

oikos

A Greek word meaning "household" or "estate," which historically was the first subject of economics analysis.

physiocrat

A believer in the eighteenth-century philosophy that argued that laws created by humans are artificial and unnecessary because they interfere with natural laws (such as an individual's pursuit of self-interest), which would ultimately benefit all of society.

laissez-faire

A French term meaning "leave to do" or "let alone," which became associated with the idea that an economy operates best if individuals are allowed to pursue their own self-interest without government interference.

Adam Smith (1723–1790)

Ideas that are significant enough to change the world usually emerge during turbulent times. Generally speaking, the more radical the idea, the more troubled the society it originates from, if only because it is during times of extreme crisis that people are most willing to listen to radically different ideas.

Adam Smith is known today as both the "father of modern economics" as well as the "founder of capitalism." He was the first thinker to outline in detail the characteristics and benefits of a complete economic system—in his case, the free-market economy. He did this in a two-volume work called *An Inquiry into the Nature and Causes of the Wealth of Nations*. Published in 1776, the same year that the American colonies declared their independence from Great Britain, this work is usually referred to as *The Wealth of Nations* and is recognized as the foundation of modern economic theory.

BIOGRAPHY

Adam Smith was born in 1723 to a middle-class family in a fishing village near Edinburgh, Scotland. He entered the University of Glasgow at 14 and, at 17, won a scholarship to Oxford University.

At the age of 27, Smith was offered a position as professor of logic at the University of Glasgow. Shortly afterwards, he earned the more prestigious position of professor of moral philosophy; in 1758, he became dean of the university. With his eccentric personality, the deep-thinking but absent-minded professor became Glasgow's most illustrious citizen.

In 1759, Smith's first book, *The Theory of Moral Sentiments*, made him famous throughout Great Britain. He accepted a lucrative offer in 1764 to become the private tutor of a young English aristocrat. This new position gave him the opportunity to live in France for two years. While visiting Switzerland, he met French philosopher Voltaire, and back in Paris he became acquainted with a new school of economic thought whose leaders were known as the **physiocrats**.

The physiocrats reasoned that if unchangeable natural laws governed the physical world, then natural laws also governed human behaviour and, therefore, the social, economic, and political worlds. They argued that if all human behaviour was controlled by natural laws, then all the artificial laws created by humans were unnecessary and ineffective. Since people have a natural tendency to serve their own best interests and to acquire wealth, the pursuit of self-interest would ultimately benefit all individuals if they were left alone to create more wealth. This doctrine of non-interference became known by the French term **laissez-faire**, which means literally "leave to do," or leave things alone so that matters can work themselves out naturally.

While travelling as a tutor, Smith began his most important project, *The Wealth of Nations*, which took him 12 years to complete and have published. Smith was greatly influenced by American politician and writer Benjamin Franklin, who provided much information about the economic situation in the American colonies. In 1778, Smith was appointed commissioner of customs for Edinburgh, where he lived for the rest of his life.

THE TIMES

Adam Smith was born into a world where **mercantilism** was the prevailing economic system. This system is based on the state's control of economic production and trade, with the goal of exporting as many goods as possible for sale abroad while, at the same time, importing as few foreign goods as possible. When this system is successful, it means that gold and silver from abroad (the money paid for the exported goods) are flowing into the country while very little money is flowing out of it. At the time, gold and silver reserves were thought to constitute the real wealth of any country.

To make mercantilism work, a country's government adopts a **protectionist** policy to safeguard its gold and silver reserves by limiting the entry of foreign goods. As a result, authorities impose stiff taxes, or **tariffs**, on imported goods to make them more expensive than the goods produced in the country. Problems arise, however, as more and more countries adopt this strategy. Trade between countries drops off, and prices of all but the most common domestic products go up. Mercantilism, a product of the Middle Ages, did not sit well with the established merchant class, the growing industrialist class, and the heavily burdened working class. All of these classes were feeling increasingly handcuffed by government regulations and taxes.

Laissez-faire philosophy provided a strong argument for replacing state control of the economy with a reliance on natural laws to regulate economic activity. This idea contributed to the political ferment in France that led, in turn, to the French Revolution. Smith learned from Benjamin Franklin that the growing mood of rebellion in the American colonies was a direct reaction to interference by the British government, through various taxes and regulations, in the economic life of the colonists. This interference led to the Declaration of Independence in 1776 and the American Revolution during the years 1775–1783.

Many of Smith's ideas developed in response to the rapid economic changes he observed in Great Britain. The Enclosure Movement broke up the large plots of land that towns had held in common since the Middle Ages and redistributed them in small plots to individual landholders. Owners began to run these farms for profit rather than subsistence. Inventions such as the spinning jenny, the power loom, and the steam engine made it possible for factory owners to increase both the scale of their operations and the level of their profits. In the new factories that sprang up, workers performed increasingly specialized tasks and used a variety of machines. This period of technological innovation and new means of production, which started during Adam Smith's lifetime, came to be known as the **Industrial Revolution**.

mercantilism

An economic system that emphasized state control of trade, with the goal of exporting as many goods as possible and importing as few foreign goods as possible.

protectionist

This is a term used to characterize an economic policy that restricts imports through tariffs, quotas, and regulations in an effort to boost domestic industry.

tariff

A tax on an import levied by a country; also called *custom duty*.

Industrial Revolution

The period of technological innovation and factory production, beginning in Britain in the late eighteenth century, that eventually changed an economy that was largely agricultural and rural to one that was industrial and urban.

self-interest

An idea, central to the philosophy of Adam Smith, that each individual's strongest drive is to better his or her own condition.

invisible hand

Adam Smith's notion that the unintended result of individual producers' desire for profit is to supply society with the goods and services it needs; at prices consumers are willing to pay, as a result of competition.

division of labour

The specialization of workers in a complex production process, leading to greater efficiency.

law of accumulation

Adam Smith's theory that business people who invest a percentage of their profits in new capital equipment increase the economy's stock of capital goods, thus ensuring economic growth and future prosperity.

IDEAS THAT ADVANCED ECONOMIC THOUGHT

Self-Interest

Adam Smith believed that human beings are motivated primarily by what he called **self-interest**, or the desire each of us has to better our condition in life. This means that the profit motive provides the major stimulus for economic growth and prosperity. When society requires greater production to satisfy its wants, it does not appeal to the generosity of producers, but rather to the desire of producers to increase their own profits.

The trick is to ensure that this desire for greater profits does not completely overwhelm a producer's sense of obligation to the rest of society. For this reason, in a free market, there is competition among many producers, none of whom can raise their prices too high without losing customers. In this way, self-interest and competition work together to advance the common good. Government regulation is not necessary to control the economy because the forces of market competition will serve, in Smith's famous phrase, as an **invisible hand**, or a natural control. To see how this works, let's consider a hypothetical situation.

Suppose an ambitious farmer decides to charge three times the going rate for a bushel of potatoes. Buyers will naturally do business with one of the many other farmers who sell their potatoes at lower market prices. The first farmer will have to reduce the price of his potatoes or face the economic consequence of lost sales. Even if all Ontario potato farmers conspire to sell their potatoes for exorbitant prices, entrepreneurs will bring potatoes into Ontario from other markets, such as Prince Edward Island, to realize a profit. At the same time, when local farmers realize that growing potatoes has become more profitable, they will replace some of their crops with potatoes. This increased supply of potatoes will naturally force the price of potatoes back down again. Smith believed that these natural "laws of the market" are at work in all openly competitive marketplaces.

Ongoing Progress and Prosperity

After reflecting on the substantial increases in wealth that had occurred in Britain during the previous 100 years, Smith outlined three reasons for the country's continued economic growth and increasing prosperity: the division of labour, the law of accumulation, and the law of population.

For Smith, the **division of labour**, or the specialization of workers in a complex and mechanized production process, led to increases in levels of production. These production increases provided greater profits for investors, more consumer goods for workers, and ultimately greater economic efficiency for society.

The **law of accumulation** worked naturally to fuel further rounds of growth and prosperity. The accumulated profits that industrialists invested in additional capital goods, such as factories and machinery, permitted increases in total production and efficiency for the economy as a whole. These increases in turn led eventually to greater profits for investor industrialists. The increased profits could then be reinvested in additional capital goods, providing the stimulus for further rounds of economic growth.

According to Smith, the **law of population** also contributed to the maintenance of this steady rate of growth and prosperity. The accumulation of capital naturally increases the demand for labour to operate the additional machinery that the industrialists purchase. To attract more workers, competing industrialists must offer higher wages. Wage increases lead to improved living conditions for workers, which in turn reduce mortality rates. As a result, there is an increase in the population and, therefore, in the labour force. Increases in the labour force mean that workers must compete with one another to find jobs, and this competition tends to keep wages from increasing. Thus, industrialists continue to make healthy profits.

law of population

Adam Smith's theory that the accumulation of capital by businesspeople requires more workers to operate the equipment, leading to higher wages, which in turn lead to better living conditions, lower mortality rates, and an increase in population.

A monument to Adam Smith on the Royal Mile in Edinburgh, Scotland.



geometrical progression

A number sequence (such as 2, 4, 8, 16, 32, 64...) that has the same ratio (in this case, $\times 2$) between each number in the sequence; it is associated with population growth in the pessimistic theories of Thomas Malthus.

Thomas Robert Malthus (1776–1834)

Recognized historically as the first professional economist, Thomas Robert Malthus was a mild-mannered cleric whose shyness was compounded by a severe speech impediment. He challenged Adam Smith's view of a world governed by natural laws that provided ever-increasing prosperity, and he predicted inevitable poverty and famine for the masses. Malthus first presented his pessimistic views in a book he published in 1798 called *An Essay on the Principle of Population, as It Affects the Future Improvement of Society*. He revised and expanded the text five times between 1803 and 1826. Although he softened his views slightly over the years, his pessimistic conclusions did not change. After reading Malthus, English writer Thomas Carlyle referred to economics as "the dismal science."

BIOGRAPHY

Malthus was born into an English upper-middle-class family in 1766. He was admitted to Jesus College at Cambridge University in 1784, where he studied a wide range of subjects and took prizes in Latin and Greek before earning a master of arts degree in 1791. In response to a religious vocation, Malthus took holy orders in the Anglican Church in 1797 and pursued the quiet life of an English country curate.

He was named professor of history and political economy at the East India Company's college at Haileybury, Hertfordshire, in 1805. This was the first time that the term *political economy* was used for an academic position, so Malthus can rightly be identified as the first professional economist.

THE TIMES

Malthus's thoughts and writings were greatly influenced by the existing economic conditions in Britain. The country was in the midst of the Industrial Revolution, a period when great numbers of workers left their farms and crowded into cities, where they hoped to find jobs in factories. They lived in congested and unsanitary quarters, struggling to survive on minimal wages. At the same time, a prolonged, expensive, and bloody war against Napoleon Bonaparte's France added to the misery of the British working class. Poor crop yields and a simultaneous population boom further aggravated the situation. It began to look as if Britain's once-rich farmlands could no longer feed the country's people.

IDEAS THAT ADVANCED ECONOMIC THOUGHT

Population and Food Production

Malthus based his ideas about population and food production on what he thought were two self-evident premises. The first is that food is necessary to sustain human life. The second premise is that human sexual instinct is constant. Starting with these two premises, Malthus built an argument that the population, if left unchecked, would double every 25 years (about one generation). This doubling effect meant that the population grew in what statisticians call a **geometrical progression**.

Food production, on the other hand, can only grow in an **arithmetical progression**. As more land is required for food production, less-fertile tracts of land will be employed out of necessity, and these less-fertile lands will yield fewer crops. At the same time, as more and more workers cultivate the lands more intensively, the productivity of the added workers also declines. Malthus used the economic principle of the law of diminishing returns (see Chapter 2) to explain why growth in food production would be limited to arithmetical increases from one generation to the next. That is, each generation's food production increases by an amount equal to the original quantity. Figure 5.1 illustrates what became known as the "Malthusian dilemma."

Malthus had a very pessimistic outlook. He thought that if wages went up, workers' improved standard of living would reduce infant mortality rates, which would lead to an increase in the population at a faster rate than the means of subsistence. Where Adam Smith saw a world of steadily increasing prosperity, Malthus believed that wages and the standard of living should hover around the subsistence level to keep the population from growing out of control.

Although Malthus admitted that two types of population control existed, he did not think they would prove strong enough to check the geometric progression of the world's population. **Positive checks**, which increase the death rate, include war, famine, disease, and epidemics. **Preventive checks**, which reduce the birth rate, include moral restraints such as late marriage and sexual abstinence.

In the end, Malthus failed to predict two developments that had major impacts on his theories of population. In the twentieth century, a series of technological breakthroughs in the field of agriculture, known collectively as the Green Revolution, increased food production rates beyond anything Malthus might have imagined. Also, continued urbanization has had a negative effect on the birth rate. Whereas additional children in farm families have always been seen as assets to help with the work, this has never been the case in urban families. Average family size in urban industrial countries continues to decline, to the point where several countries in the world today have reached zero population growth. Does this mean Malthus was wrong? Two hundred years after the publication of his ground-shaking text, the debate continues.

arithmetical progression

A number sequence (such as 1, 3, 5, 7, 9, 11, 13 ...) that has the same difference (in this case, by 1) between each number in the sequence; it is associated with food production in the pessimistic theories of Thomas Malthus.

positive check

Thomas Malthus's theory that war, famine, and disease would check population increases to some extent, but not enough to prevent the geometrical progression of the world's population to unsustainable levels.

preventive check

Thomas Malthus's theory that restraints such as late marriage and sexual abstinence would help reduce the birth rate to some extent, but not enough to prevent the geometrical progression of the world's population to unsustainable levels.

Generation	1	2	3	4	5	6	7	8	9	10
Year	1	25	50	75	100	125	150	175	200	225
Population	1	2	4	8	16	32	64	128	256	512
Food	1	2	3	4	5	6	7	8	9	10

Note: Each 25-year period refers to one generation. Each generation, the population doubles. Every 25 years, food production increases by an amount equal to the original quantity produced during the first year.

To keep this table simple, constant units of population and food production are used instead of actual figures. One unit of population might represent 1 million people, and 1 unit of food might represent enough wheat to sustain 1 unit of population from one harvest to the next.

FIGURE 5.1

The Malthusian dilemma

A balanced economic system (in which 1 unit of food is available for 1 unit of population) naturally transforms—if left unchecked—into an economically unbalanced situation. After 10 generations (or 225 years), 512 units of population must subsist on only 10 units of food. Unless population growth is controlled, famine awaits the entire human race!

David Ricardo (1772–1823)

Adam Smith's notion of humankind living in a harmonious world governed by natural laws was most effectively assailed by David Ricardo, the articulate son of a Dutch merchant banker who had immigrated to Britain and made a fortune on the London Stock Exchange.

BIOGRAPHY

David Ricardo was born into a prosperous family in London in 1772. At 14, he went to work in his father's investment business, but by the time he turned 22, he had established his own business with a capital base of £800. He retired 20 years later with over £1 million.

Recognizing that most investors tend to overreact and exaggerate the importance of events, Ricardo was able to use his knowledge of different kinds of securities to make great profits. For example, in the panic following Napoleon's return to power in France—and with the increased likelihood of war—the market for British government securities declined sharply. Ricardo, however, invested heavily in government securities prior to the Battle of Waterloo. When the Duke of Wellington defeated Napoleon's armies at Waterloo, Ricardo's profits were significant.

When Ricardo retired to the country at the age of 42, he devoted his attention to the new science of political economy. His most famous book, *On the Principles of Political Economy and Taxation*, exposed the bitter class conflicts at the heart of any society structured around free-enterprise capitalism. Published in 1817, it challenged the power of the aristocratic landlord class by questioning the contributions of this class to society. The book was hailed by the rising industrialist class and became an influential document of political reform.

Elected to the House of Commons in 1819, Ricardo argued on behalf of free trade and carefully outlined the complex laws of land rent that allowed the idle landlord class to exploit land, labour, and capital. In 1823, he died suddenly at the age of 51, before he could witness first-hand the full impact of his economic ideas.

THE TIMES

Ricardo lived during a period of great social conflict and political unrest in Britain. The British population grew rapidly, putting a strain on food supplies. The Napoleonic Wars and successive years of poor crops further drained food reserves.

Not surprisingly, where Adam Smith saw society as a family making great progress together, Ricardo saw clear divisions between conflicting groups. He identified the three main groups in British society as the working class, who lived on modest wages; the industrialist class, who made healthy profits by operating the factories they owned; and the aristocratic landlord class, who received substantial rent from the land titles they held. One group, Ricardo argued, could prosper only at the expense of the others.

Ricardo reasoned that, given their hold on the land, landlords were best positioned to compete effectively against the other classes. The working class

would always struggle to live at or near subsistence levels. The rising industrialists had new-found riches but lacked sufficient representation in Parliament. Therefore, the powerful and entrenched landed aristocracy would always prevail.

To illustrate his case, Ricardo used the example of the landlord-dominated Parliament forcing through legislation known as the **Corn Laws**. These measures imposed stiff taxes on grains imported from other countries. Since there was a shortage of grain in England at the time, the taxes drove up the price of domestic grain to levels usually seen only in times of famine. By 1813, a bushel of wheat sold for twice the average worker's weekly wage. This forced the industrialists to pay higher wages (to ensure that their workers would survive), which, in turn, cut into their profits. High grain prices, however, guaranteed the payment of high rents to the landlords. When the industrialists finally succeeded in repealing the Corn Laws in the 1840s, they effectively broke the power of the landed aristocracy and slowly began replacing them as the dominant class in British society.

IDEAS THAT ADVANCED ECONOMIC THOUGHT

The Iron Law of Wages

Ricardo reasoned that, because of the working class's unchecked rate of reproduction, labour's natural wages would always remain at the subsistence level. Higher wages would increase the population by ensuring lower rates of infant mortality but would not raise living standards because the higher wages would have to be distributed among larger families.

Greedy industrialists seized on this economic principle to justify keeping their workers' wages at the lowest level possible, in some cases claiming that they were thereby performing a public service. Low wages became the figurative leg irons that shackled the working class to their slums. This was never Ricardo's intent. He always believed that wages should be determined by free-market conditions.

The Theory of the Comparative Advantage of Trade

It is a commonly accepted principle that when one community can produce grain more efficiently than another, while the other community can produce wool more efficiently, trade will provide an obvious or **absolute advantage** to both communities. Ricardo was the first person able to recognize and explain that even when one community can produce both wheat and wool efficiently, there remains a **comparative advantage** to be shared when both communities trade the products they can each produce most efficiently. (We'll explore both concepts in Unit 6.)

As a result of his belief in comparative advantage, Ricardo became a strong advocate of free trade at a time when Britain imposed high tariffs on many imports precisely to discourage trade with other countries. While these taxes often protected the earnings of the rich landlords, they hurt the workers and the industrialists. Once again, argued Ricardo, the interests of the landlords ran counter to the interests of the rest of the economy. From Ricardo's perspective, the landlord class grew very rich while others performed all the work and assumed all the risks. Ricardo quickly became the parliamentary champion of the previously unrepresented industrial capitalist.

Corn Laws

Early nineteenth-century taxes on grains imported into Britain that drove up the market price of domestic grain to benefit aristocratic landlords. These taxes became a focus of opposition for David Ricardo's wage and free trade theories.

absolute advantage

The capacity of one economy to produce a good or service with fewer resources than another.

comparative advantage

The capacity of one economy to produce a good or service with comparatively fewer resources than another (for example, having a lower opportunity cost).

bourgeoisie

The term used by Karl Marx for industrial capitalists who, he theorized, would be overthrown by the working class.

proletariat

The term used by Karl Marx to describe the working class who, he theorized, would rise up and overthrow the bourgeoisie, or industrial capitalists.

Karl Marx (1818–1883)

According to Karl Marx, all of human history is governed by economic laws and a series of struggles between people of different social classes. Marx believed that economics is central to people's lives. He held that people's need to eat, drink, and have shelter (the material means of existence) comes before other pursuits in life, such as politics, science, art, and religion.

In collaboration with his friend, wealthy capitalist Friedrich Engels, Marx founded an international workers' movement intended to overthrow the corrupt ruling class of industrial capitalists and aristocratic landlords. Marx called the ruling class the **bourgeoisie**. In 1848, Marx and Engels published the *Communist Manifesto*, in which they incited all exploited workers (whom they called the **proletariat**) to rise up against their oppressors: "Let the ruling classes tremble at a Communistic revolution. The proletariat have nothing to lose but their chains. They have a world to win. Workers of all countries unite!" And so was born the international revolutionary socialist movement of communism. Several rebellions followed in European countries, but none of them succeeded until the Russian Revolution in 1917.

For his radical views, Marx has come to be known as either "the prophet of the proletariat" or "the demonic philosopher." Either way, it is undeniable that he left an indelible mark on the science of economics and on the course of human history.

BIOGRAPHY

Karl Marx was born in the German Rhineland in 1818. An excellent scholar, he attended Bonn University, where he studied philosophy. Marx became the editor of a small, middle-class liberal newspaper. One of the first editorials to get Marx into trouble with the government denounced a new law that prevented peasants from exercising their traditional right to gather fallen timber in the forest for firewood. The authorities first censored and then closed down the newspaper. Marx became more and more outspoken as, one by one, the papers he edited were suppressed by the state.

As his views became more radical and even revolutionary, Marx had to flee Germany. He moved first to Paris and then to Brussels, but his troubles with the state followed him until he moved to London in 1849. Marx and his family lived in London in relative poverty for the rest of his life.

His most comprehensive work, *Capital* (*Das Kapital* in the original German text), was published in three volumes in 1867, 1885, and 1894. In this cold and complex critique of economics, Marx explained why capitalism would ultimately destroy itself. The book was completed by Engels after Marx died in 1883.

THE TIMES

Living in the second half of the nineteenth century, Marx witnessed first-hand the ill effects of the Industrial Revolution on the working class. By the time of Marx's death, England had been transformed from an agricultural and artisan-based economy to one in which the dominant mode of production was the steam-powered factory.

Workers lived in the slums of crowded cities and worked 18-hour days in unsafe and unclean factories. Since there were no laws against child labour, working-class children had to endure these same hardships. After working long hours, children rarely had the time to acquire the education that might lift them out of such deplorable circumstances.

To Marx, the capitalist system was immoral and the people who exploited it unspeakably evil. He saw a world in which all wealth was achieved on the backs of the workers. Yet, the working class received few of the benefits of their labour. Marx believed capitalism, as an economic system, was morally bankrupt and that its moral bankruptcy would one day bring about its own demise.

IDEAS THAT CHANGED ECONOMIC THOUGHT

The Economic Interpretation of History

Marx thought that the laws of economics determine the course of human history. He believed history was an ongoing series of class conflicts between exploiters and the exploited: free citizens against slaves, patricians against plebeians, lords against serfs, guild masters against journeymen, and industrial capitalists against workers. Whenever conditions become unbearable, the oppressed rise up in open rebellion against their oppressors. The capitalist system, based on exploitation and self-gratification, has sown the seeds of its own destruction. Capitalist exploitation will continually worsen the living standards of workers. Immersed in misery, workers will eventually unite to overthrow the corrupt ruling class.

The International Communist Revolution (Revolutionary Socialism)

According to Marx, this revolution would begin in the most industrialized countries of Western Europe (where capitalism was strongest and where workers were exploited most severely) and then would spread throughout the world. The violent overthrow of capitalism would lead to international socialism based on the common ownership of land and capital. Socialism, once fully evolved, would be transformed into its ideal state of communism: a worker-governed society based on the guiding principle "from each according to ability, and to each according to need."

The Labour Theory of Value and the Impact of Marx

For Marx, the value of any item is the value of all labour used in its production (**labour value**). This includes the direct labour supplied by workers in the manufacturing process as well as the amount of indirect labour—that is, the labour embodied in the machinery and buildings used in the manufacturing process. In a capitalist system, workers receive only a portion of what their labour is worth. The difference, which Marx called **surplus value**, is stolen from the worker in the form of profit for the capitalist.

To better understand this concept, let's use a simple example. Assume that the production of a wool sweater requires \$40 worth of labour, \$5 worth of materials, and \$5 worth of wear and tear on machinery (depreciation). If the industrial capitalist can sell the sweater for \$80, then a surplus value of \$30 is created in the form of profit for the capitalist. This surplus value arises from the market's determination that the real value of each sweater is \$80. Since the value of the indirect labour is \$10 (\$5 + \$5), the value of the direct labour must be \$70. Since workers are only paid \$40 for knitting the sweater, \$30 represents the amount of worker *exploitation*.

Worker employment in a capitalist system is based on the premise that the worker will always produce more for the employer than the employer will have to pay in the form of wages. Workers are forced to sell their labour to capitalists for less than it is truly worth because there is always what Marx identified as a "reserve army of the unemployed." Capitalists always have the option of hiring desperate unemployed workers at lower wages, which ensures that wages will never rise above the subsistence level.

The impact of Marxian thinking was so pervasive that it eventually became a separate and distinct school of economic thought. From 1917 to 1991, communist movements grew to eventually include one-third of the world's population.

In economics today, we clearly distinguish between *Marxist* thinking and *Marxian* thinking. *Marxist thinking* is intended to refer to his revolutionary political ideology, focused on the overthrow of the existing ruling class by a united working class. *Marxian thinking* is intended to refer to his socialist economic ideas and theories, based on equality and social justice.

labour value

Karl Marx's notion that the value of any item is equal to the value of the labour used to produce it.

surplus value

The difference between the value of a good measured in terms of the labour used to produce it, and its higher selling price, a surplus that Karl Marx believed was stolen from labour by capitalists.

Self-Reflect

- 1 Explain in your own words Adam Smith's concept of the "invisible hand" and how it relates to self-interest and competition as the primary economic motivators.
- 2 Explain the Malthusian dilemma in your own words. How did the law of diminishing returns contribute to the pessimistic conclusion of Malthus?
- 3 According to Ricardo, what are the main three classes in any free-enterprise society? How does self-interest result in bitter class conflicts?
- 4 Do you agree with Marx that all capitalists exploit workers? Support your position by explaining the relationship between surplus value and exploitation.

school of economic thought

A group of economists who share and promote common ideas on how economies function.

John Maynard Keynes (1883–1946)

In 1936, John Maynard Keynes published *The General Theory of Employment, Interest, and Money*. In it, he defended the “revolutionary” ideas already being applied by governments in Britain, Canada, and the United States to deal with the era of massive unemployment known as the Great Depression. He also provided a blueprint that explained how government intervention could save a country from widespread unemployment and the economic stagnation that accompanied it. Keynes’s book helped to rescue the capitalist system from self-destruction and the spectre of international communism. The approach we have come to call “Keynesian economics” analyzes relationships among demand, production, and unemployment, and focuses on government’s role in sustaining economic activity. In time, this way of thinking gained much support and led to the formation of a distinct “Keynesian” **school of economic thought**.

BIOGRAPHY

Keynes was born in Cambridge, England, in the same year that Karl Marx died. In addition to teaching economics at Cambridge University, Keynes served as an economic adviser to the British treasury during both World Wars and attended post-war international peace conferences as a representative of the British government. He was also appointed as director of the Bank of England, Britain’s central bank. The tireless Keynes served as editor of a major economics journal, chair of an insurance company, and manager of an extremely successful investment trust. Inspired by his mother, Keynes was an early supporter of the movement that eventually won British women the right to vote.

In 1944, Keynes was the chief British representative at the Bretton Woods Conference, which established the International Monetary Fund and the World Bank. His last major public service was the brilliant negotiation in 1945 of a multi-billion-dollar post-war reconstruction loan from the United States to Great Britain.

THE TIMES

Keynes’s career spanned the two World Wars and the period of economic upheaval between them known as the Great Depression. At the end of the First World War, the Allies forced Germany to pay more in reparations than its economy could bear. The result was a severe and long-term depression in Germany that Nazi dictator Adolf Hitler exploited to further his own political agenda.

The Great Depression (1929–1939) was a difficult time in Europe and North America. At the beginning of the Depression, most capitalist governments believed that skyrocketing unemployment rates were only temporary; they thought economic conditions would improve as their market economies reverted to a more balanced state. They called for unemployed workers to tighten their belts, make do with less, be patient, and ride out this period of badly needed correction. Making no attempts to initiate economic improvements, these governments were clearly part of the problem rather than the solution. In fact, government attempts to cut spending and pay back war debts contributed to a decline in the amount of money in circulation.

DID YOU KNOW?

A *school of economic thought* is a collection of thinkers who share a common perspective on how economies work and how governments can support economic growth and stability. Today, critics of the Keynesian school point to his *General Theory* as the leading cause of high inflation rates and massive public debts that Western countries have since accumulated. On the other hand, it is undeniable that national unemployment rates have not returned to the levels witnessed during the 1930s.

IDEAS THAT ADVANCED ECONOMIC THOUGHT

War and Sustainable Peace

As a representative at the peace conference that followed the First World War, Keynes strongly criticized the Treaty of Versailles, which he predicted would ruin the German economy by forcing the country to pay the victorious Allies more than it could afford. He abruptly resigned from the British government.

While serving as a key economic adviser to the British government during the Second World War, Keynes recommended a daring plan that used “**deferred savings**” as the principal means of financing the war effort. A portion of every worker’s pay would be automatically invested in government war bonds that could not be cashed until the war had ended. Keynes hypothesized that, during the war, consumer spending would interfere with the war effort; after the war, consumer buying power would help to stimulate investment, permit increased production of consumer goods, and maintain employment levels.

The 1945 peace treaty and post-war reconstruction plan were greatly influenced by Keynes, who argued that, to secure a lasting peace, the defeated enemy should be helped, not punished. As former enemies became business associates, economic co-operation replaced military intervention in Western Europe. With developments such as the European Union, history appears to have proven Keynes correct.

deferred savings

A policy of bringing foreign peoples under the control of one country for its economic benefit; pursued in the nineteenth and twentieth centuries by European countries over sizable areas of Asia, Africa, and South America.

Combatting the Great Depression

In *The General Theory*, Keynes advanced an idea considered unconventional at the time: that governments bore a large part of the responsibility for the high unemployment rates (approaching 20 percent) ushered in by the Great Depression. He believed these rates could be lowered most effectively by government intervention, especially by sponsoring public works projects that would provide jobs to idle workers. By taking control of interest rates and increasing public spending, a government could stimulate consumer spending, raise the demand for consumer goods, and bring more people back into the workforce. As these previously unemployed workers spent their wages, the money would be re-spent by those receiving it. In this way, increased employment would trigger additional rounds of consumption, investment, and employment increases, as the economy continued to put previously idle resources to work. The resulting growth in the economy would have the effect of correcting the problem of high unemployment rates.

Keynes claimed that, since consumers are limited in their spending by the size of their incomes, they are not the source of depressions or any other cyclical business shifts. Business investors and governments are the primary forces behind business cycles. To Keynes, the Great Depression (which was a major downward cycle) was ultimately a problem of too little investment. If investors were given a reason to invest, combined with favourable interest rates, the economy would necessarily recover, but government intervention was required before this could happen.

Joan Robinson (1903–1983)

As a colleague and follower of Keynes, Joan Robinson successfully overcame gender bias and an aversion to mathematics to become one of the most prominent economists of the twentieth century. She is not known primarily for a single idea or focus (unlike many other economists). However, through her diverse writings, she made substantial contributions to various areas of economics.

BIOGRAPHY

Joan Violet Maurice was born in Surrey, England, in 1903. Her controversial father was a major general who publicly accused the British prime minister of misleading Parliament and the entire country during the First World War. Her maternal grandfather was a renowned surgeon and academic. Joan studied economics at Girton College, a women's college in the University of Cambridge. She graduated in 1925 and married fellow economist Austin Robinson the following year. Soon after marriage, the Robinsons moved to Gujarat, India, where Joan became engaged in a research committee studying Anglo-Indian economic relations.

The Robinsons returned to Cambridge in 1928, when Austin was appointed assistant professor of economics at the University of Cambridge. Joan became an assistant lecturer in economics at the university in 1931. As a key member of the "Cambridge School" of economics, she contributed to the fine-tuning and promotion of Keynesian general theory, especially in regard to employment dynamics during the declining production of the Great Depression.

In 1958, Robinson joined the British Academy (a prestigious national funding organization for research projects in the humanities and social sciences). In 1965, she finally assumed the position of full professor and fellow of Girton College at the University of Cambridge. In 1979, just four years before her death, she became the first honorary fellow of King's College at the University of Cambridge.

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Being 20 years younger than Keynes, Joan Robinson experienced the Great Depression, the Second World War, and the period of significant economic growth that followed the war years. She also witnessed the spread and eventual misapplications of Keynesian theory and attempted to revive and redirect this school of economic thought. She did so by promoting the general applicability of Keynesian theory—that it could be applied to matters beyond combatting unemployment—and defending Keynes's ideas against the criticism of mainstream conservative economists who favoured traditional economic restraint.

Robinson witnessed the unionization of workers who fought for fair treatment and wages that would end their exploitation and better reflect their productivity. She also observed a marked disparity between economic growth rates in countries such as the United Kingdom and the United States, compared with struggling countries such as India and China, which she visited and studied.

Before Joan Robinson, economic thinking was a bastion of male dominance. With her sound ideas and prolific writings, she made a significant impact on the

DID YOU KNOW?

Joan Robinson was a leader in moving the Keynesian school of thought forward. Sometimes she is called a *neo-Keynesian*. Given her left-of-centre views later in life, she was also instrumental in revitalizing some of the merits of Marxian economic thinking.

recognition of women as equal contributors. Robinson's early works catapulted her to the forefront of economic thinking. She was an incisive interpreter of the history of economic thought and recognized the discipline as both a means for social control and a vehicle to produce objective scientific knowledge. From Robinson's perspective, this helped to explain the natural tensions in economic thinking.

Robinson was harshly criticized for sympathetic publications (in 1942) about Karl Marx as an important economist and (in 1969) about the successes of China's Cultural Revolution that brought communist leader Mao Zedong to uncontested power. In later life, Robinson's writings reflected a growing pessimism regarding the future of conservative capitalism and a growing appreciation for socialistic (or left-wing) considerations.

IDEAS THAT ADVANCED ECONOMIC THOUGHT

Monopsony and Imperfect Competition

Robinson's early works helped to establish her as a leading economic thinker. In a 1933 publication entitled *The Economics of Imperfect Competition*, she introduced the theory of **imperfect competition** as the more common market occurrence between the extremes of perfect competition (where many sellers interact with many buyers) and monopoly (where one seller interacts with many buyers).

Robinson developed the concept of **monopsony** (the reverse of a monopoly market), where the market is dominated by many sellers (usually workers) and has one buyer (usually an employer). This concept is important in labour economics, where a single employer is buying labour and many workers compete to sell their labour to that employer. Monopsony theory recognizes that employers can exert a large influence over wages: if a sole employer exists in a particular market, that employer can pay workers less than the value of the work they perform. Collective bargaining, where workers negotiate wages as a unit or labour union, is one strategy to address the imbalance of monopsony. Minimum-wage legislation is another way to protect workers from exploitation by employers offering unfair wages. Robinson later used monopsony to help explain the wage discrepancy between male and female workers of equal productivity.

Economic Growth and Development

In 1956, Robinson published what many consider her greatest work, *The Accumulation of Capital*. This work extended Keynesian thinking to address long-term economic growth and prosperity. It reflected on the conditions required for the achievement of a cumulative long-term growth of income and capital, which she referred to as a "golden age." The entire analysis is effectively carried out without the use of mathematics.

In reaction to the exploitation she recognized as coming from the unfair allocation of resources to maximize productivity and the inadequacy of wages to fairly compensate workers, her views sometimes reflected socialistic overtones supporting equity in income distribution. After her time as a researcher in India, Robinson remained keenly interested in the problems faced by underdeveloped countries on the uphill struggle to balanced and sustainable development.

imperfect competition

A common market situation where competition is less than perfect (where many buyers interact with many sellers) but still competitive (unlike monopoly). Samples include monopolistic competition and oligopoly.

monopsony

The reverse of a monopoly market, where there are many sellers (usually workers) but only one buyer (usually an employer).

John Kenneth Galbraith (1908–2006)

Prolific writer and gifted economist John Kenneth Galbraith has been called one of Canada's most notable exports to the United States. When Galbraith published his book *The Affluent Society* in 1958, he coined the term "affluent society," which summed up the remarkable increase in wealth that the United States and Canada had enjoyed since the end of the Second World War. At the same time, the book set out a devastating criticism of government economic policies because they did not pay enough attention to providing and maintaining public services.

BIOGRAPHY

John Kenneth Galbraith was born in Iona Station, Ontario. After graduating in agricultural economics from the University of Toronto in 1931, he earned a doctorate at the University of California at Berkeley in 1934. He taught economics at Harvard and Princeton Universities until the United States entered the Second World War. During the war, Galbraith worked in the federal Office of Price Administration. After the war, he was appointed director of the US Strategic Bombing Survey, which studied the effects of air raids on Japan and Germany.

Galbraith served as editor of *Fortune* magazine from 1943 to 1948 and then returned to Harvard in 1949 to teach economics. He stayed there until his retirement, except for a brief stint as ambassador to India under US President John F. Kennedy. In addition to *The Affluent Society*, his other noted publications include *American Capitalism*, *The New Industrial State*, *Economics and the Public Purpose*, *The Age of Uncertainty*, and *The Nature of Mass Poverty*.

John Kenneth Galbraith



Milton Friedman (1912–2006)

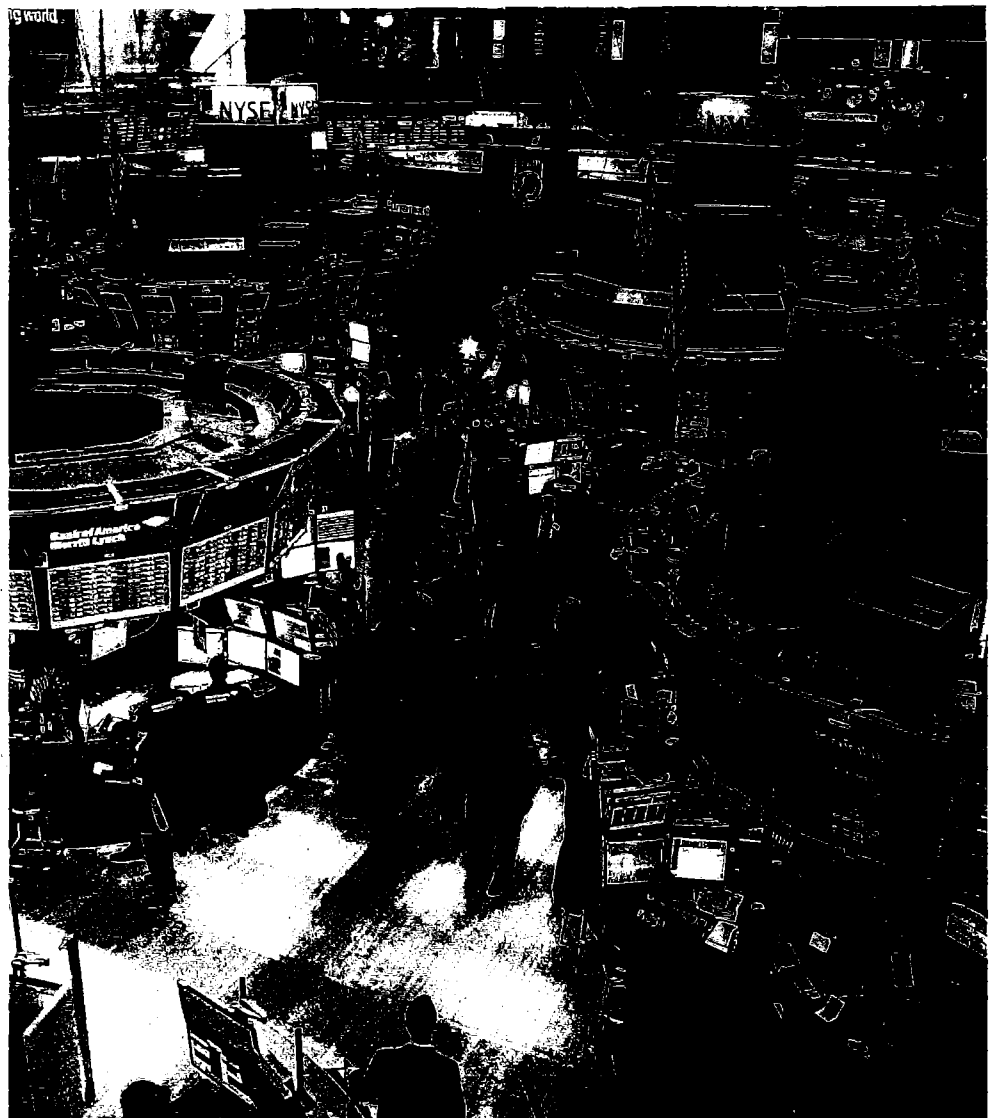
Whereas Galbraith is regarded as a leading proponent of the liberal economic perspective, Milton Friedman is acknowledged as the most articulate champion of the conservative view and free-enterprise capitalism. He was an influential adviser to Richard Nixon and other US presidents.

BIOGRAPHY

Milton Friedman was born in Brooklyn, New York, in 1912. He enrolled in his first economics course in 1930, a time when the single most important issue facing Western countries was the Great Depression. An accomplished scholar, Friedman studied at Rutgers, Chicago, and Columbia Universities before being appointed a government economist during the Second World War. He joined the faculty of the University of Chicago in 1946, where he remained until 1977.

When he received the 1976 Nobel Prize in Economic Sciences, Friedman was cited for "his achievements in the field of consumption analysis, monetary history and theory, and for his demonstration of the complexity of stabilization policy." Friedman has written many books, the best known of which are *Capitalism and Freedom* and *A Monetary History of the United States, 1867–1960*.

These traders on the floor of the New York Stock Exchange are buying or selling ownership shares for their clients. How would low interest rates affect the volume of trade on these stock exchanges? What effect would high borrowing rates have on investors?



THE TIMES

A contemporary of Galbraith, Friedman was strongly influenced by the amount of unproductive government intervention in the US economy following the end of the Second World War. He believed that government attempts to induce cycles of economic growth and full employment (by increasing spending and reducing taxes) resulted in periods of significant price inflation and a steady increase in the rate of public debt. In addition, Friedman thought government intervention made both the economy and individual citizens increasingly more dependent on government assistance and, therefore, weaker.

IDEAS THAT CHANGED ECONOMIC THOUGHT

Laissez-Faire Capitalism

According to Friedman, free markets will largely resolve their own economic problems more effectively if they are left alone rather than subjected to government intervention. Friedman saw individual self-sufficiency and the preservation of the work ethic as important pillars of productivity and sustained economic growth. For this reason, he advocated a program of guaranteed income (or negative income tax) over centralized social welfare services and the massive, inefficient bureaucracy they require. The abolition of minimum-wage legislation is another laissez-faire strategy that Friedman recommended to free up the marketplace.

Friedman also advocated the application of the free-market principle to the supply of education. Under his plan, parents would annually receive government vouchers equal in value to the cost of a child's education. They could spend the vouchers at the school of their choice. Schools would then be developed to meet the demands of parents (the people who best know the needs of their children). Excellent schools would have no problem attracting students. Schools that did not attract enough numbers would automatically close. The education market could thus take care of itself!

The Importance of Money Supply

Friedman is a leading member of the **monetarist** school of thought, sometimes referred to as the "Chicago school." Monetarists believe that the most effective way for governments to influence the economy is by regulating the money supply in circulation. They maintain that business cycles are determined by the money supply and interest rates, not by levels of taxation and government spending. According to Friedman, governments should raise the money supply by a fixed amount each year. This increase should be equal to the long-term growth rate of the economy, that is, between 3 and 5 percent. Too much money in circulation causes price inflation; too little money reduces investment and employment levels.

monetarist

A school of economic thought based on the belief that the most effective way for government to affect the economy is by regulating the money supply.

DID YOU KNOW?

Faculty from the University of Chicago, including Milton Friedman, have received more Nobel Prizes for economics than any other university. The Chicago school of economic thought favours free-enterprise capitalism and regulation of the money supply to promote economic growth and stability. This monetarist school of thought has been traditionally critical of the Keynesian approach.

Self-Reflect

- 1 Explain how John Maynard Keynes's "deferred savings" plan would work both during and after war.
- 2 Explain Joan Robinson's theory of imperfect competition and why it would be a more common market occurrence than perfect competition.
- 3 Describe in your own words John Kenneth Galbraith's theory of social balance. Do you agree with his assessment that more attention is paid to the private interests than to the public good? Use examples from your own community to support your position.
- 4 What does Milton Friedman see as the best ways to free up the American economy to maximize the benefits of capitalism?