

## **SOCIAL REVOLUTIONS IN THE WEST**

### Political Revolutions: The Beginnings

The American Revolution: Birth of a Growing Power

The French Revolution and the Rise of Napoleon

Revolution and Independence in Latin America

### Economic Revolutions

New Patterns of Production

The Free Enterprise Revolution

The Agricultural Revolution

The Industrial Revolution

### Consequences

Explosions: People, Production, and Power in the West

Changing Social Conditions

### Responses to Capitalism and Industrialism

Affirmation

Adam Smith and Classical Economic Liberalism

Interlude: Basic Economics in Modern Terms

Ricardo and Malthus, Bentham and Mill

Rejection and Revolution

The Utopian Socialists

The Socialism of Marx: Materialism, Determinism, and Revolution

Diverging Strands of Socialism

## **POLITICAL REVOLUTIONS**

### **THE AMERICAN REVOLUTION: BIRTH OF A GROWING POWER**

By the mid-1700's, the original English settlements of North America had become a thriving set of thirteen colonies, stretching from Georgia in the south to what is now Maine in the north. The colonies were made up of people from many walks of life and religions, all thrown together in a rough frontier society. Land was plentiful, so more men were landowners, and therefore voters, than in England. All these things made the colonies more religiously tolerant, and less class conscious, than their mother country. England had been mired in wars with the other great powers of Europe during the 1700's, and the colonists had grown accustomed to minimal interference from across the Atlantic. By the late 1700's, many had begun to think of themselves as a distinct people.

Britain, following mercantilist policies, did regulate international trade in the colonies, and forbade colonists to trade with other European nations or their colonies. This policy would have given merchants in the British empire a virtual monopoly on trade, except that many colonial merchants simply smuggled in forbidden goods. This was a source of friction between colony and mother country. Trouble really began to brew, however, with the ascent of George III to the British throne in 1760, and the end of the Seven Years War in 1763. George was a firm believer in the divine right of kings, and tried to win back powers lost in the English revolutions. The Seven Years War (called the French and Indian War in the colonies) had left the British with territories formerly held by France, but it also left them deeply in debt. Since British troops still guarded the new territories against attempts at reconquest by France, George felt that the colonies should help pay for the war; and while they were at it, to start abiding by British trade policies.

Soon Parliament passed a series of laws that the colonists found extremely oppressive. . . New laws cracked down on tariff-evasion and smuggling, and colonists were required to house and feed British troops. Most unpopular of all were the Stamp Acts, which put new taxes on a wide range of goods. The English had been paying similar taxes for years, but the colonists were used to very light taxation. Furthermore, the taxes were imposed by Parliament without representation from the colonies. Crying that "Taxation without representation is tyranny", the

colonists rioted and boycotted British goods. Parliament finally repealed the tax, but re-asserted its right to tax the colonies. Tensions eased, but only for a while.

New taxes were soon imposed, and colonists began to riot again. British troops marched into the cities, angering the colonists further. In 1770, British soldiers opened fire on a jeering crowd in Boston, killing five people. This led Parliament to cancel all taxes, except those on tea. Not long after, however, they reduced the taxes on tea for the British East India Company, giving the company an advantage over colonial merchants. Colonists responded by boycotting tea, and a group disguised as native Americans dumped a shipment of tea into Boston Harbor. This angered Parliament, which responded in 1774 by passing what the colonists called the Intolerable Acts, placing Massachusetts under military rule. When British troops were sent to Concord, Massachusetts to search for stockpiled weapons, they met armed resistance in Lexington. The American revolution had begun.

At the Second Continental Congress, a meeting of delegates from most of the colonies, the Declaration of Independence was issued. Thomas Jefferson, the principal author of the declaration, drew on Locke in his justification of the revolution, claiming that a people have natural rights to “life, liberty, and the pursuit of happiness”, as well as the right to revolt against a ruler who ignores these rights. The Declaration went on to give a detailed list of George III’s failures to uphold his end of the social contract.

The colonists were not nearly as well armed or well trained as the British troops, and they suffered serious losses at first. But British troops were far from home, lines of supply and communication were long, and Britain had a worldwide empire to look after (of which the American colonies were not the most economically important part). The colonial armies, meanwhile, were fighting on their home ground. Armed with weapons secretly supplied by France, they began to win important battles. In 1778, France joined the war openly. In 1781, under pressure from Parliament, George III agreed to negotiate a peace treaty recognizing the independence of the United States of America.

At first, the new country was a loose confederation of states with a constitution that gave few powers to the federal government. This proved to be unworkable, and in 1789 delegates from the states met to draw up a new constitution. Following Montesquieu, the constitution provided for a clear separation of powers between three branches of government. The Legislative

branch, composed of the House of Representatives and the Senate, has the power to pass new laws. The executive branch—the president and his administration—is charged with executing those laws. The Judicial branch is the court system, which interprets laws, and decides on their constitutionality. Checks and balances between these three branches insure that no one branch becomes too powerful. For example, the president can veto laws passed by Congress, but Congress can override the veto with a two thirds vote. They can also remove the president from office. Though they did not think of it in these terms, the writers of the constitution had harnessed the power of negative feedback for insuring stability. However, many states felt that the constitution did not go far enough in protecting individual liberties, so a Bill of Rights was added as a set of ten amendments to the constitution. Modeled on the English Bill of Rights, these amendments guaranteed things like freedom of religion, speech, and the press, protection from unreasonable searches, and the right to a fair trial.

Under the Constitution, the United States was a new kind of country. The ideas of the Enlightenment, especially those of Locke and Montesquieu, had been put into practice. The Constitution proved to be remarkably effective, provided a combination of flexibility and stability that has served as the foundation of the US government for over 200 years. It also provided a degree of freedom far beyond most other societies of the time. Of course, by today's standards, the early United States was not terribly progressive. Only propertied white males could vote at first. African Americans who were not enslaved suffered intense discrimination. Many northern states soon abolished slavery, but the plantation based southern states clung to it ever more rigidly. Native Americans had hardly any rights at all, and the colonists were steadily expanding into their lands, sparking conflicts and atrocities on both sides. Still, the United States was the most progressive country in the world in the late 1700's. Many were inspired by the new style of nation, as well as the revolution that gave it birth.

## **THE FRENCH REVOLUTION AND THE RISE OF NAPOLEON**

The word “revolution” has many meanings. It can mean “revolt”, where elements of a society rise up against their rulers. But it can also mean “swift transformation”, as in the Scientific Revolution or the Industrial Revolution. Successful revolts are revolutionary in both

senses—there is an uprising against leaders, combined with the transformation of a society. But some revolutions are more profoundly transforming than others.

The frontier society of the 13 British colonies was relatively fluid, unstratified, and independent compared to Britain, which itself was one of the most liberal societies in Europe. Its transformation into an independent country built on Enlightenment principles was profound, but not earthshaking. When revolution hit France just a few years later, the transformation was cataclysmic. France was a land of ancient traditions and sharp class distinctions. While Paris was a major center for Enlightenment thought (both moderate and radical), nearby Versailles was the center of Old Regime authority. Wealthy nobles lived in extravagant luxury, while the poor often went hungry. The combination of liberal thought, popular discontent, and decadent, oppressive rule was an explosive one. Since France was the most influential country in Europe, the explosion of revolution would send shockwaves through the western world. In fact, the French Revolution was really the first of a series of revolutions that left French politics oscillating violently between moderate liberalism, radicalism, reactionary conservatism, and ambitious imperialism.

The spark that ignited the French Revolution was an economic crisis. The French population had grown a great deal in the 1700's, but crop failures in the late 1780's led to severe food shortages. Meanwhile, war and the extravagance of Versailles had built up an enormous national debt. Louis XVI could not raise money to pay this debt because the increasingly powerful nobility had shifted many taxes to the lower classes. When his attempts to get the nobility to pay more taxes failed, he tried to get popular support by calling the Estates General, which had not met since 1614. The Estates General was an assembly of delegates from France's three traditional classes—the clergy, or First Estate; the nobility, or Second Estate; and the commoners; or Third Estate (commoners included both wealthy bourgeois and poor peasants). When the Estates General met in 1789, the Third Estate disputed with Louis over voting procedure. Locked out of their meeting hall, they assembled in a tennis court nearby and declared themselves France's National Assembly. Joined by some members of the other estates, they swore not to disband until they had written a constitution for France. The First and Second Estates joined the National Assembly, and it set to work.

It was a long and contentious task, however, and the French masses were restless. When they heard that Louis XVI had moved troops to Versailles, they believed that the Assembly was

about to be disbanded. On July 14, 1789, a crowd in Paris stormed a prison called the Bastille, which had come to be a symbol of Old Regime oppression. Popular uprisings soon spread throughout France, with peasants rising up against their lords in an attempt to wipe away all traces of feudalism. The popular revolt forced the National Assembly into action, and on a single August night they abolished serfdom, tax exemption for nobles, and many other feudal traditions. By the end of August, they had adopted the Declaration of the Rights of Man and of the Citizen, supporting equal rights for citizens of all classes. The French population was still clamoring for concrete reforms, however, and in 1789 a crowd of Parisians, led by women, marched on Versailles and forced Louis XVI and his family to return with them to Paris, where they could watch him. Soon the National Assembly also moved to Paris. Here, they declared freedom of worship. They also began selling off church lands to raise money, which alienated many Catholics who had supported the revolution. By 1791, the assembly finally adopted a constitution, which made France a limited, constitutional monarchy with separation of powers between the king, the legislature, and the judiciary. Class distinctions were abolished, and equal rights were declared for all citizens (the right to vote, however, was still reserved for male taxpayers).

The new constitutional monarchy was troubled from the start. Radical revolutionaries, who wanted a fully democratic republic, thought it was too conservative. Many nobles, of course, thought it was far too liberal, and large numbers fled France. These emigres urged other European leaders to step in and restore the Old Regime. The king also plotted with other rulers, and finally tried to flee with his family, but they were caught and forced to return. The king's flight deepened the divisions in the new Legislative Assembly. The more conservative members, who wanted a constitutional monarchy, sat on the right, while those who wanted a republic sat on the left. This is the origin of the one-dimensional political spectrum placing conservatives to the right, liberals to the left, and moderates to the center. The growing conflict between France and the rulers of other European countries led to war with Austria and Prussia in 1792. The French armies were disorganized, however, and soon the highly disciplined Austrian and Prussian forces were advancing on Paris. As more and more French people joined the fight, the invaders were driven out. Meanwhile, further shortages and high prices caused by the war led to more unrest. Paris and the Legislative Assembly were taken over by radical republicans. The king was removed from office and imprisoned, making the old constitution unworkable. A national

convention was called to write a new constitution, and France became a republic.

In January 1793, Louis XIV was tried for treason, found guilty, and beheaded. By this time, French armies had gone on the offensive, and were invading the Netherlands and Prussia, promising to spread liberalism. Rulers across Europe were aghast. Great Britain, Spain, and the Netherlands joined the war against the French. With France besieged, food shortages became dire. Some French people decided the revolution had gone too far, and counter-revolutions sprang up in many places. In response to this crisis, the radicals who dominated the National Convention set aside the latest constitution. Their leader was Maximilien Robespierre, who had been influenced by Rousseau's ideas about the General Will. Rousseau had occasionally suggested that those out of line with the general will might have to be forced into it. Robespierre took this advice to its extreme. In what came to be called the Reign of Terror, anyone suspected of being an enemy of the revolution was arrested, and thousands of men, women, and children died on the guillotine (one of them being the queen, Marie Antoinette). At the same time, a universal draft was initiated for French men, and France became almost totally mobilized for war. French armies soon began beating back their opponents. Robespierre's methods began to be questioned, and the Reign of Terror ended when he himself was sent to the guillotine.

With the end of the Terror, a more conservative mood began to fall across France. Yet another constitution was written, establishing a republican government called the Directory. The new constitution gave the vote only to literate, property-owning males. The Directory government was corrupt and inefficient, and rising prices soon caused more riots. However, the vast French armies continued to win battles. The brilliant young general Napoleon Bonaparte achieved many stunning victories, and became a hero to the French people. By 1797, only Great Britain remained at war with France. Napoleon's armies invaded Egypt in order to cut off Britain's passage to India, but the British navy devastated the French navy, leaving the French army stranded in Egypt. Napoleon returned to France, and the French people (who hadn't heard about the defeat) gave him a hero's welcome. In 1799, with the help of loyal troops, Napoleon overthrew the Directory. A fourth constitution was drawn up, and Napoleon became the leader of France at age 30. The French Revolution was over, but the rise of Napoleon was just beginning.

Napoleon was enormously popular, and he steadily increased his power over the French

government. He declared himself “Emperor of the French” in 1804, and the French people voted their approval. Napoleon continued those reforms of the French Revolution that suited him. French law was compiled into the Napoleonic Code, which combined revolutionary reforms such as equality before the law and freedom of religion with more traditional laws, some going back to the Roman law codes. French armies under Napoleon’s leadership began to create an empire in Europe. He defeated Austria and Russia in 1805, dissolved the Holy Roman Empire, and organized the many independent states in what is now Germany into the Confederation of the Rhine, which remained under French control. This caused Prussia to declare war on France, but they were promptly defeated by Napoleon’s forces.

By 1812, Napoleon was emperor of France, the Netherlands, and parts of Italy and the Balkans. The Confederation of the Rhine, Switzerland, and the rest of Italy, as well as Spain, were under French control, and Austria and Prussia had been forced to ally with France. At first, Napoleon’s armies were seen as liberators by the common people, because they introduced reforms in the lands they conquered; promoting religious freedom, abolishing serfdom, and implementing the Napoleonic Codes. As in France itself, however, dissent was brutally suppressed. Men in conquered countries were drafted into Napoleon’s armies, while taxes were raised to pay for his wars. These acts, combined with growing nationalistic feelings, set many of the common people in occupied nations against French rule. The traditional ruling classes, of course, had been against Napoleon from the start.

Great Britain, with its powerful navy, was for a while the only nation to challenge France. The British navy once again destroyed the French navy in 1805. Napoleon then declared the Continental System, under which all European nations were ordered to cease trading with Great Britain. Britain responded by blocking or taxing all ships bound for French ports. Trade decreased in Europe more than in Britain, which increased opposition to Napoleon. By 1812, nationalist guerillas had driven the French from Spain. The same year, Russia resumed trade with Britain, and Napoleon made the ill-advised decision to invade Russia. Russian armies retreated before French armies, burning their own crops and villages, and drawing the French deeper into Russia. Though Napoleon won a battle with the Russian army near Moscow, his supplies were running short, and he ordered a retreat. Winter was descending, and many of the retreating soldiers froze to death or starved. Stragglers were picked off by Russian snipers. A coalition of

British, Austrian, Russian, Swedish, and Prussian forces then attacked the army as it left Russia. In 1814, the coalition took Paris, and Napoleon abdicated and was exiled to an island off the coast of Italy. Louis XVI's brother was installed on the French throne. Napoleon escaped and proclaimed himself emperor once again in 1815, but was decisively defeated at Waterloo, near Brussels. This time he was sent to St. Helena, in the south Atlantic, where he died in 1821. Napoleon had been defeated, but as the old rulers of Europe were about to discover, the revolutionary ideas of the Enlightenment were even harder to suppress than Napoleon's armies.

## **REVOLUTION AND INDEPENDENCE IN LATIN AMERICA**

Revolutionary ideas found extremely fertile ground in Latin America. In the 300 years since the arrival of European conquerors, the colonies in Mesoamerica, the West Indies, and South America had maintained an extremely stratified, authoritarian social structure. Under the mercantilist system, Latin America's economy was based almost entirely on raw materials. Sugar was grown on enormous plantations, and minerals like silver and copper were extracted from vast mines. Land, wealth, and power were concentrated in the hands of a tiny percentage of the population, while the vast majority of people were oppressed workers. The powerful minority could be divided into three groups: officials of the colonial government, the church, and the powerful landowners and mine owners. The high offices of the government and the church were held almost exclusively by *peninsulares*, people sent from Europe to oversee the colonies. Below the peninsulares on the social ladder were creoles; people of European descent who were born in the colonies. Some creoles owned vast properties and were enormously wealthy, but they were still looked down upon by many peninsulares. Still lower on the ladder were mestizos (people of mixed European and Native American ancestry), and mulattoes (people of mixed European and African ancestry). African slaves, and native Americans (many of whom were near-slaves) were at the bottom of the social scale.

All but the peninsulares resented their station in colonial society, and in the late 1700's there were several revolts against colonial rule. The first to succeed occurred in the French colony of Haiti—a land of vast sugar plantations owned by just a few French people. As in most of the West Indies, the native population had vanished, and the plantations were worked by African

slaves. When the French Revolution broke out, the slaves thought that they should be freed in accordance with the principles of the revolution. When they were not, they revolted, in 1791. Under the leadership of the ex-slave Toussaint L'Ouverture, they soon drove the French and the Spanish from Hispaniola. Napoleon tried to retake Haiti in 1801, but French troops were devastated by Haitian fighters and yellow fever. L'Ouverture was tricked and captured, and died in a French prison, but the struggle went on. By 1804, Haiti had become the first independent Latin American state.

When Napoleon conquered Spain in 1808, revolutionaries in the Spanish colonies began to claim their independence. In Mexico, two creole priests led a rebellion beginning in 1810. Both were captured and executed, but by 1821 Mexico had declared its independence. Central Americans claimed independence at the same time, forming the United Provinces of Central America. The greatest revolutionary leader in northern South America was Simon Bolivar, a wealthy creole from Venezuela inspired by Enlightenment ideals. Bolivar and his armies crossed the Andes from Venezuela into Colombia in 1819, defeating the Spanish there. He was named president of the new Republic of Great Colombia, which included what is now Panama, Colombia, Venezuela, and Ecuador. To the south, José de San Martín helped liberate Argentina in 1816, and then crossed the Andes into Chile to defeat the Spanish. San Martín and Bolívar then teamed up to help free the Spanish lands between the two realms. By 1824, only Cuba and Puerto Rico remained in Spanish hands. Portugal lost Brazil around the same time. The Portuguese royal family had fled to Brazil in 1808, when Napoleon invaded that country. They returned in 1821 after Napoleon's defeat, leaving Prince Pedro in charge of Brazil. Pedro then proclaimed Brazil independent, and it became so with no violence.

Many of the new states adopted constitutions based on the Constitution of the United States. Unfortunately, however, Latin America had far more rigid social stratification than the American colonies, and far less experience in representative government. Though slaves were freed throughout the region, creoles still held most political power and—together with the Catholic church—most of the land. Various factions that had cooperated in overthrowing colonial governments now began to fight amongst themselves. Before long, the new Latin American states were fragmenting into smaller states. In many, military dictators called *caudillos* seized power. Many nations also suffered because of their undifferentiated raw materials economies,

which subjected them to violent economic fluctuations depending on prices in Europe. Still, the new nations had won their independence from distant, exploitative colonial powers, and that was a start.

## **ECONOMIC REVOLUTIONS**

### **NEW PATTERNS OF PRODUCTION**

By the 1700's, riches from overseas colonies had combined with the explosion of knowledge fostered by the scientific revolution to create sweeping social upheavals. Western European countries were becoming more populous, urban, wealthy, and chaotic. The country best able to adapt to the changing times was Great Britain, with its relatively flexible social structure, its rising dominance as a colonial power, and its willingness to adopt new patterns of life. Britain was the epicenter of three interlocking revolutions whose impacts would later spread across the entire world: a private enterprise revolution; an agricultural revolution; and the Industrial Revolution. The last would be the biggest transition the world had seen since the development of agriculture at the end of the last glacial cycle. Like that earlier transition, the industrial revolution would change the world—the human world as well as the natural world—in fundamental, lasting ways. For better, and for worse.

### **THE PRIVATE ENTERPRISE REVOLUTION**

Like “revolution”, the word “capitalism” has more than one meaning. Today it is often used to describe a certain kind of economic system; where most industries are owned by private parties instead of governments, and where many aspects of the economy are regulated by the dictates of the market, not by the government. Such a system is also called a free-market, private enterprise, or laissez-faire system. But there was capitalism before there was a capitalist system in the free-market sense. First of all, there have been capitalists for millennia. Merchants and moneylenders were, in a sense, capitalists, because they invested their wealth (their capital) in the hopes of getting more back. But for most of history, these people did not function in free market

economies. Production and trade were usually tightly regulated. Priests, kings, and emperors controlled the economy of most states throughout history. In Medieval Europe, guilds controlled manufacturing in the cities while lords controlled agricultural production in the countryside. As the medieval system gave way to the early modern system in Europe, powerful, centralized states controlled the economy according to mercantilist theory.

If the potential profits are high enough, though, private enterprise tends to find ways around regulation. One sign of this was in the *domestic system* of production. Since the 1500's, merchants had been bypassing the craft guilds in the cities by bringing raw materials to people in the countryside, who worked in their homes converting them into finished products. This began with woolens, but soon spread to other industries, including cotton, linen, leather, and metals. This helped put many of the guilds out of business. Many of the entrepreneurs who employed domestic laborers grew quite wealthy. By the 1700's, the domestic system had become very widespread and increasingly complex and specialized.

Private enterprise also grew up within the mercantilist system. For one thing, private investment was vital in the rise of international trade in Europe. Wealthy merchants, nobles, and financiers in cities like Venice, Genoa, Amsterdam, and London invested in expeditions to find new raw materials and new markets, and often profited handsomely by doing so. But as we have seen, the mercantilist system was not a free market, because trade was tightly regulated. Overseas trading companies like the Hudson Bay Company, and large state banks like the Bank of England, relied on private capital, but they were under the control of the state. Under mercantilist policies, trade between competing states, such as Britain and France, was discouraged by legal prohibitions or tariffs. But there are many advantages to international trade, and great profits to be made in bypassing the regulations. This made smuggling a big business in Europe and its colonies, as we have seen. Mercantilist regulations were protested, avoided, or simply ignored, and eventually proved impossible to enforce.

## THE AGRICULTURAL REVOLUTION

The 1700's also saw great changes in agriculture, especially in Britain. In the medieval manorial system, peasants and serfs had been allowed to gather wood and graze livestock in

common areas. Beginning in the 1500's, wealthy landowners began claiming these common areas for their exclusive use. This *enclosure movement* gained momentum in the 1700's, as landowners experimented with new techniques that made farming vastly more productive and profitable. One such advance was crop rotation, developed by Charles "Turnip" Townshend. Since early times farmers had left fields unplanted, or fallow, every third year in order to restore fertility.

Townshend discovered that turnips or clover could be planted instead of leaving the field fallow. This replenished the soil, and provided feed for livestock over the winter. Selective breeding of livestock also improved productivity, as did inventions such as the iron plow and the seed drill, which planted seeds in orderly rows.

## THE INDUSTRIAL REVOLUTION

The agricultural revolution, while greatly increasing farm productivity, also ejected huge numbers of peasants from their lands. These peasants swarmed into cities, which grew big and chaotic, full of unemployed, discontented people. At the same time, the rising food supply and falling death rates encouraged a great surge in population growth—the largest since the adoption of agriculture in prehistory. These big, urban populations created a great demand for goods, especially clothing. At the same time, they were a potential labor force. The domestic system of industry was unable to meet the demand for cloth, and people started looking for ways to make production more efficient. One way they did this was through a series of mechanical innovations. A machine calling the flying shuttle, invented in 1733, sped up cloth weaving so much that spinners could not provide enough thread to keep pace. This led to spinning machines such as the spinning jenny, as well as the water frame and the spinning mule, which were powered by water. Now the weavers had to catch up with the spinners. This spurred the invention of the power loom in 1785, a water-powered device that vastly multiplied the amount of weaving one worker could do. In 1793, an American, Eli Whitney, invented the cotton gin, a machine for separating cotton fibers from seeds. The slave-based agriculture of the American south switched from tobacco to cotton, which it shipped to Britain to be turned into finished products.

The new machines for weaving and spinning were too heavy and expensive to put in people's homes, so they did not fit in with the domestic system. This led to the adoption of the

*factory system*, starting in England and southern Scotland. Machines, raw materials, and laborers were all brought together in large buildings, or factories. To this day, factories are called *mills*, because the first ones were set up alongside rivers, which provided power by turning water wheels (originally used to mill flour). Maybe that's where the term "daily grind" comes from.

When James Watt invented a relatively efficient steam engine, many factories switched over to steam power. Steam engines worked by heating water to produce steam, but they actually got their energy from coal. Another use for coal had also been discovered in the early 1700's. Previously, iron had been smelted by heating with charcoal (partially burned hardwood), but the British countryside had been all but cleared of hardwoods. Abraham Darby and his son found a way to make iron by using *coke* (made from coal) instead of charcoal. Since steam engines and other new industrial machines were increasingly made of iron (and powered by coal), iron and coal became big businesses. Fortunately for Britain, they had large deposits of iron ore and coal, and factories began to concentrate in places where the two overlapped, such as Sheffield, Birmingham, and Glasgow.

All this industry required better systems of transportation, in order to move raw materials to factory, and finished products to market. Until the early 1700's, Britain's dirt roads were terrible, and often impassable. Improvements in road building, such as using gravel, flat stones, and better drainage, had made road travel much better by the early 1800's. By that time, other means of transportation were coming along. Many canals were dug across Britain, allowing heavy goods to be transported by water. Steam engines were also used to power the first locomotives, which were pulling trains across thousands of miles of track by the mid-1800's. Steam engines also turned paddle wheels on steamships, which began to traverse rivers, and, by the mid-1800's, oceans. All this made travel easier, which also improved communications. Communication outpaced travel after 1837, when Samuel Morse invented the telegraph. An underwater telegraph wire was installed across the English Channel in 1851, and across the Atlantic Ocean in 1866, able to transmit messages along their length in a matter of seconds.

Although the early Industrial Revolution was centered around Britain, industrialism soon spread to other countries (despite British secrecy, as well as bans on the emigration of skilled workers and the exportation of technology). Belgium, with its good sources of iron and coal, had become thoroughly industrialized by the mid-1800's. The German lands also had excellent iron

and coal reserves. They began to industrialize as well, but did not become a powerhouse until after Germany became a unified country in 1871. Industrial techniques also reached France early on, but its industrialization was hampered by inferior coal and iron reserves as well as political turmoil. In Southern and Eastern Europe, poor industrial resources and more rigid social structures combined to keep economies primarily agricultural.

But northwestern Europe was not the only industrial region of the world. The United States had embraced industrialism early on. Eli Whitney, the inventor of the cotton gin, also pioneered the use of identical, interchangeable parts in his gun factory. This idea allowed manufactured products to be produced and repaired far more efficiently. British-style textile mills appeared in the northeastern US early on, followed by iron and steel mills and the spreading tendrils of railroads, canals, and telegraph wires. When Japan began its vigorous transition to industrialism in the 1860's, the industrial revolution had spread beyond the Western World.

The industrial revolution was a self-reinforcing, positive feedback process that resulted in the exponential growth of technology, communications, travel, wealth, and human populations. One of the most significant exponential leaps was in the availability of energy. People in the 1600's still relied mostly on wind, flowing water, and draft animals to supply power beyond that of human muscle. All these power sources would have been quite familiar to the ancient Egyptians. With the use of coal (a fossil fuel) to power steam engines, the amount of energy available for human use exploded. To this day, fossil fuels provide the majority of energy used in the world. But coal and steam were just the beginning. Steam engines, and the enormous amounts of coal needed to run them, were bulky, unwieldy affairs. In the 1800's, energy became not only more available, but more portable. One great innovation was the development of the internal combustion engine, which burned more portable petroleum products in a smaller engine. Gottlieb Daimler developed the gasoline engine in 1886, thus opening the way for the automobile explosion of the 20<sup>th</sup> century, while Rudolph Diesel invented an engine that was better for powering large machines such as ships, locomotives, trucks, and industrial machines.

An even greater leap in the portability of energy came with the harnessing of electromagnetism. With the invention of the electric generator (which turns other kinds of energy into electromagnetic energy) coal, oil, wind, or water power could be converted into electricity, which could be transported along thin wires to other places in an instant; ready to power any

among the growing legions of devices that could be plugged in to it. In 1865, James Clerk Maxwell realized that light is simply electromagnetic energy being transmitted in waves through space, and that light is only a tiny slice of a wide spectrum of electromagnetic waves, most of which nobody had ever seen. Heinrich Hertz soon invented a way of transmitting and detecting one slice of this spectrum—radio waves—and by 1901, Guglielmo Marconi had sent signals across the Atlantic Ocean—not across cables, but through the air.

## **CONSEQUENCES**

### **EXPLOSIONS: PEOPLE, PRODUCTION, AND POWER IN THE WEST**

The changing patterns of production brought by the capitalist, agricultural, and industrial revolutions had enormous consequences for society. This was true not just in the west, but also around the world, because all these revolutions accelerated the growing dominance of the west over other regions. It was the beginning of an era of explosive growth—of population, wealth, technology, factual knowledge...in short, the human power to change things, for better and for worse. The first such explosion was in human numbers. Europeans responded to the increased food supply of the agricultural revolution by having more babies, while advances in medicine and sanitation lowered death rates. As a result, the European population soared from about 140 million in 1750 to 460 million in 1914. The percentage of Europeans compared to other peoples shot up from less than 25 % in 1750 to nearly 40 % in the early 20<sup>th</sup> century (after which it began to decline steeply as European population growth slowed relative to the rest of the world). As their numbers grew, “Europeans” were no longer confined to Europe. Migration to other regions exploded as more people streamed from Europe to the New World, to Australia and New Zealand, and in the case of Russia, into Siberia.

Amazingly, even with the population expanding at such a rate, economic growth was even faster. Economists measure economic growth within a state in terms of Gross Domestic Product, or GDP, which measures the value of goods and services produced in a given period of time. If an economy is growing, GDP will follow an upward trajectory. Of course, we have to adjust GDP for inflation, usually by setting it in terms of the value of a country’s currency at one

particular time. We also need to adjust for population, by thinking in terms of average GDP per person. Both these adjustments will make real economic growth seem less explosive than it would at first appear. Nonetheless, the wealth of the “average person” exploded as a result of the Industrial Revolution, beginning in Britain, and then spreading to mainland Europe and the rest of the Western world. In recent decades, industrialization and economic growth per person has spread to other regions of the world.

Of course, thinking in terms of the “average person” can be quite misleading. The growing economic pie was not handed out equally during the industrial revolution. Some people grew extremely rich, while the majority remained, at least at first, very poor. Nevertheless, with the industrial revolution, the west became not just more technologically sophisticated and militarily powerful than the rest of the world, but also richer and more *economically* powerful. Not that this expanding wealth was just due to expanding production at home. It was also the result of exploitation of other regions. This was another result of the revolutions of production in the west—by the beginning of the 1800's, western dominance over other regions of the world had become practically irresistible.

## CHANGING SOCIAL CONDITIONS

In the Middle Ages, when society had been predominantly rural and agricultural, most people fell into one of two social tiers—a few were aristocratic landowners and a great many were poor serfs. The middle class (the burghers or bourgeoisie) had slowly grown with the rise of towns and cities (burghs). By the 1800's, western Europe's exploding populations were increasingly living in explosively growing cities. It was becoming a predominantly urban society. Rural farmworkers were becoming urban factory workers, and the aristocracy was increasingly yielding power to a rising class of wealthy middle class industrialists. Nobility still had prestige, however, and the wealthy middle class did their best to emulate aristocratic lifestyles, often marrying into aristocratic families or buying titles of nobility.

Such conspicuous consumption was in sharp contrast to the great mass of urban workers. In the first years of the industrial revolution, their lives were appallingly grim. The industrial cities had sprung up with hardly any planning. There were no garbage removal systems, sewer systems,

or police and fire departments. People crowded into tenement houses with several people to a room, and crime, alcoholism, and disease spread unhindered. Life at work was no better. With such a huge supply of labor, wages were minuscule, as were worker's rights. Children as well as adults worked 12 to 16 hour days, six or seven days a week. Workers could be fired for no reason. Child workers were often beaten. There were no vacations, paid sick days or holidays. There was no compensation for workplace injuries (which were common, given that people were performing repetitive, boring tasks, for hours on end, using powerful machines). There was no health insurance, or pensions for those too old, sick, or mangled to work. Among the upper classes, such conditions were usually viewed with indifference or outright contempt. Many believed that workers would become unproductive unless they were kept poor. Not surprisingly, many workers resented their lot in life. Some tried to organize themselves into unions in the late 1700's, but unions were declared illegal. Many workers rioted, smashing machines and burning down factories. Some demonstrations were peaceful, but were often brutally broken up by police and soldiers.

These ghastly conditions began to improve toward the mid-1800's. In Britain, the Combination Acts were revoked in the 1820's, and labor unions organized and began to demand reforms. This, combined with an expansion in production and efficiency, raised wages and made consumer goods more affordable to workers. Reformers also appeared in the government and media. The British Parliament opened investigations into conditions in mines and factories in 1831, while journalists, and novelists such as Charles Dickens increased public awareness of the plight of workers. In 1833, the Factory Act limited the workday to 8 hours for children between 9 and 13 years old, and to 12 hours for those between 14 and 18. By 1874, the workday for all workers had been limited to 10 hours. Government regulations, and the growing realization that healthy workers were more productive, made factories safer. Unemployment and injury insurance became more common, as did retirement pensions. City life also improved, as building codes reduced the risk of fire and collapse; water, sewer, and garbage systems reduced the spread of disease; and police forces, higher wages, and increased employment reduced crime. By the late 1800's, electric streetcars and subways allowed people to live farther from their work, allowing cities to expand a bit and become less crowded. By the early 20<sup>th</sup> century, the lot of workers had improved enormously since the early days of the industrial revolution. Of course, control of

factories, mines, land, and finance, as well as a great deal of wealth, were still concentrated in the hands of a relative few. Whether the workers should have more control of such factors of production, and a greater share of the wealth produced, was far from settled.

## **RESPONSES TO CAPITALISM AND INDUSTRIALISM**

### **AFFIRMATION**

#### *ADAM SMITH AND CLASSICAL ECONOMIC LIBERALISM*

Classical political liberalism, with its emphasis on individual freedom, basic rights, private property, and limited central government, was stated most definitively by John Locke, at the same time as a liberal political system was emerging in England under the limited monarchy of his friends William and Mary at the end of the 1600's. Liberalism reflected the sensibilities of the rising middle class, especially the business class, some of whose members had become wealthier than most nobles. Before long people came to feel that political liberalism should be combined with economic liberalism—an increased freedom to do business unhampered by government controls. But economic liberalism was still ill-defined in Locke's day, and with mercantilism in full swing, it was certainly not state policy. But as private enterprise and early industry began to rise during the 1700's, the power of an unleashed economy was becoming more apparent, and people began to argue against mercantilist restraints.

Among the first to make such arguments were a group of French philosophes who became known as physiocrats. The most influential physiocrat was François Quesnay, the physician to Louis XV. Quesnay compared the flow of goods in a state with the flow of blood in the body, arguing that mercantilist policies tended to shut off the supply where it was needed. He also questioned the mercantilist equation of wealth with stocks of gold and silver, arguing that a state's wealth depends instead on its production of useful goods.

The definitive expression of classical economic liberalism, however, was made by a Scottish professor named Adam Smith. Smith had been a professor of moral philosophy at the University of Glasgow, but he left to take a job as the tutor to the stepson of Charles Townshend

(the same man, ironically, whose mercantilist policies helped precipitate the American Revolution). Smith traveled through the continent with his young charge, and in Paris, he met Voltaire, as well as Quesnay and other physiocrats. Upon his return to Britain, Smith continued to work on a book which he had begun in France. In 1776, he published *The Wealth of Nations*, the classic statement of the principles of free-market capitalism.

The *Wealth of Nations* is a big, sprawling book that covers an amazing range of topics, but its principal insights are fairly simple. First and foremost is Smith's explanation of the benefits of a free market. Throughout history, economies had mostly been organized by tradition or command, dictating who would work where, what goods and services they would produce, and how those goods and services would be distributed. The profit motive was typically considered an antisocial tendency, and merchants and moneylenders were looked upon in many societies with suspicion. Smith, by contrast, made the startling, counter-intuitive claim that self-interested profit seeking and free markets could be used as a way of organizing a society's economy, and could do so quite efficiently.

Self-interest, Smith argues, drives people to produce and offer for sale what is most in demand. If cotton shirts become more popular than wool shirts, for example, the demand will cause the price of cotton shirts to increase. The potential for profit will pull entrepreneurs from other businesses to start making cotton shirts. Similarly, the increased demand for workers in the cotton shirt industry will increase wages, luring workers away from other fields. More cotton shirts will be produced, and fewer wool shirts. In this way, what is produced is what society wants, even though the people doing the producing are thinking of themselves and their material well being, not necessarily that of society at large. Now, what is to keep a merchant from charging too much for his shirts, or making a poor product? What keeps a laborer from doing shoddy work, or charging too much for his time? The answer, according to Smith, is *competition*, which keeps self-interest from running rampant. If there are big profits to be made in the cotton shirt business, lots of people will move into that business. If one manufacturer tries to charge too much, or sell shoddy products, people will stop buying his wares and buy from someone else. Similarly, if there is a great demand for laborers in the cotton shirt industry, people will stream in from other fields. If a laborer asks for more than the competitive rate, an employer can simply hire someone else. If an employer tries to pay laborers too little, they will go

somewhere else.

Smith also pointed out that, not only does a free market regulate itself to a large degree, but it also expands. As a resident of Glasgow, Smith had seen free-market capitalism and early industrialism first hand, and had seen that Britain's economy was growing—it was producing more goods and services, and thus growing wealthier. Smith attributed this growth to the increased efficiency associated with the division of labor in industry (as I discussed way back in Chapter One). If different people specialize in one part of a complex process, the whole process gets done faster, and more products are produced.

As the title of *The Wealth of Nations* indicates, Smith was concerned with discrediting mercantilist policies, which relied on extensive regulation, especially in international trade. Smith opposed the mercantilist notion that a state's wealth is a function of the amount of gold it can hoard, and argued that production and trade are the real keys to wealth. And not just trade between a colonial state and its colonies—Smith was an early advocate of free trade between states, and opposed the idea that one nation's loss was always another's gain. Because different places can produce different products more easily, he argued, free trade between regions can enrich all. This idea would become a basic principle of economic liberalism, and an enduring argument for free international trade.

Discuss strengths and weaknesses of Smith's vision

### *INTERLUDE: BASIC ECONOMICS IN MODERN TERMS*

Whether one agrees with Adam Smith or not, it is clear that society was making a transition to a new system of organization, and he was the first to clearly discern some of the inner workings of that system. For that reason, he is rightly regarded as the founder of the modern field of economics. Of course, since Smith's time the basic principles of economics have been refined a great deal. Perhaps now is a good time to pause and take a closer look at these principles, because they provide useful models for understanding history, especially after the capitalist and industrial revolutions.

Let's start with the basics. What, exactly, is economics? Basically, economics is the study of the production, distribution, and consumption of goods and services. The fundamental fact

that makes economics (and many other fields) interesting is that people can't just get whatever they want by snapping their fingers. Goods and services are *scarce*—there is only so much to go around. (This is simply a special case of more basic laws of nature, which ultimately rest on the laws of conservation of matter and energy, and the second law of thermodynamics.) Because of this scarcity, choices have to be made. Should I buy that new car I've been coveting, or should I keep driving my old one and invest? I can't do both. I could if I were wealthy, but then I would face new choices—a new jet, or a private island? Decisions, decisions. Governments and corporations also have to make decisions. Should tax revenues go toward increased military spending, or expanded pre-school programs? Should more money be put into research and development, or into building new factories?

Economists have identified three basic economic decisions that every society must make.

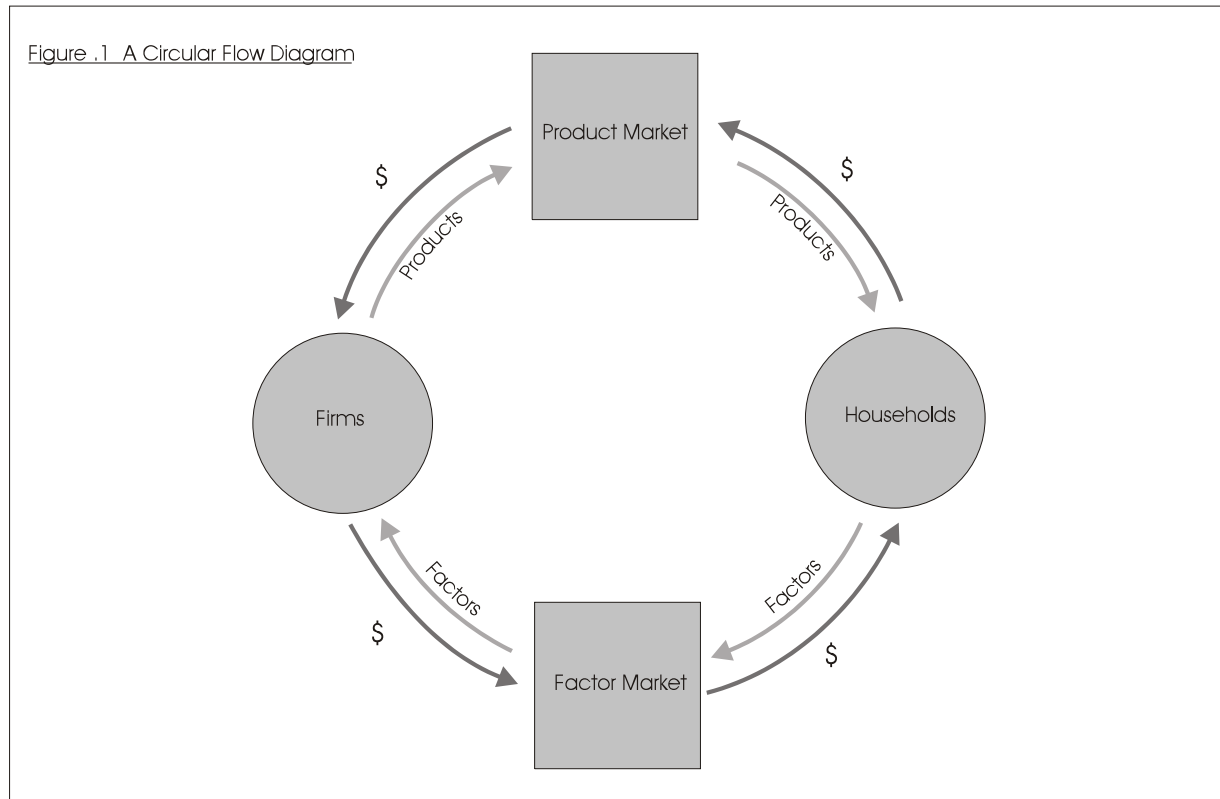
1. *What will be produced?* Should we gather nuts or go hunting? Should we plant that field with wheat or rice? Do we need more Sport Utility Vehicles, or more gas/electric hybrids? 2. *How will it be produced?* Should everybody join in the harvest, or should some do other jobs? Should our shirts be made in homes, or in factories? If in factories, should they be made by machines, or by people? Should the factory be here or abroad? 3. *How will what is produced be distributed?* Do we distribute everything equally, or let people choose what they want? Do we let everybody have the same amount of stuff and the same access to services, or do we let some have more than others?

Obviously, different societies answer these questions in different ways. Simple societies like hunter-gatherer bands relied mostly on tradition. Many complex societies, from ancient Egypt to the USSR, have relied a great deal on centralized command—a central planner decreed what, how, and to whom. Command and tradition are still important, but in the last few hundred years, personal choice and markets have come to play a dominant role in answering economic questions in many societies. *What* is produced is determined mainly by what people want, and whether they are willing to spend enough money on it to justify producing it. *How* it is produced depends to a large extent on personal choice and the dictates of the market. People decide (within limits) what they want to do for a living (what goods or services they want to produce). Of course, the market limits choices as to how things will be produced. You won't stay in business long if you try to sell surfboards in the desert, or if you locate your high tech factory in a

place where nobody has high tech skills. Finally, the question of distribution—of who gets what—is decided mostly by markets. Goods and services are distributed according to who decides to buy what. How much different people have is determined to a large extent by how much money they make, and that is determined (in part) by the value the market puts on their efforts. Of course, it is also decided by who their parents are, who they married, who they know, and who their ancestors were. Markets and choice aren't everything. But they are very important.

So, we need to take a closer look at how a market economy works. First, let's look at some of its components. In order for goods and services to be produced as output, certain inputs are needed, called **factors of production**. The factors of production are: *natural resources* (land, minerals, sunlight, biological productivity); *capital* (the machines, tools, buildings, and vehicles needed to produce, transport, and market goods and services, or the money that is allocated for capital); *labor* (the people available to work in production, and the skills they have to offer); and, finally, *technology*. In order for the economy to grow (for the amount of goods and services produced to increase), the factors of production must either increase in quantity or quality, or be used more effectively. Adam Smith saw division of labor as a key to economic growth. This is an example of increased effectiveness in the use of factors of production. But the economy can also grow for other reasons. One reason the economy expanded after the Middle Ages is that capital expanded. People began to put more of their profits back into capital, with the result that production increased. At the same time, technology grew more sophisticated. Many states have realized that a better-educated, highly-skilled population is more productive; representing an improvement in the quality of the labor force. Natural resources are a bit different. Oftentimes, the total stock of a natural resource does not increase. Minerals such as oil and coal, for example, are *non-renewable* resources. The more you take and use, the less is left over. However, advances in technology often lead to an increased *supply* of non-renewable resources, even when the total *stock* is diminishing, because it allows the extraction of minerals that couldn't be reached before. Some resources, such as forests and pastures, are renewable, as long as they are not used at a rate that is too fast to allow them to renew themselves.

Today, there is a lot of talk about people as *consumers* of goods and services, and our behavior, preferences, and rights as such. There is less talk, in the popular media, about the other side of the coin. Working adults are also *producers*. In order to have money to spend as



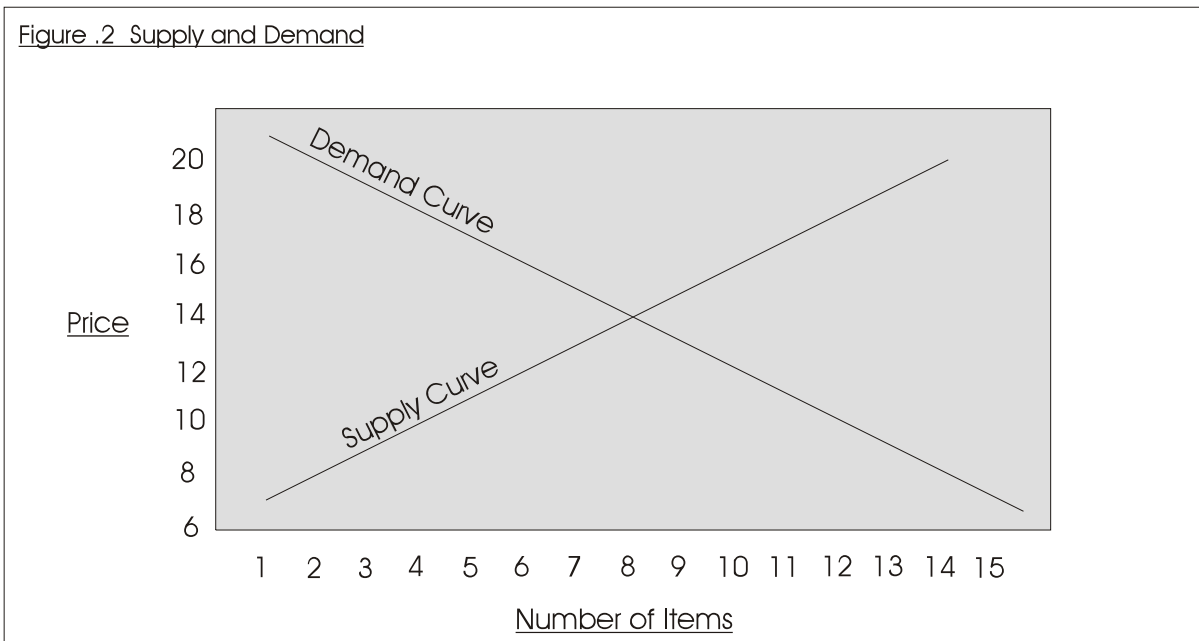
consumers, they have to go off to work. People buy products from businesses, but businesses also buy labor from people. Oftentimes, people's roles as producers and consumers come into conflict. For example, a new mega-discount store in a small town may be great for the townspeople as consumers, but it can be bad for them as producers; if they lose their jobs as smaller businesses are driven out.

Economists represent this cyclical pattern with the so-called circular flow model (Figure .1). In the model, there are two basic types of idealized economic agents: businesses (or *firms*, as economists like to call them) and households. There are also two distinct markets in a market economy. At the top is the product market, where firms sell their products to households. As the arrows show, products flow from firm to household, while money flows from household to firm.

But households have to get money from somewhere. This is where the *factor market* comes in. Here, households sell their labor to firms. Labor flows from household to firm, while money flows from firm to household. Actually, as the name suggests, other factors of production are sold in the factor market. Many households own natural resources, such as land, minerals, or forests, which they sell to firms. Some households also "sell" capital to firms by investing money

in them. This can be direct investment, as when people buy stocks, or indirect investment, as when they put their money in a bank, and then the bank invests in stocks. Of course, the circular flow model is an idealization. Oftentimes, both products and factors are exchanged between firms and other firms, or households and other households. Also, it doesn't show other players that influence the economy, such as the government. Like many models, it is useful, but limited.

Now, in a market economy, the basic economic decisions of society—what to produce, how to produce it, and how to distribute it—are made in large part by the markets themselves. And in many cases (though not all), the markets make those decisions quite effectively. How do they do that? To understand this, we need to take a closer look at the forces of supply and demand. According to the **law of demand**, people will buy more of a product at a low price than a high price. Let's say Bob makes birdhouses and sells them, along with some other crafts, at a farmer's market on Saturdays. If he charges \$20 apiece, he will sell about 2 in a day. At \$14 he will sell 8, and at \$10 he will sell 12. We can represent this in a graph, as in Figure .2. As falling slope, the *demand curve*, shows, the lower the price, the more people will buy. Now, there is also a **law of supply**. This says that firms will produce more items for sale as the price rises. If Bob could get 20 dollars apiece for every birdhouse he made, he would make 14 of them (and probably make fewer of his other crafts). If he could get \$14 each for them, he would make eight, and at \$10 he would make four (and probably spend more time making other crafts). We can also



represent this as the graph, as the demand curve. The demand curve, the line slopes upward, because the higher the price Bob gets for each birdhouse, the more of them he will make.

Now, what price will Bob actually charge for his birdhouses? If he is a good businessman, he will settle on a price of somewhere around \$14, at which price he will sell about 8 birdhouses. This is the point where the demand curve and the supply curve meet—the equilibrium point. At higher prices, Bob will have a surplus of birdhouses. At \$20 each, for example, he would produce 14, but he would only sell 2, leaving him with 12 birdhouses. At prices lower than \$14, on the other hand, Bob would have a shortage. At \$10 each, he would only produce 4 birdhouses, but he could sell 12. After some trial and error, Bob would probably settle on the equilibrium price, where the number he makes equals the number he sells. Now, think of how much is being determined here. The market is determining what should be produced (birdhouses, because people want them), how many should be produced (8), and at what price they should be sold (\$14). The market is dictating the production and pricing of Bob's birdhouses.

Factor markets also find equilibria, as supply and demand determine prices (which in the labor market, are known as wages). Suppose Bob starts a small workshop to produce more birdhouses. Now he needs to hire workers. The law of demand will apply here as well, because Bob will be willing to hire more workers as the amount he has to pay each worker decreases. However, the law of supply will also apply. More workers will want the job as the pay increases. Eventually, an equilibrium will be found, where a certain number of workers work for a certain rate of pay. So, we need to remember that, in the circular flow diagram, both the product and the factor markets work by finding equilibria between supply and demand.

### *RICARDO AND MALTHUS, BENTHAM AND MILL*

In the early 1800's, urban, industrial squalor had made it difficult to maintain Adam Smith's optimism in the benefits of capitalism. The key problem was the exploding population, which was flooding the labor market with workers and keeping wages low. At the same time, tariffs on imported grain were keeping food prices high, and urban workers hardly had enough to eat. This situation led Thomas Malthus to suggest that populations, which grow exponentially, would tend to increase faster than the food supply. Malthus warned that uncontrolled population

growth would outrun resources, leading to war, famine, and disease, which would naturally cut back the population. David Ricardo, a friend of Malthus who put Adam Smith's ideas into a very precise form, argued that population growth would keep wages at subsistence levels. He believed that wages and population exerted a cyclical influence on each other. Higher wages, he thought, cause higher fertility, which increases the labor supply and leads to lower wages. This results in lower fertility, decreased labor supply, and higher wages—and so on, in a continuous cycle. Such ideas led others to dub economics “the dismal science”. While Ricardo and Malthus were both well-meaning men who were repulsed by human misery, they thought that government interference with market forces would get in the way of natural controls on population, thus making the problems worse. Other, less well-meaning thinkers would use such ideas as an excuse for apathy and contempt for the working classes.

In any case, *laissez faire* policies became the rule in Britain. One result was the repeal of the Corn Laws, which imposed tariffs on imported grain. This was partly the work of David Ricardo (who was member of Parliament). Ricardo elaborated on the advantages of free trade, arguing that if each country specializes in what it is best able to produce, all nations would benefit. This theory, known as the theory of *comparative advantage*, is still a basic tenet of economics. Another of Ricardo's ideas was that the main source of value in goods was the labor that went into producing it. This would find great resonance in the thought of Karl Marx.

Happily, Ricardo and Malthus were overly pessimistic about the horrors of overpopulation. They underestimated the ability of increasing production to keep pace with a growing population, and they misunderstood the response of population to increased prosperity. Unlike farmers, for whom children provide much-needed labor, urban workers have incentives to have fewer children. Generally, fertility actually decreases with higher wage. When countries industrialize, birth rates begin to fall. This phenomenon is known as a **demographic transition**. Still, Malthus was right about the results that would follow if populations continued to grow unchecked. Populations in nature do tend to outrun resources, and human populations can as well, if conditions are right. Even in today's world, Malthusian catastrophes are still a possibility.

Some British thinkers questioned the idea that government should stay out of economic affairs, or that poverty could not be avoided. Jeremy Bentham, James Mill, John Stuart Mill (James' son) promoted a *utilitarian* system of ethics which held as its ideal the greatest happiness

for the greatest number. While they believed in private property and free markets, they also believed that governments should step in when these systems fail to promote the general good. With the utilitarians, liberalism began to move toward its more modern meaning, with an emphasis on balancing political and economic freedom with government regulation to ensure social justice. The influence of the utilitarians helped promote some of the social reforms of the 1800's. John Stuart Mill and his wife, Harriet Taylor Mill, were early advocates for women's rights.

## REJECTION AND REVOLUTION

### *THE UTOPIAN SOCIALISTS*

Adam Smith had published *The Wealth of Nations* in 1776, at the time when the power of private enterprise was becoming apparent, but before the turmoil and exploitation of the early industrial revolution. Observers of the early 1800's also understood the power of capitalism, but they were far less optimistic than Smith about its tendency to organize society in desirable ways. Many saw industrial capitalism as a calamity caused by unbridled greed, and sought alternatives for organizing society. One such alternative was *utopian socialism*, which developed mainly in France. People such as Henri de Saint-Simon, Charles Fourier, Pierre Proudhon, Louis Blanc, and, in Britain, Robert Owen, were appalled by the selfishness, lack of community spirit, and inequality of the early industrial revolution. They believed in communal (as opposed to private) ownership of property and capital, central planning, and equal distribution of wealth. In other words, they established the basic tenets of **socialism**. But the utopian socialists didn't generally have a good understanding of economic forces, and their visions of perfect societies were mostly just visions (Some utopian communities were actually founded based on their principles. New Lanark, founded in Scotland by Robert Owen, actually worked very well).

### *MATERIALISM, DETERMINISM, REVOLUTION: THE SOCIALISM OF MARX*

What the socialists needed was a thinker who could combine the passion of the Utopians with a firm understanding of the economic forces identified by Adam Smith and his intellectual

heirs. That person was Karl Marx. Marx was born in Prussia in 1818, to Jewish parents who had recently converted to Lutheranism. He earned his doctorate in philosophy in 1841, but his critical views on religion and the Prussian government kept him from getting an academic post, so he worked for a radical newspaper until it was shut down by the Prussian authorities. Fleeing to Paris with his new wife, Jenny, he became involved in socialist workers organizations, and met Friedrich Engels. Engels was a journalist whose father owned factories, so he had seen the life of workers firsthand. When the French authorities began to crack down on radicals, Marx, Jenny and Engels moved to Brussels, where Marx and Engels wrote *The Communist Manifesto*, published in 1848 (an eventful year, as we will see). After a brief return to Prussia, Marx and his family settled in London, where they generally lived in poverty. In 1864, Marx founded the International Workingmen's Association (later called the First International). The organization was plagued with internal disagreements and didn't accomplish much. In 1867, Marx published the first volume of the enormous *Capital* (*Das Kapital* in German) which detailed his theories of capitalism and socialism. The second and third volumes were edited by Engels, and published after Marx's death in 1883.

Marx was a true revolutionary, who believed that necessary social change could only be accomplished by an uprising of workers against their employers and governments. But he was also a brilliant economic thinker and social critic. To understand the roots of his thought, we need to look at the way German philosophy had developed after Kant. Kant had been a rather half-hearted idealist (in the philosophical sense of the opposite of materialism). He did believe that all we can really know is the content of our perceptions, but he still made a distinction between things as they appear to us, and things as they are in themselves. Later German philosophers rejected this distinction. They embraced idealism fully, arguing that ideas (not just cold rationality but also emotional drives and morals) were the essence of reality. For the philosopher Fichte, for example, consciousness or "spirit" is the fundamental feature of the universe, and thus, the appropriate object of philosophy. Indeed, on the European continent especially, philosophers ever since have tended to be more concerned with the nature of human consciousness than with questions of external reality.

The most influential German idealist was G.F.W. Hegel. Hegel agreed with Fichte that reality is "spirit" or consciousness. But Hegel believed that spirit developed over time, in the

emergence and interplay of new ideas. Like many thinkers of his day, Hegel realized that the world had changed over time, and he stressed the importance of thinking in historical terms. Hegel thought of the development of ideas as creative, in the sense that they changed over time, but deterministic in that they can only develop in one way. For Hegel, human ideas developed in a *dialectical* process, where one prevailing set of ideas would give rise to another, opposite set. Later, a new set of ideas would emerge that combined the two opposites. As others would put it, an ideological *thesis* would produce an *antithesis*. Then the two would combine in a *synthesis*. It is hard to deny that this is a common process in the history of ideas. For example, rationalism, as a thesis, provoked a reaction and antithesis: empiricism. Later, the two were combined in a synthesis by Kant. For Hegel, the dialectical interplay of ideas was gradually building a sort of universal consciousness, a “world-spirit”, which grows more refined and encompassing over time.

Now, Marx also believed in the importance of history, and he adopted Hegel’s idea of the dialectic play of opposites in a deterministic process. But he was having none of Hegel’s optimistic idealism. Marx was also strongly influenced by the nuts and bolts theories of the classical economists, and he believed that material forces, not ideas, were the real engine of history. His theory of economic history therefore came to be called **dialectical materialism**. Marx combined dialectical materialism and classical economics into his own theory of socialism and capitalism. According to Marx, history had always been characterized by a struggle between classes, between “haves” and “have nots”—masters and slaves, lords and serfs, and in his own day, industrial capitalists and workers, which he called the **bourgeoisie** and the **proletariat**. Marx believed that capitalism rests on the exploitation of workers. According to his theory of *surplus value*, all profit is the result of labor performed on raw materials, so capitalists make profits by paying workers less than the actual value of their labor. But workers would have the last laugh, Marx, believed, because the capitalist system would inevitably bring about its own collapse, and would be replaced by a socialist system where the workers owned the means of production.

This would occur because the fierce competition of capitalism would cause the accumulation of capital into fewer and fewer hands as huge corporations came to replace small companies and self-employed individuals. More and more people would fall from the ranks of the middle class, into the ranks of the workers. But the workers, who would remain poor and often unemployed, would lack the money to buy the things that the capitalists were producing.

Eventually, the workers would rise up in revolt and seize the means of production from the few remaining capitalists. With the workers in control, social classes would disappear. Government, whose main function had been to protect private property, would eventually “wither away” as well, as society stabilized in a socialist system of common property and equality; the final stage in history’s dialectic.

Evaluation of marxism.