for their incomes.

### Instructions

Ask the class to answer the following questions. Give them time to write an answer to each question, and then discuss their answers before moving on to the next question. The first question can be answered with a brief phrase. The second question is the core of the assignment and takes several minutes. Ask them to list as many categories of workers as possible. The third question introduces demand concepts; most of the determinants of demand can be introduced during this discussion. For the fourth question, ask the class to look at the country-of-origin tags sewn into their garments.

1. Where did your clothes come from?
2. Who worked to produce your clothes?
3. What things do you consider when buying a garment?
4. Where were your clothes produced (what countries)?

### Common Answers and Points for Discussion

1. Where did your clothes come from?

There are many possible ways to answer, but many students will say “the mall” or another retail outlet. Some may say “a factory,” “a sweatshop,” or “a foreign country.” Mention the importance of markets here (this can be emphasized by asking “Is anyone wearing something made by themselves, a friend, or a relative?”) and discuss distribution versus production.

1. Who worked to produce your clothes?

There is no end to the possible answers; garment and textile workers are obvious but most students will also list workers dealing with raw materials, transportation, management, design or machinery. Some may think more broadly to investors, road crews, bankers, engineers, or accountants.

1. What things do you consider when buying a garment?

Most answers focus on preferences (fit, style, quality, color). Price is cited less frequently. Ask about the importance of price until someone volunteers that income is important. Prices of substitute goods should also be discussed. Expectations of price changes may also be mentioned. Few students mention complementary goods and most students reject the idea of choosing a sweater to match a particular outfit.

1. Where were your clothes produced (what country)?

A large number of countries will be represented, even in small classes. Students may be surprised to find how few garments are domestically produced. They will almost certainly find that Asian countries and some middle- eastern or north African countries feature, as well as other European countries. You will probably find that goods from south or North America appear in smaller numbers.

This pattern shows the limits of simple explanations such as “cheap labour.” Briefly discuss the importance of comparative advantage and specialization.

* 1. The Capitalist Economic System
     1. An **economic system** is the way in which resources are organized and allocated to provide for the needs of an economy’s citizens.

### A capitalist economic system incorporates the principles of the private ownership of factors of production to produce goods and services which are exchanged through a price mechanism and where production is operated primarily for profit.

### Critics of the capitalist system argue that they are inherently unstable and lurch from boom-to-bust and that owners of the factors of production are too powerful and can distort resource allocation.

### Markets Can be a Good Way to Organize Economic Activity

### A market economy allocates resources through the decentralized decisions of many firms and households as they interact in markets for goods and services.

### Definition of market economy: an economy that addresses the three key questions of the economic problem by allocating resources through the decentralized decisions of many firms and households as they interact in markets for goods and services.

### In a pure market economy, where there is no government intervention, no one looks after the economic well-being of society as a whole. Instead buyers and sellers are interested in their own well-being.

* + - 1. Market prices reflect both the value of a product to consumers and the cost of the resources used to produce it. Therefore, decisions to buy or produce goods and services are made based on the cost to society of providing them.



Explain to students that when households and firms do what is best for themselves, they often end up doing what is best for society, as if guided by market forces—or an invisible hand. Spend some time and emphasize the magic of the market. Use numerous examples to show students that the market most often allocates resources to their highest valued use.

* + 1. Planned Economic Systems.
       1. Definition of planned **economic systems:** economic activity organized by central planners who decided on the answers to the fundamental economic questions.
       2. Most countries that once had centrally planned economies have abandoned this system and are developing more market-based economies.
    2. *FYI: Adam Smith and the Invisible Hand*

1. Adam Smith’s 1776 work suggested that although individuals are motivated by self-interest, an invisible hand guides this self- interest into promoting society’s economic well-being.
2. Smith was interested in how humans pursue their own self-interest in their own way.
3. Smith’s astute perceptions will be discussed more fully in the chapters to come.
   1. Governments Can Sometimes Improve Market Outcomes
      1. There are two broad reasons for the government to interfere with the economy: the promotion of efficiency and equity.
      2. Government policy can be most useful when there is market failure.

### a. Definition of market failure: a situation in which a market left on its own fails to allocate resources efficiently.

* + 1. Markets fail when there is an externality, the presence of excessive market power, and when incomes are very unequitable.

### Definition of externality: the impact of one person’s actions on the well-being of a bystander.

1. Definition of **market power:** the ability of a single economic actor (or small group of actors) to have a substantial influence on market prices.
2. Because a market economy rewards people for their ability to produce things that other people are willing to pay for, there will be an unequal distribution of economic prosperity.
   * 1. Note that the principle states that the government *can* improve market outcomes. This is not saying that the government always *does* improve market outcomes.
3. How the Economy as a Whole Works
   1. Macroeconomics and Microeconomics
      1. Definition of **microeconomics:** the study of how households and firms make decisions and how they interact in markets.
      2. Definition of **macroeconomics:** the study of economy-wide phenomena, including inflation, unemployment and economic growth.
      3. Microeconomics and macroeconomics are closely intertwined. Because changes in t

overall economy arise from the decisions of millions of individuals.

* 1. An Economy’s Standard of Living Depends on Its Ability to Produce Goods and Services

### Definition of economic growth: the increase in the amount of goods and services in an economy over a period of time.

* 1. Definition of **gross domestic product per capita:** the market value of all final goods and services produced within a country in a given period of time divided by the population of a country to give a per capita figure.
  2. Definition of **standard of living:** a measure of welfare based on the amount of goods and services a person’s income can buy. Usually measured by the inflation adjusted (real) income per head of the population.
     + 1. Differences in living standards from one country to another are quite large.
       2. Changes in living standards over time are also great.
          1. Between 2010 and 2016 China grew by 8 per cent a year compared with Brazil’s average growth of 1.35 per cent.

c. The explanation for differences in living standards lies in differences in productivity.

### 4. Definition of productivity: the quantity of goods and services produced from each hour of a worker’s time.

a. High productivity implies a high standard of living.

b. Policy makers need to raise productivity by improving education, training, investment in the latest technology and developing infrastructure.

5. There are other measures used to measure well-being including people’s health and the environment they live in.

1. Prices Rise When the Government Prints Too Much Money

### Definition of inflation: an increase in the overall level of prices in the economy.

* 1. When the government creates a large amount of money, the value of money falls.
     1. Examples: hyperinflation in Zimbabwe in March 2007 was running at 2200 per cent and in 2018 in Venezuela inflation is estimated to be over 4000 per cent
  2. High inflation imposes various costs on society and so policymakers try to keep inflation low.



Ask students to think about how someone paid monthly in Venezuela at the beginning of 2018. What would the pay have been worth in real terms (assuming there was no pay rise) at the beginning of compared to the end of the year assuming inflation was running at 4000 per cent?How might workers in Venezuela wished to be paid?

# SOLUTIONS TO TEXT PROBLEMS:

# Critical Thinking Questions.

# Guidance:

Highlight the command words and understand what is being asked of you. For example, *why* usually requires you to explain something using text, concepts and theory. *What* can be about providing definitions or an outcome that results from a change. *Refer* points you to look at a specific part of the text or data.

Things to consider when coming up with your answers.

1. Think about incentives that will nudge behaviour. You might reference how people respond to incentives and how decisions are influenced at the margin.
2. Refer to the third paragraph.
3. Monetary behaviour here is rewarding success in exams by providing an incentive to work harder, but should you not be motivated also by your personal desire to do well. Some might question the agent’s intrinsic motivation. Can there be better ways of getting the desired results? Different people will be influenced in different ways. Consider the opportunity costs of hard and diligent studying.
4. The amount of the incentive must take account of people’s different marginal decisions. This is difficult to gauge as people are not always rational.
5. Think about how you could frame incentives for organ donors that look both at the monetary and phycological side. Can you target different groups in different ways?

### Questions for Review

1. What goods and services to produce, how to produce them by best using the resources of land, labour and capital available and who should get the goods and services that have been produced.
2. The main features of a capitalist economic system are what to produce, how to produce these goods and services using the factors of production, land, labour and capital and how to allocate the goods and services.
3. Examples of trade-offs include time trade-offs (such as studying one subject over another, or studying at all compared to engaging in social activities) and spending trade-offs (such as whether to use your last ten euros on pizza or on a study guide for that tough economics course).
4. The opportunity cost of going to a restaurant includes the monetary cost of meal plus the time cost of getting to the restaurant and sitting through the meal. The time cost depends on what else you might do with that time; if it's staying home and watching TV, the time cost may be small, but if it's working an extra three hours at your job, the time cost is the money you could have earned. Of course it is complicated by the time cost of preparing a meal at home.
5. The marginal benefit of a glass of water depends on your circumstances. If you've just run a

marathon, or you've been walking in the desert sun for three hours, the marginal benefit is very high. But if you've been drinking a lot of liquids recently, the marginal benefit is quite low. The point is that even the necessities of life, like water, don't always have large marginal benefit.

1. Policy makers need to think about incentives so they can understand how people will respond to the policies they put in place. The text's example of seat belts shows that policy actions can have quite unintended consequences. If incentives matter a lot, they may lead to a very different type of policy; for example, some economists have suggested putting knives in steering columns so that people will drive much more carefully! While this suggestion is silly, it highlights the importance of incentives.
2. Specialization and trade can make everyone better off. By allowing specialization, trade between people and trade between countries can improve everyone's welfare.
3. The two main causes of market failure are externalities and market power. An externality is the impact of one person’s actions on the well-being of a bystander, such as the effect of pollution from a firm’s production or the effect on their neighbours of someone painting their fence or trimming their hedge. Market power refers to the ability of a single economic agent (or small group of economic agents) to unduly influence market prices, as would be the case in a town with only one taxi company well or in a country with only one cable television company.
4. Productivity is important because a country's standard of living depends on its ability to produce goods and services. The greater a country's productivity (the amount of goods and services produced from each hour of a worker's time), the greater will be its standard of living.
5. The main costs of out of control inflation on the population are a fall in the value of their savings. Rapid inflation leads to a redistribution of income reflecting the fact that there will be winners and losers. If you owe money that has a fixed interest than out of control inflation will benefit you, whereas savers will lose out. Also, many people may find that their wages do not rise in line with inflation especially if people are paid in the local currency.

### Problems and Applications

1. a. A family deciding whether to buy a new car faces a trade-off between the cost of the car and other things they might want to buy. For example, buying the car might mean they must give up going on vacation for the next two years. So, the real cost of the car is the family's opportunity cost in terms of what they must give up.
2. For a member of the government deciding whether to increase spending on a new highspeed rail link between two major cities in the north of a country, the trade-off is between the rail link and other spending items or tax cuts. If money is spent on the new railway line, that may mean less spending on national defence or on the police force or on education and health. Or, instead of spending more money on the rail link, taxes could be reduced.
3. When a company chief executive decides whether to open a new factory, the decision is based on whether the new factory will increase the firm's profits compared to other alternatives. For example, the company could upgrade existing equipment or expand existing factories. The crucial question is: which method of expanding production will

increase profit the most?

1. In deciding how much to prepare for a lecture, a lecturer faces a trade-off between the value of improving the quality of the lecture compared to other things she could do with her time, such as working on additional research.
2. With 32 per cent youth unemployed in Spain it would seem that labour is not scarce, but you would need to also look at the unemployment levels for other age groups and the job vacancy rates in different sectors of employment. There still might be some skills shortages in some areas which cannot be provided from the unemployed pool of youth labour. It might be that the youth do not have the skills required and that the government and businesses are not investing enough in training young people.
3. When the benefits of something are psychological, such as going on a vacation, it isn't easy to compare benefits to costs to determine if it's worth doing. But there are two ways to think about the benefits. One is to compare the vacation with what you would do in its place. If you didn't go on vacation, would you buy something like a new set of golf clubs? Then you can decide if you'd rather have the new clubs or the vacation. A second way is to think about how much work you had to do to earn the money to pay for the vacation; then you can decide if the psychological benefits of the vacation were worth the psychological cost of working.
4. Planned economies have real disadvantages in allocating the resources to meet the needs and wants of their citizens, since the central planners organize economic activity and decide what to produce and how to produce it. Consequently, there is little incentive within such a system for producers to be efficient, so most countries that once had centrally planned economies have now developed a more market-based approach. Market economies use the price system to allocate resources. Firms decide whom to hire and what to make. Households decide which firms to work for and what to buy with their incomes. These firms and households interact in the marketplace, where prices and self-interest guide their decisions. However pure market economies still have their own problems because they are subject to market failure. This can come about from the presence of externalities or the uncompensated knock on effects of other peoples’ or firms’ actions on the well-being of a third party. In addition, market failure can come about through excessive market power allowing firms to unfairly influence prices or output.
5. If you spend €10,000 now instead of saving it for a year and earning 5 percent interest, you are giving up the opportunity to spend €10,500 a year from now. The idea that money has a time value is the basis for the field of finance, the subfield of economics that has to do with prices of financial instruments like stocks and bonds.
6. The first manager suggests looking at whether productivity would rise or fall. Productivity is certainly important, since the more productive workers are, the lower the unit cost. The second manager wants to look at average cost. But both are missing the other side of the equationrevenue. A firm want to maximize its profits, so it needs to examine both costs *and* revenues. So the third manager is rightit’s best to examine whether the extra revenue would exceed the extra costs. The third witch is the only one who is thinking at the margin.
7. a. The provision of social security benefits lowers an individual’s incentive to save for retirement. The benefits provide some level of income to the individual when he or she retires. This means that the individual is not entirely dependent on savings to support consumption through the years in retirement.

b. A person gets less social security benefits the greater are his or her earnings. So there is an incentive not to work (or not work as much) after age 65. The more you work, the lower your social security benefits will be. Thus the reduction of social security benefits discourages work effort after age 65.

1. By specializing in each task, you and your flatmate can finish the chores more quickly. If you divided each task equally, it would take you more time to cook than it would take your roommate, and it would take him more time to clean than it would take you. By specializing, you reduce the total time spent on chores.

Similarly, countries can specialize and trade, making both better off. For example, suppose it takes Spanish workers less time to make clothes than French workers, and French workers can make wine more efficiently than Spanish workers. Then Spain and France can both benefit if Spanish workers produce all the clothes and French workers produce all the wine, and they exchange some wine for some clothes.

1. a. Efficiency. The market failure comes from the monopoly power of water companies.
2. Efficiency. The market failure comes from the monopoly power of electricity companies. (Though there may be competition between electricity generating companies, there is much less likelihood of competition between electricity transmission and supply companies.)
3. Equity.
4. Efficiency. An externality arises because second-hand smoke harms non-smokers.
5. Equity.
6. Efficiency: There is an externality because of increased chance of accidents caused when drivers driving when using their mobile phones.
7. Since average income in Western European countries has increased greatly over the past century, we are likely to have a better standard of living than our parents, and a much better standard of living than our grandparents. This is mainly the result of increased productivity, so that an hour of work produces more goods and services than it used to. Thus, incomes have continuously risen over time, as has the standard of living.