

**A-Level Economics A level Guide**

**How economics is taught:**

* 5 lessons per week that will be, depending on the topic of learning, a combination of the following types of learning:
  + Mathematical model problem solving activities to illustrate theories/concepts
  + Investigation of historical economic ‘thinkers’ and the theories they presented, including a critique of those theories
  + Simulations to highlight an economic theory or concept
  + Case study analysis to highlight a theory or concept
  + Exam questions to build and assess key writing and maths skills

**Working expectations:**

* Attend all lessons
* Complete all homework
* Contribute ideas to lessons
* Be prepared to make mistakes and get answers wrong!
* Keep an organised folder with work filed in sections
* Complete all tasks to the best of your ability
* Proof read and check your work before handing in
* Seek guidance and help when required

**What 100% effort in this subject looks like:**

* Completing all class and homework tasks to a high standard
* Not giving up when you get an answer wrong or have a ‘bad’ lesson
* Being punctual to lessons and submitting homework on time
* Having the resilience and maturity to correct mistakes and discuss issues
* Reading the BBC news every day, especially the business and economy sections and keeping a print out of interesting articles
* Watching online tutorials to check your understanding and practise problem solving
* Completing additional exam paper questions
* Reading economics books for pleasure, such as Freakonomics or Nudge.

**What marking looks like:**

* Class notes are not marked
* Knowledge, application and multi choice assessments are self-marked with teacher feedback
* Assessments are teacher marked with GPA feedback and improvements.
* Longer written work is marked by teachers with GPA feedback
* Verbal feedback given in all lessons

**What homework looks like:**

* Learning key terms or diagrams for a weekly test
* Completing or marking an exam question
* Watching an online tutorial to be able to teach it or discuss it next lesson
* Revision exercises for tests

**Specification at a glance:**

The subject content for A level Economics will be assessed across three examination papers.

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**Summer preparation – Principles of Economics**

**Principle 1: Do I face trade-offs?**

You may have heard the old saying, “There ain’t no such thing as a free lunch.” Grammar aside, there is much truth to this adage. To get something that we like, we usually have to give up something else that we also like. Making decisions requires trading off one goal against another.

Consider a student who must decide how to allocate her most valuable resource—her time. She can spend all of her time studying economics, spend all of it studying psychology, or divide it between the two fields. For every hour she studies one subject, she gives up an hour she could have used studying the other. And for every hour she spends studying, she gives up an hour she could have spent napping, bike riding, watching TV, or working at her part-time job for some extra spending money.

Consider parents deciding how to spend their family income. They can buy food, clothing, or a family vacation. Or they can save some of the family income for retirement or the children’s college education. When they choose to spend an extra dollar on one of these goods, they have one less dollar to spend on some other good.

When people are grouped into societies, they face different kinds of trade-offs.

One classic trade-off is between “guns and butter.” The more a society spends on national defence (guns) to protect its shores from foreign aggressors, the less it can spend on consumer goods (butter) to raise the standard of living at home. Also important in modern society is the trade-off between a clean environment and a high level of income. Laws that require firms to reduce pollution raise the cost of producing goods and services. Because of these higher costs, the firms end up earning smaller profits, paying lower wages, charging higher prices, or some combination of these three. Thus, while pollution regulations yield the benefit of a cleaner environment and the improved health that comes with it, they come at the cost of reducing the incomes of the regulated firms’ owners, workers, and customers.

Another trade-off society faces is between efficiency and equality. Efficiency means that society is getting the maximum benefits from its scarce resources. Equality means that those benefits are distributed uniformly among society’s members. In other words, efficiency refers to the size of the economic pie, and equality refers to how the pie is divided into individual slices. When government policies are designed, these two goals often conflict. Consider, for instance, policies aimed at equalizing the distribution of economic well-being. Some of these policies, such as the welfare system or unemployment insurance, try to help the members of society who are most in need. Others, such as the individual income tax, ask the financially successful to contribute more than others to support the government. Though they achieve greater equality, these policies reduce efficiency. When the government redistributes income from the rich to the poor, it reduces the reward for working hard; as a result, people work less and produce fewer goods and services. In other words, when the government tries to cut the economic pie into more equal slices, the pie gets smaller.

Recognizing that people face trade-offs does not by itself tell us what decisions they will or should make. A student should not abandon the study of psychology just because doing so would increase the time available for the study of economics.

Society should not stop protecting the environment just because environmental regulations reduce our material standard of living. The poor should not be ignored just because helping them distorts work incentives. Nonetheless, people are likely to make good decisions only if they understand the options that are available to them. Our study of economics, therefore, starts by acknowledging life’s trade-offs.

**Written task 1: Describe an important trade-off you recently faced. (200 words)**

**Principle 2: What is the true cost of a decision I make?**

Because people face trade-offs, making decisions requires comparing the costs and benefits of alternative courses of action. In many cases, however, the cost of an action is not as obvious as it might first appear.

Consider the decision to go to university. The main benefits are intellectual enrichment and a lifetime of better job opportunities. But what are the costs? To answer this question, you might be tempted to add up the money you spend on tuition, books, room, and rent. Yet this total does not truly represent what you give up to spend a year in university.

There are two problems with this calculation. First, it includes some things that are not really costs of going to university. Even if you quit school, you need a place to sleep and food to eat. Room and board are costs of going to college only to the extent that they are more expensive at college than elsewhere. Second, this calculation ignores the largest cost of going to college—your time. When you spend a year listening to lectures, reading textbooks, and writing papers, you cannot spend that time working at a job. For most students, the earnings they give up to attend school are the single largest cost of their education.

The opportunity cost of an item is what you give up to get that item. When making any decision, decision makers should be aware of the opportunity costs that accompany each possible action. In fact, they usually are. University athletes who can earn millions if they drop out of school and play professional sports are well aware that their opportunity cost of attending college is very high. It is not surprising that they often decide that the benefit of a college education is not worth the cost.

**Written task 2: Give an example of some action that has both a monetary and nonmonetary opportunity cost. (200 words)**

**Principle 3: Am I thinking rationally?**

Economists normally assume that people are rational. Rational people thoroughly and purposefully do the best they can to achieve their objectives, given the available opportunities. As you study economics, you will encounter firms that decide how many workers to hire and how much of their product to manufacture and sell to maximize profits. You will also encounter individuals who decide how much time to spend working and what goods and services to buy with the resulting income to achieve the highest possible level of satisfaction.

Rational people know that decisions in life are rarely black and white but usually involve shades of grey. At dinnertime, the question you face is not “Should I fast or eat like a pig?” More likely, you will be asking yourself “Should I take that extra spoonful of mashed potatoes?” When exams roll around, your decision is not between blowing them off and studying 24 hours a day but whether to spend an extra hour reviewing your notes instead of watching TV. Economists use the term marginal change to describe a small incremental adjustment to an existing plan of action. Keep in mind that margin means “edge,” so marginal changes are adjustments around the edges of what you are doing. Rational people often make decisions by comparing marginal benefits and marginal costs.

For example, suppose you are considering calling a friend on your smart phone. You decide that talking with her for 10 minutes would give you a benefit that you value at about £7. Your smart phone service costs you £40 per month plus £0.50 per minute for whatever calls you make. You usually talk for 100 minutes a month, so your total monthly bill is £90 (£0.50 per minute times 100 minutes, plus the £40 fixed fee). Under these circumstances, should you make the call? You might be tempted to reason as follows: “Because I pay £90 for 100 minutes of calling each month, the average minute on the phone costs me £0.90. So a 10-minute call costs £9. Because that £9 cost is greater than the £7 benefit, I am going to skip the call.”

That conclusion is wrong, however. Although the average cost of a 10-minute call is £9, the marginal cost—the amount your bill increases if you make the extra call—is only £5. You will make the right decision only by comparing the marginal benefit and the marginal cost. Because the marginal benefit of £7 is greater than the marginal cost of £5, you should make the call. This is a principle that people innately understand: Smart phone users with unlimited minutes (that is, minutes that are free at the margin) are often prone to making long and light-hearted calls.

Marginal decision-making can help explain some otherwise puzzling economic phenomena. Here is a classic question: Why is water so cheap, while diamonds are so expensive? Humans need water to survive, while diamonds are unnecessary. Yet people are willing to pay much more for a diamond than for a cup of water. The reason is that a person’s willingness to pay for a good is based on the marginal benefit that an extra unit of the good would yield. The marginal benefit, in turn, depends on how many units a person already has. Water is essential, but the marginal benefit of an extra cup is small because water is plentiful. By contrast, no one needs diamonds to survive, but because diamonds are so rare, people consider the marginal benefit of an extra diamond to be large. A rational decision maker takes an action if and only if the marginal benefit of the action exceeds the marginal cost. This principle explains why people use their smart phones as much as they do, why airlines are willing to sell tickets below average cost, and why people are willing to pay more for diamonds than for water. It can take some time to get used to the logic of marginal thinking, but the study of economics will give you ample opportunity to practice.

**Written task 3:** *Thinking at the margin works for business decisions as well. Consider an airline deciding how much to charge passengers who fly standby. Suppose that flying a 200-seat plane across the UK costs the airline £100,000. In this case, the average cost of each seat is £100,000/200, which is £500. One might be tempted to conclude that the airline should never sell a ticket for less than £500. But a rational airline can increase its profits by thinking at the margin. Imagine that a plane is about to take off with 10 empty seats and a standby passenger waiting at the gate is willing to pay £300 for a seat. The marginal cost for this passenger would be the free drink issued as part of the ticket.* **Should the airline sell the ticket? (200 words plus calculations)**

**Principle 4: Do people respond to incentives? Always!**

An incentive is something (such as the prospect of a punishment or reward) that induces a person to act. Because rational people make decisions by comparing costs and benefits, they respond to incentives. You will see that incentives play a central role in the study of economics. One economist went so far as to suggest that the entire field could be summarized as simply “People respond to incentives. The rest is commentary.” Incentives are key to analysing how markets work. For example, when the price of an apple rises, people decide to eat fewer apples. At the same time, apple orchards decide to hire more workers and harvest more apples. In other words, a higher price in a market provides an incentive for buyers to consume less and an incentive for sellers to produce more. As we will see, the influence of prices on the behaviour of consumers and producers is crucial to how a market economy allocates scarce resources.

Public policymakers should never forget about incentives: Many policies change the costs or benefits that people face and, as a result, alter their behaviour. A tax on petrol, for instance, encourages people to drive smaller, more fuel-efficient cars.

That is one reason people drive smaller cars in Europe, where petrol taxes are high, than in the UK, where petrol taxes are low. A higher petrol tax also encourages people to carpool, take public transportation, and live closer to where they work. If the tax were larger, more people would be driving hybrid cars, and if it were large enough, they would switch to electric cars.

When policymakers fail to consider how their policies affect incentives, they often end up facing unintended consequences. For example, consider public policy regarding auto safety. Today, all cars have seat belts, but this was not true 60 years ago. In 1965, Ralph Nader’s book Unsafe at Any Speed generated much public concern over auto safety. Government responded with laws requiring seat belts as standard equipment on new cars.

How does a seat belt law affect auto safety? The direct effect is obvious: When a person wears a seat belt, the probability of surviving an auto accident rises. But that’s not the end of the story because the law also affects behaviour by altering incentives. The relevant behaviour here is the speed and care with which drivers operate their cars. Driving slowly and carefully is costly because it uses the driver’s time and energy. When deciding how safely to drive, rational people compare, perhaps unconsciously, the marginal benefit from safer driving to the marginal cost.

As a result, they drive more slowly and carefully when the benefit of increased safety is high. For example, when road conditions are icy, people drive more attentively and at lower speeds than they do when road conditions are clear.

Consider how a seat belt law alters a driver’s cost–benefit calculation. Seat belts make accidents less costly because they reduce the likelihood of injury or death.

In other words, seat belts reduce the benefits of slow and careful driving. People respond to seat belts as they would to an improvement in road conditions—by driving faster and less carefully. The result of a seat belt law, therefore, is a larger number of accidents. The decline in safe driving has a clear, adverse impact on pedestrians, who are more likely to find themselves in an accident but (unlike the drivers) don’t have the benefit of added protection. At first, this discussion of incentives and seat belts might seem like idle speculation. Yet in a classic 1975 study, economist Sam Peltzman argued that auto-safety laws have had many of these effects. According to Peltzman’s evidence, these laws give rise to fewer deaths per accident but also to more accidents. He concluded that the net result is little change in the number of driver deaths and an increase in the number of pedestrian deaths.

Peltzman’s analysis of auto safety is an offbeat and controversial example of the general principle that people respond to incentives. When analysing any policy, we must consider not only the direct effects but also the less obvious indirect effects that work through incentives. If the policy changes incentives, it will cause people to alter their behaviour.

**Written task 4: Describe an incentive your parents offered to you in an effort to influence your behaviour. (200 words)**

**Principle 5: Can trade make everyone better off? Yes.**

You may have heard on the news that the Chinese are our competitors in the world economy. In some ways, this is true because British and Chinese firms produce many of the same goods. Companies in the UK and China compete for the same customers in the markets for clothing, toys, solar panels, automobile tires, and many other items. Yet it is easy to be misled when thinking about competition among countries. Trade between the UK and China is not like a sports contest in which one side wins and the other side loses. In fact, the opposite is true: Trade between two countries can make each country better off. To see why, consider how trade affects your family. When a member of your family looks for a job, she competes against members of other families who are looking for jobs. Families also compete against one another when they go shopping because each family wants to buy the best goods at the lowest prices. In a sense, each family in an economy competes with all other families. Despite this competition, your family would not be better off isolating itself from all other families. If it did, your family would need to grow its own food, make its own clothes, and build its own home. Clearly, your family gains much from its ability to trade with others. Trade allows each person to specialize in the activities she does best, whether it is farming, sewing, or home building. By trading with others, people can buy a greater variety of goods and services at lower cost. Like families, countries also benefit from the ability to trade with one another. Trade allows countries to specialize in what they do best and to enjoy a greater variety of goods and services. The Chinese, as well as the French, Egyptians, and Brazilians, are as much our partners in the world economy as they are our competitors.

**Written task 5: Why is a country better off by not isolating itself from all other countries? (250 words)**

**Principle 6: Are Markets Usually a Good Way to Organize Economic Activity? Yes.**

The collapse of communism in the Soviet Union and Eastern Europe in the late 1980s and early 1990s was one of the last century’s most transformative events. Communist countries operated on the premise that government officials were in the best position to allocate the economy’s scarce resources. These central planners decided what goods and services were produced, how much was produced, and who produced and consumed these goods and services. The theory behind central planning was that only the government could organize economic activity in a way that promoted economic well-being for the country as a whole.

Most countries that once had centrally planned economies have abandoned the system and are instead developing market economies. In a market economy, the decisions of a central planner are replaced by the decisions of millions of firms and households. 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.

At first glance, the success of market economies is puzzling. In a market economy, no one is looking out for the economic well-being of society as a whole. Free markets contain many buyers and sellers of numerous goods and services, and all of them are interested primarily in their own well-being. Yet despite decentralized decision making and self-interested decision makers, market economies have proven remarkably successful in organizing economic activity to promote overall economic well-being.

In his 1776 book An Inquiry into the Nature and Causes of the Wealth of Nations, economist Adam Smith made the most famous observation in all of economics: Households and firms interacting in markets act as if they are guided by an “in-visible hand” that leads them to desirable market outcomes. One of our goals in this book is to understand how this invisible hand works its magic. As you study economics, you will learn that prices are the instrument with which the invisible hand directs economic activity. In any market, buyers look at the price when determining how much to demand, and sellers look at the price when deciding how much to supply. As a result of the decisions that buyers and sellers make, market prices reflect both the value of a good to society and the cost to society of making the good. Smith’s great insight was that prices adjust to guide these individual buyers and sellers to reach outcomes that, in many cases, maximize the well-being of society as a whole.

Smith’s insight has an important corollary: When a government prevents prices from adjusting naturally to supply and demand, it impedes the invisible hand’s ability to coordinate the decisions of the households and firms that make up an economy. This corollary explains why taxes adversely affect the allocation of resources: They distort prices and thus the decisions of households and firms. It also explains the great harm caused by policies that directly control prices, such as rent control. And it explains the failure of communism. In communist countries, prices were not determined in the marketplace but were dictated by central planners. These planners lacked the necessary information about consumers’ tastes and producers’ costs, which in a market economy is reflected in prices. Central planners failed because they tried to run the economy with one hand tied behind their backs—the invisible hand of the marketplace.

**Written task 6: Why do we have markets?**

**Principle 7: Can Governments Sometimes Improve Market Outcomes? Yes.**

If the invisible hand of the market is so great, why do we need government? One purpose of studying economics is to refine your view about the proper role and scope of government policy. One reason we need government is that the invisible hand can work its magic only if the government enforces the rules and maintains the institutions that are key to a market economy. Most important, market economies need institutions to enforce property rights so individuals can own and control scarce resources A farmer won’t grow food if she expects her crop to be stolen; a restaurant won’t serve meals unless it is assured that customers will pay before they leave; and a film company won’t produce movies if too many potential customers avoid paying by making illegal copies. We all rely on government-provided police and courts to enforce our rights over the things we produce—and the invisible hand counts on our ability to enforce those rights.

Another reason we need government is that, although the invisible hand is powerful, it is not omnipotent. There are two broad rationales for a government to intervene in the economy and change the allocation of resources that people would choose on their own: to promote efficiency or to promote equality. That is, most policies aim either to enlarge the economic pie or to change how the pie is divided.

Consider first the goal of efficiency. Although the invisible hand usually leads markets to allocate resources to maximize the size of the economic pie, this is not always the case. Economists use the term market failure to refer to a situation in which the market on its own fails to produce an efficient allocation of resources. As we will see, one possible cause of market failure is an externality, which is the impact of one person’s actions on the well-being of a by-stander. The classic example of an externality is pollution. When the production of a good pollutes the air and creates health problems for those who live near the factories, the market left to its own devices may fail to take this cost into ac-count. Another possible cause of market failure is market power, which refers to the ability of a single person or firm (or a small group) to unduly influence market prices. For example, if everyone in town needs water but there is only one well, the owner of the well is not subject to the rigorous competition with which the invisible hand normally keeps self-interest in check; she may take advantage of this opportunity by restricting the output of water so she can charge a higher price. In the presence of externalities or market power, well-designed public policy can enhance economic efficiency.

Now consider the goal of equality. Even when the invisible hand yields efficient outcomes, it can nonetheless leave sizable disparities in economic well-being. A market economy rewards people according to their ability to pro-duce things that other people are willing to pay for. The world’s best basketball player earns more than the world’s best chess player simply because people are willing to pay more to watch basketball than chess. The invisible hand does not ensure that everyone has sufficient food, decent clothing, and adequate health-care. This inequality may, depending on one’s political philosophy, call for government intervention. In practice, many public policies, such as the income tax and the welfare system, aim to achieve a more equal distribution of economic well-being.

To say that the government can improve on market outcomes does not mean that it always will. Public policy is made not by angels but by a political process that is far from perfect. Sometimes policies are designed simply to reward the politically powerful. Sometimes they are made by well-intentioned leaders who are not fully informed. As you study economics, you will become a better judge of when a government policy is justifiable because it promotes efficiency or equality and when it is not.

**Written task 7: According to economists, what roles should government play in markets?**

**Principle 8: Is a Country’s Standard of Living Dependent on Its Ability to Produce Goods and Services? Yes.**

The differences in living standards around the world are staggering. In 2014, the average American had an income of about $55,000. In the same year, the average Mexican earned about $17,000, the average Chinese about $13,000, and the aver-age Nigerian only $6,000. Not surprisingly, this large variation in average income is reflected in various measures of quality of life. Citizens of high-income countries have more TV sets, more cars, better nutrition, better healthcare, and a longer life expectancy than citizens of low-income countries.

Changes in living standards over time are also large. In the United States, incomes have historically grown about 2 percent per year (after adjusting for changes in the cost of living). At this rate, average income doubles every 35 years. Over the past century, average U.S. income has risen about eightfold.

What explains these large differences in living standards among countries and over time? The answer is surprisingly simple. Almost all variation in living standards is attributable to differences in countries’ productivity—that is, the amount of goods and services produced by each unit of labor input. In nations where workers can produce a large quantity of goods and services per hour, most people enjoy a high standard of living; in nations where workers are less productive, most people endure a more meagre existence. Similarly, the growth rate of a nation’s productivity determines the growth rate of its average income.

The fundamental relationship between productivity and living standards is simple, but its implications are far-reaching. If productivity is the primary determinant of living standards, other explanations must be of secondary importance. For example, it might be tempting to credit labor unions or minimum-wage laws for the rise in living standards of American workers over the past century. Yet the real hero of American workers is their rising productivity. As another example, some commentators have claimed that increased competition from Japan and other countries explained the slow growth in U.S. incomes during the 1970s and 1980s. Yet the real villain was not competition from abroad but flagging productivity growth in the United States.

The relationship between productivity and living standards also has profound implications for public policy. When thinking about how any policy will affect living standards, the key question is how it will affect our ability to produce goods and services. To boost living standards, policymakers need to raise productivity by ensuring that workers are well educated, have the tools they need to produce goods and services, and have access to the best available technology.

**Principle 9: Do prices Rise When the Government Prints Too Much Money? Yes.**

In January 1921, a daily newspaper in Germany cost 0.30 marks. Less than two years later, in November 1922, the same newspaper cost 70,000,000 marks. All other prices in the economy rose by similar amounts. This episode is one of history’s most spectacular examples of inflation, an increase in the overall level of prices in the economy.

Although the United States has never experienced inflation even close to that of Germany in the 1920s, inflation has at times been an economic problem. During the 1970s, for instance, when the overall level of prices more than doubled, President Gerald Ford called inflation “public enemy number one.” By contrast, inflation in the first decade of the 21st century ran about 2½ percent per year; at this rate, it would take almost 30 years for prices to double. Because high inflation imposes various costs on society, keeping inflation at a low level is a goal of eco-nomic policymakers around the world.

What causes inflation? In almost all cases of large or persistent inflation, the culprit is growth in the quantity of money. When a government creates large quantities of the nation’s money, the value of the money falls. In Germany in the early 1920s, when prices were on average tripling every month, the quantity of money was also tripling every month. Although less dramatic, the economic history of the United States points to a similar conclusion: The high inflation of the 1970s was associated with rapid growth in the quantity of money, and the return of low inflation in the 1980s was associated with slower growth in the quantity of money.

**Principle 10: Does Society Face a Short-Run Trade-off between Inflation and Unemployment? Yes.**

Although a higher level of prices is, in the long run, the primary effect of increasing the quantity of money, the short-run story is more complex and controversial. Most economists describe the short-run effects of monetary injections as follows:

* Increasing the amount of money in the economy stimulates the overall level of spending and thus the demand for goods and services.
* Higher demand may over time cause firms to raise their prices, but in the meantime, it also encourages them to hire more workers and produce a larger quantity of goods and services.
* More hiring means lower unemployment. This line of reasoning leads to one final economy-wide trade-off: a short-run trade-off between inflation and unemployment.

Although some economists still question these ideas, most accept that society faces a short-run trade-off between inflation and unemployment. This simply means that, over a period of a year or two, many economic policies push inflation and un-employment in opposite directions. Policymakers face this trade-off regardless of whether inflation and unemployment both start out at high levels (as they did in the early 1980s), at low levels (as they did in the late 1990s), or someplace in between. This short-run trade-off plays a key role in the analysis of the business cycle—the irregular and largely unpredictable fluctuations in economic activity, as measured by the production of goods and services or the number of people employed.

Policymakers can exploit the short-run trade-off between inflation and un-employment using various policy instruments. By changing the amount that the government spends, the amount it taxes, and the amount of money it prints, policymakers can influence the overall demand for goods and services. Changes in demand in turn influence the combination of inflation and unemployment that the economy experiences in the short run. Because these instruments of economic policy are potentially so powerful, how policymakers should use them to control the economy, if at all, is a subject of continuing debate.

This debate heated up in the early years of Barack Obama’s presidency. In 2008 and 2009, the U.S. economy, as well as many other economies around the world, experienced a deep economic downturn. Problems in the financial system, caused by bad bets on the housing market, spilled over into the rest of the economy, causing incomes to fall and unemployment to soar. Policymakers responded in various ways to increase the overall demand for goods and services. President Obama’s first major initiative was a stimulus package of reduced taxes and increased government spending. At the same time, the nation’s central bank, the Federal Reserve, increased the supply of money. The goal of these policies was to reduce unemployment. Some feared, how-ever, that these policies might over time lead to an excessive level of inflation.

**Written task 8: List and briefly explain the three principles that describe how the economy as a whole works. (300 words)**

All text written by N. Gregory Mankiw, from his text Principles of Economics (the world’s best selling economics textbook!)