

P A R T

# 2

## Great Minds

### Ready for the Expedition?

- What is the invisible hand in our economic life?

- Who emphasized the division of labor, an important concept in economics?

- We have been benefiting from the consumer surplus. Do you know what consumer surplus is?

- Are you, as a consumer, rational or quasi-rational?

- Who could be called the father of economics?

- Can a country achieve full employment naturally? Why or why not?

# LECTURE 4

## Adam Smith—Father of Economics

### PRELUDE

The invisible hand of the market always moves faster and better than the heavy hand of government.

—Mitt Romney

Free trade, one of the greatest blessings which a government can confer on a people, is in almost

every country unpopular.

—Thomas B. Macaulay

The most important single central fact about a free market is that no exchange takes place unless both parties benefit.

—Milton Friedman

There are always controversies concerning the invisible hand. Does the invisible hand exist? Can the invisible hand regulate the supply and demand? What's the relationship between market and government?

### PREPARATION

We can say Adam Smith is the father of economics due to his great theoretical contributions, but today his reputation rests mainly on his explanation of how rational self-interest in a free-market economy leads to economic well-being, that is, the theory of the invisible hand. When we read the text in the Collection section we will find out that this theory is certainly simple, attractive, and persuasive. Actually, it describes the way that things really work on many occasions. For instance, paying for your dinner is a more reliable way to get it than appealing to the benevolence of others.

Nevertheless, Smith installed himself as the leading

figure of economic thought with *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776), published as a five-book series, seeking to reveal the nature and causes of a nation's prosperity. By reading the text in the Expansion section we will learn that Smith's writings are both an inquiry into the science of economics and a policy guide for realizing the wealth of nations. He attempted to assert that economic development is best fostered in an environment of free competition that operates in accordance with universal "natural laws." These enormously influential ideas attributed to the general intellectual climate of his time.

# Adam Smith and the Invisible Hand<sup>1</sup>

<sup>1</sup> Economics is a relatively young science. The foundation of economics was laid in 1776, when Adam Smith published *An Inquiry into the Nature and Causes of the Wealth of Nations*. Ideas have consequences. Smith's ideas greatly influenced not only Europeans but also those who mapped out the structure of the U.S. government. His great ideas, however, arose from his special growing and working experiences.

## Biographical details

- <sup>2</sup> Adam Smith was born in the seaport and manufacturing town of Kirkcaldy, Scotland. His father, **comptroller** of **customs** in the town, died before his son was born. Margaret Douglas Smith provided a home for her son until her death in 1784.
- <sup>3</sup> Young Smith attended the University of Glasgow when he was 14 years old and studied moral philosophy; he later studied moral and political science and languages at Balliol College, Oxford. He then returned to his mother's home to continue independent study for two years. After that Smith moved to Edinburgh, where he gave a series of public lectures. He was elected professor of logic at the University of Glasgow in 1751, and in the following year he was given the chair of moral philosophy, which he held for over 10 years. In 1759, he published *The Theory of Moral Sentiments*, after which his lectures concentrated less on **ethical doctrines** and more on **jurisprudence** and political economy.
- <sup>4</sup> In 1776, Smith published *An Inquiry into the Nature and Causes of the Wealth of Nations*, which he had begun in France 10 years earlier. Its fame was immediate, and it established Smith's reputation forever.
- <sup>5</sup> After the publication of this book, Smith spent two years in London, where he **mingled** with the leading **intellectuals** of the day. Then, on being appointed **commissioner** of customs in Scotland, he went to live in

**inquiry** /ɪnˈkwaɪəri/ *n.* 调查, 查究  
**comptroller** /kəmˈtrəʊlə/ *n.* 审计官  
**customs** /ˈkʌstəmz/ *n.* (pl.) 海关  
**ethical** /ˈeθɪkəl/ *adj.* 关于伦理的  
**doctrine** /ˈdɒktrɪn/ *n.* 教义, 学说  
**jurisprudence** /ˌdʒʊərɪsˈprʊːdəns/ *n.* 法学, 法律学  
**mingle** /ˈmɪŋɡəl/ *v.* 应酬, 交际  
**intellectual** /ˌɪntəˈlektʃʊəl/ *n.* 知识分子  
*adj.* 有知识的, 高智力的  
**commissioner** /kəˈmɪʃənə/ *n.* 部长, 专员

1

This text is based on *The Evolution of Economic Thought* written by Stanley L. Brue and Randy R. Grant, published in 2012 by Cengage Learning and an article written by Helen Joyce with the same title from the *Plus* magazine website at <http://plus.maths.org/content/os/issue14/features/smith/index>.

Edinburgh with his mother. It is believed that much of his income was spent secretly on charities. He was always happy to receive his friends at dinner, even without the **formality** of an invitation. Among the honors **bestowed** on Smith was his election as Lord **Rector** of the University of Glasgow. Shortly before he died in 1790, most of his unpublished **manuscripts** were destroyed according to his wish and without explanation.

## Various influences on Smith's thinking

- 6 There were several key influences on Smith's thinking. First and perhaps foremost was the general intellectual climate of his time. This was the period known as the **Enlightenment**. This intellectual movement was built upon two **pillars**: people's reasoning ability and the concept of the natural order. As we know, the scientific revolution associated with Newton established that order and harmony characterize the physical universe. Through systematic reasoning, people could discover not only these physical laws but also those that govern the society. Enlightenment thinkers therefore were **optimists**; they generally believed that human thought and energy could produce **virtually** unlimited progress.
- 7 Second, but definitely related, Smith was influenced by the **physiocrats**, particularly Quesnay<sup>2</sup>. The physiocrats' attacks on **mercantilism** and their proposals to remove trade barriers won his admiration. From these thinkers he drew the themes of wealth as "the consumable goods annually reproduced by the labour of society," the desirability of minimal government interference in the economy, and the concept of the **circular** process of production and distribution. He had planned to **dedicate** his *Wealth of Nations* to Quesnay, had the latter lived until the book was completed.
- 8 Francis Hutcheson<sup>3</sup>, Smith's instructor at the University of Glasgow, was a third significant influence on Smith. Hutcheson felt that people themselves could figure out what is ethically good—the will of God—by discovering the actions that serve the good for humankind.
- 9 Finally, Smith was influenced by his friend David Hume<sup>4</sup>, who through his letters and personal conversations contributed to Smith's intellectual development and economic ideas.

## The theory of the invisible hand

- 10 Smith's early education experiences and later intellectual influences upon him **triggered** him to come up with many original thoughts, among

**formality** /fɔ:'mælɪti/ *n.* 遵守礼节

**bestow** /bɪ'stəʊ/ *v.* 赠与, 授予

**rector** /'rektə/ *n.* 学院院长, 学校校长

**manuscript** /'mænjʊskript/ *n.* 手稿

**the Enlightenment** /m'laɪnmənt/ (18 世纪欧洲的) 启蒙运动

**pillar** /'pɪlə/ *n.* (信仰或思想) 非常重要的部分

**optimist** /'ɒptɪmɪst/ *n.* 乐观主义者

**virtually** /'vɜ:tʃuəli/ *adv.* 实际上, 几乎

**physiocrat** /'fɪziəʊkræt/ *n.* 重农主义者

**mercantilism** /'mɜ:kəntaɪlɪzəm/ *n.* 商业主义, 营利主义

**circular** /'sɜ:kjʊlə/ *adj.* 循环的

**dedicate** /'dedɪkeɪt/ *v.* 献给

**trigger** /'trɪgə/ *v.* 引发, 激发

2

François Quesnay: French economist and intellectual leader of the physiocratic school. He is known for publishing the *Tableau économique* in 1758, which provided the foundations of the ideas of the physiocrats.

3

Francis Hutcheson: an Irish philosopher born in Ulster to a family of Scottish Presbyterians who became known as one of the founding fathers of the Scottish Enlightenment

4

David Hume: a Scottish philosopher, historian, economist, and essayist, who is best known today for his highly influential system of philosophical empiricism, skepticism, and naturalism

which the theory of the invisible hand is the most influential.

*... every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention.*

- 11 In this passage, taken from his 1776 book *The Wealth of Nations*, Adam Smith set out the **mechanism** by which he felt economic society operated. Each individual strives to become wealthy, “intending only his own gain,” but to this end he must exchange what he owns or produces with others who sufficiently value what he has to offer; in this way, by division of labor and a free market, public interest is advanced.
- 12 Smith was profoundly religious, and saw the invisible hand as the mechanism by which **benevolent** God **administered** the universe in which human happiness was maximized. He made it clear in his writings that quite considerable structure was required in society before the invisible hand mechanism could work efficiently. For example, **property** rights must be strong, and there must be widespread **adherence** to moral **norms**, such as prohibitions against theft.
- 13 The system in which the invisible hand is most often assumed to work is the free market. Adam Smith assumed that consumers choose for the lowest price, and that entrepreneurs choose for the highest rate of profit. He **asserted** that by thus making their excess or insufficient demand known through market prices, consumers “directed” entrepreneurs’ investing money in the most profitable industry.
- 14 One extremely positive aspect of a market-based economy is that it forces people to think about what other people want. Smith saw this as a large part of what was good about the invisible hand mechanism. He **identified** two ways to obtain the help and cooperation of other people, upon which we all depend constantly. The first way is to **appeal to** the benevolence and goodwill of others. To do this a person must often act in a **servile** and **fawning** way, which Smith found **repulsive**, and he claimed

revenue /ˈrevɪnjuː/ *n.* 收益, 收入  
mechanism /ˈmekənɪzəm/ *n.* 机制  
benevolent /bəˈneɪvələnt/ *adj.* 仁慈的, 仁爱的  
administer /ədˈmɪnɪstə/ *v.* 管理, 治理  
property /ˈprɒpəti/ *n.* 资产, 财产  
adherence /ədˈhɪərəns/ *n.* 遵守, 信守  
norm /nɔːm/ *n.* 标准, 规范  
assert /əˈsɜːt/ *v.* 断言  
identify /aɪˈdentɪfaɪ/ *v.* 确定, 发现  
appeal /əˈpiːl/ *to* 诉诸, 求助于  
servile /ˈsɜːvaɪl/ *adj.* 过分屈从的, 卑躬屈膝的  
fawning /ˈfɔːnɪŋ/ *adj.* 巴结的, 讨好的  
repulsive /rɪˈpʌlsɪv/ *adj.* 令人厌恶的, 令人反感的

it generally meets with very limited success. The second way is to appeal instead to other people's self-interest. In one of his most famous quotes:

*Whoever offers to another a bargain of any kind, proposes to do this. Give me that which I want, and you shall have this which you want, is the meaning of every such offer; and it is in this manner that we obtain from one another the far greater part of those good offices which we stand in need of. It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity, but to their self-love.*

<sup>15</sup> For Smith, to propose an exchange is to attempt to show another that what you can do, or what you have, can be of use to the other. When you carry out the exchange, it means the other person recognizes that what you can do or what you have is of value. This is why so much of a person's self-esteem is bound up in his/her job—a well-paid job is supposed to be a sign that others value his/her contribution and find it worth exchanging their own resources for.

<sup>16</sup> Nowadays, invisible hand explanations are **invoked** to explain all sorts of phenomena, from scientific progress to environmental **degradation**.

invoke /ɪnˈvəʊk/ v. 援引(法律、原则或理论以支持自己的观点)

degradation /ˌdeɪgrəˈdeɪʃən/ n. 退化, 恶化

## RECOLLECTION

- 1 What effect did the book *The Wealth of Nations* have on Smith?
- 2 What happened to most of Smith's unpublished manuscripts shortly before he died in 1790?
- 3 What are the key influences on Smith's thinking?
- 4 What is the foundation of the Enlightenment?
- 5 What ideas did Smith get from the physiocrats?
- 6 Did Smith dedicate his book *The Wealth of Nations* to Quesnay? Why or why not?
- 7 Where did the term "invisible hand" first appear?
- 8 What is the invisible hand mechanism?
- 9 What is the prerequisite condition for the invisible hand mechanism to work efficiently?
- 10 What is the extremely positive aspect of a market-based economy?
- 11 Why can we say that much of our self-esteem is bound up in our jobs?
- 12 What phenomena is the theory of the invisible hand employed to explain nowadays?

### Free Trade

Free trade is a policy followed by some international markets in which some governments do not restrict imports from, or exports to, other countries. Free trade is exemplified by the European Economic Area and the Mercosur, which have established open markets. Today, most nations are members of the World Trade Organization (WTO) multilateral trade agreements. However, some governments still impose some protectionist policies that are intended to support local employment, such as applying tariffs to imports or subsidies to exports. Governments may also restrict free trade to limit exports of natural resources. Other barriers that may hinder trade include import quotas, taxes, and non-tariff barriers, such as regulatory legislation. There is wide agreement among economists that protectionism has a negative effect on economic growth and economic welfare, while free trade and the reduction of trade barriers to trade have a positive effect on economic growth.

### Types of Business Firms

Business firms can be divided into three categories based on the rules and conditions of ownership. The firms of the greatest number are sole proprietorships, in which a single individual owns the firm, takes responsibility for it, and receives all of the profits as part of his/her household income. Common examples of sole proprietorships include shops and restaurants that are owned by just one person, and the business of freelance consultants, writers, and artists.

Other firms are partnerships, in which ownership and responsibility are shared among two or more co-owners. Small professional practices—such as medical, dental, or law practices—are often partnerships. In

partnerships, like in sole proprietorships, the owners receive all of the profits as part of their household income.

The largest firms—such as General Motors, Time Warner, Starbucks, and Sony—almost always fall into the third category: corporations. In a corporation, ownership is divided among those who buy shares of stock. Each share of stock gives its holder (1) a vote for the board of directors, which, in turn, hires the corporation's top management; and (2) a fraction of the corporation's total profit. While some of the profit may be paid out to the shareholders as dividends, it's not uncommon for most or all of it to remain with the corporation, where it can be used to fund new projects.

### Market Economy and Command Economy

In a market economy, consumers and producers decide what they want to purchase and produce by voting with their dollars in the marketplace. Purchasers decide what to buy based on their preferences and the prices of goods and services. Producers decide what to produce based upon their sales and the prices they get for their goods and services. In a pure market economy, also known as a *laissez-faire* economy, the government plays a very limited role. The government does not direct, and may even lack the power to direct, the private sector to purchase or produce specific goods and services.

In a command economy, also known as a planned economy, the government largely determines what is produced and in what amounts. It directs producers to make and deliver goods and services in specified amounts.

## Physiocrat

A physiocrat is any of a school of economists founded in 18<sup>th</sup>-century France and characterized chiefly by a belief that government policy should not interfere with the operation of natural economic laws and that land is the source of all wealth. It is generally regarded as the first scientific school of economics.

The physiocrats envisaged a society in which natural economic and moral laws would have full play and in which positive law would be in harmony with natural

law. They also pictured a predominantly agricultural society and therefore attacked mercantilism not only for its mass of economic regulations but also for its emphasis on manufactures and foreign trade. Whereas mercantilists held that each nation must regulate trade and manufacture to increase its wealth and power, the physiocrats contended that labor and commerce should be freed from all restraint. Again, whereas mercantilists claimed that coin and bullion were the essence of wealth, the physiocrats asserted that wealth consisted solely of the products of the soil.



## EXPLORATION

### Task 1

Read the passage, and answer the questions below it.

It is believed that many things, such as love, friendship, envy, and sympathy, motivate people to act, but Adam Smith concluded that only self-interest would generate the cooperation with strangers needed for large-scale specialization and division of labor.

- 1 Do you agree with Adam Smith's conclusion? Why or why not?
- 2 What else do you think can lead to large-scale specialization and division of labor besides self-interest?
- 3 Do you think large-scale specialization and division of labor means a higher standard of living? Why or why not?

### Task 2

Read the passage, and answer the questions below it.

If you often visit local grocery stores, you will find great changes in the prices and amounts of goods provided in the same stand. For instance, the prices of green vegetables will rise sharply in winter compared with summer. Even in this case, producers are sure that their products can be sold out.

- 1 Why do producers try to raise the prices of their products?
- 2 Why are producers sure that their products can be sold out?
- 3 Who decides the prices of the products in the market? And how?

**Task 3**

Read the passage, and answer the questions below it.

Whoever offers to another a bargain of any kind, proposes to do this.

Give me that which I want, and you shall have this which you want, is the meaning of every such offer; and it is in this manner that we obtain from one another the far greater part of those good offices which we stand in need of. It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity, but to their self-love.

- 1 What does a market-based economy look like in the passage?
- 2 Suppose you are selling your second-hand desktop computer you have used for over four years, who could be your buyers?
- 3 As we know, famous popular singers sing for charity sometimes. So do you agree that “It is not from the benevolence of... but from their regard to their own interest”?

**Task 4**

Read the passage, and answer the questions below it.

To propose an exchange is to attempt to show another that what you can do, or what you have, can be of use to the other. When you carry out the exchange, it means the other person recognizes that what you can do or what you have is of value. This is why so much of a person’s self-esteem is bound up in his/her job.

- 1 What is the relationship between a person’s self-esteem and his/her well-paid job?
- 2 In what sense is it related to the theory of the invisible hand?
- 3 Do you agree with Smith’s idea about self-esteem? Why or why not?

## REFLECTION

### Task 1

Write a summary of about 250 words on the topic “Adam Smith—Father of Economics.”

Your essay needs to cover:

- 1 a brief introduction to his biography;
- 2 resources of his thinking;
- 3 a brief introduction to the theory of the invisible hand.

### Task 2

Read the passage “Why Business Organizations?”. Write an essay of no less than 250 words titled “My View on Business Organizations.” Your essay can be structured into three parts:

- 1 Introduction (1 paragraph): State your view on business organizations.
- 2 Body (2–3 paragraphs): Elaborate your view by commenting on the effect of business organizations on our current economic development.
- 3 Conclusion (1 paragraph): Summarize your points.

## Why Business Organizations?

A striking aspect of contemporary market economies is the importance of large, organized groups working together as business firms. The self-employed individual who works alone is the exception in our economy—only a small fraction of those working fit into this category. There is a puzzle here, because in the large firm the role of the market as a coordinator of decisions is replaced by commands of a hierarchical authority. From a worker’s point of view, for example, factory life in the market economy is very similar to factory life in a command economy. In both systems the number of people working at various tasks in a factory as well as the schedule they must work is determined not by a market, but by orders coming from above.

The division of labor provides one possible reason for the existence of organized firms. If a complex task is divided into a series of parts and a specialist does each part, much more can be produced than if everyone tries to do the whole task alone.

A second possible reason for business organizations is that man is a social animal and he would rather work in groups than alone. A problem with this hypothesis is that people do not just work together in groups, but they work under the supervision and orders of a “boss.” Few people profess to enjoy obeying orders. An interesting solution to this problem was suggested in 1937 by Ronald Coase. Coase argued that “... the main reason why it is profitable to establish a firm is that there is a cost of using the price mechanism.” This cost may come from the difficulty of discovering what the prices are.

# Two Insights from *The Wealth of Nations*<sup>5</sup>

- 1 Smith's 900-page economic treatise, *An Inquiry into the Nature and Causes of the Wealth of Nations*, appeared in 1776. This was the book that established him as one of the premier economic thinkers in the history of the economic thought. Of all the insights in *The Wealth of Nations*, the division of labor and the harmony of interests and limited government require the most careful scrutiny.

## The division of labor

- 2 The first chapter of *The Wealth of Nations* is titled "Of the Division of Labour," an unfamiliar phrase in Smith's time. The first sentence reads as follows: "The greatest improvement in the productive powers of labour, and... seem to have been the effects of the division of labour."
- 3 Recognizing its importance to his overall theme, Smith applied his concept in a detailed description of a pin factory:

*To take an example, therefore, from a very trifling manufacture; but one in which the division of labour has been very often taken notice of, the trade of the pin-maker; a workman not educated to this business (which the division of labour has rendered a distinct trade), nor acquainted with the use of the machinery employed in it (to the invention of which the same division of labour has probably given occasion), could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly could not make twenty. But in the way in which his business is now carried on, not only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire, another straightens it, a third cuts it, a fourth points it..., in this manner, divided into about eighteen distinct operations, which in some manufactories, are all performed by distinct hands, though in*

<sup>5</sup>

The text is adapted from *The Evolution of Economic Thought* written by Stanley L. Brue and Randy R. Grant, published in 2012 by Cengage Learning.

*others the same man will sometimes perform two or three of them...*

- 4 The division of labor, said Smith, increases the quantity of output produced for three reasons. First, each worker develops increased dexterity in performing one single task repeatedly. Second, time is saved if the worker need not go from one kind of work to another. Third, machinery can be invented to increase productivity once tasks have been simplified and made routine through the division of labor. Notice the emphasis on manufacturing production and the productivity of labor here. Recall that mercantilists were concerned mainly with how the exchange of goods, once produced, could add to the nation's well-being. The physiocrats, on the other hand, focused on agriculture output. By beginning his book with a discussion of how the same number of workers could produce substantially more output by dividing their labor, Smith immediately made it clear that *The Wealth of Nations* was a break from the prominent economic notions then in existence.

## The harmony of interests and limited government

- 5 Smith pointed out that participants in the economy tend to pursue their own personal interests. The consumer looks to find the lowest price for a piece of goods, given its quality. The worker tries to find the highest pay, given the non-wage aspects of the job. But hidden within the apparent chaos of economic activity is a natural order. There is an invisible hand that channels self-interested behavior in such a way that the social good emerges.
- 6 The key to understanding Smith's invisible hand is the concept of competition. The action of each producer or merchant who is attempting to garner profit is restrained by the other producers or merchants who are likewise attempting to make money. Competition drives down the prices of goods and in so doing reduces the profit received by each seller. In situations in which there is initially only a single seller, extraordinary profit attracts new competitors who increase supply and erase the excessive profit. In an analogous way, employers compete with one another for the best workers, workers compete with each other for the best jobs, and consumers compete with one another for the right to consume products. Stated in contemporary economic terms, the result is that resources get allocated to their highest valued uses; economic efficiency prevails. Furthermore, because business persons save and

invest—again out of their self-interest—capital accumulates and the economy grows. The pursuit of self-interest, restrained by competition, thus tends to produce Smith’s social good—maximum output and economic growth.

- 7 This harmony of interests implies that intrusion by government into the economy is unneeded and undesirable. According to Smith, governments are wasteful, corrupt, and inefficient, and his distrust of government is further reflected in his references to his own government, a regime that most historians judge to be one of the most honest and efficient ones in the world at that time. In a direct attack on mercantilism, Smith argued that government should not interfere in international trade. Nations, like individuals and private families, should specialize in producing goods for which they have an advantage and trade for goods for which other nations have an advantage.
- 8 It is tempting to label Smith as an advocate of laissez-faire; we have seen his dislike for government involvement in the economy. But unlike some of the more extreme advocates of that view, Smith did see a significant albeit limited role for the state. Specially, he saw three major functions of government: (1) to protect society from foreign attack, (2) to establish the administration of justice, and (3) to erect and maintain the public works and institutions that private entrepreneurs cannot undertake profitably.
- 9 At scattered points throughout his book, Smith favors a variety of state interventions that fit into the preceding three categories or that enlarge the scope of acceptable government action. He thought the law should enforce the performance of contracts. Control over the issue of paper money by bankers is necessary even though it might be considered a violation of natural liberty. Legal control over interest rates is acceptable; but the rate should be somewhat (though not much) above the lowest market rate to promote sound projects rather than frivolous, wasteful, and speculative ones, which high interest rates might permit. Laws ensuring the security of the agricultural tenant are good because they promote improvements and investments in the land. Smith approved of patents and copyrights of limited duration. He even favored two kinds of protectionist tariffs: (1) those that protect a domestic industry essential to the national defense and (2) those that equalize the tax burden on a particular domestic industry by imposing a tariff on imports of that

kind of goods. Otherwise, free trade is in order. But if free trade is to be introduced after a long period of protectionism, stated Smith, it should be done gradually to avoid suddenly throwing many people out of work and entrepreneurs into bankruptcy. Among the public works that a government should support are those that promote commerce and education, including canals, roads, harbors, post offices, coinage, schools, and churches. Free public education for the common people is essential as a way to, among other things, counteract the stultifying effects of the division of labor.

- <sup>10</sup> To finance these government activities, Smith recommended taxation. His four maxims for good taxes are as follows: First, taxes should be proportional to the revenue enjoyed under the protection of the state. This was a drastic departure from the regressive taxes prevalent at the time. Second, taxes should be predictable and uniform as to the time of payment, the manner of payment, and the amount to be paid. Third, taxes should be levied at the time and in the manner most convenient to the contributor. Finally, taxes should be collected at minimum cost to the government.