

VOLUME II

A Comparative History of Commerce and Industry

CONVERGING TRENDS AND
THE FUTURE OF THE
GLOBAL MARKET

DAVID E. MCNABB

A COMPARATIVE HISTORY OF
COMMERCE AND INDUSTRY, VOLUME II

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David E. McNabb

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For my family

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PREFACE

This series is pointedly a subjective review of how the cultural, social, and economic institutions of commerce and industry evolved in the four industrialized nations of Great Britain, Germany, Japan, and the United States. The product of that evolution was the institution we now know as the *business enterprise*. The book is a synthesis of ideas and concepts about this evolution taken from a variety of streams of scholarship. This book, the second of two volumes, brings this comparative history discussion to a point in the early years of the twenty-first century. The first volume dealt with the divergent paths taken by these four industrialized nations. This volume addresses the convergence in style and structure of the business enterprise brought about by the interconnections of firms in the global marketplace.

My efforts to chronicle the national cultural foundations and traditions of the four nations led me to searches of sources in anthropology, history, sociology, applied psychology, organizational dynamics, and political economy, among others. My search for an understanding of national character required investigations into the literature of culture, religion, philosophy, political science, and economic history. In looking at how ideology shaped national character, it was necessary to examine each nation's economic systems from the viewpoints of philosophy, political science, anthropology, sociology, politics, and social psychology. Richard Lehne's *Government and Business* (2006) touched on the focus problem: "In designing [and describing] national business systems, there are no permanent solutions and no final victories." He included comparisons between the U.S. business system and those of Great Britain, Germany, and Japan, as I have sought to do here.

The research focus follows an investigation of multisource contributions for answers to these chief research questions: (1) how and why did each nation's economic systems evolve in the way that it has and (2) to what extent does the development of the business system of the countries examined reflect their individual cultural and social foundations? No single disciplinary point of view could supply

a complete answer, nor was any contribution excluded a priori. This focus could only be maintained by following a multidisciplinary approach. Throughout the work my goal has been to describe in the best way possible how human thought and deed have shaped—and continue to shape—national character in the context of the social, cultural, and economic institutions they adopt.

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Neither of these two volumes would have seen the light of publication without the unflagging encouragement and assistance of the editorial staff at Palgrave Macmillan. Bradley Showalter marshaled this and the first volume in the series through the many trials involved in getting books through the publishing process. I wish also thank Casie Vogel, my original editor, for her belief in and encouragement for the series. She will be missed.

PART I



TRANSITION TO AN
INDUSTRIAL SOCIETY

CHAPTER 1



THE EVOLUTION OF COMMERCE AND INDUSTRY

Historical accounts of social institutions such as commerce and history are, inherently, selective. Moreover, they reflect the experiences, background, and points of view of the analyst. This history of the institution of business is no exception. This, the second of two volumes, continues the review of the same four leaders of industrial society: the United Kingdom, Germany, Japan, and the United States. I have included the historical events and trends that I feel have contributed most to making each country's business system what it is today. If others' explanations or preferences have been omitted, there remains room in the fertile, but often ignored, field of business history for yet another treatment of the material.

From the conceptual base described in the Preface, the final form and structure of the volumes has been framed from my research and writing with separate but related points of view. The book is a broadly based, but necessarily selective, analysis and interpretation of two core aspects—commerce and industry—of the societies studied. I have selected aspects of the four nations' underlying economic ideology, social structure, institutions, and management philosophy. Thus, neither of the two books in this set is intended to be a comprehensive, point-by-point comparative evaluation of all of the components that together influence a nation's business system. My research and writing focuses on the topics that my academic and business experience have led me to believe are important. The points included in the comparison reflect my own interests and biases. I have benefited much from the research carried out by others on ideas, culture, values, and

national character. However, any sins of omission or commission are mine and mine alone.

It has been said that the process of coming to understanding a society today best begins by looking at earlier manifestations of the society in its historical context. It therefore follows that the way to understand an institutional system in a society is to begin by looking at earlier manifestations of the institution for, as Trygve Tholfsen (1984) pointed out in his study of modern business systems in Europe, every society is the product of its own history, and each is formed by permanence and change through time. Moreover, each continues to embody elements created in the past.

Careful readers will note that woven throughout the narrative is the common warp of political economy. It is no accident that much of today's best research and writing on the history of business has been done by economic historians. If we are to believe Van Doren (1991), all serious history is economic history—any history worthy of the name must deal with economic facts, whatever else it deals with. It has certainly been my intent throughout the endeavor of researching and writing that this work be considered serious.

The 150 or so years from about 1600 until the 1750s stands between what is considered by many to be the end of the Middle Ages and the beginning of the Modern Age. Containing many elements of both periods, it is a difficult period to classify. According to G. N. Clark (1957), this century and a half was a transitional—if not pivotal—period in history. The period stands alone; it cannot be placed within any single, distinct phase of the West's economic development. It is neither part of the medieval nor of the renaissance eras, although it contains elements of both. Perhaps its most salient characteristic was the emergence in Europe of early capitalism, a new social institution rooted in trade and discovery that grew out of the earlier, precapitalistic world. This was also the fertile soil in which the seeds of an industrial revolution were planted. Out of this relatively brief transitional period emerged the fully developed business system we recognize today.

In Europe it was the beginning of mercantilism, an economic and political philosophy heavily influenced by the sudden flood of New World gold and silver. In Japan, 1600 was the beginning of the Tokugawa or Edo period, which saw the more or less complete collapse of foreign trade that had grown so rapidly during the first quarter of the seventeenth century. Japan began more than two centuries of self-imposed economic and cultural isolation. Beginning in 1467 and throughout most of the sixteenth century, Japan was wracked

by civil war among feudal barons. The age of war ended with victory over the feudal barons in 1600, and the ushering in of two centuries of relative calm and peace that made possible small-scale growth in trade and commerce.

In the New World colonies of Great Britain, France, Spain, and Portugal, this was a time when a few entrepreneurial settlers, many of whom were driven by a search for religious freedom, began their efforts to carve out a livelihood in the new lands thinly populated by a technologically weak indigenous population. Nearly all things manufactured in the New World were made in the settlers' home country, with investments in developing the colonial enclaves focused on producing a return on the sponsors' investments.

THE INSTITUTIONS OF COMMERCE

The growth of trade that took place in Europe from the fifteenth century to the middle of the eighteenth century was most often the result of the labor of private individual traders, usually operating under shifting and complex relations with their local political authorities. When they conducted their businesses legally, they operated under licenses awarded by their local sovereign, religious or secular. The most common payment demanded for the license was one-fifth of the proceeds. The license had to be renewed for each voyage or overland journey. As such, the system was inadequate for the tremendous expansion of trade that would take place in the fifteenth and sixteenth centuries. As a result, many new or changed procedures, rules, laws, and institutions had to be invented or put into place during this 150-year period. Among the most important of these key institutional system ingredients were:

1. A legal system with predictable rather than discretionary decisions
2. Improved trading conditions with the development of bills of exchange and a credit system
3. Development of a market for insurance on goods and property
4. A shift in government revenue systems from taking by force to regular taxation
5. Legitimization of private property ownership and a heightened interest in entrepreneurship

Two very important management functions or tools must be added to these innovations in economic institutions: First, the invention of double entry bookkeeping, and second, the invention of

the corporation. Corporate ownership first appeared in the form of a joint-stock enterprise, often managed by someone who might or might not be a principle owner in the venture, but who was not a principal owner. These were the first professional managers.

The growth in business activity created a need for a body of commercial law to bring order to the system.

Early Commercial Law

From the dawn of recorded time until the fifteenth century in Europe and the eighteenth century in Japan, business ventures were typically family firms, with internal loyalties based on kinship. In Europe, the concept of limited partnerships emerged in the late Middle Ages when the size and value of ventures outgrew many families' ability to finance the venture, or risked too much of their still limited capital on the one activity. From these early limited partnerships there eventually developed the idea of a joint-stock company, with ownership spread among many investors, few of whom would have any active operating interest in the venture. These new institutions themselves evolved into the great merchant companies of the eighteenth century and beyond.

Importance of Roman Law

Laws regulating commerce across Europe had existed from at least the Roman period, and probably earlier. The Romans developed an intricate body of commercial law to govern business activities throughout their empire. They also introduced a uniform currency system. However, the order and stability that made it possible for business to function effectively began to collapse even before the Rome fell in 476. The decline in commercial and legal order followed a collapse of the Roman political system. What resulted was another 500 years of waiting before modern business would take shape.

From the fifth through the ninth century Western Europe remained largely a vast, underpopulated wilderness. In the Mediterranean region, commerce was essentially driven from the seas as the Ottoman Empire took control over its eastern and southern shores, as well as a large proportion of its northern coast. Bands of brigands roamed Europe's forests, cutting off travel and killing traders. With little access to products from outside, people of all ranks across Europe were forced to rely on their own natural resources and skills. Out of this emerged the self-reliant feudal manorial and monastic systems.

In time, population increased enough for towns to grow around local market areas. As old towns reestablished themselves and new

towns were built, over several centuries a more complex economy developed; demand for such things as harnesses, flour, spices, armor, shoes and clothing brought craftsmen to the larger towns. Skills such as dyeing, weaving, carpentry and masonry, metalworking, tanning and a host of others were best developed and honed where demand for their function resided. Although the supply of goods was still strictly regulated by closely held monopolies under the system of guilds, eventually enough of a surplus was produced for trade to again occur and expand.

By the thirteenth century, in an expansion of the guild system, a few towns in northern Germany joined together to guarantee free trade, and to safeguard trade routes throughout the Baltic Sea region. These few towns eventually formed the Hanseatic League, which by 1350 included trade centers in London, southern Europe and the Mediterranean, including Turkey, and Russia.

By the middle of the fifteenth century, however, trade had slowly been reestablished. The hearty survivors of a series of plague epidemics, pillage, and rapine emerged from the depopulated farms, cities, and towns eager to profit from the resulting dissolution of social and legal restraints on personal liberty.

Formation of Commercial Institutions

The next hundred years were spent in rebuilding a business system that the previous hundred years had devastated. A key to the success of these new trading ventures were laws that made widespread creation of joint-stock companies possible. Although similar group ventures had existed before the seventeenth century, they usually remained together for only a single or brief related series of ventures. The joint-stock company first appeared in its modern form in England in 1553, with establishment of the Russian Company, followed by formation of the African Company the same year. These "companies" merged the association idea of the guilds with the principles of group ownership.

For the first time, capitalists could profit (or lose) from private ventures without taking an active role in the management of the enterprise. Once it appeared, this organizational system grew rapidly. Among some of the better known early joint-stock companies to be formed were the East India Company, the Bank of England, and the South Seas Company. Nor did it take long for the idea to spread to the rest of Western Europe, led first by the Dutch and later by the French.

Birth of a Financial Infrastructure

The introduction of bills of exchange in Italy in the thirteenth century as a substitute for payment in coin allowed for the transfer of amounts owed in much the same way as bank balances are exchanged today by check. In Antwerp and later Amsterdam, markets developed for the buying and selling of bills of exchange. These markets supplied the short-term credit needed by increasing volume of commerce. Banks and deposit banking developed along with markets for bills of exchange, as the new bills could be discounted when bought, circumventing the Church's bans on interest.

The earliest form of commercial insurance was a loan system used by the ancient Greeks. The loan, fully repayable with a high premium, was due if the trading venture succeeded, but not repayable if the ship carrying the cargo was lost in transit. Later, Italian merchants in the twelfth century were the first to separate insurance from financing, developing a system of marine insurance that was adopted by all Western trading nations. Policies written by Lloyds in eighteenth-century London were little different from the Italian policies of two or three centuries earlier. Major marine insurance markets soon developed in London and Amsterdam, in competition with those in Italy and elsewhere.

Prior to the sixteenth century, and in some places even later, it was not uncommon for kings and other sovereigns to force merchants, guilds, or towns to place ruinous levies on themselves for funds to pay for government, which too often meant to finance another war. Or, they would periodically either repudiate all their debts or devalue their currency to the point that repayment was meaningless. Eventually, the pluralism that characterized the period gave lesser lords and towns power enough to demand that such arbitrary expropriation be replaced with predictable, systematic taxation.

STRUCTURE OF THIS BOOK

The book is organized into five sections. The first includes this introduction and a chapter that reviews events contributing to the shape and conduct of early commerce and trade, and serves as a means to organizing and guiding the story of economic and social conduct. The second section turns to the story of how the economic system of Great Britain slid from world dominance to become a victim of its own successes, attacked on all sides by commercial and imperial rivals. The third section focuses on the early industrial development in Germany,

which was, along with the United States, the chief great industrial competitor of Britain. The fourth section looks at the trade and commerce system of Japan, which in many ways is an Eastern mirror of all that is both good and bad in the business systems of all business systems, but which is at the same time clearly a unique creation of its own cultural and economic antecedents. Twenty-first century Japan has yet to find a way out of several decades of slow or negative economic growth. In addition, Japan now faces stiff competition in all its markets from its giant neighbor China. The final systems of commerce and industry examined are those of the United States. After achieving global economic leadership following World War II, the United States became firmly established as the world's leading economy.

Part 1, "Transition to an Industrial Economy," is an overview of where modern business has gone since the end of the nineteenth century and early decades of the twentieth century. Chapter 1 introduces the topic and sets out the structure of the book. The second chapter begins with an economic history explanation of why commerce and trade emerged and flourished when and where it did.

Part 2, "Transformation of British Commerce and Industry," begins in Chapter 3 with a description of socioeconomic factors that helped shape the changing institutions of commerce and industry in Great Britain near the end of the 1800s and into the early 1900s. Chapter 4 then takes the story to Great Britain's slow revival after World War II in the recovering world of global economic and manufacturing competitiveness. Chapter 5 describes Britain's reduced but still important position as one of Europe's major economies. Although it no longer maintains a position of dominance in commerce and industry, the UK remains a strong, innovative leader in selected new industries. The chapter concludes with a look at Britain's future prospects as a leading member of the world's largest trading block, the European Union (EU) which welcomed Croatia as its twenty-eighth member in 2013.

Part 3, "German Commerce and Industry in War and Peace," begins in Chapter 6 with the story of Germany's rise to leadership in the coal, iron, and steel industries from the 1890s to the close of World War I. Chapter 7 then describes German business between the two World Wars (1919–1939), and the shift from its traditional system of "organized capitalism" to what became known as *social capitalism*. In Chapter 8, the discussion picks up the story of German business after World War II, when Germany's experiment in what today is called *welfare capitalism* came into full bloom after Germany's postwar economic miracle. This part closes with a somewhat pessimistic look at the state of the new, united Germany as it struggles to maintain its

role as the major economic engine driving the economic well-being of all EU member states. Germany's industrial economy is dependent upon Russia for the largest proportion of its energy supplies. A newly militaristic stance of a revanchist Russia and the subsequent potential threat of reduced access to those supplies hangs as a sword over the economic head of Germany.

Part 4, "Japan's Path to a Modern Industrial State," examines in Chapter 9 the evolution of the business system in Japan from the end of the Meiji period. The Japanese economy rose from nearly total destruction at the close of World War II to become the second largest economy in the world. Chapter 10 is a discussion of how Japan opened its doors to Western technology and business management, in the process becoming a partner of the allied powers in World War I. This period describes how late modern Japan developed its strong network of *kaisha* and *zaibatsu*, the immensely powerful international business networks that dominate commerce and industry in this island nation. The section closes with a pessimistic forecast in Chapter 11 of Japan's ability to retain its overwhelmingly dominant role among tomorrow's global business systems without significant reforms of its business system.

In Part 5, "U.S. Commerce and Industry Competing in a Global Economy," the history of business activity begins in Chapter 12 with the rapid growth and emergence of *big business*. The next chapter describes the business system between the two World Wars, and is followed by a description of the system that evolved after 1945. The section concludes in Chapter 14 with a discussion of some of the challenges faced by U.S. business during the early decades of the twenty-first century.

Events that shape commerce and industry are moving far more rapidly today than they ever have done before. Therefore, any projection of the future of the business system and business institutions must be seen as simply one author's prognostication. However, historical trends do tend to follow relatively constricted pathways, moving in one direction within a limited range of variation. This work is my interpretation of the evolution of the business systems of the past and present in the four cases analyzed.

CONCLUSION

Commerce and industry have evolved along with civilization from small-scale trade among prehistoric tribes to become the engine that drives the style of life enjoyed by a large portion of the world's

population. Driving that success has been what Adam Smith described as the primeval drive of self-interest. As most societies of the world embrace some form of capitalism, living standards continued to improve. Of course, the system is not perfect; its evils are often as widespread as its benefits. The benefits of capitalism have never been shared equally; there are very few wealthy and it is impossible to estimate the number of poor. However, society has not yet come up with a system better able to produce and distribute the fruits of human labor. In the chapters that follow, my goal is to describe how the systems of commerce and industry have evolved from the twentieth century to the early years of the twenty-first century.

DISCUSSION QUESTIONS

1. How were commerce and industry shaped during the seventeenth and eighteenth centuries?
2. Why did the economy of Japan begin its growth in trade and commerce after 1600?
3. Why was it important to commerce and industry for societies to develop a system of commercial law?
4. What role did early financial institutions play in the growth of commerce and industry?
5. How does capitalism help in improving societies' standard of living?

CHAPTER 2



THE PATH TO INDUSTRIALIZATION

The growth of a system of commerce and trade was the driving force behind the emergence of modern capitalism. This does not mean that it did not exist in many guises for many centuries before this transitional period. Certainly, trade and commerce must have taken place as early as the dawn of civilization and the first cities. Townsfolk need to trade with people outside of their walls for much of their food and most of their luxuries. We know that small-scale businesses were operating even before the Golden Age of Greece and the flowering of the Roman Empire. For the Romans, the Mediterranean was one large, watery trading highway. Early on, their commerce reached fairly substantial proportions and included trade with such then-distant lands as North Africa, Asia, and the British Isles. Such products as olive oil, wine, grain, slaves, and metals were regularly traded by the Romans for amber, jewels, gold, timber, wool, silk, and a host of other goods.

Merchants and traders, most often acting alone but sometimes in temporary partnership with others, had long provided a small but wealthy urban elite with luxury goods. However, the great majority of the world remained almost exclusively agrarian and poor, with mass consumption requiring centuries to emerge. It was a time of what Clark (1957) identified as “pre-capitalism.” What finally made it possible for our business systems to appear was first a change in the legal foundations for business organization, and second, the emergence of new technology in transportation and agricultural production.

Europe’s growth in trade that came during the sixteenth and seventeenth centuries was built on a technological advance in transportation: the introduction of the three-masted trading vessel in the late fifteenth century. Although the size of these vessels alone made it

feasible for great increases in the volume of trade, the new transportation and shipping technology had even greater impact: the ships made possible the great voyages of discovery that soon followed. Trade not only followed discovery, it was typically a major instigator of voyages and journeys to distant lands.

The growth in trade that occurred after the fifteenth century was both a quantitative and qualitative change. Not only was there more trade volume, but what was carried also became more valuable. Prices that had once been set according to custom or religious mandate could no longer be maintained and were soon replaced by prices based on negotiation between traders as interpreted by perceptions of supply and demand.

The major technological change taking place in Japan during this period occurred in agriculture rather than trade or transportation. The water wheel was introduced in China about this time, and not long afterward was operating in Japan. These water wheels were not the great wind-driven engines appearing in Europe about this time, but instead were driven by human or animal power. However, they had a tremendous impact on Japanese agriculture and, eventually, population growth. Water wheels made terracing possible. In turn, terracing of Japan's mountainous territory brought about great expansion in rice production. Another important change that occurred at about the same time was more intensive use of existing land from introduction of a double cropping system—two crops were grown on the same land. In Europe, the first three-plot rotation system began to appear, increasing yields even more than the two-plot rotation system.

EFFECTS OF DEMOGRAPHICS

Another important factor in the development of trade during these years of transition was growth in the total population. In Western Europe, this growth had a powerful and pervasive effect on all aspects of economic activity, from farming to commerce and early manufacturing. The outbreak of plague in the mid-fourteenth century had greatly reduced the population of Europe; possibly as much as 30 percent of the population died before the series of plagues ended. However, by the end of the fourteenth century, population growth had resumed, so that by about 1600 Europe's population had again reached the pre-plague level, which is estimated to have been somewhere around 90 million.

Similarly, the two centuries of peace during Japan's Tokugawa period that followed the century and a half of civil wars resulted in

population growth. Growing and trading in rice, the nation's staple crop, also fueled the economy. Taxes, loans, and wages were paid in rice, with even some futures speculation taking place. Little or no money circulated.

Most of the growth that occurred in Europe from the end of the Middle Ages occurred in towns and cities. Great increases in trade were necessary just to meet the most basic food and shelter needs of these growing urban populations, in addition to the need to export their finished goods to other markets. This growth in markets and commercial activities was intensified in the urban centers as manufacturing specialization came into being (Rosenberg and Birdzell 1986). The primary centers of this new specialized production were the low countries—Belgium, Luxembourg, and the Netherlands—and Northern Italy. These regions were primarily known for their dominance in the textile industry. Together, they contributed to a new north-south trade in such products as woolens, lace, silk, and linen, an early substitute for cotton. Along with this trade in goods came a need for such facilitating institutions as banking and insurance, so that by the sixteenth century most of the ingredients necessary for modern business to appear were in place, or not long in coming.

MERCANTALISM

By the end of this period, the direction of trade had shifted from north-south to east-west, with the great trading centers of Europe moving from the Mediterranean ports to cities on the Atlantic seaboard. Trade also shifted from bartered commodities to luxuries traded for specie. The gold and silver—once rare commodities—flooding into Spain and Portugal from the New World soon found its way into the heart of Europe, fueling tremendous inflationary pressures and giving birth to the economic system known as *mercantilism*. Mercantilism is based on the theory that national wealth and power are attained by increasing exports, limiting imports, and collecting as much gold and silver—eventually including paper money backed by precious metals or property was added—as possible.

This period also saw the emergence of absolute monarchies, characterized by highly centralized government, a professional bureaucracy, and a shift of power and autonomy from the local lords and cities of feudalism to the hands of the central state. Powerful central governments were a way of controlling the many violent wars of religion, civil unrest, and despotism that followed the Reformation. People were willing to give up their autonomy for peace and safety.

This resulted in the military, tax collection, and the judicial system, all of which had been the rights of the nobility, falling under the absolute control of the king. This age of absolutism died with the French Revolution.

The newly emerging absolutist states, led by France under Louis XIV, came to control economic life, often through chartered corporations or trading organizations. It was not long before mercantilist thinking expanded into finding and securing sources of raw materials for domestic factories and markets for their products. This led to a drive for colonies in Asia, Africa, North and South America, and elsewhere. The citizens of these colonies could only receive imported goods carried on ships and/or goods manufactured in the mother country. Great Britain's global reach and economic power at this time was fueled by mercantilist policies. Through a series of Navigation Acts, England was eventually able to destroy the commerce of Holland, its chief economic rival during the seventeenth century. Thus, England was able to become the preeminent trading nation of the West.

THE FOCUS OF EARLY ECONOMIC POLICIES

The policies of almost every European trading state in the seventeenth century were framed around the following social goals:

- Capture and keep as much gold and silver as possible.
- Enact protectionist policies in the form of export promotion and import restrictions to secure a permanent trade balance surplus.
- Encourage and financially support the industries that transform raw materials into exportable finished products, such as textiles and iron products.
- Encourage a large population for two reasons: First, to make available a large workforce for the export-oriented factories, and, later, to provide enough soldiers for the large armies that would be needed to protect the nation's interest at home and abroad, and to maintain domestic tranquility.
- Develop a skilled bureaucracy large enough to monitor the process and interfere in the economy whenever necessary.

BIRTH OF INDUSTRIAL INSTITUTIONS

For large-scale trade to develop, a new concept was needed: the idea of a firm as an entity distinct from its proprietor or the founding family;

an entity with a continuity of association, but with a capacity to create feelings of loyalty and duty similar to those of a family enterprise. It was necessary that such an entity be separated from investors' other property and that transactions take place in the name of the entity itself. The successes of the venture had to be recorded in such a way as to be separate from the records of the operating individuals, enhancing the assets of the enterprise, and failures having an opposite effect, again only for the enterprise. The *Protestant ethic* helped make loyalty to the firm possible. Double entry bookkeeping was the tool invented for keeping a record of the firm's financial activities separate from the owner's family accounts.

The feudal ethical system, built around the needs of a military hierarchy, did not meet the needs of many individuals in the growing class of merchants. Nor could the medieval Church, which prohibited interest as usury and dictated what were appropriate "just prices" and "just wages," meet the needs of the emerging business system. A system of ethics that could meet the needs of the new merchant class eventually came out of a merging of the ideas of Martin Luther and John Calvin. For business, the most important aspect of the Protestant Reformation instigated by Luther was *Calvinism*. Calvin urged that individuals dedicate themselves to their endeavors, thus demonstrating their membership in the *Elect*—those few of the world's population who would escape eternal damnation.

To become one of the Elect, a person needed only to be committed to work, to accumulation, and to economic success. Godly worthiness became synonymous with possession of material goods. With Calvinism, wealth was not to be used for ostentation, but rather as capital for future needs. Thrift, not poverty, and trust and honesty, not distrust nor chicanery, were to be the major virtues of man. Prosperity on Earth became the key to entering God's Kingdom after death. Thus, the Protestant ethic soon came to dominate the secular attitudes of most European Protestant traders, and soon, most of Western society.

Double entry bookkeeping, probably invented in Italy sometime before the late fifteenth century, introduced a system that supplied a financial record and financial picture of the enterprise. This financial picture enabled other traders to deal with the firm as an entity, and with some understanding of its capacity to meet its commitments. A Franciscan monk, Fra Luca Pacioli, the "father of the balance sheet," published the first known major work on double entry bookkeeping in 1494. Many of the accounting methods he described in that work are considered to be just as applicable today as they were in

the fifteen century. The importance of this invention cannot be over-emphasized. According to Werner Sombart (1953), it is impossible to imagine what capitalism would be without double entry bookkeeping.

Role of Human Factors

The relative surge in economic growth that began during the eighteenth century has been attributed to many different factors, among which are an entrepreneurial drive fostered by such personal, psychological, or ideological dynamics as:

- a puritan or Protestant work ethic,
- the desire to compete,
- a personal drive to amass wealth and/or the power that wealth brings, and
- the application of science to industry.

Along with these “positive” personal factors, misconduct—or, simply, *greed*—has also been mentioned as a major cause of economic growth. The types of misconduct most often mentioned include the increased inequalities of income and wealth, exploitation of workers, colonialism and imperialism, and slavery. Inequalities of income and wealth may, indeed, be a necessary condition for economic growth; investment capital must be amassed, and individuals do make uneven marginal contribution to an economy, resulting in unequal rewards. Exploitation is the use of resources, including labor. However, such use is not nor need be inherently invidious.

On the other hand, neither is exploitation of other people a guarantee of success. Colonialism may have helped Great Britain’s economy during the seventeenth and eighteen centuries, but it did not do so for Portugal, Spain, or France. Slavery may have contributed to production of cotton and rice in the American South and in the production of cane sugar in the West Indies. However, slaves were rarely used in Western industry; the labor of free men and women was generally available at much lower cost. Slaves had to be cared for and represented a capital cost. Employees, on the other hand, could be left to their own resources when not actually on the job.

Although British slavers, ship owners, and British West Indian planters were heavily involved in the slave trade to the New World, slavery as an institution did not exist at all in Great Britain at this time, so it did not contribute much at all, if anything, to the Industrial Revolution. Nor was slavery a factor in advances in agriculture that

made it possible to feed a rapidly growing world population. In short, slavery was an economic and social bust.

THE ECONOMIC BENEFITS OF INDUSTRIALIZATION

Industrialization of production came about because of the bringing together of all of these factors. Of particular importance was the serendipity of these factors coming together when raw materials, accessible sources of energy, and the entrepreneurial spirit appeared alongside rapidly growing populations that drove demand for ever greater amounts of supply. The Industrial Revolution began in Britain in the last half of the eighteenth century.

In 1700, more than a half-century before the acknowledged beginnings of the Industrial Revolution, as measured in millions of 1999 dollars gross domestic product (GDP) indicated that Great Britain had a distinctly weaker economy than its two continental competitors, Germany and France. The economy of the still relatively isolated Japan was a full 50 percent greater than that of Britain. The economy of the British colonies that together would become the United States was comparatively miniscule (Table 2.1).

By the end of the Napoleonic Wars, around 1820, only the economy of France was greater than that of Britain; again, the economy of the United States still lagged behind that of the other four countries, and less than a third that of Britain. By 1870, one year later after the beginning of the Industrial Age, Britain was still the dominant global economy, something like 25 percent greater than that of Germany or France, and four times as great as that of Japan. In the same year, however, the economy of the United States was very nearly as large as that

Table 2.1 GDP for selected countries, 1700–2012 (\$ millions or trillions world)

Country	Year					
	1700 (\$ million)	1820 (\$ million)	1913 (\$ million)	1990 (\$ trillion)	2000 (\$ trillion)	2013 (\$ trillion)
UK	10,706	36,232	224,618	1,019	1,493	2,522
Germany	13,410	26,349	237,332	1,714	1,886	3,634
Japan	15,390	20,739	71,653	3,103	4,731	4,901
United States	547	12,548	517,383	5,979	10,249	16,800

Source: OECD 2014 and World Bank 2014.

Table 2.2 Ranks of top 10 industrial countries, 1980–2014

RANK	1980	1990	2000	2014
1	United States	United States	United States	United States
2	Germany	Japan	Japan	China
3	Japan	Germany	Germany	Japan
4	United Kingdom	Italy	China	Germany
5	France	United Kingdom	United Kingdom	Italy
6	Italy	France	Italy	Brazil
7	China	China	France	South Korea
8	Brazil	Brazil	South Korea	France
9	Spain	Spain	Canada	United Kingdom
10	Canada	Canada	Mexico	India

Source: World Bank 2014.

of Britain. By 1913 the U.S. economy was more than twice as large as any of the five industrialized nations, with Britain the third largest following the United States and Germany. France's economy, while still substantially larger than it had been in 1870, had fallen to half that of Britain. The GDP of each of the countries in 1950 reflect the results of two major wars and the early recovery that occurred in Japan. The 1950 GDP of the United States reflects its global economic leadership at that time.

While the United States has maintained the world's largest economy since just prior to World War I, it is important to keep in mind that not all countries have been so fortunate. Change is, indeed, a constant, as the changes in the list of the top 10 countries with the largest economies since 1980 shown in Table 2.2.

CONCLUSION

The surge in economic growth that began during the Renaissance was a consequence of what Rosenberg and Birdzell (1986), Van Doren (1991), and others described as a series of "beneficent revolutions," which occurred over five centuries. These include the voyages of discovery and expansion of trade and commerce that began in the fifteenth century and might legitimately be called a mercantile revolution.

Second, in the seventeenth century, the invention of scientific method contributed to economic growth. Third, the application

of science to business and industry—including agriculture—that occurred during the eighteenth century saw the extensive use of steam power in mining and industry. Together, these factors helped make possible what we now call the Industrial Revolution.

Fourth, the introduction of electrical power in the nineteenth century and of the internal combustion engine in the early twentieth century brought about a revolution in energy application and transportation brought. Finally, today's developments in electronic storage and dissemination of data through communications systems and computers have led to what is now recognized as an information revolution.

The world has evolved in shorter and shorter periods, from an agriculture economy in the 1800s to the industrial economy of the first half of the 1900s, and from the industrial economy to a service economy that characterized the period from the 1960s to the 1990s. The service economy itself had evolved into the information economy extant by 2000, and in 2005 many observers felt that the information economy should more appropriately be considered to have evolved into a knowledge economy.

The scene was set, then, by the early 1900s with the effects of the Industrial Revolution on the economic and social institutions of commerce and industry in the United Kingdom, Germany, Japan, and the United States, for these nations to take their place as industrial leaders in the business systems of the world. The chapters in this work describe the divergent paths taken by these four economic powerhouses to bring them into a world of global competition and opportunity.

DISCUSSION QUESTIONS

1. When and where did the socioeconomic activity recognized as business begin?
2. How did mercantilism effect the growth of the economy of the United States?
3. For what reasons were early towns and villages established?
4. How did the concept of human rights emerge out of the feudal period and how did it effect the subsequent conduct of commerce and industry?
5. How and why did the Industrial Revolution occur in the eighteenth century?

PART II



TRANSFORMATION OF BRITISH
COMMERCE AND INDUSTRY

CHAPTER 3



REBUILDING BRITISH COMMERCE AND INDUSTRY

What happened to the British business system after the great depression of the late 1800s? Did this nation's economic position decline as a consequence of overproduction or growing international competition? Was it true that British entrepreneurs were unable or unwilling to adopt the many technological and managerial advances coming out of Germany and the United States? Or did the costs in human resources and capital caused by the long First World War send the economy into a tailspin from which it would never completely recover? The consensus answer for these questions is a qualified "yes." Britain's rate of growth did become slower in the last quarter than it had been during the Victorian boom years. Still, this could in no way be considered a failure. While this slowing of growth in the British economy was occurring, other nations' economies were speeding up. Britain remained the world's most powerful economy, although her competitors were growing closer. The slower growth rate was not a major blow for Britain's businesses, but it did make it easier for other nations to catch up (Table 3.1). Attempts to determine why this happened have not been conclusive. Later authors will look upon the losses in the value of Britain's manufacturing and exports as a myth; the changes that did occur were seen as more appropriately an indication of faster growth by other countries rather than failures in British industry (Bernstein 2005).

The reasons often cited for the reduction in Britain's rate of growth at this time include the following: poor productivity performance, a natural "wearing down" after her early headstart, failure of

Table 3.1 Annual growth rates, Germany and Great Britain

Period	Annual Growth (%)	
	Germany	Britain
1860–1880	1.55%	1.65%
1880–1913	1.65%	1.10%

Source: Pollard 1989, 263.

entrepreneurship, unwillingness to invest in basic research and development and in new technology, and failure to innovate in the new industries of the second industrial revolution. If British business leadership in the last quarter of the nineteenth century did not disappear, its position at the head of the industrial pack was certainly joined by others. Ravaged by its involvement in two world wars and loss of its empire, British commerce and industry in the twentieth century faced dramatic challenges. Great Britain began the century as one of the world's largest exporters of manufactured goods and ended the century as a second-tier economy.

INDUSTRIES OF THE SECOND INDUSTRIAL REVOLUTION

The major industries of the second Industrial Revolution included chemicals, electricity, glass and optics, motor vehicles (which was quickly followed by the petroleum industry), construction, nonferrous metals, and the new and growing photographic industry. Later, the consumer appliances and agricultural product processing and food packaging industries also became important. By the first half of the twentieth century these were joined by the pharmaceutical, aluminum, communication, and aviation industries, as well as the early entertainment industry—movies and radio—and retail distribution. Britain's old industries—textiles, iron and steel, and coal—suffered greatly.

Why did the decline in the British business system that occurred in the great depression of the 1870s and 1880s continue into the early nineteenth century? Was it a consequence of the long labor unrest, failure of British business leaders to invest in new technology and new businesses, or was it the huge cost in manpower and capital of the First World War that sent the economy into a tailspin from which it

would never completely recover? Did the British economy decline, fail, or recover?

As summarized by Rostow (1948), Tames (1972), and Crafts, Leybourne, and Mills (1991), among others, the evidence supports a contention that during the late Victorian and Edwardian eras, business did indeed slow down, but it did not “fail.” Agreement on the significance of the decline, its causes, and how rapid it occurred is another matter, however. Along with most of the industrialized world, the country did face economic decline after 1919, but began a recovery in the heady 1920s. That recovery ended with the depression of the 1930s.

Many attempts have been made to explain why Britain’s once world-leading economy declined after the last decade of the nineteenth century. Elbaum and Lazonick (1986) described three of these justifications. One traditional explanation was that the decline was due to the failure of the British government and industry leaders to counter growing trade union power. The British government, in an effort to avoid political unrest and violent worker’s strikes, intervened in management-labor battles. In opposition to government’s obstruction in the self-regulating economy, this theory holds that if left alone, the power of free market competition as described by Adam Smith would readily resolve worker-management conflicts and result in economic prosperity for all.

A second theory explains the decline of the British economy using a noneconomic or social rationale. This theory holds that the decline was a natural phenomenon: failure of free market competition in Britain was a natural result of either naturally occurring imperfections in the market or in the distinct conservative cultural characteristics of British business owners and managers or workers.

Elbaum and Lazonick suggested that the real reason for the decline lay in what they described as the “rigid persistence of economic and social institutions from the nineteenth century era of *atomistic competition*.” In this type of business system, the number of firms in an industry is high enough to bring about perfect competition. The characteristics of atomistic competition are: (1) existence of many small firms; (2) little or no economies of scale; (3) no firm is strong enough to set prices (they are instead *price takers*); and (4) the many small firms result in low prices for consumers and low profits for suppliers. Atomistic competition in Britain was a consequence of the industrial revolution. As manufacturers transitioned from serving local markets from small artisan shops and home production to slowly industrialize, there were few barriers to entry and little reason

for small firms to become large firms. Only as Britain developed its system of colonial markets did change begin to creep into management thinking. Thus,

Entrenched institutional structures—including the structures of [small scale] industrial relations, industrial organization, educational systems, financial intermediation, international trade, and state-enterprise relations—constrained the ability of individuals, groups, or corporate entities to transform the productive system . . . Britain’s problem was that economic decision makers, lacking the individual or collective means to alter prevailing institutional constraints, in effect took them as “given.” In failing to confront institutional constraints, British businessmen can justifiably be accused of “entrepreneurial failure.” But the cause of the failure was not simply cultural conservatism, as some historians have implied. (Elbaum and Lazonick 1984, 568)

Economic growth continued throughout the 1800s, although other nations, particularly Germany and the United States, were beginning to grow at a faster rate. The cost of building and maintaining the world’s largest and most powerful navy for keeping the sea lanes open to and from her widespread colonies was beginning to be a drag on the economy. It was not until the First World War that the slower rate of growth was considered by some to be a decline.

Textiles, iron, coal, steam engines and railways have typically been seen as the foundations upon which Britain’s first industrial revolution was built (Hudson 1983). Their importance continued well into the first third of the new century. The growth of employment in mining and manufacturing in Britain from 1871 to 1931 seen in Table 3.2 shows the importance of these two critical industries. Great Britain led technological developments in these industries and, in the process, became the first nation to industrialize. The *second industrial revolution*, on the other hand, left the British

Table 3.2 Employment in specific industries (in millions)

Industry	1871	1901	1931
Agriculture	1.8	1.5	1.3
Mining	0.6	0.9	1.2
Manufacturing	3.9	5.5	7.2
Construction	0.8	1.3	1.1

Source: from Robbins 1994, 419.

business system still struggling to retain its earlier lead in the industries of an earlier age. The second industrial revolution was to a large extent characterized by the gradual loosening of a dependence on traditional raw materials, such as coal and iron ore. New materials, processes, and technology were grafted upon the old industrial base and, in many places, supplanted them.

An example is the chemical industry. The major feedstock for the early chemical industry was coal; the first major value-added products of the coal commodity were synthetic dyes for the textile industry. At first the leader in the production of coal tar dyes, Britain's budding chemical industry quickly lost its leadership position to Germany, which maintained a comprehensive scientific and technical education system that Great Britain did not have. By the 1890s, German-trained chemists were the finest in the world, employed by British as well as German firms. The chemical industry had moved far beyond its dependence upon coal for its raw material and textiles for its major market, and Britain never regained the lead it once held in this sector.

Falling Behind in New Industries

Britain left much of the innovation in the new industries to others; the electricity industry was an important example. What Hennessey (1971) termed "the Electric Revolution" began around 1880 and ended in 1930, when Britain's original national power grid was nearly complete. Arc lights were first used in London in 1878, but failed to replace gaslights because of their high cost and the short life of available light bulbs. In one of British industry's few successes in this sector, the incandescent lamp was apparently simultaneously invented by Joseph Wilson Swan in Britain and Thomas Alva Edison in the United States. Swan and Edison joined forces in 1882 to establish the Swan and Edison United Electric Light Company, and by 1883 were producing as many as 10,000 light bulbs a week in Britain.

In its first years as an industry, electricity was used almost exclusively for lighting. Before long, however, it was put to use for traction, powering tramways and underground railways. By 1914, electricity had been applied to many other uses, as well as opening up many new areas of its own. What started as a way of providing cheap and safe light was soon powering streetcars and subways, projecting motion pictures, heating stoves and ovens, and driving tens of thousands of electric motors in all kinds of industrial applications. Within 50 years, the Electric Revolution was over. Electricity was here to stay.

A partial list of the explanations for Britain's business community to make these important investments includes: (1) the unwillingness of Britain's small, family-owned manufacturers to invest in modern production technology and product research; (2) the City of London's (i.e., banking and investment community) preference for making foreign investments—such as railroads in the United States and elsewhere—rather than providing funds necessary for industrial modernization at home; and (3) an elitist educational system, with insufficient emphasis on science and engineering.

Additional suggestions include public attitudes that considered business and industry as “undesirable money grubbing” or just “dirty,” something that gentlemen just don't do; and a lack of professional managers and management expertise because of insufficient management education programs or business schools.

Finally, three political and social factors are also often mentioned: a hands-off attitude toward entrepreneurial activity, with little or no support or encouragement from the British government; a shift from a national emphasis on manufacturing to service industries, such as banking, insurance, and the like; and the high cost of maintaining a navy to protect its global empire and free trade policies.

Not only did Britain fail to make leadership investments in the second generation industries, it also failed to innovate in older staple industries. According to Tames (1972) and others, these two factors helped British business lose its dominance of the global market for manufactured goods and contributed to a long slide of decline. Also seeking an answer to the question of why Britain failed to maintain its industrial leadership, Chandler (1990) attributed the stagnation in the British economy to three fundamental errors:

1. Failure to invest in production facilities large enough to benefit from economies of scale and/or scope
2. Failure to develop comprehensive marketing and distribution systems for the same economies
3. Failure by the owners of private, family-operated firms to employ professional managers in sufficient quantity to enable the firm to grow beyond its relatively narrow, myopic concentration on the domestic market.

British business had been slow to adopt the newest technology in its staple industries, textiles, coal, and iron and steel. As a result, by 1913 there were few industries in which British producers maintained a technological lead. On the other hand, Britain did lead the world in

the shift from an industrial economy to one founded on the provision of services. It has been suggested that this change possibly occurred too early and may have exacerbated the decline resulting from deindustrialization. Still, in 1913, Britain led the world in such services as banking and finance, insurance, and shipping. These and other “invisible” exports made up for a negative balance of payments in her goods exports, and funded the extensive direct foreign investment carried out by British businesses (Tames 1972). Regardless of what might have been the cause or causes of Britain’s decline, economic statistics clearly reveal that a deceleration of the British economy did take place after 1880.

Despite the slowing down of her economic growth rate, the value of Britain’s exports remained far greater than that of her rivals, the United States and Germany. Additionally, Britain’s exports, which had declined slightly in the 1870s, regained their growth after the depression of the 1880s.

Relinquishing Leadership

According to Harley (1991), Britain’s relinquishing of industrial leadership to the United States and Germany was brought on by the reduction in her rate of growth and reluctance to change her business system. Of the two, the more important may have been failure to implement institutional change. In 1913, and even into the 1930s, Britain’s industry was largely composed of small firms. These tended to focus on serving a limited number of markets. Meanwhile, in the United States and Germany, mergers, syndicates, and cartels were creating large, integrated international corporations. Furthermore, in Britain, firms continued to rely on labor- and skill-intensive production methods, delaying adoption of labor-saving machinery and “high-throughput” technology. The tradition of “hands-off” lending followed by Britain’s banks, as opposed to German banks, which acquired partial ownership and served on the management boards of their borrowers, further limited innovation in British business.

By the 1980s and 1990s, other “causes” had been added to the list reasons for Britain’s decline. Among these are: draining the Treasury by funding unprofitable nationalized industries; caving into excessive and irrational labor union demands, both in wages and work rules; and the high cost of two world wars and a series of “adventures” afterward, including the Suez crisis of the 1950s and the Falklands War in 1982. Pollard (1989, 265) determined that although growth did

slow, Britain's growth after 1880 should not be considered a decline by any meaning of the word. Instead, he argued that,

Above all . . . the debate on entrepreneurship in much of the literature is fundamentally misconceived. Great Britain was not a backward country steeped in traditionalism which had to wait for its entrepreneurs to awaken it to economic opportunities. It was the most advanced country of the day, the country in which the breakthrough to the modern economy had occurred first, in which, therefore, certain inhibiting elements of traditionalism had the weakest hold in Europe. There was no lack of entrepreneurial spirit in Britain; on the contrary, from the nobility on downwards, all were keen to make money . . . If there was a lack, it was in certain sectors only, a failure to reach particular decisions, in particular contexts, for particular reasons, not a failure in entrepreneurship as a weakness in British society.

Pollard conceded that a major change in the global economy was also underway at this time. Britain lost its solitary preeminence in industry and mining production and, instead, was forced to compete with several newly industrialized countries. Each of her new competitors had access to similar capital resources, industrial technology, and scientific knowledge. Giving up its leadership may have been a traumatic experience for many Britons, and one they had not yet fully absorbed when the devastation of World War II made it clear that Britain would never regain its old industrial superiority. The slide of Britain's businesses after 1945 was not, according to Pollard, the result of the actions of earlier generations. Rather, that decline must clearly remain the responsibility of the nation's leadership in the post-war years. This is discussed in detail in chapter 3.

PHASES OF OVERALL SLOWER GROWTH

The slowdown in the rate of growth of Britain's economic leadership was not something that happened overnight, nor was it a continuous phenomenon. After 1870, Britain passed through three main phases: depression, competition, and war.

The Great Depression of the 1800s: The first phase occurred during the 23 years from 1873 to 1896, when the great depression saw a nearly continuous drop in prices, wages, and industrial profit margins (Rostow 1948). Prices fell in this period because of lower production and raw material costs, exacerbated by growing foreign competition. Costs dropped because of increased productivity, which resulted from the great investment period that preceded the depression. The most

important investment factors were the railway network, which made transportation fast and cheap, and steam power applied to all types of manufacturing processes.

Stiff Competition: The second period of decline occurred between 1880 and 1914, when British businesses first encountered stiff competition from her two biggest industrial rivals of the time, Germany and the United States. More importantly, both of these rivals were competing from behind high tariff walls, while Britain tried to maintain her free trade policies.

Two World Wars: The third period of decline consisted of the years between World War I and II. After each of the two wars a much weakened Britain tried but failed to resume her former world standing. The interwar period in Britain was marked by an extensive merger movement as firms fought for survival. As Blackford (1988, 103) explained, “[Between World War I and II] British businessmen were . . . not totally successful in their efforts to improve the efficiency of industry. It proved difficult to attract the necessary financing from the City of London, which was often more interested in overseas investments than domestic ones. Moreover, the government often was at best lukewarm to proposals designed to spur business expansion. The feeling that business, and especially industry, were somehow ‘dirty’ hindered the full development of a business rationalization movement.”

The *third industrial revolution*, which emerged in the last decades of the twentieth century, is being paced by firms based in nations other than Great Britain, particularly in the United States, Japan, and the faster-growing nations such as the BRICS (Brazil, Russia, India, China, and South Korea). This apparent change in industrial focus has been characterized by many as *the Communications Age*, *the Computer Age*, or the *Information Technology Age*. Like much of Europe, Britain does not play a leadership role in the continued development of many of these new technologies.

CONCLUSION

Crafts, Leybourne and Mills (1991) reminded us it is important to remember that much of British business, and particularly manufacturing, during the last half of the 1800s and for the first 13 years of the twentieth century consisted of traditional, small-scale firms, a great many of which were still family owned. These businesses catered to local markets without entering into international trade.

These small, domestic-market-oriented firms provided employment for some 60 percent of Britain’s total industrial workers, and

probably experienced no productivity gains whatsoever from 1760 to 1860, and little thereafter. These industries waxed and waned with economic conditions at home. They were often the first to feel the pinch of economic decline, and the last to benefit from a turnaround.

That the British business system and its pattern of growth were strikingly different from the experiences of most other nations at the time cannot be questioned. Nor should it be a surprise that other nations, hiding behind tariff walls and national industrial policies that targeted specific areas of British economic strength, could catch up with Britain and then overtake her. A pattern similar appeared after World War II when nations like Japan and Germany did the same to the economies of the United States and Great Britain. One only has to think of the fate of the once-strong British motorcycle business and the U.S. television and home electronics industries, as well as the world's steel, chemicals, and automobile industries, to see parallels. What's important is to learn how, if at all, the British business system has reacted to those challenges, what has been done to counteract their severity, and what path British business will take in the twenty-first century.

The first half of the twentieth century was exceptionally trying for the United Kingdom. Drawn into two world wars, dragged down by one of the deepest and longest lasting global depressions, loss of an empire, and near destruction by government over-regulation and take-overs of major sectors of the economy, industry was unable to meet the social and economic requirements to retain its global leadership.

DISCUSSION QUESTIONS

1. From the end of the Napoleonic Wars in 1815 up to the start of World War I in 1914, British manufacturing and international trade dominated the rest of the world. What were the causes of its long-term slide in leadership in these businesses after 1890?
2. How was British commerce and industry affected by World War I and II?
3. What are some of the reasons often cited for the reduction in Britain's rate of growth after the last two decades of the nineteenth century?
4. Why was Great Britain unable to gain a foothold in the new industries that were forming in the last half of the nineteenth century?
5. What were some of the reasons for Britain's failure to implement institutional change in her commerce and industry?

CHAPTER 4



POSTWAR COMMERCE AND INDUSTRY IN BRITAIN

The twentieth century has been one of almost continuous turmoil for the businesses of Great Britain. If we grant the first 13 years of the century to really belong to the “long nineteenth century,” the modern period can be said to have begun in 1914. Between 1914 and 1918, the nation suffered the loss of millions of lives in World War I. This was followed 10 years later by a deep and nearly universal economic depression that began in 1929 and lasted through most of the decade of the 1930s. Then, the nation became embroiled in an even more devastating global conflict, World War II, again with Germany the enemy. In this war, Japan and Italy were also Germany’s allies.

Britain emerged from this near half-century of conflict shorn of her empire and well on a slide to becoming a second-rate, unimportant “spectator island” stuck somewhere off the coast of Europe. Britain’s slide into further decline was arrested during the decade of the 1970s, however, and in the last two decades of the twentieth century the nation has reestablished itself as one of the leading economies of the world.

The experiences of British business during the twentieth century fit neatly into three disproportionate periods. The first began after World War I and continued to 1939 and the start of World War II in Europe. During these years British business was involved first in a transformation from the production of wartime products to producing industrial and consumer products for the global boom that began after 1921. During this period she attempted to reclaim the industrial leadership she had lost to her rivals Germany and the United States.

The second period began in 1950, several years after the end of World War II, with slow rebuilding and further consolidation of Britain's business structure. Full recovery did not begin until passage of the European Recovery Act in the United States and Marshall Plan aid that first began in 1948. This rebuilding period lasted until approximately 1973.

The most recent period under which the British business system was shaped in the twentieth century began in 1973, after the Arab oil embargo and Britain's membership in the European Economic Community (EEC). The rate of growth was further accelerated after North Sea oil began to flow in the late 1970s. First gas and then oil had been found offshore. These new sources of relatively cheap and clean energy fueled Britain's economic renaissance. This period continued to about 1995, although the rate of growth slowed after the 1980s. Deregulation and privatization during this period helped maintain Britain's economic growth. Another factor was access to the more than 380 million consumers in the expanded European Union (EU) and associated nations of eastern Europe.

THE INTERWAR YEARS, 1918–1939

British business was strong at the start of the interwar period. None of Britain's productive capacity had been destroyed by the war, and transition to a peacetime economy was relatively painless. A worldwide postwar slump bottomed out by 1921, and by the middle of the 1920s the British business system had fully recovered from the disruptions of 1914–1919. However, the steep depression that descended on the world in 1929 and continued through most of the 1930s made it impossible for recovery to continue. The depression years were marked by economic hardship everywhere, and Britain's international trade was severely cut by a series of disastrous trade wars among the developed nations. Governments everywhere tried to revive their domestic industries by erecting very high tariffs against foreign manufactures. This only resulted in retaliatory tariffs and further depression of the industrial sector.

Consolidations and mergers, often to avoid bankruptcy, were the norm for large businesses during these years. Thousands of small and midsized businesses were less fortunate and were forced to close their doors for good. Unemployment at the depth of the depression in Britain exceeded 25 percent. The economy only recovered when Britain began to slowly re-arm following Germany's aggression in the demilitarized Rhineland in 1934 and in Austria and Czechoslovakia

in 1938. Full wartime production did not start until Britain and France declared war on Germany in September 1939.

Return to a Peacetime Economy

The transition from a total mobilization for the production of arms and armaments to a peacetime economy may have seemed painless on the surface, but deep problems with the overall economy were soon to have dramatic effects on Britain's business system. One of the most profound changes was a remnant of the war: the government had adopted a series of production controls to ensure a steady supply of war goods, together with sufficient consumer goods to avoid social upheaval. At first, the government did not change its stance toward foreign trade. As it had prior to World War I, the British government continued to support a free trade policy and exercised only limited control over businesses. A consequence in the drift downward in the growth of Britain's exports was that the value of imports continued to exceed exports. Table 4.1 shows this trend continued until well after the end of World War II.

During World War I, British businesses had been forced to curtail their exports to many of their traditional markets, and both Japan and the United States quickly jumped in to meet that demand. Thus, after the war, one of the greatest difficulties facing business in Britain was how to regain much if not all of her former export dominance in the staple industries. In Asian markets, Japan's new industries were particularly successful, while in Europe, revitalized German industries and U.S. firms captured much of Britain's old markets for steel and coal. Coal exports, while still high, were declining as oil and gas were replacing coal as the preferred fuel for ocean shipping, powering electrical generators, and in industry. The greatest market for coal from Britain's mines soon became domestic electrical power-generating plants. In industrial goods, particularly in Latin America, U.S.

Table 4.1 Volume of Britain's trade from 1910 to 1992 (£ millions)

	1910	1925	1930	1950	1975	1992
Total imports	678.3	1,320.0	919.5	2,602.9	24,037.0	120,453.0
Total exports and re-exports	522.0	927.4	523.3	2,255.0	19,761.0	107,047.0

Source: Robbins 1994, 428.

businesses were squeezing many British firms out of the market. By 1920, Britain's exports were some 60 percent below what they had been in 1913 (Musson 1978). They were no greater in 1938.

A radical shift occurred in the export component Britain's business system during the interwar period. The stagnation of exports after 1913 was not all lost business. Domestic demand had grown and all but absorbed the lost export activity. This growth was largely in the new industries, including chemicals, synthetic dyes, pharmaceuticals, glass and optics, aircraft and motor vehicles, artificial silk (rayon), electrical goods, building construction, and distribution. Social and public services also increased during this period, although Britain began to lag far behind in other services, except for banking and insurance.

Britain's free-enterprise capitalist economy had been almost fully restored by 1924. By then, the new industries were growing fast enough to counterbalance some of the stagnation in the old staple industries. Overall growth was enough to ensure that the great majority of Britons were enjoying a clearly improved quality of life. Still, for most of the 1920s, unemployment remained around the 10 percent figure. It ballooned to over 23 percent in the early 1930s.

The Great Depression that began in 1929 put a halt to any hope of a return to the government's old *laissez-faire* policies toward business and its related policy of free trade. An Import Duties Act passed in 1932, setting a 10 percent tax by value on most imports, initiated a trend of ever higher tariffs and new nontariff barriers such as quotas. These barriers to imports were passed in the mistaken belief that Britain's businesses, thus sheltered behind a high tariff wall, would revive sooner from the effects of the depression. Instead, the reverse was true; Britain's trading partners themselves set up retaliatory tariffs and other barriers, defeating any advantage British firms had hoped to gain.

During the 1930s many industries rationalized, consolidated, or joined formal trade organizations that functioned something like Germany's great industrial cartels. As a result, by 1939 a large portion of British industry had become more or less controlled by trade associations. In many cases, the rules and regulations of the association had been built upon controls that had been in effect since World War I. In place of individual firms competing against one another, there now existed in Britain an extensive system of licensing, quotas, marketing agreements, and delegated authority over resource allocation. Many of those complex control systems remained in effect until long after 1950.

Britain's new industries were among the first in Britain to adopt new developments in the management of organizations. Most of these new techniques were invented in the United States, and were placed

under the catch-all label of “scientific management” (Musson 1978, 272). They began with what in Europe was called Fordism, after the automobile assembly line process that was introduced in Britain before 1914. In the United States, this system was known as Taylorism after its inventor, Frederick Taylor, who referred to the system as *scientific management*. Whatever the name, it soon resulted in a greater emphasis on managerial efficiency, scientific selection of employees, staff training and management development, cost accounting, improvements in factory design and layout, and a general improvement of firms’ organization and control. Few of these developments had been adopted by British businesses prior to the outbreak of World War II, and many would have a long way to go before their acceptance was general. Management education was a rarity in Britain; for example, the country did not have a single full-time, day professional management school until 1960, although a few night and short course programs were available. Few of Britain’s managers took advantage of them, however.

By and large, the interwar period can be described as a time of Britain’s transition from an older heavy industrial base toward a modern economy founded on success in the industries of the second industrial revolution. Much of British industry had to completely retool or find a new niche in which to compete. The predicament of British business between the wars was described by Professor A. J. Youngson of the University of Edinburgh (1960, 35–6):

The task which faced British industry in the years between the wars was to adapt itself to novel economic conditions, both of demand and of supply. New products had become or were becoming important, techniques of production were altering, and markets were changing, often radically, in size, nature and location. As a result, a great number of workpeople had to switch their jobs—this often required them to leave the district in which they lived and go elsewhere—while much capital became unremunerative and had to be written off, a process naturally disappointing to entrepreneurs and shareholders, and resisted by them accordingly. The numbers of people and the sums of money involved were large, and the task of adaptation was therefore a great one. . . . The core of the trouble lay in two industries, coal and cotton; especially in coal.

Although British businesses trailed in the development of most of the new industries, there were enough successes to enable this aspect of the economy to thrive all the way up to the outbreak of World War II. Despite their very real successes, Britain’s second generation

industries were never global leaders, as had been textiles, coal, ship-building, and iron and steel. The big problem was that for most of its new industries, British businesses never captured large enough market shares to benefit from economies of scale. In automobile production, Britain's performance took a backseat to its major competitors. While both Ford and General Motors established production plants in Britain, quickly gaining a large share of the British market, British motor car makers retained production in Britain. In addition, many European manufacturers successfully imported their automobiles into Britain, despite a steep 33 percent protective tariff.

Consolidations marked Britain's chemical industry during the interwar years. Even then, the industry was in bad shape by the middle of the 1930s, and had to be given subsidies from the government to survive. The many mergers and consolidations that had begun as early as the 1880s in the industry culminated in the formation of the giant Imperial Chemical Industries (ICI) in 1926. Chemical production required large sums for capital investments. The only way British firms could compete with German cartels, such as I. G. Farben and Bayer, and protected American companies, such as Du Pont, was if they became large themselves (Robbins 1994). The ICI mergers enabled Britain to compete in the changed environment for chemicals.

Another spate of mergers brought together most of Britain's sugar producers, while they also continued in the brewing and distilling industries. Similar competitive pressures resulted in a merger of Britain's Lever Brothers with Dutch firms in 1929 to create the Anglo-Dutch Unilever Corporation, producers of a large portion of Europe's oleomargarine and soaps. A similar combination resulted in the formation of Royal-Dutch Shell in petroleum and petro-chemicals. Before World War I, there had been very few large corporations in Britain: there were just seven firms capitalized at more than eight million pounds sterling in 1907. By 1925, the number had reached 25, and more were being formed.

As the 1930s were coming to a close, the business system of Britain was loosely divided into three broad groups or categories (Walshe 1991). First, there was a small collection of cartel-monopolies and near monopolies. Most of these functioned in relatively small markets, and many were formed after a round of rationalizations during the rough interwar and depression years. They never controlled much in the way of the British economy, making up less than 10 percent of total output in 1935. Second was a large group of concentrated businesses across a broad spectrum of the economy. Making up from 50 to 85 percent of industrial capacity in their respective industries, they

produced such goods as rayon, dyes, tires, cameras and related equipment and supplies, electrical supplies and equipment, and motor vehicles. The third group consisted of the vast bulk of the older industries. These were in such industries as iron and steel, shipbuilding, textiles, brewing, furniture, leather, and construction. This structure of the business system was not changed much during the war, and further consolidation did not begin until after the 1950s. By then, Britain's nationalization program was well underway.

BUSINESS DURING RECONSTRUCTION, 1945–1972

The second phase of the twentieth-century evolution of the business system in Britain began after Marshall Plan aid appeared in the late 1940s and early 1950s. By contributing as much as 2.5 percent of the total to the economy, that aid made up for some lost export earnings and enabled the country's reconstruction to begin in earnest. During the war, many of Britain's markets were lost to neutral countries, and, immediately after the war, to competitors in the United States. In fact, as the 1950s progressed, Britain became increasingly dependent upon the United States both financially and militarily. Britain's factories were worn out after six or more years of wartime production, during which time few if any replacement parts or machines had been available.

The war had placed the nation deeply in debt, so no government aid to hard-pressed industries could be expected for recovery. Britain was forced to withdraw from her empire and, eventually, to establish stronger ties with the nations of the European continent. In return for aid, the United States demanded that Britain open up its Commonwealth markets to American producers. In this way, the United States quickly surpassed Britain as the primary supplier of most of Canada's imported manufactured goods.

While her enemies Germany and Italy embarked on slow but steady recoveries after the war, Britain's businesses were forced to endure an extended period of dissolution and displacement. Old work and management systems were inefficient, while foreign competition, particularly in all of Britain's old staple industries, was steadily cutting Britain out of markets she once dominated. In addition, work stoppages were becoming endemic. Overall, these factors combined to drive British businesses further into decline. Reinforcing that decline was the precipitous drop in Britain's exports. Possibly the only encouraging development of the period, coming in 1967, more than 20 years after the end of the war, was when production began in Britain's newly discovered North Sea gas and oil fields.

During the first 20 years of the postwar period, Britain also embarked on an extensive experiment in social planning and spending. This included nationalizing many of the major industries, including steel, coal, shipbuilding, aerospace, energy production, transportation, and health care. Reconstruction and redevelopment in all these industries was financed by high levels of taxation and inflationary spending. In addition, the country was beset by serious and almost constant labor unrest. However, by the middle of the 1970s, it became apparent to some in Britain that a rethinking of this level of government involvement in the economy was necessary. This eventually resulted in the start of privatization of most of the nationalized industries, or a policy of permitting private enterprises to compete alongside government firms, as became the case in Britain's radio and television broadcasting industries.

Structural Change in the Business System

A major change in the structure of the British business system took place after 1945. For a long time after the end of World War II, the British business system was composed of three sectors or categories: First was the declining number of rationalized large industries that were still in private ownership. The second was the disappearance of many of the traditional small, family-run businesses that at one time predominated in the country. And finally, there were the newly nationalized, "mega-businesses" that emerged under a consecutive series of Labor governments. Of the three, the most important were the nationalized firms, for they controlled the majority of the nation's productive capacity, although generally not very efficiently, and seemed to be increasing in number.

Britain's nationalized industries were concentrated in three broad sectors of the economy: energy, transportation, and communication. They controlled gas, oil and coal production; electricity generation and distribution; water supply and waste disposal; rail, bus, and airline transportation; and telephone, telegraph, radio, television, and related communications industries. In many cases, they also included the producers of materials and equipment used by those industries. Wherever total government ownership was not in place, the government was often a major stockholder in many of the firms, or competed with private business in parallel operations.

After World War II the policy of nationalization of a wider range of Britain's productive and service sectors began to mushroom. Public ownership did not begin in 1945 by any means, however. Industries

already nationalized before 1939 under Conservative governments included the telephone and telegraph systems, which were run by the Royal Mail; radio broadcasting; the London transport system (buses, trams, and subways); and most of the supply of electrical power. Underground mineral rights were also nationalized. In addition, the government had initiated an extensive system of controls and subsidies for a wide spectrum of the business sector.

During the interwar period, nationalization had most often been seen as a way to save threatened industries. It was never a part of an overall plan of establishing public ownership of the nation's productive capacity that it became after 1945. Early takeovers simply provided a change of ownership, without making any of the changes needed to revive the firm and make it profitable again. Thus, a majority of those early nationalizations were unsatisfactory, disappointing to both the government and the general public alike. After the first rush of nationalizations in the late 1940s and 1950s, "nationalization-as-rescue" became a more or less regular occurrence. Some of the larger industries taken over this way included the automobile maker British Leyland and the aerospace industry, led by the jet-engine maker Rolls Royce. Britain's shipbuilding and ship-repair industry was nationalized for a similar purpose in 1974.

From their earliest appearance in the 1920s and 1930s nationalized industries were not subjected to direct ministerial control. Rather, public corporations were formed to manage them, thus sheltering them from any regional or special interest group pressure. Independent boards with membership from within and without the industry were formed to manage the daily operations, and to do so first and foremost in the public's interest. The first boards to be formed were the Central Electricity Board, the British Broadcasting Company (later the British Broadcasting Corporation), and the London Passenger Transport Board. This system came to be known as *corporate socialism*, and became the pattern followed in postwar nationalizations. After 1945, all nationalized industries were established by acts of Parliament as *public corporations* (Dunkerley and Hare 1991).

An acceleration of nationalization began after the Labor government took control of the country. Nationalization began with the Bank of England, overseas cable and radio services, and civil aviation all in 1946. In 1947, operations of coal mines, railroads, canals and docks, and road haulage were taken under government ownership. In the next year, the last of the electrical supply and gasworks distribution systems were nationalized. Also in 1948, the last of a series of social welfare bills were passed, greatly expanding the role of the

British government in the lives of its citizens, as well as its business. Among these expanded social programs were completely free medical care, including doctors' services, medical supplies and prescriptions, hospital care and nursing, for all British citizens. Also included were expanded old age and unemployment benefits.

In every case of nationalization, the government paid fair prices for the nationalized firms, rather than simply confiscating them. Many of the acquired firms were badly in need of capital investment, or had been kept operating long after their useful economic life. The government was forced to immediately close many of the most serious problem firms, and make heavy investment in others. Many unions also struck for unjustifiably higher wages. Together with the high purchase prices, high costs and declining overseas markets, far-reaching and expensive wage settlements placed an immediate drag on the British economy.

An example of the turmoil British businesses were forced to undergo at this time is the case of the iron and steel industry. One of Britain's healthier industries in 1950 because of the rebuilding of merchant vessels lost during the war, it still faced growing competition from the United States and many new, smaller steel producing states. The industry was nationalized by the Labor government early in 1951. However, defeat of the Labor party later that same year saw it denationalized by a Conservative government in the fall. Then, when Labor regained control of government in 1967, it was again nationalized. It was finally denationalized for good under the Prime Minister Margaret Thatcher's government.

A similar fate of nationalization, denationalization, and renationalization was suffered in the 1960s by the British road haulage industry. After those two major shifts and reshifts, subsequent Conservative governments became discouraged to the point that no further denationalizations were attempted until after Margaret Thatcher became prime minister in 1979. In just one year after taking office, the state oil firm, Britoil (now British Petroleum), and the national commercial airline, British Airways, together with some smaller firms were again placed in the hands of private investors. The policy continued under John Major, Thatcher's Conservative party replacement. Dunkerley and Hare (1991, 416) summed up this episode in Britain's business history thus: "Britain's approach to nationalization, which was, initially very appealing politically, as well as being based on a clear, simple, and administratively neat model, eventually ran up against an increasing number of difficulties which could not be resolved merely by tinkering with the established model. This model has had its day."

Decline of UK Exports

While nationalization of much of Britain's large productive sector was taking place, Britain's share of world exports of manufactured goods fell from 20.4 percent of the world total in 1954 to 17.7 percent in 1959. By 1967, the UK share had further declined to 11.9 percent, and reached its lowest point, 8.8 percent, in 1974. After 1975, Britain's share stabilized at an average of around 9 percent for the rest of the 1970s and into the 1980s. Britain's decline in share of world exports was accompanied by an equally dramatic increase in the imports of manufactured goods, particularly in such sectors as motor vehicles, office equipment, construction equipment, and miscellaneous metal goods.

Two reasons have been suggested for the shift that occurred at that time: (1) an increasing inability of Britain's nationalized and privately owned industries to be price competitive and (2) a failure to produce and market products of the right quality, in the face of rapidly changing technologies and world demand structures.

By the start of the 1970s, Britain's business system had nearly come apart. A series of wildcat strikes, widespread social unrest, growing unemployment, tax increases, steadily increasing prices, and continued national withdrawal from international markets and international involvement threatened to rend the last ties holding British society together. The few remaining binding threads were stretched even tighter in 1973 when an Arab oil embargo more than quadrupled the cost of energy overnight. But, political and economic changes were about to rescue Britain's business system from the pit in which it found itself. The first of these was Britain's entry into the common market. The second was the Thatcher government's new focus on ways to enable Britons to help themselves, rather than be "helped" by an all-embracing government.

FOCUS ON EUROPEAN MARKETS

Beginning in the nineteenth century, the traditional structure of Britain's trade with the rest of the world was such that British manufactured goods were exchanged for tariff-free imports of foodstuffs and raw materials. By the end of the century, Britain dominated world industrial production, although she was being challenged in many areas by businesses in Germany and the United States. It was impossible to continue this traditional trade structure after the 1950s. The bulk of that trade had shifted to between Britain and the Commonwealth and Overseas Sterling Area (OSA) countries, which were

predominantly lesser developed and newly developing countries in the Middle and Far East and the Caribbean. Beginning around 1955, however, the focus of Britain's trade switched toward a greater dependence on the industrial, urbanized, high per-capita income countries of Western Europe, Japan, and North America.

By 1972, the year before Britain joined the EEC, trade with the then nine-country EU countries accounted for some 30 percent of UK exports. And by 1985, the EU's share of Britain's exports had risen to 46.3 percent, and the import share to 46 percent. Over this same period, imports from Japan rose from just a little more than one-half of 1 percent in 1955 to 3.4 percent in 1980 and 4.9 percent in 1985. Exports to Japan also grew, but at a lower rate than imports. In 1955 exports to Japan constituted some six-tenths of 1 percent; it was 1.8 percent of Britain's exports in 1970 and declined to 1.3 percent in both 1980 and 1985.

During the 1960s the changing structure of Britain's foreign trade made it clear that the European Economic Community (EEC) was quickly becoming one of the greatest contributors to growth and stability that the Old World had ever experience. Britain's first effort to join the new common market was thwarted by France, however. Instead, Britain became a member of the rival European Free Trade Association (EFTA). While both the EEC and EFTA had common internal tariffs, EFTA permitted its members the right to establish unilateral external trade agreements. To become a member of the EEC would have meant cutting herself off from the remaining economic ties with her former empire, which was no longer an empire in the traditional sense. Rather, it had become an association of independent states with some common traditions and a common language. The empire was now a *Commonwealth of Nations* that agreed to maintain preferential trade conditions among themselves.

By 1991, the Commonwealth consisted of 50 independent states. Individual member states are not required to follow a single domestic or foreign policy, and are free to join other regional economic organizations; Canada's membership in the North American Free Trade Association is an example. However, the trade preference policy within the Commonwealth, along with many of the same social traditions and the English language, are strong bonds serving to hold the group together (Black et. al. 1992).

Britain's membership in EFTA allowed her to retain strong economic ties with the Commonwealth. However, as the 1960s progressed, it became apparent to Britain's leaders that she could no longer afford to remain outside of the common market, which was

increasingly coming to dominate trade in Europe. Commonwealth nations wanted access to the British markets, but were less interested in permitting British business free access to theirs, a policy that could no longer be subsidized by the weakened state of Britain's export sector. The country's economic future was clearly tied to the European continent. France vetoed a second UK effort to join, but a new French government withdrew its objection when Britain tried a third time. The UK withdrew from EFTA in 1973 to join the EEC.

The revitalization of manufacturing in Great Britain can be traced in large part to the benefits of common market membership. In addition to access to that very large market, competition between countries was leveled somewhat as no EU country could negotiate a more favorable trade agreement with competitors outside of the EU. When Britain adopted the final stages of the common external tariff clause (CET) on all trade with non-EEC countries in 1977, all tariffs on trade between the United Kingdom and each of the other members of the European Union were reduced to zero. EEC membership alone, however, was not enough to stop Britain's further decline in the 1970s.

UK BUSINESS AFTER 1973

In 1970, Britain's Conservative Party regained control of the government. Two events highlight their short four-year control: the first was passage of legislation to limit the tendency of unions to strike almost on whim; and the second was Prime Minister Edward Heath's success in negotiating Britain's way into the European Union. But the 1973 oil embargo quickly limited any short-term effects these might have had on Britain's businesses. As a result of the huge increases in the cost of energy, together with continued inflationary spending by government, by 1974 inflation in Britain had reached as high as 26 percent a year. An election was called in 1974 and the Conservative Party lost control of government. Labor was again in control, but could do little more than their Conservative opponents to turn the British economy around.

Nearly everything the government did during the 1970s to revitalize British business, while maintaining a strong commitment to social welfare programs, failed. Unemployment, taxes, and prices continued to escalate. Black et al. (1992) described the situation at the time thus,

In retrospect, it appears that the failure of the economic and social formulas of both Labor and the Conservatives in the 1970s had brought

Britain to the brink of economic and even civil chaos. Economic isolation had not worked; membership in the EEC had proved helpful but was not a cure-all. Old socialism mounted on new technology had not succeeded either. Tough labor-control measures and nurturing of uninspired management had merely brought strikes, downturns in production, and (class) division. Political, social, and economic difficulties prevented any of the programs from being tried for very long. (306–7)

The failed attempts to right the country required new thinking, together with a radical transformation of the political, social, and business systems. It came in 1979 when the Labor Party lost an election and the supporters of Margaret Thatcher beat back efforts by the incrementalists in her party to put Edward Heath back in the prime minister's seat. Britain's middle class and skilled workers agreed with Thatcher, who argued that earlier governments had been spending too much attention on the redistribution of wealth instead of focusing on its creation.

Although females had served as members of parliament since 1919, Margaret Thatcher was the first woman ever to hold the office of Prime Minister of Great Britain. She took over in May of 1979 and held that office until November of 1990. One of the first tasks she set for herself was to reduce the role—and, hence, the cost—of government. To do so, she initiated a broad program of privatization, deregulation and, except for defense, decreased government spending. One after another, most government-owned or controlled manufacturing operations, together with government-owned housing operations, and water, gas, electricity, and telephone systems were privatized. The policy continued after Thatcher was replaced by John Major. By 1996, most if not all of the railroads and bus transportation systems had been sold, and the hydro and nuclear-powered electrical generating authorities were also privatized, or were about to be.

During the mid to late 1980s, Britain's economy enjoyed a period of prosperity it had not known for 50 or more years. Productivity in the country was growing at a rate that outpaced the rest of Europe and the United States. Interest rates were kept low and the pound was strong. Stock prices were increasing and many workers enjoyed an increase in their take-home pay due to a tax cut (Black et al. 1992). While Britain's businesses as a group might never again dominate the world market, their future appeared brighter in the late 1980s and early 1990s than it had for years if not decades.

Britain's membership in the European Union has been marked by a host of disagreements and periodic trade disputes, such as the German and French-led EU ban placed on all imports of British beef because

Table 4.2 Ten-year changes in UK exports by area, 1985–1994 (£ millions)

Year	European Union	North America	Japan
1985	42,329	13,515	1,011
1986	38,393	12,229	1,182
1987	43,079	13,192	1,495
1988	45,324	12,984	1,741
1989	52,007	14,641	2,308
1990	59,789	15,235	2,632
1991	63,823	13,409	2,257
1992	65,465	14,262	2,233
1993	66,550	17,721	2,655
1994	77,090	19,436	2,990

Source: Central Statistical Office 1996, 266.

of what has been called “mad cow disease.” Britain was also dragging its heels on the single currency initiative. However, Britain is and will more than likely remain a full member of the European common market. Through that membership, Britain’s businesses have essentially duty-free access to a market of some 380 million or more consumers, when Central Europe is included with the EU’s population of something near 320 million. A comparison of Britain’s exports and imports with selected international regions is presented in Tables 4.2 and 4.3.

However, a byproduct of EU membership for Britain’s commerce and industry has been a heightened level of international competition, not only from the other 14 EU member states, but also from Japanese, Korean, American, and other nation’s businesses that have established positions in one or more of the community’s countries, thus gaining the privileges of duty-free access to other EU markets. British businesses have been forced to learn how to compete with European as well as global competitors. All indications suggest that many have learned their lessons well.

The Continuing Importance of Europe

Despite the many trade and political differences still remaining between Britain and the European Union, Europe is by far Britain’s most important trading partner. In 1994, the other 14 members of the EU took 57 percent of all Britain’s exports, and were responsible for nearly 60 percent of all of her imports. North America, the second

Table 4.3 Ten-year history of selected UK imports by origin (£ millions)

Year	European Union	North America	Japan
1985	46,259	11,931	4,115
1986	49,532	10,112	4,936
1987	55,021	11,024	5,464
1988	62,020	13,064	6,531
1989	70,674	16,094	7,104
1990	72,802	16,924	6,760
1991	67,471	15,887	9,753
1992	71,931	15,872	7,443
1993	72,758	18,464	8,517
1994	83,764	19,892	8,898

Source: Central Statistical Office 1996, 266.

largest market for British goods and import source, took a little more than 14 percent of Britain's exports and provided 13.3 percent of her imports. Imports from Japan were almost 6 percent in the same year, while purchasing just 2.2 percent of British exports.

Changes in the National Character

In addition to structural changes in Britain's business system at this time, an important change also occurred in the attitudinal or ideological makeup of many Britons (Kreiger 1987). Prior to the 1980s, Britain's fundamental ideology endorsed a merger of the interests of many groups, and was expressed in a comprehensive system of cradle-to-grave social welfare and extensive government controls. However, under the impetus of the government's actions to deregulate and privatize business during the 1980s and 1990s, values have been rechanneled toward individualism and reliance on market mechanisms. This reinforced a view of society in Britain as being composed of many self-interested competitive actors, rather than the composite body of persons willing to place their own interests behind those of a greater good of a larger society that it had once been.

This has resulted in a rise in what Kreiger called the "managerial right" (50). What this means is that there were fewer British government controls on business, and the ownership of economic institutions is rapidly being put back into the hand of private investors.

Attempts have been made to lower government spending by either reducing or limiting expenditures on social programs, including the National Health Service and higher education. Users' fees and co-payments are also becoming common. It appears as if the British business system has thrived in this new environment; some two million new businesses were established in Britain between 1980 and 1990, although some 1.5 million of them did not survive the decade (Leigh 1996). The bulk of new employment over the same period occurred in these new businesses.

There is strong reason to believe that the two decades of deregulation and privatization policies, together with a significant turn away from what was deemed to be excessive social spending, helped many of Britain's businesses to regain much of their former competitiveness. In addition, repatriated profits from centuries of foreign direct investments are now being reinvested at home, further helping British producers regain the levels of quality and innovation necessary in today's marketplace. Great Britain welcomed and actively sought foreign direct investment. This attitude has brought many foreign manufacturing firms into the country, providing jobs and increasing the country's exports (Holden, Matthews, and Thompson 1995).

A major impetus toward greater economic activity and opportunity for British businesses, as well those in the other states of the European Union, was the comprehensive drive toward final economic integration that began in 1987 with passage of the Single European Act (SEAct).

UK Business Integration after 1987

SEAct was designed to break up what had become a logjam of legislation that had piled up over 10 or more years. In passing the act, the member states went on record claiming their intention to fully open all markets within the European Community, and free the movement of goods, capital, and people across all internal borders. On a higher plane, its aim was to unify the community, turning it into a true economic—and eventually political—union. This included providing a body of law that would strengthen the power of the organization's governing bodies, including the commission, council, and European parliament, which is now directly elected. The act spelled out some 300 particular issues that still separated members and hindered the flow of goods, people, and money across internal borders.

By 1992, most of the former barriers to trade had been removed and agreements reached on many of the necessary steps required to

integrate the market's economies. Examples include conformity in many product standards; a common system of transeuropean transportation documents for shippers; liberalization of air transport between member countries; removal of barriers to television and radio broadcasting and advertising; removal of customs and emigration barriers at most inter-European borders and internal entry ports; and opening of public supply contracts to bidders from any EU member nation. In addition, the act included provisions for harmonizing efforts to control drugs, crime, and terrorism within the European Union. Monetary reform—that is, the movement toward a single currency—occurred on January 1, 1999, with the introduction of the euro.

Another major provision was a program to reduce, if not eliminate, economic disparities between regions within the European Union. Social funds were established to provide grants for economic development in depressed areas, in addition to providing for preferences in governments' purchasing to firms in depressed areas. In Britain, this meant significant development assistance became available for depressed older industrial areas in Scotland, Wales, and Britain's Midlands, the old industrial heartland of the country. Most investment in the new second and third generation industries has occurred in the south and southeast of England, while London continues to be the focal point of the nation's service, publishing, and entertainment industries.

CONCLUSION

It is important to keep in mind that if, indeed, the business system of Great Britain did suffer 100 years of decline, it did not leave her an impoverished nation. Many of Britain's businesses, both in manufacturing and the increasingly important services sector, remained strong domestic, regional, and global competitors. Britain's more than 200 years as an advocate of free trade helped to make London one of the major banking, insurance, and investment capitals of the world.

Britain also maintains a technologically advanced and diversified manufacturing base, one that is periodically enriched by her relatively open attitudes toward foreign investment on British soil. Many foreign firms, including American, Japanese, and Korean firms, have made significant investments in Great Britain, and use those operations for sales across Europe and beyond. As a direct result of uncertainty over what will happen after control of Hong Kong is returned to China,

large sums from the Colony have been pulled out and reinvested in Britain's economy, as well as in Canada, Australia, and the United States. This investment activity has included relocating businesses to Britain or elsewhere, starting new businesses, and purchasing stock in existing British firms.

In addition, the country has redeveloped its agricultural industry to the point where it is self-sufficient in a wide variety of food product categories, as well as being a major exporter of many food items. The country's transportation and communications networks are complete and are constantly being enhanced. The nation's transport system has been deregulated and, in most cases, privatized. Final privatization of the rail network occurred in 1996. The deregulation of transport, broadcasting, and advertising and other industries has increased British firms' ability to compete. Strong competition at home and abroad has helped to improve the quality of British products and raise the levels of customer service and buyer satisfaction higher than they have been for decades, if not centuries. Quality and service, together with lower labor costs than many of the country's major competitors, have kept the prices of British goods low in the global marketplace. Significant reserves of North Sea oil and gas remain under British control. And finally, a revitalized education system, including scientific, technical, and management education, has helped Britain to retain an educated and productive workforce. Finally, what can be said about the future of the business system of Great Britain? What is the likelihood of the country's still fragile economy entering on a new era of disintegration and decline?

There are good reasons to conclude that Great Britain will be able to ride the wave of modest economic success that it enjoyed over the last two decades of the twentieth century. There are a number of reasons that this success should extend at least until the year 2020, and most likely, beyond. First, the country's population is aging slower than the other large countries in Europe. This means an available labor force and lower social costs in the form of social security and medical care. Second, Britain has already gone through the painful restructuring process from older technology manufacturing to information-based industries, and did so faster than her continental neighbors. And third, Britain was able to successfully walk the tightrope of becoming increasingly involved in European affairs, while retaining the close historical ties with the Commonwealth and the United States. Should conditions change and EU integration slow or reverse itself, British businesses have a "fall-back" position that few other EU member states possess.

DISCUSSION QUESTIONS

1. The evolution of British business during the middle of the twentieth century occurred in three distinct periods. Name and describe each.
2. How did aid from the United States affect Britain after World War II?
3. What is social planning and how did it affect the British economy after 1945?
4. What happened to Britain's share of exports after World War II? Why did this happen?
5. How did the Single European Act (SEAct) affect British commerce and industry?

CHAPTER 5



UK COMMERCE AND INDUSTRY IN THE NEW MILLENNIUM

On a quiet Thursday in May of 1994, John Smith, the leader of Britain's Labor Party, a likable, quiet Scot, died unexpectedly. Under Smith's leadership, the country had severed its ties with the European Economic Community (EEC) and joined the European Union in 1992. With Smith's sudden passing, Labor said its final goodbyes to the ties of the past and stepped out into a bright new future. Smith was succeeded in July by Tony Blair, a man more comfortable with the middle-class thinking of his background than the public ownership policies of the party's labor union beginnings. The event essentially marked an end to the painful and calamitous days of the twentieth century, notable for two of the deadliest wars in all history, the loss of most of Britain's empire and the island nation's world leadership in manufacturing. Although Blair would have to wait to take office for two more years when Labor won the next general election, 1995 was the year that the British Labor Party formally parted company with thinking that emerged a century earlier and moved into the twentieth century. Blair, stumping the country in support of Labor Party candidates, was successful in getting the party membership to remove Clause Four, the section of the Labor Party constitution that called for public ownership of the country's major industries. In so doing, he did away with the last major obstacle in the minds of voters and helped make the party electable once more.

The Conservative government of John Major, in office since 1992, had not been able to find a solution to the country's economic woes. For most of this term, Major had to cope with economic stagnation, rising prices, growing unemployment, and electorate disenchantment

with Conservative Party infighting. When the results of the general election were counted on May 1, 1997, Labor took control of the government with a landslide victory at both the national and regional (Council) levels.

BEGINNING A PERIOD OF TRANSITION

This was also the start of a quiet transitional period for the British business system. In the middle of the last decade of the twentieth century the structure of the British business system continued to be characterized by a mix of a few very large firms and a huge body of small businesses. In the past, small firms had employed the majority of British workers, but by the 1990s that honor fell upon the country's middle-sized businesses. Britain's 1991 census of economic activity reported that 94 percent of all businesses in Britain had fewer than 99 employees and 68 percent of all firms had fewer than 10 workers (Table 5.1).

In the first half of the 1990s, more than half of all Britain's workers (54.5%) were employed in firms with fewer than 500 employees; small and midsize firms combined employed 26.7 million workers. The largest single category was the 99- to 499-workers group, which employed nearly 12.9 million workers.

Table 5.1 Employment by UK firm size, 1991 census

Number of employees	Firm Size		
	Number of firms	Percent of total	Total Number of employees
1-9	95,142	68.1%	2,975,000
10-19	17,203	12.3%	2,412,000
20-49	13,925	10.0%	4,336,000
50-99	5,877	6.2%	4,110,000
100-499	6,123	4.4%	12,850,000
500-999	825	0.6%	5,642,000
1000-1999	306	0.2%	4,158,000
2000-4999	138	-	8,881,000
5000-9999	25	-	1,614,000
Over 10,000	9	-	1,637,000

Source: UK Office for National Statistics 1998.

The process of consolidation and mergers that had characterized the 1930s and 1950s seems to be continuing in Britain. Except for the construction industries, the number of firms in most of the country's production industries declined over the five-year period from 1988 to 1992 (Table 5.2).

The construction industry (not shown in Table 5.2), contained the largest number of individual firms. This is, of course, reflective of the nature of this industry: many individual craftsmen functioning as independent contractors, doing most if not all of the work themselves, and owning all their own tools. Hence, while their numbers are many (210,813 in 1992), the average size of each individual construction firm is extremely small.

The agriculture, oil, and coal industries—Britain's primary industries—require relatively large capital investments, and are thus far fewer in number. The decline in the numbers of coal firms reflected the continuing decline in the importance of the British coal industry; pit closings and consolidations have reduced this industry to a tiny fragment of what it once was. Also of note is the continual decline in the number of firms in the textile industries, while the machinery and equipment group is apparently holding its own. The electrical equipment group had 14,404 firms in 1988 and 14,417 firms in 1992.

The big gainer in employment and number of firms was the service sector. Table 5.3 shows the changes in employment for the three major sectors of the economy: primary, secondary (mostly manufacturing), and services. The share of employment represented by the primary and secondary sectors declined from 4.7 and 33.7 percent in 1980 to 2.3 percent and 22.2 percent respectively in 1998. The secondary sector, made up mostly of manufacturing workers, declined by nearly 2.5 million jobs between 1980 and 1998. A similar decline

Table 5.2 Number of firms in selected UK industries, 1988–1992

Year	Electric Machinery	Coal and Oil	Chemicals	Food Products	Textiles	Machinery and Equipment
1988	14,404	320	3,627	9,852	15,707	25,655
1989	14,723	293	3,616	9,819	15,684	25,508
1990	13,777	255	3,320	9,267	14,675	24,808
1991	13,417	222	3,177	8,991	13,828	23,417
1992	14,112	215	3,281	8,856	13,098	24,139

Source: HMSO. 1995.

Table 5.3 UK employment by sector, 1980–1998

	1980	1985	1990	1995	1998
Primary					
(percent of total)	1,104,34 4.7	917,317 4.2	719,364 3.1	509,055 2.3	536,954 2.3
Agriculture, forestry, fishing	390,270	358,462	315,453	272,429	320,497
Mining/quarrying, oil and gas, resource supply	714,064	558,855	403,911	236,627	216,457
Secondary					
(percent of total)	7,864,382 33.7	6,186,436 28.3	6,002,313 25.7	4,981,139 22.2	5,264,656 22.2
Manufacturing	6,512,378	5,037,063	4,755,963	4,063,985	5,264,656
Construction	1,382,044	1,149,373	1,246,349	917,154	1,079,941
Service Sector					
(percent of total)	14,434,218 61.6	14,732,928 67.5	16,642,731 71.2	19,963,741 75.5	17,963,523 75.6
Distribution, hotels, catering, repairs	4,500,011	4,423,175	4,950,718	5,000,834	5,347,128
Transport, storage, post, telecommunications	1,511,360	1,350,255	1,413,524	1,326,878	1,372,737
Financial intermediation, real estate, renting and business service activities	2,566,154	2,897,190	3,669,378	3,847,301	4,337,114
Public administration, national defense, and social security	1,593,256	1,473,879	1,435,961	1,399,060	1,391,266
Education	1,610,968	1,635,140	1,873,182	1,857,886	1,867,570
Community, health, social and personal services	2,652,469	2,935,285	3,299,967	3,531,782	3,647,708
Totals	23,432,934	21,836,678	23,364,408	22,453,935	23,765,133

Source: UK Office of National Statistics and DTI 2003a.

occurred in the primary sector, which lost more than a half million jobs over the same period. In contrast, the service sector grew from 61.6 percent of the total employment in 1980 to 75.6 percent of the total in 1998. Over this same period, the service sector added more than 3.5 million workers.

GROWTH OF THE UK SERVICE SECTOR

Data on Britain's extensive service industry are much harder to come by, despite the fact that services probably generate upwards of three-fifths of all private sector output (Walshe 1991). A joint British and French taskforce completed a comprehensive study of both countries' service sectors two years into the new century (Department of Trade and Industry [DTI] 2003a). The study was a segment of a special program announced in March 2000 to make the EU member states the most competitive in the world. The European Council considered the service sector to be a major engine of economic growth and employment opportunities for the future. The health of the service sector was recognized as being especially important in light of the structural changes occurring in the industrialized nations. Productivity growth in manufacturing and shifting of manufacturing jobs to lower wage countries offshore has made it particularly important that the service sector continue to be the source of job creation. The joint UK/French study was carried out in order to identify barriers to the growth of output and employment in their service sectors. The study team came up with nine major findings, as follows:

- The service sector was the dominant source of job creation; in fact, the rate of growth in the European service exceeded overall job growth.
- Information and communications technology (ICT) and knowledge-based services are becoming increasingly important sources of new jobs.
- The service sector includes a wide range of activities. Some of these require highly skilled workers, while others remain predominantly the source of jobs for low-skilled workers.
- A larger percentage of women are employed in service sector jobs than in the economy as a whole, and account for a large proportion of part-time employment.
- Business services have been the main employment-generating activity in the sector. One of the reasons for this is that more employers are outsourcing activities once carried out in-house.

- The type of services that society will demand in the future cannot be predicted or determined by government. Future service sector growth will be the result of the interplay of such forces as developments in technology, customer demand and market forces, and national and supranational labor market policies.
- In order to take full advantage of service sector employment potential, government policies should eliminate current and expected barriers to growth and employment. An environment must be created that encourages and facilitates development of new service industries.

Contribution to the UK Economy

The sector covers a wide range of enterprises that include high technology, knowledge-intensive, labor-intensive, and low-skill industries. An accepted definition of a service is the result of labor that does not produce a tangible commodity (DTI 2003a). Table 5.4 shows the average annual growth of UK service industries during the last half of the 1980s and in the 1990s. The table shows that the industries with the greatest growth included computer services, waste disposal, air transport, and real estate. The growth in waste disposal services most likely occurred following the growing practice of municipalities contracting out for these services.

In 1995, services accounted for more than 66 percent of the economic output in the United Kingdom as measured by contribution to gross domestic product (GDP). Continuing its steady growth over the last half of the twentieth century, this contribution grew steadily from only 53.2 percent in 1970. In the 20 years between 1980 and 2000, the service sector added a net increase of more than 3.75 million jobs to the UK economy. Business services alone created more than one million jobs.

Barriers to Service Sector Growth

Continued growth of the services sector in the United Kingdom is subject to removal of a number of economic, political, and structural barriers to trade. Among the chief factors limiting international trade in services are:

1. Bars to importation of services provided from outside the State because they do not fall under the jurisdiction of regulatory agencies in the country of consumption. An example is the insurance trade.
2. Nontariff barriers such as limits on new foreign firms, maximum foreign equity participation, quotas, and licensing restrictions

applied to potential new entrants. Other barriers include minimum capitalization requirements.

3. Limits on the movement of people, including nationality or residence requirements for key personnel managing a local establishment. National qualification requirements for suppliers of professional services and needs tests for work permits are additional barriers.

Table 5.4 UK service sector growth, 1984–1999

Service Type	Average Annual Growth (% per year)			
	1984–89	1989–94	1994–99	1984–99
Computer services	8.6	8.7	8.7	10.8
Air transport	9.0	6.8	6.8	8.8
Post and telecommunications	5.5	3.4	3.4	6.7
Financial auxiliaries	12.4	3.3	3.3	6.5
Domestic services	14.8	6.4	6.4	6.2
Sewage and refuse disposal	4.6	7.7	7.7	6.0
Other business activities	6.5	1.3	1.3	5.3
Rental machinery	6.6	1.5	1.5	5.1
Membership groups (clubs, etc.)	4.7	6.6	6.6	4.3
Insurance and pension funds	9.9	1.6	1.6	4.1
Land transport	4.8	2.6	2.6	3.8
Financial intermediation	7.1	0.6	0.6	3.7
Retail	4.5	2.6	2.6	3.6
Transport auxiliary services	8.2	0.9	0.9	3.4
Wholesale	6.0	2.3	2.3	3.3
Recreational and cultural	3.8	2.5	2.5	3.3
Health and social work services	1.7	3.6	3.6	3.0
Motor distribution	5.7	-1.9	-1.9	2.4
Hotels and catering	5.3	-0.9	-0.9	1.8
Real estate	1.4	1.4	1.4	1.7
Education	0.9	2.4	2.4	1.4
Personal services	3.3	-4.2	-4.2	0.9
Water transport	-0.4	1.1	1.1	0.7
Public administration and defense	-0.5	90.2	-0.2	-0.6
R&D services	-1.7	-0.6	-0.6	-2.5

Source: DTI 2003a.

RETAILING AT THE END OF THE CENTURY

As the twentieth century was coming to a close, retailing continued to be an exceptionally vigorous element in the UK business system. At the end of the 1990s, there were nearly 200,000 retail-related businesses and more than 300,000 retailing outlets in Great Britain, together making up more than 5 percent of total UK output and more than 7 percent of the total UK service sector output. More than half of all retail establishments in the UK employed fewer than five workers.

In 1998, retailing employed nearly 2.5 million people—10 percent of the total workforce. More than half of the people working in retail were part-time employees, and more than two-thirds were women. Total employment in retailing grew by an average of 1.7 percent per year over the 10 years since 1988. Since 1950, the government exercised a constraint on the growth of retailing by restricting the number of hours and days of the week that retailing establishments could remain open. In 1994, parliament passed the Deregulation and Contracting-Out Act, allowing retailers to stay open without any restriction between Monday and Saturday. Shops with floor space of 600 square meters or less could also open on Sundays. This had a tremendous impact on the gross value added (GVA) from retailing and retail sales. GVA grew more than 1.5 percent faster between 1994 and 1999 than it had in the five years prior to the change.

Another development contributing to improved performance by UK retailers has been advances in information and communications technology (ICT) and the advent of e-commerce. Retail sales over the Internet were rising rapidly during the last half of the 1990s, but not for all retailers. Many small firms lacked the necessary skills and technological knowledge to take advantage of this new opportunity.

Finally, compliance with European directives under the Single European Market initiative has been both a blessing and a curse for UK retailing. On the positive side, conformity in product safety and hygiene, packaging, and recycling have helped make trade easier by improving acceptance of standardized products and brands. On the negative side, the cost of complying with these directives has been a major concern for many small retailers.

CONTINUED DECLINE OF MANUFACTURING

The decade of the 1980s was a period of rapid and nearly complete deindustrialization in the United Kingdom. This was only the most intense time of decline in a trend of relative economic decline that had

been going on since the end of World War II. This decline—called the English Disease—was most pronounced during the 1950s to 1970s. Moreover, it was particularly hard on Great Britain's manufacturing sector (Crafts 1996; Kitson and Michie 1996; Broadberry 1997). The UK economy fell from second place in real income per capita in Europe in 1950 to tenth place by 1979. Many authors have suggested reasons for this decline.

Manchester University economist Paul Hare (1985) identified 10 reasons variously given for Britain's slow growth over those 20 years, some of which are sociopolitical and others economic in nature:

1. Britain's rigid class structure, which inhibits cooperation between workers and enterprise managers and owners
2. The British public's feelings of hostility to industry in general
3. The failure of the British educational system to provide sufficient vocational and technical education programs
4. An adversarial political system that is not conducive to developing and implementing a long range economic and industrial policy, concentrating instead on short-term "quick fixes"
5. A low and declining rate of research and development expenditures, with greater emphasis on "pure" research and not enough on applied research. Added to this were Britain's disproportionately large sums devoted to defense research.
6. Modern Britain's weak interest in entrepreneurship and a commensurate small number of entrepreneurs
7. The dominant role of the "City" in leaning away from enterprise and research and development financing, instead focusing on financial markets and opportunities abroad (*The City of London* refers to a region in London that is the center of capital distribution in the UK economy. Because of its long history as the "financial center of the world," the City is able to exert disproportionate pressure on UK governments to go along with "financial orthodoxy and the general interests and demands" of the financial houses" [Kitson and Michie 1996]. As a result, insufficient sums were available for industrial investments.)
8. Associated with the preceding point are the weaknesses in the taxing system, which tended to encourage financial and real estate investments and discourage investments in industry.
9. Also associated with City shortsightedness was a banking system with an inordinate emphasis on short-term lending, with little long-term capital available. This was exacerbated by a general lack of British bank involvement in business affairs in general.

10. Finally, organizational factors that limited the effectiveness with which existing resources—financial, human, and physical—are used in manufacturing, while also inhibiting investors’ awareness and interest in manufacturing investment opportunities

Manufacturing, while declining in overall contribution to GDP, still plays a significant role in the economy of the nation. It employs four million workers—one in every seven persons in the workforce. It creates 20 percent of the national output, and still accounts for something like 60 percent of the country’s exports (DTI 2002b). Making manufacturing even more important to the UK economy is the country’s position as a member of the world’s largest single market: the now 28-nation-strong European Union.

Despite the continued significant contribution to the economy of the nation, manufacturing output has been declining since 2000, following a trend existing in most of the world’s industrialized nations. The Blair government made improving the UK manufacturing sector a salient component of its twenty-first century economic strategy. Central to developing the new manufacturing strategy are programs designed to build on what the DTI calls “the seven pillars for manufacturing success.” The UK Secretary of State for Trade and Industry, Patricia Hewitt, described the program’s limitations and the government’s role in and objectives for the new manufacturing strategy in the following way:

This strategy is not designed to be the last word on the subject. It is neither a hard and fast prescription, nor a formula for instant initiatives. Instead, we offer it as the basis for continuing to develop a robust partnership with management, employees and their unions—a manufacturing partnership based on best practices that must be effective at the national, regional and sectoral level. Long-standing problems of investment, innovation and skills will not be cured overnight. They will require consistent and determined effort over a sustained period. In order to focus our activities more effectively, [the government] will work with industry to develop firmer benchmarks against which to measure and report on progress. (DTI 2002b, 5)

The United Kingdom was not alone in suffering another slowdown in its manufacturing sector as the new century began. Manufacturing output declined 6.7 percent over the 12 months of 2001, with the loss of 150,000 manufacturing jobs. During this same period, manufacturing output fell 6 percent in the United States, 14 percent in Japan, and 5 percent in Germany. Fortunately for these countries,

a partial recovery was underway by late 2002, although not nearly what it had been over the preceding decade. Reasons cited for this widespread decline in manufacturing included partial collapse of the equity and slowing of the boom in information and communications technology in the United States, continued recession in Japan, and weaker demand growth in Europe, particularly in Germany.

A key component in the new manufacturing strategy focused on eliminating the long-time productivity gap between the United Kingdom and its major industrial competitors. Table 5.5 compares the relative output per hour worked in the basic manufacturing industries at the end of the twentieth century. Clearly, the UK manufacturing sector must make some dramatic changes in investments and labor practices if this is going to be turned around. The UK does not lead the United States in any sector, leads France only in paper, printing,

Table 5.5 Index of output per hour in manufacturing industries, 1999 (UK = 100)

	US	France	Germany
All manufacturing	155	132	129
Electrical and electronic equipment	273	145	135
Wood products	218	169	240
Petroleum products	210	218	92
Basic metals	198	148	199
Chemicals	169	141	104
Mineral products	168	142	121
Textiles, clothing and footwear	159	196	129
Motor vehicles	150	200	111
Machinery	146	107	123
Rubber and plastics	140	119	111
Paper, printing and publishing	139	90	115
Miscellaneous manufacturing	138	125	136
Food, drink and tobacco	136	108	92
Instruments	133	129	125
Metal products	100	160	138
Other transport equipment	100	109	140
Office equipment	—	—	161
Market economy total	139	122	119

Source: DTI 2002b, 7.

and publishing; and leads Germany in only petroleum products and the food, drink, and tobacco category.

These and other factors led to a distinct gap in manufacturing productivity between the United Kingdom and its three major competitors. With the United Kingdom at 100, productivity index values for the three competing nations are: the United States, 155; France, 132; and Germany, 129. The government's strategy is designed to narrow this productivity gap. The strategy to build a vibrant, knowledge-intensive, high-skilled manufacturing base in Great Britain was constructed upon the following seven pillars:

1. Maintaining macroeconomic stability. The government must stick with its successful macroeconomic management strategy; attempting to manipulate the exchange rate would risk undermining gains in keeping inflation and interest rates low.
2. Investment in key industries. All UK manufacturing industries have the opportunity to narrow the productivity gap by increasing investment in new technology, new products, and advanced processes. When the market is unable to meet demands, the government must help it function more efficiently. The government is improving access to finance for small and medium sized enterprises, both through the tax system and through direct support.
3. Science and innovation. The goal is to raise innovation in UK manufacturing by making the best use of the nation's excellent science base, by applying technology from a variety of sources, and by demonstrating the benefits generated by innovation in industry. Greater investment in R&D must be encouraged.
4. World-class best practices. Adoption of best practices is founded on a culture of continuous product and process improvement. Trade unions and employers must work in partnership to ensure adoption of best practices in management and workplace practices.
5. Skills development and lifting education levels. The quality of labor input is a key driver of productivity growth in manufacturing as well as in the rest of the economy. However, UK manufacturing is relatively lower-skilled in comparison with manufacturing in both the United States and Germany, and lower skills on average with the rest of the economy. This skills gap accounts for approximately 4 percent of the overall manufacturing productivity gap with the United States, and 25 percent of the gap with Germany.
6. Strong infrastructure. The United Kingdom needs to modernize and make more efficient its public infrastructure. This will enable business to reduce costs, increase efficiency, and improve

its competitiveness. This is seen as a “major challenge,” given the decades of under-investment that has characterized most of the nation. Of particular importance are improvements in the transport system and developing a thriving broadband market to support growing e-business in all sectors.

7. The “right” market framework. This refers to the government’s desire to make the United Kingdom the best place in the world to do business, where manufacturing innovates and thrives. This requires dynamic, competitive markets and well-informed, motivated, and confident stakeholders. The government’s role is to set the market framework, including eliminating anticompetitive behavior, economic reform at the EU level, free and fair world trade, better regulation, and a modern planning system.

BRITAIN’S NEW MANUFACTURING STRATEGY

Commerce and industry in Great Britain entered a new phase with the coming of the twenty-first century. The new government manufacturing strategy was implemented in May 2003, although many of the program’s policies and procedures were already functioning. A critical part of the program is the regular analysis of its progress on each of seven pillars and publication of regular reports on those achievements. Two conclusions stand out. First, many stakeholders—managers, employees, union leaders, etc.—believe that the government’s manufacturing strategy is doing what it was intended to do: address the barriers limiting growth in this sector of the economy. Second, UK manufacturing has a negative public image, and this bad image is the root cause of a numbers of problems facing the sector. Good university students and school-leavers alike show a reluctance to seek careers in manufacturing. Moreover, neither students nor teachers have a real awareness of the opportunities available in a career in manufacturing. This poor public image also reinforces the unwillingness of the stock market to invest in manufacturing enterprises (DTI 2004). Selected two-year progress examples in each of the seven pillars of the manufacturing strategy include the following:

Maintaining Employment Stability

The government’s macroeconomic framework has helped growth in UK GDP (estimated to be 2.3 percent per year in 2003) to be significantly higher than the country’s European competitors. Employment increased by more than 1.9 million since spring of 1997 and

unemployment, at around 4.7 percent, was dropping in every region of the country. The country was experiencing the longest period of low inflation since the 1960s, and interest rates were near historic low levels.

Investing in Key Industries

The starting corporation tax rate was cut from 10 percent to near zero in the 2002 budget, with the amount of investment eligible for first-year capital allowances doubled for small and medium-sized businesses (SMEs). In addition, an Early Growth Funding program was started to make risk capital investments in amounts averaging £100,000 to £200,000. This has been matched with small firms' loan guarantees and selective financing for investments in businesses in targeted areas.

Encouraging and Facilitating Science and Innovation

The science budget doubled from £1.3 billion (\$2.44 billion) in 1997/98 to £3 billion (\$5.64 billion) in 2005/06. Additional resources were directed toward improving the transfer of knowledge from a science base to a focus on growing the nation's business and industry. A tax credit for research and development expenditures was introduced for all companies.

Adopting World-Class Best Practices

Applications of best practices in businesses have proven to be an immediate and significant way to improve productivity and profitability. In April 2004, the government introduced a new best practices initiative for all UK businesses. This included establishing a Manufacturing Advisory Service to provide practical help to manufacturers. By March 2004, the service had responded to 27,000 inquiries, carried out more than 6,400 diagnoses, and completed more than 1,400 in-depth consultancy projects.

Skills Development and Lifting Education Levels

A first step in improving skills and education was the formation of the Skills Alliance with members from government, employers, and trade unions to identify and coordinate the match between skills needed and supply of skilled workers to meet those needs. Electronic databases and websites for employment opportunities have been established. A network of 26 specialist engineering colleges focusing on science,

mathematics, design, and technology was established. Pilot employer training programs were implemented, together with improvements in vocational and workplace-based training programs.

Maintaining a Strong, Modern Infrastructure

Following through on a 10-year transport plan, the government invested more than £180 billion (US\$3.4 billion) in long-term funding for transport improvements. A new Channel Tunnel Rail Link—the first new rail link in more than a century—opened in 2003, on time and on budget; 1,500 new railway cars entered service and a Train Protection and Warning System was fitted to the entire national railway network. The Midlands Expressway, a new toll road, was opened ahead of schedule and on budget, easing pressure on a crucial part of the national roadway network. Significant investments in broadband installation and implementation were also achieved.

A key accomplishment for the United Kingdom was enactment of the 2002 Enterprise Act. This act increased resources for competition improvement programs, and brought down barriers to innovation. The UK government retains its policy of commitment to free and open trade, while at the same time working toward making Europe the most competitive and knowledge-based economy in the world.

THE FUTURE FOR UK COMMERCE AND INDUSTRY

The new manufacturing strategy outlined above is indicative of the government's policy direction. Rather than focusing on regulation and limitation as was once the focus of many Labor Party policies, the Blair government was actively working to support and shape the UK business system to be more in keeping with the nature of the current world economy. The keys to this policy were (1) closing the productivity gap and improving competitiveness, (2) reemphasizing the commitment to maintaining a world-class manufacturing sector through greater innovation and application of the country's leadership in science, and (3) supporting growth in knowledge-based businesses, which includes improvements in education, implementing policies supporting entrepreneurship, and designing financial incentives for entrepreneurs.

Box 5.1 is an extract from a special UK government report on the status of one of its small but important knowledge-based industries, the computer games software industry. Britain's share of this global business ranks it third in the world after only the United States and Japan.

Box 5.1 UK service knowledge economy business: Games software

The world software industry is clearly a product of the knowledge economy. One small segment of this industry is the global games software industry—estimated to be worth more than \$20.7 billion in 2001 and projected to grow to \$37.6 billion annually. Importantly for global competitors, this industry is spread around the globe, with approximately \$8.65 billion centered in the United States, \$4.7 billion in Japan, and \$8.65 billion in Europe. The United Kingdom has a strong presence in this industry; the domestic market is the third largest in the world (after the US and Japan). Sales of UK-produced games generated \$2.2 billion from retail, distribution and publishing margins, development advances, and royalties. In 2000, the UK games industry employed more 20,000 people, 6,000 of whom worked in the development sector. This compares with 2,600 in this sector in France and 580 in Germany.

The UK games industry is made up of two components. First, a small base of UK-owned publishers (in 2000, there were only eight firms) competing in the increasingly global market dominated by US, Japanese, and French giants. The second component of the UK industry is a fragmented development sector, made up of independent studios with an average of 22 employees, and the in-house development staffs or wholly-owned subsidiaries of UK and foreign publishers. A major difficulty holding back continued growth of the UK game software industry is a general feeling among investors that it is not a “serious” business, and therefore should be left to the negatively described industry pioneers.

Despite its small size, the games software industry has been a significant contributor to the United Kingdom’s balance of trade, producing a positive trade balance of nearly \$350 million in 2000. Between 1977 and 1999, this positive trade balance totaled more than \$1.4 billion.

A policy white paper prepared for the UK Department of Trade and Industry (DTI) in 2002 concluded that the UK game software industry was at a turning point, with no models for it to emulate. No other country has as strong a development sector with a comparatively weak home-country publishing sector.

To retain its strong position in the global market, the United Kingdom was urged to continue to attract inward investment of overseas publishers, while also promoting the underdeveloped games investment industry.

Source: DTI (2002a).
£1 = \$1.88US in 2002

Improving Productivity and Competitiveness

The low skills-level of many UK workers has been cited as a major contributor to both the relatively low productivity and uncompetitive nature of much of the UK manufacturing sector. This is not a slight directed at the workers, but instead points to weaknesses in the national educational system and to the general unwillingness of industry and labor unions to invest in training and apprenticeship programs. It is, therefore, a major component in the government's productivity and competitiveness policy emphasis.

There is some contention that the UK business system is in what has been termed a "low skills equilibrium" (LSEq), and that the economy is trapped in a "vicious cycle" of low value added production, low worker skills, and low wages (Wilson et al. 2003). Moreover, critics of government's policies assert that this is a reflection of a failure of the UK business system in general. They lay the blame for this situation on two prior policies of the British government: not making necessary investment to improve the vocational education and training system and a tradition of an overly restrictive regulatory environment directed at business in general and particularly toward the manufacturing sector. Others argue that, in comparison to its major economic competitors, the United Kingdom may indeed be closer to the low end of the LSEq spectrum, but that the problem is more regional than national in scope.

The UK Department of Trade and Industry funded a study of two traditionally low-skill, low-wage industries in the country's industrial heartland, the East and West Midlands. Businesses in the food process and hospitality industries were studied. The researchers concluded that these sectors fit the assumed stereotype of low value added, low skills, and low wage industries. However, they also concluded that raising the LSEq level of these industries may be difficult at best, and may not be worth the investment required. In a conclusion that

reflects a sense of complacency that may be held by many UK businesses, the DTI study added:

The evidence that emerges from examining these two sectors suggests that quick and easy solutions to moving the United Kingdom closer towards being a knowledge driven, high wage, high skill, and high productivity economy may not be available. Generally the organizations studied are content with their product market positions and are not contemplating anything like . . . change in investment, skills, or product market strategies. Moreover, for many of these organizations, their current strategies are, at least for the time being, delivering the desired results, in terms of profitability and business success. They are not failing businesses. (Wilson and Hogarth 2003, xv)

Knowledge-based Manufacturing

As the twentieth century came to a close, the UK government embarked on a five-point program to exploit the business opportunities emerging with the global transition to a knowledge-based economy. Underlying this program was the conviction that in the knowledge economy a firm's most important assets are not machines and physical properties, but rather the knowledge that resides in the minds and experiences of their employees. In September 1999, the secretary of state for trade and industries met with key business leaders and trade unionists to explore how industry and government could cooperate to improve the competitiveness of UK manufacturing. The group agreed that these four related themes were pressing for immediate group action: (1) manufacturing profit increasingly depends on high value added production achieved through developing and applying new knowledge; (2) a need exists to create a strong climate for investments in R&D; (3) manufacturers need to adopt a culture of continuous improvement and best practice; and (4) all levels of the workforce must have the right skills and training.

A DTI manufacturing white paper published a month later identified the following action-plan points to be addressed by joint government-management-union policy and programs:

- Formulate and implement the programs, policies, and activities required to revitalize and redirect the moribund UK vocational and technical education system.
- Plan and put into action the changes necessary to ensure a consistent supply of people with the knowledge and skills needed to succeed in modern, innovative engineering and applied scientific

careers. This included strengthening government, university, and enterprise-funded education, training and management development programs to meet industry's needs in the new economy, and a comprehensive program to hatch and nurture a new body of entrepreneurs. Reversing the bad image that careers in manufacturing have among people entering the workforce was a critical component of this initiative.

- Design and reinforce government and industry programs to improve UK business competitiveness in all manufacturing businesses by application of the latest information and communications technologies (ICTs). ICTs, including greater use of the Internet, hold significant promise for improving competitiveness and productivity by making it possible for firms to identify gaps and reinforce strengths in the manufacturing value chain. ICTs were seen as particularly important for gaining world-class competitiveness in such key business activities as supplier relations, product design and manufacture, wholesale and retail distribution networks, and marketing and sales and after-sales care, among others.
- By building networks and applying best practices, UK manufacturers will be better able to make the most of their existing and future investments and capabilities in people and technology. The government, industry, and labor must continue to identify and implement programs to improve manufacturer's supply chain, including transportation infrastructure and financing availability. Best practices—a program out of the global total quality management movement—are a quick and efficient way for manufacturers to improve long-term sustainable competitive advantage.
- Identifying and implementing consistent, rational fiscal and industry and export support programs that contribute to maintaining competitive modern markets at home in the EU Single Market by pressing for improvements and needed modifications in the system of world trade. This includes maintaining stable and supportive fiscal programs at home, continued negotiations for removing trade barriers and subsidies, and for continued reductions in tariffs and nontariff barriers at World Trade Organization negotiation rounds.

Promoting Entrepreneurship and Improving Education

According to a 2004 study on global entrepreneurship, Great Britain is among the world's leading nations in generating and sustaining entrepreneurial activity (Kautz 2005). The study defined

entrepreneurship as attempts to create new businesses or new ventures as in self-employment, a new business organization, or expansion of an existing business by individuals, teams, or established firms. Canada, Israel, and the United States have the highest levels of entrepreneurship, followed by Italy and the United Kingdom. Several of Britain's industrial competitors rank among the lowest in this sector, including Denmark, Finland, France, Germany, and Japan. The government, universities, and industry are cooperating to ensure that Britain's high level of entrepreneurial activity is maintained and expanded.

Among the more successful entrepreneurship programs has been the government's drive to reduce red tape and eliminate barriers to business startups. As a result, in 2004, the Center for Strategy and Evaluation Services for the European Commission considered the United Kingdom to be the least difficult of all EU countries in which to start a business. The government has developed a variety of entrepreneurship websites and online organizations to help, inform, and give advice to people who own or are thinking about starting a new business. In addition, the government has worked to include entrepreneurship education into schools, colleges, and universities. Students are now taught at an early age about the opportunities and risks associated with creativity and owning a business. Finally, the government has developed programs to support minority and women-owned businesses in all regions of the country.

CONCLUSION

In the middle of the last decade of the twentieth century the British business system continued to be characterized by a mix of a few very large firms and a huge body of small businesses. In the past, small and owner-operated firms had employed the majority of British workers, but by the 1990s the country's middle-sized businesses took over the lead. Britain's 1991 census of economic activity reported that 94 percent of all businesses in Britain had fewer than 99 employees and 68 percent of all firms had fewer than 10 workers.

The share of employment represented by the primary and secondary sectors declined in 1980 and again in 1998. The primary sector, which includes agriculture and mining, lost more than a half million jobs over this period. A similar decline occurred in secondary sector, made up mostly of manufacturing workers, which declined by nearly 2.5 million jobs between 1980 and 1998. In contrast, the service sector grew from 61.6 percent of the total employment in

1980 to 75.6 percent of the total in 1998, adding more than 3.5 million more workers.

Retailing continued to be an exceptionally vigorous element in the UK business system. At the end of the 1990s, there were nearly 200,000 businesses and more than 300,000 retailing outlets in Great Britain, together making up more than 5 percent of total UK output and more than 7 percent of the total UK service sector output. More than half of all retail establishments in the United Kingdom employed fewer than five workers. In 1998, retailing employed nearly 2.5 million people—10 percent of the total workforce. More than half of the people working in retail are part-time employees, and more than two-thirds are women. Total employment in retailing grew by an average of 1.7 percent per year over the 10 years after 1988.

Manufacturing, while declining in overall contribution to GDP, still plays a significant role in the UK economy. It employs four million workers—one in every seven persons in the workforce—creates 20 percent of the national output, and still accounts for something like 60 percent of the country's exports. Despite the continued significant contribution to the economy of the nation, manufacturing output has been declining since 2000, following a trend existing in most of the world's industrialized nations. The UK government has made improving the manufacturing sector a salient component in its twenty-first century economic strategy.

The government initiated a new Manufacturing Strategy plan in 2002. Rather than focusing on regulation and limitation as the major focus of government, the Labor Party is working to support and reshape the UK business system to be more in keeping with the nature of the current world economy. The keys to this new policy are (1) closing the productivity gap and improving competitiveness, (2) reemphasizing the commitment to maintaining a world-class manufacturing sector through greater innovation and application of the country's leadership in science, and (3) supporting growth in knowledge-based businesses, which includes improvements in education, implementing policies supporting entrepreneurship, and designing financial incentives for entrepreneurs.

DISCUSSION QUESTIONS

1. What major changes were happening to British industry during the 1980s and 1990s?
2. Describe what was happening to Britain's three primary industries during the 1980s and 1990s.

3. What changes were occurring to the country's service industry during the 1980s and 1990s?
4. Economist Paul Hare (1985) identified a list of reasons variously given for Britain's slow growth during the 1980s and 1990s. Name those reasons.
5. What is the benefit of Britain's status as a member of the European Union?

PART III



GERMAN COMMERCE AND
INDUSTRY IN WAR AND PEACE

CHAPTER 6



GERMAN COMMERCE AND INDUSTRY IN THE INTERWAR YEARS

The history of the German business system from 1920 to 1990 can conveniently be grouped into four periods. The first, from 1919 through the 1920s, was the painful period of demobilization and conversion after Germany's defeat in World War I. Terms of the Allies' peace treaty forced overnight redirection of the German economy from its more than 90 percent involvement in war-related production to a peacetime economy under the short-lived Weimar Republic, which was Germany's first attempt at parliamentary democracy. The second period, which roughly corresponds to the decade of the 1930s, saw German commerce and industry undergo for the second time a complete transition from a peacetime economy to a full war footing under Adolph Hitler and the Nazis.

The third period, from the 1950s to the late 1970s, saw German business rebuild from the devastation of World War II. In this period, German business produced an "economic miracle" which enabled it to once again take a leadership position in the global economy. The fourth period, which began after the series of energy-related upheavals of the 1970s, brought about a reunified Germany and a strengthened European Union. German businesses had to learn to compete under the regulations and limitations of an expanded European Union. Figure 6.1 shows Germany in relation to its close neighboring nations.

Some say that Germany's business system is now entering a fifth phase, one marked by declining but stable global market share, excessive social spending, shorter and shorter working hours that are



Figure 6.1 Map of Europe showing Germany’s central position on the continent. *Source:* The World Factbook 2013–14 https://www.cia.gov/library/publications/the-world-factbook//graphics/ref_maps/political/jpg/europe.jpg.

pushing down productivity, and the sell-off of many of the country’s most vibrant small and middle-sized companies as second and third generations show unwillingness to labor as hard as their parents and grandparents did. However, this suggestion does not take into consideration Germany’s role as an economic leader and financial powerhouse of the euro zone. The one element that could derail

the German economic locomotive—and the economy of European Union for that matter—is their near total dependence upon Russian oil and natural gas.

GERMAN COMMERCE AND INDUSTRY AFTER WORLD WAR I

Business in Germany after World War I was a reflection of trends that began in the late nineteenth century and were accelerated during the war. Most business was big business, made up of firms with a capitalization of 20 million or more post-1924 marks (Turner 1985). These large firms, competing either as cartels or syndicates, operated in finance, industry, insurance, and commerce. Virtually all of the largest firms were joint-stock corporations. Other than a few large steel and mining operations taken over by the government after the war, only public facilities such as rail and bus lines, public utilities, and city tram systems were government owned.

The concentration and combining of German industry had been accelerated during World War I. Although industry remained almost exclusively in private hands, it was subject to an increasing system of authoritarian government controls. Industry, entirely under wartime restrictions, was directed by innumerable local boards, agencies, and bureaus, all of which were subordinate to a higher authority. This authority was either national or local. The local administrative districts are called “Länder,” and correspond roughly to American states in a similar federal system. With the unification of East and West Germany on October 3, 1990, East Germany reconstituted the administrative districts formed during the Communist era into five Länder according to their former boundaries, with Berlin as its own independent Länder. These six then joined the 10 in West Germany to bring the total to 16. The smallest of the German states or Länder is the old free city of Bremen, with some 660,000 citizens. The largest and most heavily urbanized is North Rhine-Westphalia. This traditional coal-and-iron, heavy industry heartland of the northwest had a 2010 population of more than 17.5 million.

The great majority of the growth of German industry before 1914 was based on its success in the export market for chemicals, steel, machinery, and, increasingly, electrical equipment. Once the war began, however, one of the first areas to suffer disruption was foreign trade. The export-oriented German manufacturers and trading houses immediately lost their overseas markets and physical assets. For the next five long years they remained cut off from foreign markets by the

British and her allies' blockade. German manufacturers were unable to obtain raw materials or foreign investment capital, and were isolated from almost all foreign markets. Employment statistics published in the 1914 statistical yearbook for Germany show employment statistics as of 1907. While there were nearly 3.5 million women employed, most appeared to be working in very small service industries; only 32,000 were employed in large industrial organizations (Table 6.1).

Before and after World War I, German business functioned in a system of *organized capitalism* in which a few powerful groups competed for international dominance in their specific industries. Most of Germany's exporters were large, primary-industry manufacturers, closely tied together in cartels and syndicates, operating in close association with the nation's large commercial banks. The banking system was severely disrupted early in the war because of the close ties between the two groups. Germany's financial institutions may have emerged from the defeat of World War I harmed far more than any other industry of the time.

The German economy was further disrupted when factories stopped making consumer or industrial goods and shifted to making guns and ammunition. Instead of the short, sharp, one-front war that was envisioned by Prussian generals, the conflict quickly became a two-front war with stagnation of the trenches and attrition of the nation's manpower in badly planned, wasteful offensives against well-entrenched British, French, and American troops. It was simply not possible for Germany to out-produce England, France, *and* the United States. As the war continued, Germany's economy slipped slowly but surely into collapse; austerity and hunger became a way of life for all Germans (Berghahn 1982).

Germany emerged from World War I smaller and poorer. Its losses in the Versailles treaty included some 13 percent of its territory and almost 10 percent of its population, in addition to all its colonies.

Table 6.1 Employment in German businesses by gender and company size, 1907

Classification by size	Females	Males
Small (1–5 workers)	3,124,198	5,353,576
Medium (6–50 workers)	267,410	3,644,415
Large (more than 50 workers)	32,107	5,350,025
Total	3,423,715	14,448,016

Source: Gaulke 2001.

German industry was severely weakened in comparison to its competitors in world markets. The country lost all of its big merchant ships, half of the smaller ones, one-quarter of its fishing fleet, one-fifth of its river and canal fleet, 5,000 locomotives and 150,000 railway cars (Laqueur 1974).

On the political side, however, the Weimar constitution that was adopted in July of 1919 was the most democratic the world had seen at that time. Women were given the vote and equal rights with men. The state was made responsible for a wide range of social functions, including all levels of education. The constitution established a strong federal government, enabling the *Länder* to retain much of their old powers. However, the central power of the federal government was guaranteed by retaining the right to veto any laws passed by the *Länder*.

When the war ended in 1919, the German economy faced huge difficulties. And because she had lost the war, these problems had to be solved almost immediately. Instead of being able to systematically discharge veterans as the economy could absorb them, almost immediately jobs had to be found for some six million demobilized German soldiers and three million workers who had been employed in the armaments industry. The peace treaty signed a year after the armistice limited Germany's army to just 100,000 men, did not allow an air force, and limited her navy to small coastal defense vessels.

The Shift to Postwar Production

Production had to be shifted from war products to goods and services for consumers and new markets found for the lost foreign markets. The country faced critical shortages of coal and other important raw materials. In 1919, national income had declined by a third of what it had been in 1913. In short, the war left Germany significantly poorer by every economic measure than before fighting began (Bessel 1993).

As a group, Germany's largest manufacturers were the least affected by the war. In fact, they were the only group whose economic position was actually improved. No German factories were destroyed by bombing, nor had any important German infrastructure been destroyed. The German government had paid good prices for war goods. German industries came out of the war with relatively large financial reserves, and were thus able to quickly rebuild. By 1922, German business had nearly completed the required process of restructuring, and was in many ways well on the path to full recovery. The nation had reestablished her international leadership in such important industries as chemicals, optics, and electrical machinery.

German industry had become characterized by a multiplicity of ties and webs long before the disruption of World War I. The country's largest firms did not compete as independent, autonomous units in a freely competitive market. Rather, Weimar Germany inherited what Turner (1985) described as one of the most cartelized economies in the world. Cartels were designed to "stabilize" the market by agreements to set prices and limit production levels. Although some of the cartels faded away after the end of the war, most remained, so that by the mid-1920s there were some 1,500 in industry alone.

Vertical Integration of German Business

Another characteristic of German big business under the Weimar republic was its high level of vertical integration. By the 1920s, most major industrial firms themselves produced many of the raw materials and components needed for their end products. In addition, many produced their own energy from their own coal mines. For example, the huge chemical concern I. G. Farben and many of the iron steel producers ranked among Germany's largest coal mining firms. The integrated Krupp steel works produced pig iron, bars and sheets of steel, weapons, vehicles, and machines.

The recovery of the German economy before 1923 was made possible by the existence of a skilled labor force and by the adoption of modern production methods in Germany's large businesses. Some leading firms continued the merger trend that had characterized industry before the war started. The giant firms that came into being, such as I. G. Farben in chemicals and Vereinigte Stahlwerke in heavy industry, were able to operate more efficiently than the smaller units of an earlier period.

As business success returned, cash flowed back into the banking system. Entrepreneurs were soon able to finance improvements and new factories. Financing was made even easier because inflation-affected values of the mark made it possible to pay back what was borrowed in much cheaper currency. Greatly helping to fund Germany's expansion was an influx of foreign capital, first and foremost from the United States. That investment capital continued to aid Germany's expansion until the Great Depression of the 1930s. Behind the facade of prosperity and unrestrained optimism, however, Germany's economic condition remained weak, largely because of a continuing lack of investment capital and the resulting dependence on foreign loans. American loans also enabled the German government to continue to pay its large reparations debts. The Weimar government had to take the role of the nation's leading investment banker; private banks, no matter how hard

they tried or wished to help, simply did not have sufficient means to finance the needs of the modern national economy (Laqueur 1974).

The Ruhr Occupied

Germany's relatively rapid turnaround came to a complete halt in January of 1923 when France, supported by Belgian troops, occupied the Ruhr, Germany's industrial heartland, as a reaction to Germany's failure to meet reparations payments and shipments of coal and wood to France. The French government decided to take matters into its own hands and manage the Ruhr's mines and factories itself, making sure they paid themselves first. They did not leave until 1925. Germany responded with a policy of passive resistance in the region; most economic activity in the area ceased. Workers received support payments from Weimar, which put a further strain on the country's over-strained fiscal and financial systems. The exchange rate in 1913 had been 4.2 marks to the dollar; in December of 1913 it was 4,200 *billion* marks to the dollar.

The 1923 occupation of the Ruhr was followed by a series of inconclusive political upheavals by supporters of both the Left and the Right, including the ill-fated beer-hall *putsch* by Hitler's National Socialist Workers Party—the Nazis—in November of that year. By the end of November, the value of the mark had declined from 65 to the dollar in 1921 to 6.6 *trillion* to the dollar. But as the year came to a close, the political conflicts had pretty much run their course, as had the horrendous inflation that had crippled the German economy.

The hard-pressed Weimar government was able to bring a measure of stability to German life only when it introduced the new Reichmark in 1924. By then, the warring political parties had more or less retreated from the streets, bloody and exhausted. That stability lasted only for the rest of the decade, however. The Great Depression of the 1930s threw the German economy once again into turmoil, but this time the country would be accompanied on the way down by her former enemies.

Mergers and even greater cartelization of the economy were officially encouraged by the Weimar government. With the revalued currency and renewed stability, industry profits soared. During the period from 1924 to 1929, German businesses' steadily increasing profits enabled the Weimar government to push through a number of laws improving working conditions and quality of life for workers. Included were better health and accident insurance and medical care, construction of badly needed public housing, unemployment benefits, and pensions.

The biggest supporters of these social changes were leaders of Germany's newest large businesses, the industries of the second industrial revolution—including chemicals, optics, electrical equipment, and industrial machinery. Managers of the older heavy industries (coal, iron, steel, and mining) were less inclined to support concessions to “socialist” labor unions. Faced by significant global competition and over-capacity, they were convinced such concessions would only further erode their competitive positions. Instead, they wanted wage reductions, longer working hours, protective tariffs, and high prices maintained by cartels. Such attitudes soon resulted in renewed labor unrest and confrontation, culminating in violent street riots and murders, particularly between Germany's communists and the parties of the far Right.

As the disastrous effects of the Depression deepened after 1930, German society was wracked by severe unemployment, political riots, hate-mongering, and anti-Semitism. Many but by no means all of the leaders of Germany's large cartelized industries supported the “return to order” and the Nazis' promise of renewed control over spreading communism (Turner 1985). The social turmoil of the first years of the 1930s resulted in the beginning of Germany's unspeakable nightmare: Adolph Hitler came to power in January of 1933.

BUSINESS DURING THE DEPRESSION YEARS

Soon after the Nazis took control of Germany in 1933 the Party quickly moved to take control of most aspects of political, legal, artistic, military, and social life. The one major exception was the German economy. Instead, the old entrenched bureaucracy, often without party interference, continued to direct and manage economic affairs. In this, they were fully supported by the leaders of big business. Throughout the life of the Third Reich, big business and the Nazi party maintained a close relationship, with many businessmen named to head government agencies and boards, and Party leaders moving into management and boardroom positions.

Hitler used the first two years in power to consolidate his political control of the country, which was still far from absolute (Fulbrook 1991). Many bitter rivalries for power remained, sustained by power brokers in the army and heavy industry, both of which had much to gain from Hitler's rise to power. The Party's major sphere of control over business was exercised in the area of foreign trade. The Reich government soon controlled *all* of Germany's foreign commerce. Gold and foreign currencies had to be paid into the federal bank. All purchases of German products by foreign firms had to go through

a government clearinghouse, which then paid the German producer in Reichmarks. A barter system of foreign raw materials traded for German finished products also flourished. Soon, however, foreign buyers could find few German goods of any kind available, for more and more of the country's industrial capacity was being redirected to production of military goods (Maehl 1979).

Production of war material began in earnest just six months after Hitler took control of the government. Hidden behind a jobs program called the "agricultural tractor program," the Krupp steelworks began producing tanks in July 1933. Naturally, German heavy industry was elated over the new government. By 1934, airplanes, ships, guns, and ammunition were all being made in German factories; although all were expressly forbidden under the Versailles treaty. Even earlier than this, in May 1933, the first concentration camp, Dachau, was opened near Munich.

The structured, protected, collective capitalism that characterized the German business system after World War I was simply a further manifestation of a process that had been underway since the 1880s. Large, powerful businesses, combined in cartels and syndicates, dominated their industries, including coal, iron and steel, electrical products, chemicals, and transportation. Although these firms formed the groundwork for what Glouchevitch (1992) almost 80 years later would characterize as the *German juggernaut* of the post-World War II period, they almost immediately began to decline in overall importance to Germany's economy.

While entrepreneurship and the entrepreneurial spirit were, indeed, present in Germany in the 1920s and 1930s, for most of that time there was insufficient investment capital for a vibrant small- and middle-size business tradition to develop. These smaller businesses did not become an important force in the German economy until after 1950.

GERMANY'S POSTWAR ECONOMY

Germany's defeat and occupation by the Allies in 1945 began a major shift in the nation's character (Allen 1987). A new ideological division was added to the traditional economic, political, and geographic framework. The role of the United States as the leading occupation power in West Germany helped to expand a movement toward individualism, one expression of which was a retreat from cartelization and a reawakening of an entrepreneurial spirit. Americans were quick to push for a breakup of the largest cartels and passage of antitrust legislation. The social traditions of the Center and Left resulted in

passage of much legislation to help the individual in a modern, industrialized, capitalist economy. That legislation became the hallmark of Germany's *social market economy*.

The extent of damage done by the Allies' bombing turned out to be far less than assumed as had appeared to be from the air. Repairs to many industrial operations could be carried out relatively quickly, and the smaller firms particularly found it easy to shift from the production of armaments to civilian products. Funds to replace worn-out machinery became available after 1950. In just a few short years, high-quality German goods soon reappeared on the world market. The stage was set, then, for the economic transformation that completely changed Germany over the next 10 years.

The Economic Miracle

Germany's economic miracle began in a brutal fashion after three years of protracted misery and starvation. By 1948, the old currency no longer had any value. Although wages and prices remained fixed as they had been under the Nazis, inflation had destroyed the value of the currency. No one with anything to sell would accept marks in payment. Three full years after the end of the war, apathy reigned. Production was still only half of what it had been the year the war started. When Russian pressure to force the Americans and English out of Berlin peaked in June 1947, the Western Allies—Britain, France, and the United States—announced an immediate reform of the currency in the Western Zone, replacing the Reichmark with the Deutschmark. In one day, people's money became worth only one-tenth of what it had been the day before (Crawley 1973; Grotewold 1973).

To protect the poor from total destitution, a minor exception was permitted: everyone could exchange 40 of their old marks for 40 of the new marks, and two months later, trade 20 more at the same one-to-one exchange rate. On one hand, overnight, people's savings were wiped out; on the other hand, however, those savings had been worthless anyway. The hardship also affected business and government. Businesses were permitted 60 new marks per employee. Government bodies were given an allowance of just one month's income. The remainder of their reserves was canceled outright. Germany's social market economy emerged out of this hardship.

Although savage in appearance, the move had an immediate beneficial outcome, traceable to the fact that the old currency had been deemed worthless. Overnight, it seemed, goods reappeared in the marketplace. The German people accepted the new currency without

question. The quantity of currency in circulation was so drastically reduced that people believed the values printed on the new bills. People began to buy things: food, medicines, clothing, shoes, office equipment, radios—all the things that just weeks earlier had seemed lost to them forever.

The German government under Dr. Ludwig Erhard added fuel to the recovery by offering strong support to anyone desiring to rebuild or start a new enterprise. At the same time, import duties were drastically cut, along with rationing on a number of food items. Although prices for these items increased, they never reached as high as they had been under black market conditions. More importantly, they were now available to German consumers.

The number of new businesses formed after 1948 soon mushroomed. Investment rose from practically nothing in 1948 to a yearly amount of over 30 *billion* Deutschmarks by 1953. Furthermore, companies were allowed to revalue their assets arbitrarily with currency reform. This enabled them to write off huge amounts each year, generating badly needed cash reserves. Special depreciation rates for replacing war damage encouraged further investment.

Heavy industry, as it had since the late 1800s, led the recovery miracle. Independent banks offered exceptionally liberal terms for new business ventures as well, thus helping a new business sector to emerge: the *Mittelstand*, or small to middle-size firm. These family-owned or entrepreneurial enterprises flourished under the liberal business conditions. Favorable tax rates for export revenues and seemingly insatiable demand at home and across the globe enabled Germany to re-enter the international market. Much of Germany's postwar rapid recovery was due to these small and middle-sized family-owned and often family-operated firms.

During the 1950s and 1960s, Germany's economy grew faster than other European nations, averaging around 8 percent a year for the first 10 years, and close to that in the second decade. German industry was particularly successful in the export market; exports amounted to as much as 30 percent of GNP (Ardagh 1987). When Marshall Plan aid began in the 1950s, the United States also opened its market to German products.

Reasons for High Growth

There are many reasons for the success of Germany's economy after 1950. Initially, of course, the urge to rebuild the nation was a powerful motivator. The rebuilders did not have to start completely from

scratch, either. Despite war damage to many factories, Germany's industrial capacity remained surprisingly intact. Hundreds of small and middle-sized industries were tucked into small towns and villages, and did not suffer war damage at all. Thus, in 1945, only about half of German industry had been destroyed.

Prior to World War II, the German economy had been held in a strangle hold by cartels and syndicates. As a result, internal competition in the marketplace had virtually disappeared. Both the production and marketing of goods were completely controlled. The Allies, led by the United States, were anxious that Germany never again slip into the state it was in the 1930s when Hitler came to power. Although cartels were deeply entrenched in German industry, the Americans believed that for Germany to take its place in the competitive world economy that was envisioned, cartels had to be destroyed (Berghahn 1982).

A number of German economic leaders supported the Allies' decartelization concept. They were also concerned with wealth distribution. Agreeing that the errors of the Weimar period must not be repeated, they recommended removing protective tariffs, centralized planning, and mercantilist nationalism that had characterized German business before the war. Although cartels disappeared, the cartel mentality did not; it was 1957 before a weakened version of a bill outlawing them was adopted. Since then, several additional bills have strengthened German anti-cartel laws, as have recent EU programs.

GERMAN COMMERCE AND INDUSTRY AFTER 1950

A new force for economic stability appeared in Germany in 1951: The European Coal and Steel Community (ECSC). This new program combined the heavy industries of Belgium, West Germany, France, Italy, Luxembourg, and the Netherlands in a common market, beginning a rationalization of the industry. The program proved so successful that the members decided to expand the union to other areas of business activity. The Treaty of Rome, signed in 1957, formally established the European Economic Community (EEC), as well as the European Atomic Energy Community (EURATOM). Completion of the customs union envisioned in the Rome treaty occurred in 1968. Five years later, in 1973, three additional nations joined: Great Britain, Denmark, and Ireland. Greece became the tenth member in 1981, and Spain and Portugal joined in 1986. A year later, the Single European Act, calling for full integration of the economies of the 12 members of the now-called European Community (EC), was

enacted. Finally, Finland, Sweden, and Austria became members in 1994, bringing the membership to 15 and another name change, this time to the European Union (EU). Full monetary and political union was proposed for the future.

Overall, business in Germany since 1950 evolved along four roughly parallel lines (Allen 1987). The first includes the old traditional heavy industries such as coal, iron and steel, and also includes Germany's textile industry. The number and size of these industries have in many cases been severely reduced; in some cases, they may disappear altogether.

The second consists of newer industries such as computer hardware and software, microelectronics and consumer electronics. This segment, while relatively small compared to the Japanese or American industries, is still growing. The third segment continues to dominate German industry; it contains the more mature but less high-technology industries such as transportation parts, components and equipment, machinery, and other light industrial products. The bulk of this group is made up of the dynamic *Mittelstand*. Somewhere in between the first and second group is the fourth grouping. These are the industries in which Germany remains an international leader, and include automobiles, chemicals, industrial electronics, and machine tools. While their growth is no longer spectacular, they remain particularly important to the German economy.

The success of German business since 1950 has been attributed in large part to two of what on the surface may appear to be conflicting social forces (Smyser 1992). One is the fact that most non-German businesses compete fiercely, both domestically and in foreign markets, for market share and to produce the best products in their class. The second factor is the continuing system of close relationships and cooperation among managers, through such business organizations as trade associations, chambers of commerce, and other industry groupings. In addition, many firms maintain relatively large ownership shares not only in their customers' or suppliers' firms, or both, but also in competing firms. In Germany, competitors may compete, but they do so as social partners in a broader socioeconomic sphere, and on a level playing field where everyone knows the rules and plays by them. Joined in this cooperative-but-competitive effort by federal and regional governments, the German business system became a closely monitored, collaborative environment of relationships that came to be known, rightly or wrongly, as *Germany, Inc.*

These factors allowed Germany's *Mittelstand* to develop and grow during the Economic Miracle and its aftermath. However, today these

same factors are making it extremely difficult for this sector of the German economy. The *Mittelstand* have relied on debt rather than equity to fund growth. German managers have distrusted equity financing, seeing it as a threat to their personal control, and the disclosure requirements of equity as an invitation for the German government to tax them more than they are already. As a result, the venture capital industry plays a minor role in Germany, and is still not fully established.

German managers also have a reputation for being autocratic, rather than democratic; they have been unwilling to empower their employees and, as a result, have lost out on potential flexibility in their labor force. The German management culture has been serene, refusing to be ruffled. It is not eager to accept or adopt change in any of its many faces today, including reengineering or down-sizing.

Possibly the greatest difficulty faced by German businesses, and particularly the many small and mid-sized firms, was the combination of very high wages and taxes, and decreasing productivity driven by shorter and shorter work weeks. German workers typically work no more than 35 hours a week, with the trend continuing to move downward to 30 hours—with no reduction in pay. For Germany's family-owned businesses, succession is another huge problem.

Partners in Germany's Successes (and Failures)

The major players in the business system's comprehensive network of relationships are German banks, trade and industry associations, chambers of commerce, management and labor, and government. Banks play a critical role in the system. Rather than acquiring funds through the sale of stock or bonds, most firms turn to their local banks for capital. Typically, the banks in turn acquire some degree of ownership in their borrowers' firms, and serve on their boards of directors.

Over a quarter of Germany's banks are commercial banks, while most of the rest are local or regional savings banks. Nearly all offer a complete range of business services. Policy is set by Germany's powerful central bank, the Bundesbank. Others, led by the "big three"—the Commerzbank, the Deutsche Bank, and Dresdner Bank—own or control somewhere near 25 percent of all voting stock in Germany's largest firms, including Daimler-Benz, Siemens, Krupp, Bayer, and many others. They own shares in manufacturers, insurance companies, retail stores and chains, wholesale distributors, utilities, construction firms and real estate syndicates, shipping companies, and

publishers. They are equally represented if not more so on the boards of Germany's small and mid-sized firms, the *Mittelstand*.

German trade and industry associations and chambers of commerce also play a deciding role in the country's business system; more than 1,200 such groups are registered. The most powerful are the Federation of German Industry (BDI), the German Industry and Trade Association (DIHT), and the Federation of German Employers' Association (BDA). Representing the interests of labor is the Federation of German Trade Unions (DGB), while the agricultural industry is represented by the German Farmers' Union (DBV).

The largest organization is the BDI, which is a cooperative body representing some 34 different trade associations. These associations represent more than 500 smaller trade and regional business associations. Altogether, after reunification, some 100,000 separate business firms are represented by the BDI. Because of its size and broad membership base, BDI influence upon government policy is tremendous.

The DIHT is another association of organizations; it represents all of Germany's local and regional chambers of commerce. By law, all German businesses must become a member of their local chamber of commerce. Thus, the DIHT represents all businesses, but it is particularly important as the voice of small and mid-sized business. Its members administer the country's vocational training programs, run stock exchanges, help shape regional economic policy through their *Länder* governments, issue licenses and work permits, set store hours, and resolve disputes between their members. In sum, by forming and controlling rules for production and trade, they shape and set most of the regulations controlling how German business is conducted (McRae 1995).

The third major business organization is the BDA, which coordinates the collective bargaining strategy of most German employers, administers a strike fund, and offers legal and social welfare advice and guidance. It represents more than 80 percent of all German employers. Its counterpart on the labor side is the federation of labor unions. German trade unions serve two roles: first, they negotiate with employers for their members on matters of pay and working conditions and hours. Second, they serve to integrate German workers into the broader economy, thus avoiding confrontation, dissatisfaction, and violence such as occurred in the 1930s. Through these efforts, they have won for their workers one of the world's most comprehensive—and most costly—social security systems, including health, accident and old-age insurance programs, safe working conditions, longer holidays, and shorter and shorter working hours.

Representing German farmers, the DBV has a membership of more than one million agricultural workers. Through its efforts, prices for German farm products have been kept artificially high, thus ensuring that Germany's tiny agricultural sector also participates in the country's economic success.

In the late 1990s, the German business system continued its emphasis on the manufacturing industry, as opposed to services, which were becoming increasingly important in Great Britain, Japan, and the United States. The German economy remained basically a processing economy. Acting in concert with this still-strong foundation is a large foreign trade component. Although it is declining in importance, the industrial sector continued to represent nearly 40 percent of the GNP. Manufacturing also accounted for nearly 39 percent of employment in Germany.

German manufacturing is no longer dominated by large cartels or syndicates. Rather, German business today is overwhelmingly made up of small and medium-sized firms with fewer than 500 employees. These make up some 98 percent of all German businesses and contribute significantly to Germany's export strength. This are where most new jobs are created and where most innovation takes place, both in production techniques and in products themselves.

Policy of Co-determination

One of the most distinctive ways in which German businesses functioned at the end of the century can be seen in the institution of co-determination. German law requires all firms with at least five employees to establish permanent workers' councils, the purpose of which is to ensure that workers have a voice in (but not control over) company policy. This does not mean that they can interfere in traditional management functions. However, they are important in that they serve to eliminate many sources of labor-management tension before the issues erupt into costly strikes or other disruptive behavior. More than 85 percent of German employees are so represented. Many firms also have workers sitting on their governing boards as well. German unions have also lobbied strongly to have similar laws adopted by the European Union, which would extend the policy to all 25 member nations.

To a degree much greater than either the United States or the United Kingdom, in the last decade of the twentieth century the German business system continued to depend upon industry for much of its economic strength. Its service sector was not as developed as it might be, nor possibly even as much as it should have been.

German industrialists from large and middle-sized manufacturing concerns remain exceptionally export-minded. There is little question that, at least within the confines of the European Union and its affiliate nations, it will continue to do so. And, until the government's proposed economic and labor market reforms kick in, the German business system will continue on the road to mediocrity.

CONCLUSION

Until 1990, two Germanys existed: West and East. East Germany with its command economy remained under the ideological and economic sway of the Soviet Union, while West Germany became a dominant force in the Western capitalist system. West Germany functioned as a mixed economy, as does the unified Germany today. In West Germany, a government-mandated, wide-spread and very expensive social welfare system was built up over the years, but unlike Great Britain after World War II, the German government did not become heavily involved in public ownership. Rather, it has exercised only a modest level of intervention in the economy

During the 80 years from the end of World War I and the close of the twentieth century, the German business system suffered through several catastrophic upheavals. The history of the German business system in this period can be grouped into four periods. First, from 1919 through the 1920s, was the painful period of demobilization and conversion after Germany's defeat in World War I. Terms of the Allies' peace treaty forced overnight redirection of the German economy from its more than 90 percent involvement in war-related production to a peacetime economy under the short-lived Weimar Republic. The second period, which roughly corresponds to the decade of the 1930s, saw German business undergo for the second time a complete transition from a peacetime economy to a full war footing under the Nazis. The third period, from the late 1940s to the late 1970s, saw German business rebuild from the devastation of World War II. In this period, German business experienced an "economic miracle," which enabled it to once again take a leadership role in the global economy. The fourth period, which began after the series of energy-related upheavals of the 1970s, brought about a reunified Germany and a strengthened European Union.

In 2015, the German economy continued to be one of the world's largest, ranking in fourth place after the United States, China, and Japan. Moreover, Germany has come out of the deep recession of 2008–2012 with a much strengthened position as the political leader

and economic engine driving of all of Europe. While much of its large-scale manufacturing has gone offshore, the many German mid-sized, export-focused manufacturers remained at home and continue to produce products and services considered to be among the world's finest. Problems with a weakened Euro and dependence upon energy from Russia threaten the German economy as much if not more than most of Europe.

DISCUSSION QUESTIONS

1. What were the products that accounted for most of the growth in German trade in the years following World War I?
2. What were some of the problems restricting German growth during the Weimar period?
3. What is *hyperinflation* and how did it affect the German economy in the 1920s?
4. Discuss the effects of the nationalism movement that occurred in Europe in the early and middle nineteenth century.
5. Describe the events that made the so-called German miracle possible during the early years following World War II.

CHAPTER 7



THE GERMANY ECONOMY AFTER REUNIFICATION

From the 1950s through the 1980s, West German industry, with less than a third of the population and limited natural resources compared with the United States, was able to dominate global markets in a host of manufactured market categories. Through much of the last part of this period, German labor costs were much higher; paid vacations often ran as long as six weeks; strong unions became heavily involved in the prerogatives of management and company policy; and unions consistently pressured employers to drive the work week down to around 35 to 30 hours with no reduction in wages. However, despite these economic millstones, up until the 1990s Germany was able to sustain its position as one of the strongest economies in Europe and in the world, eclipsed only by the United States and Japan. It was able to sustain that growth by supportive government actions and high demand for both industrial and consumer products in the aftermath of the dramatic destruction of World War II.

BUSINESS AND GOVERNMENT COLLABORATION

Government and business in the Federal Republic of Germany (West Germany) were highly collaborative. Coalitions among the L ander and the federal government resulted in what Anderson (1992, 197) referred to as Germany's "marble cake federalism." This system encouraged overlapping and supportive coalitions that work for a common set of policies. These policies tend also to over-protect and over-regulate the German business system. The system worked

Table 7.1 GDP per capita in West Germany compared with communist states, 1980–1989

Country	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
West Germany	13340	13290	12270	11450	11230	10970	12000	14430	18320	20520
Bulgaria	n/a	n/a	2450	2260	2150	2040	2170	2560	2750	2320
Czechoslovakia	n/a	n/a	2980	3000	2860	2740	2790	3030	3060	3460
Hungary	1930	2150	2260	2150	2050	1940	2020	2250	2450	2580
Poland	n/a	n/a	1540	1800	2060	2080	2030	1850	1850	1780
Yugoslavia	3250	3450	3230	2640	2270	2040	2290	2510	2720	2920

Source: Kelly 2014. Data from World Bank World Facts 1988.

well for the 1980s, as the West German economy in terms of GDP per capita far exceeded that of most nearby countries behind the Iron Curtain. The data in Table 7.1 show the effects of the mid-1980s recession in all countries listed.

Managed Capitalism

Under this overly regulated business system, determining whether German business is able to maintain its leadership position in the highly competitive global economy of the future depends on the point of view of the person asked, although a growing consensus holds that it cannot under the present model (Wever and Allen 1992; Dyson 2001; Kitschelt and Streek 2003). The earlier, successful model of the German business system reached its zenith in the 1980s, when Germany’s managed capitalism appeared to be perfectly suited to the postwar economic recovery of Europe and growing world trade. Postwar political, business, and labor leaders had come to a phenomenal level of agreement on wages, social programs, product quality, and worker productivity.

The West German central government remained small, functioning as a captain of policy, with implementation in most cases residing in the hands of local *Länder* governments. Social support tended to be in the form of transfers financed by social security payments, rather than in programs managed and operated by large bureaucracies. This federal model limited the national government’s ability to enact innovative policies, since *Länder* governments and the many private nonprofit organizations with implementation responsibility retained “multiple institutional veto” power. In the 1990s, with the unification of the

East and West Germany, this system began to unravel. The external forces of globalization, changing market dynamics, economic union, reunification, and demographic shifts exerted pressures that require major adjustments to the business system—reform that consensus politics has not been able to effect. The picture of Germany's system of managed capitalism a little more than 10 years after reunification has been described thus:

The overall picture, then, is one of a German political economy that produces only slow innovation and adjustment. Growth trailed most other major economies in the 1990s and the gap has recently widened. Industrial employment has fallen slower than one might have expected, given its comparatively high level in the 1980s; similarly, consumer-oriented service employment has grown more slowly than the relatively small size of the sector would have led one to believe. . . . The German economy encounters difficulties entering new and technologically advanced industries and the growing sector of business services. Slow political and economic change coincides with a pattern of continued wage compression in industry accompanied, however, by rising inequality of household incomes. (Kitschelt and Streek 2003, 18)

REUNIFICATION OF EAST AND WEST GERMANY

History is typically written as a sequence of game-changing events. Bernd Hüppauf and his fellow analysts (1993) recognized this but then added a caveat that a difficulty in writing modern history is that these important events have a habit of moving faster and faster. This is particularly true of the history of Germany after 1945. One way to look at this brief time period is to divide that history in four or five convenient sections: demobilization and separation from 1945 to 1950; recovery and accelerated growth, 1950 to 1989; unification and rebuilding, 1990 to 2008; and stabilization and leadership, 2008 and beyond. Each of these periods can be broken down into smaller salient sections. For example, the period of unification and rebuilding can be addressed in four subsections: unification boom and bust, a new economic miracle, long stagnation, and a weaker, echo recovery (Grömling 2008; Sinn 2000).

Prior to the initial boom that occurred at the time of the unification of East and West Germany almost all East German producers were required to sell to and secure their supplies and raw materials from domestic suppliers or sources controlled by the USSR through the Soviet Council for Mutual Economic Assistance (Collier and

Siebert 1991; Smyser 1992). East Germany's manufacturers were organized into 316 *Kombinate* (conglomerates), 221 of which were vertically and horizontally integrated industrial groups. The *Kombinate* were protected from domestic and foreign competition, but starved for investment capital and technological and managerial innovation. West German industry, on the other hand, had benefited from access to Western industrial advances and global investment capital. The United Nations and the U.S. Marshall Fund had helped trigger and support West Germany's economic miracle.

Completion of three processes was necessary to transform the East German production system from central command and control to the West German government's social-market system with full economic partnership. First, all units in the conglomerates and legally sanctioned trusts had to be divested and reestablished as independent economic entities. Second, the productive efficiency in the now independent enterprises had to be improved and raised to West German standards. Third, all state-owned enterprises were to be either returned to their owners or sold to private owners.

To achieve these objectives, some 8,000 *Kombinate* units were declared legally independent enterprises, able to buy and sell in an open market. Improving efficiency was a tougher task (Bryson and Melzer 1987). Among other changes, it required significant structural and managerial changes that included opening suppliers to competition; producing components and products in-house where economically justified rather than through forced outside acquisition; shutting down of obsolete product lines and complete enterprises; and curtailment of the provision of social services by firms. Organizational restructuring meant privatization wherever possible. A new government agency, the *Treuhandanstalt*, was originally established by the East German government to oversee the transfer and sale of state-owned properties to private owners and operators. After reunification the agency and the process were taken over by the West German government, which was from then on the government for both areas. In addition, privatization meant state help in forming new small businesses. These were patterned after the *Mittelstand*, the heart of the West German economy. In the first 10 months of 1990, more than 220,000 new businesses were established, about half of which were in retailing and food and beverage services. Over this same period, close to 3,000 of the 12,000 small businesses that had been nationalized were returned intact to their original owners. Another approximately 3,000 firms were providers of public utilities or other services that were not to be privatized (Smyser 1993).

The unification of East and West Germany proceeded remarkably quickly. On March 18, 1990, general elections in East Germany put in office a new government that promised to adopt the West German economic, political, and social systems. It would take place by unification with the West. This meant that the West German Deutschmark (D-mark) was the only legal tender in both East and West Germany, and that from then on responsibility for East German economic policy was to be in the hands of the Bundesbank and the Ministries of Finance, Economics, Labor, and Social Affairs. Financial support for East Germany was to be provided by the German Unity Fund's distribution of 120 billion D-marks over a five-year period from 1990 to 1994 (Kröger and Teutemann 1992).

The Treuhandanstalt was taken over by the West German government on June 17, and on July 1 the two governments agreed to a monetary, economic, and social union with the West German Bundesbank becoming the central bank for both East and West. On the same day East German marks were to be converted to West German D-marks on a one-for-one basis for most personal accounts. The Treuhandanstalt then began the task of modernizing East German commerce and industry. In May 1990 the West German government established a special Fund for German Unity with 122 billion D-marks to fund the privatization process until 1994. Political union took place on October 3, 1990. A united German tax code went into effect on January 1, 1991, along with a number of measures to support the growth of businesses and investments in the former East German states. The Treuhandanstalt completed its work by 1995 and was replaced by a smaller agency charged with managing and enforcing the hundreds of privatization contract sales of state-owned businesses that had taken place in the previous five years.

Effects of Unification on East German Commerce and Industry

The events of 1990 had a disastrous effect on East German producers and distributors. Almost overnight they lost nearly all their domestic and foreign markets. Unemployment soared while economic growth nosedived (Table 7.2). Industrial production in the remaining factories fell by two-thirds of their reunification levels in the 18 months after the fall of the wall separating the two Germanys (Burda and Hunt 2001). The result was bankruptcy for hundreds of East German suppliers and unemployment for millions of East German workers. West Germany softened the unemployment blow somewhat by extending social safety net programs to East Germans and initiating

Table 7.2 GDP and productivity changes in East Germany, 1989–1993

Factor	1989	1990	1991	1992	1993
GDP (billion D-marks)	234	178	159	213	262
GDP growth (%)	–	–19	–20	7	9
GDP deflator (% change)	–	–6	12	25	13
Productivity (% per capita)	–	–9	13	13	9
as a % of West German productivity	32	29	32	36	38

Source: Kröger and Teutemann 1992, 7. European Commission forecast data.

worker retraining programs. East German producers were unable to meet the quality or productivity levels of West German manufacturers. The conversion to D-marks together with inefficient production cost them their price advantages.

At the same time, access to markets controlled by the Soviet organization Comecon—a group formed ostensibly to provide economic assistance to Russia’s European satellites after World War II—ended with conversion to a hard-currency system. Exports of East German goods to Eastern European markets essentially ended completely after January 1991. East German retailers, however, quickly substituted Western goods for domestic products. The collapse of demand for exports and shift in domestic demand to Western products resulted in dramatic declines in industrial production. At the same time, failures in the distribution system and lack of investment capital caused cuts in agriculture production and more unemployment. From 1989 to 1991 GDP in East Germany dropped by roughly 30 percent, value added in industry declined by more than 60 percent. Unemployment increased from an official rate of zero to more than 15 percent.

The effects of reunification on West German businesses were clearly positive. At the time of the merging of the two economies, the global demand for German exports of consumer products was weak. Opening the border and immediate conversion of individuals’ East German Ostmarks for West German D-marks at a one-for-one basis triggered a rapid increase in sales for West German producers. That growth continued until 1993 (Table 7.3).

The decline in GDP in East Germany in 1990 was 15.6 percent, whereas in West Germany the positive impact of reunification contributed to a 5.7 percent rate of growth for the same year. The pattern repeated itself in 1991, when East Germany experienced a decline of nearly 23 percent in GDP while in West Germany an

Table 7.3 Real GDP growth and unemployment in East and West Germany, 1990–2000 (%)

Year	GDP		Unemployment	
	East	West	East	West
1990	-15.6	5.7	n/a	n/a
1991	-22.7	4.6	10.3	6.3
1992	7.3	1.5	14.8	6.6
1993	8.7	-2.6	15.8	8.2
1994	8.1	1.4	16.0	9.2
1995	3.5	1.4	14.9	9.3
1996	1.7	0.6	16.7	10.1
1997	0.3	1.6	19.5	11.1
1998	0.6	2.3	19.5	10.5
1999	1.0	1.6	19.0	9.9
2000	1.1	3.3	n/a	n/a

Source: Burda and Hunt 2001, 6.

increase of 4.6 percent was reported. As noted in Table 7.3, the differences began to reverse themselves in 1993, when East Germany enjoyed a rise in GDP of 7.3 percent while that of West Germany declined to 1.5 percent. GDP growth continued in this way until 1997 when modest differences were reported for both regions. Similar patterns existed for rates of unemployment, with the unemployment rate peaking at 19.5 percent for East Germany in 1997 and 1998 (Table 7.3).

GERMANY'S SLOWER GROWTH RATES

By the early years of the new century, no German firm would be a leader in the important new industries of the future: electronics, computers and software, biotechnology, and information and communications technology (ICT). The country was still too dependent upon the old industrial model that enabled it to achieve the economic miracle after 1950. While productivity growth in German ICT manufacturing increased faster than in other industries; the share of ICT products produced in Germany remained relatively small. The proportion of workers with strong ICT skills in the German workforce

remains below the EU average; one-third of German businesses surveyed in a 2003 EU study reported that lack of ICT skills prevented their making ICT investments. In the early 2000s, critics of the German business system were calling for the government to back away from its paternalistic control of business and, in the process, develop in a manner similar to what had befallen British industry after the war. Table 7.4 shows the decline in relative market share of the top five German exporters after reunification for a number of leading industrial sectors in 1991, 1995, and 2002.

Table 7.4 Export market shares of top exporters in selected sectors (% of total)

	1991	1995	2002
	(%)	(%)	(%)
Pharmaceuticals			
Germany	17.0	14.4	10.2
United States	12.1	9.2	9.8
Switzerland	12.1	10.6	9.6
United Kingdom	11.3	10.6	9.1
France	10.2	9.6	9.1
Chemical (other than pharmaceuticals)			
Germany	18.4	14.9	12.1
United States	15.9	13.9	13.6
France	10.2	8.9	7.2
Netherlands	7.3	6.4	5.0
Japan	6.7	7.2	6.2
Machinery			
Germany	20.2	17.2	16.1
United States	16.1	15.1	16.3
Japan	14.0	15.1	10.4
Italy	8.7	8.3	7.9
United Kingdom	7.4	6.1	6.2
Vehicles			
Japan	18.5	19.5	13.4
Germany	18.2	15.7	16.7
United States	16.8	14.1	13.8
France	8.8	8.7	8.1
Canada	7.3	8.6	8.1

Sources: Fuentes, Wurzel and Morgan 2004; UN COMTRADE database.

The German Disease

At the turn of the century, German business, like the German government, was feeling the effects of bad case of “the German disease,” the symptoms of which included sluggish growth, inflexibility, lack of innovation, and emphasis on the technologies of the future, very high labor costs, and even higher taxes to support a “cradle to the grave” social welfare system. Some of the key problems facing the German business system included the following:

- German business had the highest labor costs and among the shortest working hours of any industrial nation.
- German industry was highly imbalanced, with a heavy dependence on chemicals and electromechanical manufacturing, and weak in electronics.
- German business, supported by a complacent and compliant government and reinforced by powerful trade associations, had developed a highly inflexible manufacturing technology and organizational structure.
- The German economy maintained a disproportionate reliance on capital goods, on mechanical engineering products such as motor vehicles, and on basic commodities such as chemicals.
- Demand for almost all Germany’s manufactured products was reaching saturation, in both the domestic and export markets; little or no growth was expected in these mature industries.

Calls for Structural Reform

Germany, in 2000 still the third largest economy in the world, was also the largest European economy in which business institutions suffered from high-wage, high-unemployment economic malaise. In 2005, the business system of the Federal Republic of Germany faced a number of significant challenges. Like firms in many industrial nations, German businesses were struggling to find a way to deal effectively with intense competitive pressures brought about by the emerging global economy.

Germany, where the overwhelming majority of businesses are small and medium-sized enterprises, has been less effective in exploiting business opportunities formed by the explosion in ICT and expansion of knowledge-based industries. The German economy has remained disproportionately dependent upon its manufacturing sector. This is supported by the history of Germany’s patent application.

Germany ranks second, behind only Ireland, in the number of manufacturing patents filed per capita and first in services, and ranks third among Organisation for Economic Cooperation and Development (OECD) member nations in the amount spent on innovation in both manufacturing and services. However, most of the money spent on patents and R&D in Germany happens in industrial sectors. Patenting is concentrated in transportation equipment (including automobiles) and in chemical manufacturing. A large share of German patenting occurs in industries considered to be medium-to-high-tech, with a very small proportion of innovative activity occurring in high-tech industries (Fuentes, Wurzel, and Morgan 2004).

Germany's share of the world export market in pharmaceuticals—long one of the major pillars of German industry—declined significantly during the 1990s. Medium-to-high-tech industries such as pharmaceuticals have long been major drivers of the country's export success. However, declines in patents and R&D expenditures in this sector and in machinery production are an indicator of major changes to the relative leadership of German industry. Moreover, the numbers of new firms established in the country have declined since the mid-1990s—particularly in the number of new firms in the medium-to-high-tech sector. New knowledge- and technology-intensive services experienced substantial growth after 1995, but not enough to compensate for the losses in the medium-to-high-tech sector.

Structural problems with its educational system placed Germany in the unenviable position in 2005 of having the highest unemployment rate since the 1930s—12.1 percent—while many German businesses were unable to attract the skilled workers they needed to compete in the knowledge economy (FRG 2005b; Richardson 2005). In 2004, the German education system was reported to not be providing new job entrants the education and training in the skills needed by industries in the knowledge-based economy (OECD 2004). Graduate rates in German higher education continue to be very low. However, the vocational training system, jointly administered by industries and local education administrators, appeared to have solved many of its earlier problems. In 2012, despite the deep recession that had affected all of Europe and the United States, the 7.8 percent rate of German youth unemployment was among the lowest of all developed nations. By 2015, the greatest problem facing German education was a surplus of teachers, a decline of traditional students, and a surge in the numbers of non-German immigrant children. To help improve the school-to-work situation for young school graduates, industry agreed in 2004 to fund another 40,000 paid apprenticeship positions.

Of 30 OECD countries, only Turkey, Greece, France, Spain, the Slovak Republic, and Poland had higher 2004 unemployment rates than Germany. One of the reasons for the unemployment problem is the structural disincentive inherent in the labor market/social welfare system. Roughly two-thirds of the country's social expenditures were paid by social security contributions of employers and employees, which raised employers' nonwage labor costs to a very high level. It also encouraged labor unions to demand higher wage increases to compensate for the large deductions from workers' paychecks. As a result, employers had strong incentive for capital-intensive and labor-saving investments and an equally strong disincentive for adding more workers. Together, these factors contribute strongly to the high rate of unemployment (Schmidt 2001).

Since the 1950s, German political leaders have been guided by four key economic goals: (1) price stability (low inflation); (2) achieving economic efficiency with an expansive program of social and economic equality; (3) a strong central government with a focus on transfers rather than a large bureaucracy; and (4) delegation of many state functions to nongovernment institutions and quasi-public societal associations (Schmidt 2001). The chief element in these policy directives has been maintaining price stability at all costs, even at the cost of growing unemployment.

Until the 1990s, the German government's policy was highly successful; Germany's rate of inflation from 1950 to 1989 was the lowest in the world. The country was able to fund a growing pro-welfare policy, such that by 1990, Germany had become one of the strongest welfare states in the world. Germany was able to combine a high level of public expenditure without a large expansion of the public workforce by emphasizing such income transfers as old age pensions, rather than on funding such programs as the United Kingdom's national health service. Other functions have been delegated to quasi-public institutions such as the German Bundesbank and others.

For many reasons—not the least of which was the high cost of assimilating the bankrupt East German economy to that of West Germany—the old four-pillar economic policy has not been able to maintain the high rate of growth the country experience from 1950 to 1990. While price stability has been maintained, it has also been achieved in many other countries, thus eliminating one leg of the former competitive advantage of many German industries. The cost of integrating the economies of the two Germanys has been far greater than anticipated, resulting in high tax increases to pay for the integration. This has reduced discretionary income and lowered consumer

purchasing, which in years past was an important driver of economic growth. The cost of maintaining the exceptionally generous social protection and welfare system has also become onerous, particularly since such a large portion of the programs are funded by employers' and workers' social security contributions and the aging workforce has left fewer younger workers to carry a disproportionately large share of the social payments burden.

BUILDING A FUTURE FOR GERMAN BUSINESS

Although its share of the global total continues to decline, German business as the twentieth century came to an end remained strong in those sectors it considers its manufacturing export core: pharmaceuticals, chemicals, machinery, and vehicles (Kalmbach et al. 2003). From 1991 to 2000 German manufacturing's share of GDP declined by three percentage points. Despite this drop, the share of the export core industries increased somewhat during the decade. However, recent events have effectively eliminated high-tech IPOs and essentially closed entrepreneurs' access to venture capital, as the story in Box 7.1 illustrates.

Box 7.1 Missing venture capital for entrepreneurs

The successful growth of entrepreneurial activity requires a ready source of risk capital. In the United States, this usually takes the form of venture capital financing. In both the United Kingdom and Germany, the availability of private venture capital is exceptionally weak. This is one reason there has been relatively little participation in the rapidly advancing information and communications technology (ICT) sector. As a percentage of GDP, venture capital financing in Germany was roughly a fifth of what it was in the United States during the years 1998 to 2001. Moreover, the size of the venture capital market in Germany is smaller than in many of its European competitors, despite government support.

The 2003 closure of the *Neuer Markt* segment of the stock exchange (the Deutsche Borse) further weakened entrepreneurial activity in Germany. The Neuer Markt provided something like 75 percent of the initial public offerings (IPOs) for venture

capital-backed businesses between 1998 and 2000. The Neuer Markt was launched in March of 1997 with the hot IPOs for MobilCom, the telecommunications provider partially owned by France, and T-Online, Deutsche Telekom's Internet division. The Neuer Markt was established by the Borse to compete with the U.S. NASDAQ. However from 2000 to 2002 the value of the 264 stocks lined on the exchange fell approximately 96 percent. In May 2002, while NASDAQ stock valuations were only one-third of their March 2000 peak, the Neuer Markt was one-tenth of its value at the 2000 peak. After plunging a few months later to less than one-twentieth of its peak value, Germany's stock exchange operator, Deutsche Borse, AG, announced that it would shut the Neuer Markt down at the end of 2003.

Another weakness in the German venture capital market is the relatively small contribution made by German pension funds. In both the United Kingdom and the United States, pension funds contribute a large portion of the capital for IPOs. Assets of private pension funds represent nearly 60 percent of GDP in those countries, but only account for something like 17 percent in Germany. Moreover, German industry retains more than one-third of private pension wealth as retained earnings, making it unavailable for venture capital investments. Finally, in Germany, more than half of the capital available for new venture investments is provided by German banks, an amount far greater than in the United Kingdom and the United States. German banks tend to be far more risk-averse than UK or U.S. venture capitalists.

Sources: Fuentes et al. 2004; Minesite 2002; and Ryan 2003.

As might be expected, the German government focused on taking an active role in improving the percentage of the ICT industry served by German industry—and gains are being achieved. For example, the OECD reported that Germany's position advanced to 10 from 17 on an 80-nation list of networked readiness index from 2002 to 2003. In 2004, the ICT industry in Germany employed some 750,000 employees and an annual turnover of 130 billion euros. Continuing its tradition of private/public sector cooperative efforts, among the more active programs designed to improved Germany's ICT business

are the D21 Initiative, the German Broadband Initiative, and the Digital Broadcasting Initiative.

The German government's approach emphasized cooperation within the inter-sector (i.e., federal and Länder governments) public and private partnerships (PPPs). Initiative D21 was Germany's largest public-private partnership. Launched in 1999, D21 is a registered nonprofit association with no commercial interests. It is funded from membership fees and donations and has its head office in Berlin. Its managing board consists of 25 members and in 2004 was chaired by Thomas Ganswindt, a member of Siemens AG's corporate executive committee. It is designed to be a noncompetitive arena with more than 400 representatives of enterprises, associations, parties, political institutions, and other organizations involved, including global companies such as Alcatel, AOL, Cisco Systems, IBM, Microsoft, and Siemens (InitiativeD21 2005). The chief goal of the program is to make it easier for German business to move successfully into the information and knowledge economy and to make Germany more internationally competitive and ready for the future.

D21 is designed to promote skills in the use of information and communications technologies among all social groups and genders, in schools, government agencies, associations and businesses. To facilitate these broad goals, the work of the initiative is focused on four subject areas that include a number of specific objectives and subinitiatives:

- Education, training, qualification and equality of opportunity
- eGovernment and security and confidence in the Internet
- Information and communications technologies in health care
- Growth and competitiveness, with the focus on broadband and the mobile society

CONCLUSION

The evolution of German commerce and industry from rock bottom in 1945 to one of the world's leading manufacturers and exporters in a host of business sectors resulted from the commitment of a small number of personal managers, many of whom were products of engineering training and experience. Georgetown University professor W. R. Smyser (1992 and 1993), after having lived, worked, and studied in postwar Germany for many years, identified what he claimed was a distinctive German management style. It blends aspects of conservatism and dynamism in often unpredictable ways, always with an

eye for the future and long-term results. Managers are likely to have had experience in production and pride themselves on attaining superior quality of products and services. They are highly competitive, but in the sense of niche markets and market share rather than market dominance. They do not see government as the enemy but instead are prone to work closely with government for the benefit of everyone. They do not plan for product obsolescence, but rather for items to last as long as possible. Relations between managers and workers are not adversarial. Rather, managers know, respect, and listen to their workers. Some of the characteristics of what Smyser (1993, 74) saw as making up the German management style are:

- Management tends to be more collegial rather than hierarchical or individualistic.
- Managers achieve consensus rather than issuing orders.
- They are conscious of the employees and respectful of their knowledge.
- They are concerned with the company's product, its quality, precision, and service.
- They tend to be loyal to one company and its long-term prospects.
- Because they are long-term oriented, they are less likely than Asian or U.S. managers to react quickly to innovation or new developments.
- They are committed to maintaining market position, even if maintaining it means temporary losses.

The highly efficient manufacturing sector that developed in West Germany from 1950 to 1990 gave the recovered nation world export leadership—but often at the cost of overly burdened and obsolescent business enterprises in the old industries. As the old century moved on, German industry continued to be a leading exporter of industrial products, but it also encountered growing competition in almost all of its once-dominant positions. All sectors from automobiles to chemicals, electrical machinery and machine tools were affected. By the 1980s, much of this competition was coming from Asia as well as the United States. Whether the German business system is able to maintain its global leadership position as the new century progresses depends upon the ability of German policy makers to transform the economy from the beautifully organized, social market industrial economy it was in the 1970s into a flexible, knowledge-based, quick-reacting business system that is more appropriate for the next century. This means developing greater flexibility, reducing production costs,

and moving heavily into new technologies such as computers and biotechnology. The next chapter follows the German government's attempts to improve the competitiveness of existing German businesses while at the same time encouraging investment in new information and communication technologies.

DISCUSSION QUESTIONS

1. Do you agree or disagree that German businesses were in need of structural reform? Explain the reasons for your opinion.
2. What were some of the key strengths of the German economy in the early 2000s?
3. Germany has had four key policy goals for its economy. Name these and describe how relevant they are in the twenty-first century.
4. What effect do EU growth programs have on growth in Germany?
5. Why has the growth of the economy of the former East German states lagged behind that of West Germany despite reunification?

CHAPTER 8



COMMERCE AND INDUSTRY IN A UNITED GERMANY

In 2011, 20 years after Germany's reunification, survey results published by the Center for Eastern Studies reported that a number of assimilation problems continue to plague the unified of East and West Germany. These included mutually negative stereotypes and strong disagreement in interpretation of different versions of German history after 1945. Another factor contributing to misconceptions is that things in the eastern Länder (the "new" states) are not as bad as they are reported to be by the Western-based press. Moreover, the new states are growing faster than the old (Western) states, although they are still not as well off as the old state. Also, both left and right radical political parties are much stronger in the five new states than the older states of the West.

For this analysis, however, the most relevant differences are those in perceptions of distribution of benefits of reunification. The thinking in the West is that companies and citizens in the East are the main beneficiaries of reunification. Since 1990 the new states have received funds from the federal government and from individual Western states. It is estimated that by 2019, these aid funds will total three trillion euros. Often forgotten is that West German companies benefited significantly from the opening of the market of 16 million-plus consumers in the East. Because modernization occurred in the East 40 or so years later than it did in the West, the roads, railroads, and telecommunications networks are in much better condition than those in the West, making it easier and less costly to serve those markets.

Over the more than 20 years since reunification, East and West Germany remain one society, but with two distinct societies within it (Zawilska-Florczuk and Ciechanowicz 2011). The process of merging the political, legal and administrative institutions of the East with those of the West was accomplished quickly. However, bridging the deep divide in the cultural and economic differences has been more difficult. Industrial development benefited some but not all regions of the East.

GERMANY'S WEAKENING TRADITIONAL STRENGTHS

Twenty years after reunification, West Germany's traditional economic strengths began to be weakened by a number of important changes taking place in the world economy. Challenges facing the German business leaders in the new century are led by changes in the nature of a market driven by rapidly changing technologies, globally interconnected economies, and shifts in customer demand. Long production runs of high-quality products have been replaced by constant and rapid changes in customer values; this has necessitated German industries to develop an ability to change rapidly to meet shifts in demand. Germany's traditional leadership in the chemical, transportation, and machinery markets is being challenged by manufacturing advances in the newly industrializing nations, leading to reductions in size of many international markets. These difficulties would be exacerbated by the deep global recession that began in 2008 and bankrupted several EU member states, causing a drop in the world's confidence in the euro.

According to some analysts, by 2003, the system of German commerce and industry—and of many other European nations as well—was in need of structural reform. Symptoms making this need apparent included endemic high unemployment, low gains in productivity, and the low number of hours worked by the labor force (labor force participation). While some critics lay the blame for these conditions on many European workers' reputation for preferring more leisure over work, others see the problem as more systemic, caused by economic distortions brought about by welfare state policies and institutions (Duval and Elmeskov 2005). There was general agreement that the major demographic shifts then well underway, particularly the aging of the population and low or negative population growth, are sure to exacerbate the economic difficulties facing much of Europe. Population aging in many of these countries is already signaling a coming confrontation between the large number of pensioners and the younger cohorts who finance most of the country's social spending through

high social security contributions and taxes. Germany's economy as the twenty-first century began was described as being out of balance:

Post-unification Germany continues to be one of the world's top welfare states. Relative to Gross domestic product [GDP] per capita, the share of social spending as a percentage of GDP is even higher than in most other industrial countries, and so, too, is the level of employment protection. But in terms of the control of inflationary pressure, Germany is no longer top but rather a middleweight . . . one could argue that the effort to achieve efficiency and equality in post-unification Germany is out of equilibrium. (Schmidt 2001, 9–10)

The OECD economic survey of Germany for 2004 reported that the German economy was successful in dealing with the severe shocks suffered by most of the European Union at the end of the twentieth century, but still had far to go before it could assume its former position as the engine driving EU growth. The OECD survey report described Germany's recovery from the bursting of the 1990s bubble economy this way: "With the effects of adverse external shocks diminishing, the German economy is currently recovering, ending a couple of years in stagnation on the back of its traditionally strong, competitive and innovative export-oriented manufacturing sector. However, the economy is far from operating at full strength due to the weakness of final domestic demand. Poor labor market performance continues to weigh on consumer sentiment and business confidence remains volatile. The labor market suffers from weak growth and distorted incentives, with both contributing to problems in taking up work and providing employment" (OECD 2004).

By early 2005, the OECD could report that the German economy was at last emerging from a three-year period of near stagnation, with a strong and competitive export industry helping the economy recover its strength. The OECD also expected some rising demand at home, but predicted the construction industry to remain in the doldrums, and no early turnaround in the nation's labor market. Germany's high labor costs were driving many manufacturers to seek off-shore production.

Germany regularly produces some of the best industrial products in the world. It is a global leader in chemicals and pharmaceuticals, and makes some of the finest automobiles in the world. It has arguably one of the world's best industrial vocational training systems and the banks most closely aware of commerce and industry problems and most forward-looking banks.. Its small and middle-size industries continue to

develop innovative products and production technology. Germany is a land of social stability and high living standards for most if not all of its citizens, although her many “guest workers” remaining from the labor shortages during the postwar economic miracle do not share in all of this good life. German workers may be seen as overpaid, but they were also recognized as among the most productive in the world.

What Went Wrong?

So, with a record like this what cause the economy to slow? In the first place, Germany has become a land of high unemployment, inflexible work standards enforced by powerful intransigent labor unions, strong trade associations, and government bureaucrats. The result was a system in which consecutive German governments attempted to overprotect everyone and everything in society.

German industry, the economy’s most important sector, was long characterized as unwilling to adopt such often-critical management practices as downsizing and transformation. Strong regulatory restrictions on genetic research most likely resulted in the slow shift of the strong pharmaceutical industry to biotechnological techniques from traditional chemical methods. Although the regulations were eased in the mid-1990s, Germany has not made up lost ground (Fuentes, Wurzel, and Morgan 2004).

A Way Out

One of the approaches Germany hoped would re-energize the business system in the new millennium was to make it easier for entrepreneurs to start their own businesses. Making sure that funds are available for new ventures and investment in innovative products and process is a plank in the government’s reform package. However, it was not going to be a total answer to the problem. Until the income tax reductions of 2004 and 2005, Germany’s high taxation of high incomes made it difficult for individuals to amass discretionary sums that could be used for new venture capital investments, and difficult to use high wages as incentive for attracting the highly skilled workers needed by German businesses. A survey conducted in six EU countries, the United States, and Switzerland revealed that Germany was one of the countries with the highest average effective taxation of wages of highly qualified personnel such as engineers and scientists.

Despite the federal government’s promise in 2002 to reduce the red-tape barriers that have made the country one of the most difficult

in which to start a new business, the structure of the German political system continues to restrict entrepreneurial activity. For example, the Agenda 2010 plan (*Me-plc* or *Ich-AG*) to encourage the unemployed to start their own businesses is often effectively cancelled out by regulatory actions taken at the Länder, city, or quasi-public agency level (see Box 8.1).

Box 8.1 German entrepreneurs fight red tape to succeed

Johanna Ismayr, an unemployed resident of Berlin, decided to take advantage of a new government program to help the chronically unemployed get off welfare by helping them start their own small businesses. Ms. Ismayr signed up for the *Me-plc* (*Ich-AG*) program included in the government's Agenda 2010 Plan. The government's Agenda 2010 included a number of reforms that would change the political and economic system in order to reduce unemployment and put people back to work.

Ms. Ismayr was both innovative and successful—so much so that it became an exemplar for others wishing to follow in her footsteps. Her idea was to bring the seacoast to the people, instead of forcing them to travel long distances. She imported sand from Germany's Baltic Sea coast and created a temporary artificial beach near the Reichstag (Germany's capitol building). She then added tourist attractions such as bars and restaurants.

Ms. Ismayr's Berlin beach resort was an immediate success. Open for two summers, her new business employed up to 30 people. But the bureaucrats are snapping at her heels; she might not be able to open for the third year. She must apply to the city of Berlin each year for a new permit. The city government does not like the idea. The reason for their unwillingness is that the park is a "green area;" the city does not want businesses or events in the area. Getting a city permit has become more difficult each year. Ms. Ismayr and her 30 employees could find themselves back among the unemployed.

According to news accounts, attempts to cut the amount of regulation in the German economy have been blocked by the complex parliamentary process. Programs of the party in office at the federal level can be blocked by the opposition part or by the governments of the 12 federal states, the Länder. For example, recent attempts by the current government to liberalize

rules for doing business in a number of occupations, from carpenter to butcher, the opposition party refused to go along with the plan. To become a “master” carpenter or butcher takes years of apprenticeship and a special certificate of authorization called a “Meisterbrief.” Some critics of the system see this as restraint of initiative that adds to Germany’s growing uncompetitiveness.

With these and many, many other examples of red tape and over-regulation, the 2005 BBC report concluded that there was little sign that Europe’s biggest economy would get back on track any time soon.

Source: Furlong 2005.

Agenda 2010

On March 14, 2003, German Chancellor Gerhard Schröder announced an ambitious government program designed to deal with the problems of the German business system and implement some degree of structural reform primarily by reforming fiscal policy and labor markets. The plan was designed to stimulate economic growth, ensure the long-term stability of the social systems, and strengthen Germany as an economic location (*Deutschland Magazine* 2004). The program, called Agenda 2010, is based on the assumption that a welfare state like Germany is not equipped to deal with the demographic changes in society. Furthermore, during an economic crisis like the one Germany found itself in at the start of the twenty-first century, the huge welfare state costs are an insurmountable burden on the already-fragile economy. Key goals of the Agenda 2010 initiative included (1) reductions in nonwage labor costs, (2) boosting domestic demand and capital spending, (3) helping the unemployed find a job more quickly, and (4) making the labor market more flexible. By 2014, most of these initiatives had been implemented.

To accomplish these goals, the Agenda 2010 program focused on macroeconomic conditions by cutting taxes and subsidies, expanding worker education by encouraging businesses to provide more training opportunities, loosening Germany’s rigid labor market regulations, and reengineering the ailing health care and pension systems to improve everyone’s health, pensions, and family benefits. Eight of the 12 laws of the Agenda 2010 came into force in January 2004. In addition to a 15 billion euro tax cut, the joint government-industry

Agenda 2010 initiatives to resurrect the economy included the following (FRG 2004):

- Commissions of experts have been formed to propose ways to reduce unemployment and modernize the social security systems in Germany. Some of the results were incorporated into the federal government's reform concept and the laws passed by parliament in December 2004.
- A commission named after its chairman, Volkswagen manager Peter Hartz, submitted proposals to reform the labor market. These have since become legislation. Its goals are to create new jobs by liberalizing temporary and agency work and regulate mini-jobs held by self-employed entrepreneurs. In January 2004, unemployment benefits were merged with income supports.
- The Rürup Commission proposed ways to adapt German social systems to future needs. The key proposals were: the gradual raising of the statutory retirement age from 65 to 67 starting in 2011; a reduction in the gross level of pensions; introduction of a basic sustainability factor; a new health insurance program to which civil servants and self-employed people would also contribute; and simplified health premiums with everyone paying a lump-sum contribution irrespective of income.
- Under a new *Me-plc (Ich-AG)* program, business start-up grants have been introduced to promote self-employment among the unemployed. A *Minijob* program allows deduction-free employment for employees who earn up to 400 euros a month. Employers pay a lump sum of 25 percent of the amount paid to the worker.
- Pension adjustments include an annual increase in retirement pensions, which is generally linked to the increase in wages. In 2002, the pension rate was 68.2 percent of average net earnings.
- Unemployment benefits: Job seekers receive benefits up to 60 percent of their previous net earnings if they were employed and liable to pay contributions for at least one year in the three years before they became unemployed. From 2006, benefits would normally be paid for up to 12 months.

As of 2005, some 20 percent of the Ich-AG units started under Agenda 2010 auspices had gone bankrupt—which to U.S. eyes probably does not seem as bad as it is perceived in Germany. Conventional wisdom in the United States holds that as high a proportion as 80 percent of all new business ventures fail within two years

of their formation. The U.S. CIA's *World Factbook* identified the German economy as the fifth largest economy in the world in purchasing power parity (PPP) terms: the unified country benefits from a highly skilled labor force and is Europe's largest and a leading exporter of machinery, vehicles, chemicals, and household equipment. However, as noted earlier, Germany and the other EU member states face great demographic challenges to sustained long-term growth. These include low fertility rates and declining net immigration. Together these factors are placing heavy pressure on all social welfare systems.

Reforms launched by the government of Chancellor Gerhard Schroeder, deemed necessary to address chronically high unemployment and low average growth, contributed to strong growth and falling unemployment in 2006 and 2007. Those advances, as well as a government subsidized, reduced working hour scheme, help explain the relatively modest increase in unemployment during the 2008-09 recession—the deepest since the end of World War II—and its decrease to 6.5 percent in 2012. GDP contracted 5.1 percent in 2009 but grew by 4.2 percent in 2010, and 3.0 percent in 2011, before dipping to 0.7 percent in 2012. The decline was a reflection of low investment spending due to crisis-induced uncertainty and the decreased demand for German exports from recession-stricken periphery countries. (*World Factbook* 2013)

Economic stimulus efforts begun in 2008 and 2009 and tax cuts introduced in Chancellor Angela Merkel's second term increased Germany's total budget deficit to 4.1 percent in 2010, but slower spending and higher tax revenues reduced the deficit to 0.8 percent in 2011. In 2012 Germany reported a budget surplus of 0.1 percent. A constitutional amendment approved in 2009 limits the federal government to structural deficits of no more than 0.35 percent of GDP per year as of 2016. This target was reached in 2012. Following the March 2011 nuclear disaster in Fukushima, Japan, Chancellor Merkel announced that eight of the country's 17 nuclear reactors would be shut down immediately and the remaining plants would be closed by 2022. The plan is for Germany to replace the lost nuclear power with renewable energy—an ambitious plan indeed. Before the shutdown of the eight reactors, Germany relied on nuclear power for 23 percent of its electricity generating capacity and 46 percent of its base-load electricity production.

Funding of ICT research in universities and private and public research institutions is focused on areas of the industry that hold promise of creating jobs in the small and medium-sized sector and

establishing German industry's technological leadership in the sector. The OECD predicted in 2003 that future innovation for German industry is likely to occur in such fast-growing areas as mobile Internet/ambient intelligence, IT system reliability and security, nanoelectronics (including displays), and knowledge management. A selected list of digital economy program objectives is shown in Table 8.1.

Table 8.1 Program objectives in four D21 policy areas

Policy Area	Examples of Program Objectives
Education, training, equal opportunity	<ul style="list-style-type: none"> • Use and greater availability of new media in schools, vocational training centers, and universities • Development and enhancement of e-science application by 2004 • Increase in Internet penetration and use; use among over-14-year-olds increase to 75% by 2005 • Even male/female proportion of Internet use and raising proportion of women in IT training to 40% as soon as possible
eGovernment and trust in the Internet	<ul style="list-style-type: none"> • Creation of a totally integrated eGovernment, bringing federal, Länder, and local governments online through "Germany On-Line" • Implementation of 50% of Germany On-Line projects by end of 2005 • All of federal government's Internet capable services on-line by end of 2005 • Common business models to enable federal, Länder and local governments to use each others' eGovernment solutions
Greater use of ICTs in health care	<ul style="list-style-type: none"> • Testing of electronic health card from 2004, with nationwide use by January 1, 2006; issue of 300,000 identity cards for members of the healing occupations by 2006 • Create conditions necessary for patient medical documentation accessible by all healthcare institutions • Enable electronic subscriptions by 2006 • Create work structures for ongoing standardization of ICT in the healthcare sector; architecture agreement as of 2004
Growth and competitiveness	<ul style="list-style-type: none"> • More than 20 million broadband lines in Germany by 2010 • Continued growth in the mobile-telecommunications market • Rapid introduction of digital broadcasting; shift from VHF to digital radio by 2015 • Boost small and medium-size enterprise (SME) and craft/trade sectors' use of e-business; 40% of companies use by 2008

Source: OECD 2004.

Both complicating and enhancing Germany's efforts at bringing greater emphasis on these and other ICT industry products and programs are the activities of institutions at the EU level. One of these programs was the *eEurope 2005* action plan. This initiative was implemented to make it possible for EU nations to create a business environment that fosters private investment and job creation, modernizes public administration and health care, and gives all citizens the possibility of participating in the global information society. The German government is also participating in similar job-creation programs directed by the International Telecommunication Union (ITU), the United Nations, the OECD, and other regional, national, and international government, labor union, and nonprofit organizations (OECD 2004).

The 2008 Recession

Despite the ambitious goals, without additional structural reforms there was little significant near-term improvement in Germany's economic outlook. Progress was halted by the Great Recession of 2008–2010 and subsequent problems in the euro zone. "Managed capitalism" is about coordination and slow, incremental and undramatic change in order to retain the consensus. As Dyson (2001, 142) explained, the reform logic of managed capitalism is "modernization by stealth." Growth in most of Europe over the early 2000s was glacial. Although Germany remains Europe's strongest economy, its rate of growth in GDP from 2005 to 2013 followed the same pattern (Table 8.2). GDP growth slipped into negative numbers at the bottom of the recession in 2009; after a brief 4.0 percent increase in 2010 it declined in the next three contiguous years. A rate of growth in GDP of 1.5 percent was forecast for 2014, half a percentage point below the average for all industrial countries.

The nearly flat rate in 2007 and negative rate in 2009 were products of the three-year global recession. That recession was considered by many to have been the deepest drop that many countries had experienced since the 1930s. The industrial producing sector is the most important contributor to Germany's economic health. Hence, the slowdown in the European economy, and particularly the Eurozone countries, hit Germany harder than otherwise might be expected. Manufacturing output declined in both 2012 and 2013, and was expected to decline or be flat again in 2012. One of the few bright spots was the predicted 3 percent growth in the pharmaceutical industry.

Table 8.2 German development indicators, 2006–2013

Factor	Year							
	2006	2007	2008	2009	2010	2011	2012	2013
GNI per capita, PPP in current international \$	34,260	36,120	37,550	36,860	39,150	41,910	42,860	44,540
Population (million)	82.4	82.3	82.1	81.9	81.8	81.8	80.4	80.6
GDP in current US\$ (billion)	2.903	3.324	3.624	3.298	3.304	3.628	3.423	3.635
GDP annual % growth	4.0	3.0	1.0	-5.0	4.0	3.3	0.7	0.4

Abbreviations: GDP, gross domestic product; GNI, gross national income; PPP, purchasing power parity.

Source: World Bank 2014.

GERMAN COMMERCE

Outside of Germany, an often ignored sector also contributing to the vigor of the German economy and, increasingly, to exports, is the retailing sector (also referred to as the *tertiary sector*). At annual sales exceeding US\$370 billion in 2005 or 430 billion euros in 2013, Germany represents the world's third largest retail market, following only the United States and Japan. Retail trade is the third largest economic sector in Germany.

In 2014 there were something like 400,000 retail establishments in Germany (the actual number varies regularly due to the relatively inexpensive and easy entry and subsequent high failure rate of small retail establishments everywhere). This does not include restaurants, taverns, or bars, which are considered to be in the service sector. Inside Germany, however, this sector remains the country's clearest examples of the traditional "organized capitalism" approach. This philosophy results in the retail sector being one of the most structured and regulated sectors of the German business system, as the following Euromonitor statement notes: "The retail sector in Germany remains extremely traditional, with a high level of control through government legislation, trade associations, trade [labor] unions, consumer groups, environmental groups, and even the church. This is in spite of rapid changes in its structure. Rigid control is restricting the modernization of the retail sector and curtailing the flexibility that is

needed to respond to a highly dynamic market environment. Strict shop opening hours, for example, have hampered growth in the convenience store sector, which is showing popularity to a mobile population” (Euromonitor 2004).

Germany’s retail sector has joined the four core industrial sectors in making its presence felt in international markets. German retailers are increasingly expanding in such foreign markets as China (See Box 8.2), and the United States, where the German steep discounter Aldi has continued to expand. Aldi announced in 2013 that it planned to expand by 50 percent more outlets in the United States over the next five years, which would make it the largest discount grocery store chain in the country.

The structure of the German retail industry changed dramatically over the last quarter of the twentieth century (Euromonitor 2004). At the end of the 1970s, more than three-quarters of retail outlets in German cities were small independent specialty shops. In 2004, that percentage had dropped to less than 25 percent, with specialist superstores operated by large retail chains taking their place. By the second decade of the 2000s, the bulk of growth in new retail outlet locations had shifted from individual stores to outlets in suburban centers. By 2014, fully a third of the 400,000 retail outlets in the country indicated they had begun to include Internet sales in their business models. German retailers also expanded their global operations, as the example in Box 8.2 illustrates.

Box 8.2 German retailer expands in China

Metro Cash & Carry opened its third outlet in China in May of 2014. Metro, a German retailing giant, continues to expand around the world. Metro is in 29 countries with over 750 self-service wholesale stores. With more than 120,000 employees worldwide, the wholesale division achieved sales of about 31 billion euros in the financial year 2012–2013 (a short financial year 2013). The Metro Cash & Carry division is part of Metro Group, one of the world’s largest and most international retailing companies. The group had sales of around 66 billion euros in the financial year 2012–2013 (the short financial year 2013). Metro Group has around 265,000 employees and operates around 2,200 stores in 32 countries. Group units include Metro/Makro Cash & Carry (the self-service wholesaler), Real

hypermarkets, Media Markt, Saturn (European marketer of retail consumer electronics), and Galeria Kaufhof department stores.

The retail division entered China in 1995 by founding Metro Jinjiang Cash & Carry Co., Ltd., in cooperation with Shanghai-based Jinjiang Group. The joint venture has expanded across China since 1996 when the first such outlet was founded in Shanghai. The joint venture also contributes to China's exports; over 10,000 different commodities made by Chinese producers have been sold worldwide via Metro's global supply network.

Metro has clearly been a success in China, according to Jean-Luc Tuzes, president of Metro Jinjiang Cash & Carry Co., Ltd. Tuzes said in 2003 that the company would open more new stores in cities such as Dongguan of south China's Guangdong Province and Dalian of northeast China's Liaoning Province, and he hoped the number of Metro chain stores in China would number 40 in three to five years. They have clearly met if not exceeded their expectations: the 2014 cash and carry store is its seventy-seventh outlet in China.

Source: China Daily 2003 and 2013; Yahoo Finance 2014.

Over the 1980s and 1990s, retail outlets in the cities came to be dominated by outlets owned by these large chains, particularly in the nonfood sector; in 2004 they controlled from 50 to 60 percent of all outlet space in cities and towns. Shopping centers and huge hypermarkets in out-of-town locations became increasingly popular, with large specialty stores selling garden products, furniture, toys, office equipment, sporting goods, consumer electronics, and footwear leading the growth. The trends toward more and larger "big box" stores, franchise outlets, discounters, factory outlets, and e-commerce are expected to continue for the foreseeable future.

Many U.S., UK, and other European retailers have a strong presence in the German retailing sector. Not all these retailers are equally successful, however. German consumers have adopted the furniture retail giant IKEA as their own, but have not been as eager to shop at Walmart stores. Walmart management has had difficulty determining how to function in Germany. Clearly, attempts to transplant the Bentonville, Arkansas, model have not worked. Since entering the

German market in 1997, Walmart has captured just 2 percent of food sales and is a marginal player in nonfood retail items.

In just a few short years, Walmart's presence had dropped from the 95 supercenters it operated in 2002, to 91 in April of 2005—a fifth the size of its largest German rival Kaufland. To do justice to the company, the stores closed may have been the most inefficient and money-losing outlets of the acquired chains. Walmart acquired the 21-store Wertkauf chain in 1997 and 74 Interspar hypermarkets a year later. At the low end of the market, Walmart must compete with the 4,000-plus steep discounters, the Aldi Group (*Business Week* 2005a and b; *Economist* 2005; Troy 2000). Aldi stores stock a limited selection of high quality but very inexpensive products—estimated to average no more than 900—compared with the more than 20,000 items in a typical German super store. In 2004, analysts estimated that Walmart was losing around \$200 to \$200 million per year in Germany—with harsher critics estimating the losses to be greater than \$600 million per year (ICFA 2004).

Walmart's Failure to Understand German Culture

Failure to understand the German culture has further contributed to Walmart's difficulties (ICFA 2004). For example, in 2004 the company distributed a personal ethics manual to all employees—a practice that would raise no eyebrows in the United States. However, in Germany the document resulted in widespread turmoil, where German workers perceived it as a slap in the face. The policy document warned against supervisor-employee personal relationships and required employees to report their co-workers whenever they saw an ethics infraction. Moreover, employees were told to not kiss other employees on the job. The caution of relationships was seen as a “puritanical ban on interoffice romance,” and reporting ethics breeches as an order to spy on their fellow workers in a way similar to what occurred in the 1930s and for decades after World War II in East Germany. Workers also balked at orders to smile at customers because it smacked of a sexual come-on.

Walmart closed the last of its 85 stores in Germany in 2006. It reported the experiment cost in the neighborhood of \$1 billion. Although Walmart ran into a brick wall in the German retail market, it has succeeded very well in China, where as of January 2014 they operated a total of 400 outlets. These included 358 Walmart Supercenters, 10 Sam's Clubs, 2 Neighborhood Markets, 5 Smart Choice

outlets (discount compressed hypermarkets), and 25 Trust Mart hypermarkets.

REFORMS IN INDUSTRY AND BANKING

From the last half of the 1990s until 2004 Germany was considered by many to be the “sick man of Europe,” suffering from chronic “Eurosclerosis,” a stagnant economy shackled by high long-term unemployment, overregulation, and overly generous social benefits—primarily in the former East German states. The old German model was unable to generate the impetus necessary to turn the economy around. However, beginning around 2004, the effects of a series of transformational changes in the structure of German commerce and industry began to take effect. The changes that began in the 1990s included the following:

- A decline in the power of industrial unions to negotiate sector-wide wage and hour agreements with producers’ associations.
- A shift away from policy makers’ focus on long-term stability, full employment, homogeneity in incomes, and government protection from competitors to a focus on market share and higher profits.
- A shift by industry from investing in domestic innovation and productivity improvement to investing in foreign low-cost or rapidly growing markets that meant a move from domestic production to participating in global supply chains.
- An end to the old “hausbank” partnership of banks with a few non-competing industrial firms and low profits from long-term loans by commercial banking to higher profits from independent investment banking.
- A shift from focus on EU and Eurozone markets to developing nation markets and the emerging former Soviet Central and Northern Europe states.
- A drop in consumer good purchases produced by EU states to demand for lower cost products from Asian suppliers.
- A shift from rigid, sectorwide labor union contracts to individual company contracts or non-union operations that resulted in new, flexible wage and hours agreements. Flex-time provisions provided the means for maintaining employment during economic downturns.
- Decline in both the number of individual firms in industry associations and the number of workers covered by union contracts.

- Changes in tax laws that eliminated or lowered capital gains taxes on banks divestures of holdings in enterprise shares common during the house bank era.

Possibly the most important changes in the postunification German economy was the shift from commercial “house” banking to independent investment banking and the rapid globalization of industry. Brookings Institute analyst Carlo Bastasin (2013) summarized the resulting impact of changes facing German commerce and industry:

In summary, the change [in the social market economy of Germany before reunification] was catalyzed by the reaction of the country’s major banks and companies to the loss of competitiveness caused by the wage and tax consequences of German reunification. The effect of the *Neue Länder* depressed productivity in the German economy, which declined to reach a historic low in 1996. Around the mid-nineties . . . companies and private banks accelerated the process of internal reform, allowing them to shift the focus of their activities abroad by the end of the nineties in response to the rigidities of the domestic economy and expectations of falling demand. Since the 1990s, this process of economic “openness” also extended to the majority of medium-sized companies. (2013, 4)

The shift to a global supply system to match its enhanced attention to serving a global market resulted in German industry’s ability to maintain stable employment during the deep recession that began in 2008. German industry had long focused on exports, so much so that by the start of its turnaround in 2005 German firms controlled large market shares in its traditional heavy industries such as capital goods, consumer durable goods, and pharmaceuticals. In 2013, German exports totaled US\$1.453 trillion, an increase of 28.8 percent since 2009. Exports contributed approximately 45 percent to Germany’s total GDP of US\$3.227 trillion in 2013. Values for the top 10 German exports in 2013 are shown in table 8.3.

The internationalization of German industry after 2004 consisted of offshore production as well as exports from Germany. The establishment of the European Single market in 1986 eliminated many of the internal nontariff rules and regulations that curtailed European growth and protected domestic industries. By 2000, almost all large industries and nearly 60 percent of medium-sized companies had established production facilities outside the EU. Much of that investment occurred in the again independent former Soviet countries in central and northern Europe.

Table 8.3 Shares and values of Germany's top 10 exports in 2013 (in 2014 euros)

Product Group	Value	Share of 1,134 billion total
Motor vehicles, trailers, and semi-trailers	203 billion	17.9%
Machinery and equipment	166 billion	14.6%
Chemicals and chemical products	107 billion	9.4%
Computers, electronics, and optics	90 billion	7.9%
Electrical equipment	68 billion	6.0%
Pharmaceutical products	62 billion	5.5%
Other transport equipment	51 billion	4.5%
Basic metals	50 billion	4.4%
Food products	49 billion	4.3%
Rubber and plastic products	40 billion	3.5%
Totals	886 billion	78.1%

Source: Statistisches Bundesamt, from official German Federal Statistics Office data 2015.

Changes in German Banking

Growth in German industry after World War II was financed by a triangular system of cooperative capitalism. One leg was the German government; the second was the large banks that became partners as much as banker; the third was the distinctive structured system of large, medium, and small businesses. Both the federal government and individual states contributed to the success of Germany's social market economy. One of the underlying principles of the system was stability in prices and employment. To ensure stability, the market had to conform to a social policy established and guaranteed by central authority while enterprises had to be protected from their own cutthroat competition and monopolistic tendencies (Siebert 2005). A bank-based financial system provided the financial framework for German recovery to happen. Cooperative banks functioned as partners to industry. They were, in fact, house banks (*Hausbanken*). Their major role was to provide financing for industries through long-term, low-interest loans. They functioned as universal banks, performing a wide range of financial services as both commercial and investment bank services. House banks ensured their loans by representation on company boards and through what became "relationship banking." Loans were based on personal relationships rather than market

studies. House banks and companies often shared ownership in each other's enterprises.

The house banking system began to come apart in the 1980s. Germany's largest bank, Deutsche Bank, chose to phase out its house banking business when it found itself in the middle of an attempted takeover of Germany's Continental Group by the Italian Pirelli tire maker. Deutsche Bank was house bank for both companies. This put it in a conflict of interest position. Deutsche Bank decided to get out of the house banking business and reinvented itself as predominantly an investment bank. To emphasize the shift, it moved the headquarters of its capital market operations from Frankfurt to London in 1989. In 1996 the presidents of nearly a third of 100 major German industries were Deutsche Bank managers; in 1998, the number had dropped to just 17.

Other German banks followed this transformation, particularly after a series of political and administrative changes occurred in the German financial system. In 1994 a law was passed banning insider trading, which had been common under the house banking system. This was followed in 1995 with a change in the security trading laws that required disclosure of ownership by institutions that owned large shares of a company. In 1998, firms were required to adopt international or U.S. accounting principles. Further changes in voting rights and non-voting shares system followed. In 2000, the German government repealed the law requiring capital gains taxes on sales of shares acquired by banks under the old house banking system.

DEMOGRAPHIC PROBLEMS

The ability of Germany to sustain its leadership in Europe and the global marketplace is threatened by its continued population decline. The 12 Länder of what was West Germany include Schleswig-Holstein, Bremen, Lower Saxony, North Rhine-Westphalia, Hesse, the Rheinland-Palatinate, Saarland, Baden-Württemberg, Bavaria, and Hamburg; the end of East Germany added six more Länder to the federation: Mecklenburg-Western Pomerania, Brandenburg, Berlin, Saxony-Anhalt, Saxony, and Thuringia. Population decline is greatest in the eastern six Länder as residents there took advantage of unification to flee to the West in search of a better economic future, despite the country's efforts to improve working and living conditions in the East.

In 2013 the total population of unified Germany was estimated to be 82.7 million; it is estimated that Germany has lost 1.5 million

Table 8.4 Population projections for Germany, 2020–2100

Year	Population	Percent change
2020	81,431,000	-1.91
2030	78,275,000	-3.88
2040	74,106,000	-5.33
2050	69,004,000	-6.89
2060	63,173,000	-8.45
2070	57,812,000	-8.49
2080	52,820,000	-8.64
2090	47,942,000	-9.23
2100	43,364,000	-9.55

Source: World Population Review 2013.

people since the last census. The country's birthrate is among the lowest in Europe. If 2013 projections are correct, its population could drop to close to 69 million over the next 50 years (Table 8.4). In 2013, of the 27 countries then in the European Union, Germany had the highest percentage of immigrants in its population; it was also actively encouraging even greater immigration.

CONCLUSION

Until the 1990s, Germany was able to sustain its position as one of the strongest economies in Europe and the world, led only by the United States and Japan. But in the 1990s, Germany's traditional strengths were weakened by the revolutionary changes taking place in the world economy. Among the challenges facing the German business system are changes in the market that are driven by rapidly changing technologies and dramatic changes in customer demand. Long production runs of high quality products have been replaced by constant and rapid changes in customer values, necessitating the ability to change rapidly to meet shifts in demand. Germany's traditional market leadership in the pharmaceutical, chemical, transportation, and machinery markets is being challenged by manufacturing advances in the newly industrializing nations, leading to reductions in size of many international markets. Major demographic shifts are now beginning, including aging of the population and low or negative population growth, which adds to the economic difficulties facing Germany and much of

Europe where most of the social spending has been financed through high social security contributions and taxes.

For most of the years following its economic miracle after World War II, Germany regularly produced some of the best industrial products in the world. It has been a global leader in chemicals and pharmaceuticals, and made some of the world's finest automobiles. It had the world's best industrial vocational training system and the most understanding and long-term thinking banks. Its schools and universities were admired everywhere, and served as the model adopted by many developing nations. Its small and middle-size industries continued to develop innovative products and production technology. Germany has become a land of social stability and high living standards for most if not all of its citizens—many “guest workers” do not share in all of this good life. German workers may have been seen as overpaid, but they were also recognized as among the most productive in the world.

However, as the twentieth century drew to a close, much of this enviable picture faded. Germany has become a land of high unemployment, inflexible work standards enforced by powerful intransigent labor unions, strong trade associations, and government bureaucrats. The result is a system that overprotects everyone in society.

In 2003, Germany began an ambitious program to deal with the problems of the German business system and implement some degree of structural reform primarily by reforming fiscal policy and labor markets. The plan was designed to stimulate economic growth, ensure the long-term stability of the social systems and strengthen Germany as an economic location. Called Agenda 2010, the program recognized that a welfare state like Germany was not equipped to deal with the global demographic and economic changes occurring in society. Key goals of the Agenda 2010 initiative included: (1) reductions in nonwage labor costs, (2) boosting domestic demand and capital spending, (3) helping the unemployed find jobs more quickly, and (4) making the labor market more flexible. The effects of these and earlier changes began to take effect by 2004 and the German economy began a remarkable recovery that lasted until the recession of 2004, but began to gain after just a year or two.

Germany, like most industrialized nations, experienced a deep recession in 2008 and 2009. GDP dipped 6.6 percent from its peak in the fourth quarter of 2007. Yet, the overall impact of that recession was far less in Germany than in most other nations. A series of political and economic restructuring actions that began in the 1990s cushioned the effects of the recession in Germany. Although hours worked declined somewhat, unemployment barely changed at all. By 2009,

the German economy was again the leading economy in Europe and one of the world's strongest economies, although most of its major industrial capacity had been disbursed to wherever a market justified the investment. There was little place for a social market economy anymore. Growth in Germany's GDP was again less than 1 percent in both 2012 and 2013.

DISCUSSION QUESTIONS

1. What role did the high cost of unification have on the economy of West German?
2. How did government barriers to entrepreneurship affect the German economy as the twenty-first century began? What did the German government decide to do about the problem?
3. What did Germany decide to do about strengthening its information and communication technology industry?
4. How badly did the Recession of 2008 and 2009 affect the German economy? What role did its industrial exports play in its recovery?
5. What role did changes in Germany's banking system have in the country's renewed industrial strength?

PART IV



JAPAN'S PATH TO A MODERN
INDUSTRIAL STATE

CHAPTER 9



COMMERCE AND INDUSTRY IN THE MEIJI PERIOD

The emergence of Japan as a modern industrial state began with the demise of the Tokugawa shogunate and the formation of a government that restored leadership to the imperial family. The last of the shoguns was forced to relinquish power in 1867, after which time control of the government was put back into the hands of the Meiji emperor, although members of the three powerful clans initiating the Restoration retained control of government policy. From that date it took only 20 years for the Japanese to completely change their country. The map in Figure 9.1 shows Japan and its Pacific islands.

During those two decades, Japanese leaders searched the world for the best institutions and systems in business, government, education, the army and navy, and the arts (Vogel 1979). Putting the best of these to work, they took the nation from what had been a feudal agricultural society with a technologically simple manufacturing and cottage-industry nation of lords, vassals, and peasants, and forcibly turned it into a modern industrial power. This was Japan's first economic miracle.

The appearance of an American fleet of war ships off the Japanese shore, demanding that Japan open her ports to Western trade, forced the Japanese to recognize that they could not continue their centuries-old system of isolation. A group of young dissatisfied middle-caste samurai began by destroying the ancient four-level social system, eliminating their own samurai class in the process. They introduced a series of borrowed social institutions from Europe and the United States, and then turned their hands to shaping a modern industrial

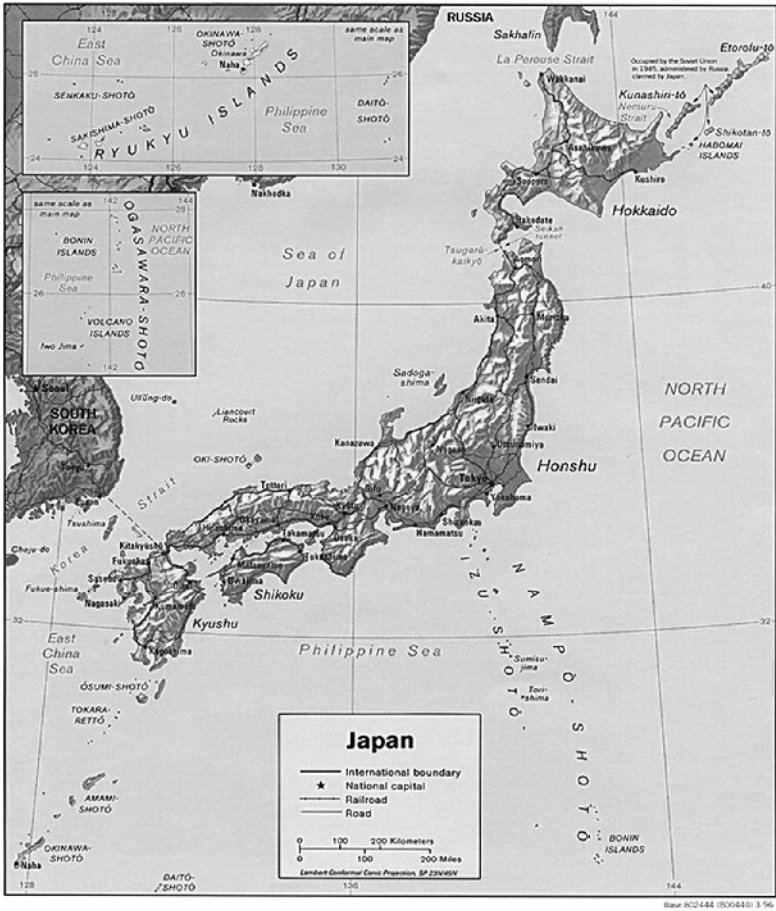


Figure 9.1 Map of Japan showing the location of major cities.
 Source: The World Factbook 2013–14 <https://www.cia.gov/library/publications/the-world-factbook/graphics/maps/ja-map.gif>.

economy. It was a remarkable performance, unprecedented in the history of world at that time. Eleanor Westney (1987, 1) described the nearly 55 years from the opening of Japan in 1859 to the end of the Meiji era in 1912 as “one of the most remarkable social transformations in modern history.” The transformation of Japan in that short period was largely due to the deliberate application of what were deemed to be the best examples of Western organizational structure and processes. For example, the Japanese communications system was

patterned after the British, banking on the American, and the legal system first on the French then the German. Other emulations are reviewed later in this chapter.

REVOLUTION AND RESTORATION

The restoration of imperial rule began with a coup d'état on January 3, 1868. The shogunate was abolished and all lands were confiscated by the state. The samurai who led the revolution and restored the 15-year-old Meiji emperor to power were low-ranking members of three clans: the *Satsuma*, *Chosu*, and *Tosa*. The aims of the government they helped to establish were proclaimed in a five-article manifesto that the emperor read to the public that April. These called for:

1. All matters of consequence to the people to be openly discussed in assembly, with decisions reached democratically.
2. All classes to work together to carry out the administration of the state.
3. All people, regardless of rank or caste, to be permitted to choose their own occupation and place of residence.
4. Any unjust custom to cease forthwith; all relationships to be based on the laws of nature.
5. The people to actively seek knowledge from outside the country so as to protect and strengthen the imperial rule.

The revolution that made the restoration of the imperial system possible was led by a small group of young middle-status samurai from the rural west. These young idealists believed that the only way for their country to become strong enough to deal with the increasingly domineering foreign traders was a return of power to the emperor, who would be advised in governing the nation by an elected chief administrator. This would be the first official ever to be elected to such a high-level position in Japan. According to Reischauer (1970, 122), the young samurai leaders of the revolution were a “group [with] extraordinary ability, the products of an age of turbulence and rapid change, when only the ablest and most flexible could hope to succeed. Ranging in age from twenty-seven to forty-one in 1868, they were remarkably young, and thus able to adapt to the new conditions.”

The young men who led the revolution were not seeking to benefit themselves nor their class. Instead, their goal was to eliminate all samurai privileges. They wanted to free farmers from life-long servitude,

and substitute merit and ability for class position as the criterion for advancement in the service of the country. More important, perhaps, they wanted a Japan that was strong enough to avoid the overbearing foreign intervention that China had been forced to suffer through. They were remarkably quick in achieving these goals. In 1869, they simplified the class system of the Tokugawa period, guaranteeing all citizens freedom of choice both in occupation and marriage. In 1871, they eliminated the right of dominance still held by clan lords and did away with clan domains, replacing them with the present-day prefecture system and bureaucratic administrators. Initially, the Meiji government also restored old titles and offices that had existed during the eighth century, the last period of strong imperial rule. However, since no special privileges were attached to the titles, they never really caught on and were soon forgotten.

Civil war followed the coup, but troops loyal to the emperor and his advisors were able to quickly defeat the rebels and restore order. Edo, a small town some distance away from the old Imperial City of Kyoto, was renamed Tokyo and became the capital city of the restored Empire.

In 1869, the Meiji government initiated the first of a series of changes in the daimyos' status. They would no longer be lords of their domains, but instead were appointed as imperial governors. Distribution of the rice tax was not changed until later. In 1871, the domain system was completely abolished, replaced by a system of prefectures that still exists today. The administration of the prefectures was to be based on merit and ability, rather than inheritance.

In 1873, the Meiji government initiated a revolutionary change in the social structure of the country: they replaced the ancient warrior-samurai system with universal military service. The new professional army was initially established on a pattern similar to the French army, but was soon changed to follow a German model. Annual stipends that the samurai had received from clan lords were taken over by the government and, beginning in 1873, were gradually abolished. They ceased entirely in 1876. In place of the annual rice payments, the warriors were paid one lump sum in government bonds.

Despite their many successes, the early years of the new Meiji government were marked by a series of domestic conflicts led by disgruntled samurai and their retainers. The young government leaders were able to successfully put down all rebellions, and grew stronger with each new victory. The citizen army they had created proved equal to the task they had envisioned for it. The last rebellion by conservative, traditionalist samurai was crushed in 1877.

DEVELOPING A SYSTEM OF COMMERCE AND INDUSTRY

The Meiji government quickly embarked on a process of modernizing all of Japan's basic institutions. At that time, this meant adopting what it could from Europe and the United States. The government sent fact-finding missions abroad as fast as it could. These brought back what they believed to be the best the West had to offer. Eclectically selecting the best from any source enabled the Japanese economy to grow very rapidly, so that in just 20 years it had become a modern industrial state. It did not matter that to the outside world the new Japan appeared to be a hodgepodge of assorted, unrelated ideas. It worked.

Some examples of the more successful social borrowings included the nation's new education system, the army and navy, and the civil and criminal codes. The education system, established in 1872, was patterned on the French district-based structure. Universities were patterned after those in the United States. The Imperial Japanese Navy was almost a carbon copy of the British Royal Navy. The army, initially patterned after the French army, was changed to mirror the Prussian system. The new civil code was of also German origin; the criminal code was adopted from France; the early Japanese rail system was designed and built by British engineers; and British textile equipment firms set up entire cotton spinning factories.

To speed up the country's modernization process, many government officials were sent abroad after the restoration to study the best social institutions and to determine which should be imported into Japan. The government also paid for private industrialists' trips overseas to study foreign industry and technology. A large number of young people were sent abroad to attend foreign universities. The country also hired many foreign experts to guide them in modernization of the government and industrialization.

By the end of the nineteenth century, Japan had settled more or less into the mold it was to follow into the twentieth century. The educational system was completed with establishment of a number of colleges to provide technical education, culminating in the founding of Tokyo Imperial University in 1886. The old system of patronage and personal connections as the basis for government employment was replaced by recruitment by examination and educational qualifications.

Japan's efforts to modernize its industrial base was at first less successful than its public administration programs. Few of the model enterprises set up by the government proved to be economically

viable. Often they were too small to compete on price against Western imports, or the lack of management expertise resulted in severe mismanagement. The government's heavy expenditures in these new industries contributed significantly to a budgetary crisis in the 1880s. In contrast to its costly start-up businesses, a substantial number of the successful small, privately owned businesses that had been established during the Tokugawa period were flourishing.

Rather than continue to throw money at the government-owned factories, the Meiji administrators turned to the country's new entrepreneurs and offered them the factories at bargain prices, with operating subsidies thrown in for good measure. Although some of the newly privatized firms never did prove to be profitable, the many that did survive eventually became some of the largest and most powerful businesses in Japan. An important side effect from this process was the strengthening of bonds between the bureaucracy and industry leaders.

The government's determination to modernize its economy also resulted in the establishment of a national industrial policy. This was formalized in 1881 with the formation of a Ministry of Agriculture and Commerce. This agency's primary function was to coordinate all state efforts at promoting those two sectors of the economy. Out of this early effort there evolved the pre-1945 Ministry of Commerce and Industry, and the powerful, postwar Ministry of International Trade and Industry (MITI).

Although early entrepreneurs were able to obtain some low-cost loans and subsidies through these bureaucracies, the bulk of the country's development passed into the hands of private investors and banks. Almost all of the growth in the major nineteenth century industries, and particularly silk and cotton, was privately funded, although government-owned demonstration plants did serve as models of the latest technology.

The transportation infrastructure, on the other hand, was almost entirely funded by the government, either directly, as in railroad construction, or indirectly in the form of subsidies, as in shipbuilding and ocean transport. The government also established a modern postal and telegraph network. It would later build the nation's electricity-generating and distribution system.

Government Railway Construction

Railway construction was one of the first industries to receive the attention of the Meiji reformers. They recognized that, initially at least, all such major construction had to be done by the government if

it was going to be done at all. No group of entrepreneurial capitalists existed to make such investments. The first rail line built by the new government opened in 1872, just four years after the Restoration. The 18-mile line connected Tokyo with Yokohama. Construction of the line was guided by British engineers, used British equipment, and was paid for by a loan raised in London. The first line built without any foreign assistance was a 10-mile stretch connecting Kyoto with Otsu. Private companies were formed after 1880, but additional construction was slow at best; in 1884 Japan still had only 76 miles of track installed and functioning. The railway boom took off during the 1890s. The national network was not completed until after 1910.

Developing Ocean Shipping

As late as the 1890s, only about 10 percent of Japan's foreign trade was transported in Japanese flag vessels. Of 74 shippers licensed in Japan at the time, only four were Japanese. The government set out to rectify this weakness by setting up a joint government and private-sector agency to operate the country's few ships. Managing this agency proved difficult, so after acquiring 13 more vessels to transport a military venture against Taiwan, it was reorganized into the Department of Ships within the Bureau of Posts and Communication. The decision was made in 1875 to transfer ownership and operation of the ships to a private company, Mitsubishi, along with an annual subsidy, provided the firm opened new routes. The line connecting Yokohama to Shanghai was the first of these.

In the meantime, the Mitusi Company, whose officers had comprised the bulk of the managers in the ill-fated first shipping venture, set up a new government-sponsored shipping line to challenge the Mitsubishi monopoly. The Mitusi Company's fortunes were founded on an extensive retailing network. A fierce competitive rate war raged between these two firms until 1885, when they merged to form *Nippon Yusen Kaisha* (NYK), which is still Japan's major shipping line.

OVERHAUL OF AGRICULTURE AND COMMERCE

The Japanese economy prior to the Meiji period was overwhelmingly agricultural. However, many of the preconditions for industrialization had been firmly set in place during the 250 years of Tokugawa era stability. A diverse and active commercial sector thrived in nearly all parts of the nation, but was particularly strong in the major cities and towns. The first businesses with liability shared beyond the family

house—the first companies in the modern sense—were established in 1867, the final year of the Tokugawa shogunate. The government allowed groups of wealthy merchants to join together to form ventures large enough to compete with the new products pouring into the newly opened country. These early businesses were not limited liability joint-stock corporations, but simply cooperative enterprises set up as import/export trading companies. Although they were relatively ineffective and did not last long, they did pave the way for the joint-stock companies formed after the 1868 Meiji Restoration. By 1871, none of these early ventures were operating (Clark 1979).

Japan's first effective commercial code, in which the legal rights and responsibilities of joint-stock companies and other types of business organizational structures were set forth, was enacted in 1899. The focus of the new law was not to control private influence or excess as were similar laws in the United States and Great Britain, but rather to permit and promote the growth of large, powerful businesses that could be compared with the biggest and best of such firms in the West.

In the rural areas, improvements in farming practices, new seeds, and fertilizers resulted in expanded yields of such staple crops as rice, millet, and soy beans. Rising production costs and growing demand for cash encouraged many landowners to diversify into high-demand, high-value cash crops such as cotton, hemp, potatoes, tea, tobacco, ginseng, sugar cane, dye plants, and oil seeds. Mulberry leaves for silk production was also a growing source of farm income. Some daimyo further increased their income by processing these and other crops, and by setting up small manufacturing operations. Samurai were appointed as managers of these activities in addition to becoming local civil administrators. Out of these initial commercial activities there emerged a new rural middle class made up of wealthy farmers and former samurai. Values of the most important crops in 1900 are shown in Table 9.1.

Centers of Commerce

The three largest cities, Osaka, Kyoto, and Edo (Tokyo), had formed the core of Tokugawa Japan's political, economic, and artistic development. In these and other commercial centers, Tokugawa merchants and craftsmen created such business enterprises as copper refining, printing, paper making, spinning, weaving and apparel production, musical instrument making, cabinetry, building construction, gold

Table 9.1 Gross values of selected staple crops in Japan in 1900 (current yen)

Crop	Average value in 1900 ¥
Rice	155,439,087
Grains (wheat and barley)	124,069,274
Beans	35,952,282
Silkworm cocoons	93,618,991
Silkworm eggs	3,844,126
Mulberry twigs and silkworm litters	7,953,103
Cured tea	9,037,545
Livestock	4,953,533
Misc. butchered meats	12,540,394
Dairy products	4,128,017
Poultry and eggs	17,281,419
Miscellaneous other	153,872,649

Source: Yamawaki 1903, Ministry of Agriculture and Industry data.

and silver jewelry making, iron and steel smelting, toy making, brewing and food processing, as well as the transportation, storage, and sale of these and other domestic and imported items.

After the Restoration, Meiji reformers moved forward quickly with the changes they believed were necessary if Japan was to avoid being degraded in the same way that the Western powers had forced concessions from China. They were convinced that only a nation that was truly modern and strong militarily and economically could stand against the West. Becoming modern in this sense meant developing an economy based on industrial capitalism and a government based on a constitutional foundation. Of the two, possibly the most important decisions they made were in the area of economic policy and the business system.

After taking control of the government, the reformers expanded the few industrial experiments started during the Tokugawa shogunate. These introduced new textile factories, modern shipbuilding, and weapons production. A number of other important economic developments had begun during the Tokugawa period, including a network of coastal shipping with port and harbor improvements, warehousing and distribution systems including retail chains operations, and a

nationwide system of credit and bills of exchange. In addition, a strong tradition of handicrafts and cottage industries produced cotton, silk, and flax textiles and many other items. Entrepreneurship thrived both in the countryside and in the centers of daimyo consumption.

At the time of the Restoration, some 80 percent of the country's population earned their livelihood from agricultural pursuits, although the country had a long history of absentee land ownership. The government's plan to replace the crop tax with a land tax could not occur until land ownership was established. A survey of the land holdings of individual households was undertaken and title to those lands passed to the farmers of the parcels. After that step was accomplished each family's tax burden could be assessed on the value of their land. Initially, the tax was assessed at 3 percent of land value; this was lowered in a few years to 2.5 percent (Franks, 1992). In this way, the government gave legal sanction to the private ownership by peasants of plots they had formerly farmed only with their lords' permission, thereby instituting land reform.

The new government also initiated a complete overhaul of the country's communications system, beginning with construction of a nationwide telegraph network, followed soon afterward by an improved road network. Port facilities throughout the country were modernized.

A New Financial System

The new government quickly realized that changes in the way revenue was collected and distributed were necessary if the country was to have modern budgetary and monetary policies. Thus, one of the first priorities of the new government was to restructure the basis of its revenues. Nearly all of the country's income came from taxes on farm production, particularly taxes on the rice crop. The daimyo collected all farm production and paid a collective tax for his entire domain. In 1871, the new government successfully introduced a stable base for future modernization when it formed a modern currency system. The yen was made the basic monetary unit. At the same time, they set up a modern banking system, at first based heavily on government bonds issued to deposed samurai.

Changes in Banking

In 1881, serious inflation forced further changes in Japan's financial system. The new finance minister, Matsukata Masayoshi, slashed government spending and sold off to private owners most of the

government's pilot factories in nonstrategic industries, retaining only munitions and shipbuilding operations. Many of these privatized factories were successful, and taxes on their revenues eased the government's budget crises. In this one quick move, an entrepreneur class was firmly established in Japan. Many of the new owners became enormously wealthy and had significant impact on the future growth of the Japanese business system. These benefits were limited to only a few privileged families, however.

The new finance minister's program included establishment of the Bank of Japan. The main purpose of the bank was to withdraw all the earlier inflationary, nonconvertible paper money the new government had issued, replacing it with a more stable, deflated currency. He also set up a number of other important financial institutions, including clearinghouses for foreign exchange dealings and a network of national and rural banks to make loans to the new industrial and agricultural entrepreneurs. Also included were cuts in government spending and programs to expand exports while reducing imports.

Over the rest of the 1880s and into the 1890s, these reforms successfully established the financial stability necessary for the Japanese business system to flourish. This was not done without a cost, however. Deflation drove many small businesses and farms into bankruptcy and further strengthened the grip of the large firms on the national economy, while large firms continued to grow. By the end of the nineteenth century, there were more than 40 industries employing more than 1,000 employees. More than three-quarters of these were still in the textiles (fibers) industries (Table 9.2).

Creating a Modern Industrial System

The Meiji government established a number of modern factories to serve as models for Japanese businessmen, as well as a way to hurry the country's industrialization process. Since few wealthy private investors existed in Japan at the beginning of the country's move toward industrialization, the government felt forced to establish the factories themselves. Most important were industries regarded at the time as critical for nation-building: shipbuilding, iron and steel manufacturing, textiles, chemicals, arms and munitions, and mining.

As it was in many industrial nations at the close of the nineteenth century, working conditions in the Japanese industrial sector at this time were particularly harsh. It was not uncommon for workers in

Table 9.2 Motor-powered industries in Japan by size and sector

Industry Sector	1900 Total	Number of Employees			
		100 or less	More than 100	More than 500	More than 1,000
Fiber industry					
Filature ¹	1,722	1,527	188	5	2
Spinning	137	261	90	62	27
Weaving	52	21	23	7	1
Other	10	8	2	—	—
Total	1,921	1,514	303	74	30
Machinery					
Machine making	114	97	14	3	—
Shipbuilding	18	5	8	3	2
Vehicles	13	2	8	2	1
Other	63	56	7	—	—
Totals	208	160	37	8	3
Chemical					
Cement	37	27	10	—	—
Paper mills	11	11	12	—	—
Leather	4	4	2	—	—
Matches	5	5	3	1	—
Other	103	94	7	—	—
Totals	190	155	34	1	—
Miscellaneous					
Breweries	21	19	2	—	—
Tobacco	91	82	7	2	—
Printing	65	52	13	—	—
Other	171	169	2	—	—
Totals	348	312	34	2	—
Special					
Smelting	96	21	49	16	10
Other (includes electrical)	89	16	47	16	10
	7	5	2	—	—

Notes: ¹Filature = drawing silk thread from cocoons

Source: Yamawaki 1903, data from Ministry of Agriculture and Industry.

some seasonable industries to remain at their jobs for 16 or more hours each day (Box 9.1). Japan's textile industries employed the largest number of workers in the last years of the 1800s. By 1899, the number of women workers employed in Japan was nearly double that of the number of male workers (Table 9.3).

Table 9.3 Gender distribution in Japanese workshops with 10 or more employees, 1896–99

Motorized workshops					
Meiji restoration year	Western calendar year	Number of workshops	Males	Females	Total number of workers
29	1896	1,967	104,164	169,735	273,889
30	1897	1,971	117,081	174,154	291,235
31	1898	2,003	118,251	171,095	289,246
32	1899	2,736	96,187	184,111	280,292
Nonmotorized workshops					
Meiji restoration year	Western calendar year	Number of workshops	Males	Females	Total number of workers
29	1896	n/a	76,509	76,309	104,631
30	1897	n/a	82,554	82,554	149,331
31	1898	n/a	81,328	81,320	139,551
32	1899	n/a	70,679	70,679	112,617

Source: Yamawaki 1903, data from Ministry of Agriculture and Industry.

Box 9.1 Working hours in Japanese industries in 1900

Writing in 1903, Yamawaki of the Ministry of Agriculture and Industry described the working hours of industrial laborers as being more or less typical of many industrial workers. Work in the textile industry, where large numbers of females and children younger than nine years of age had long been employed in most of the industrializing nations, conditions appear to have been particularly harsh, as Yamawaki described in his exhaustive report of Japanese culture and industry:

“In general, the working-hours of operatives are 12 hours a day, but sometimes they extend as long as 16 or 17 hours. In cotton mills 12 hours are standard, both for day and night workers, they being made to take day and night work by turns every two days. In filatures [unwinding, collecting and spinning fibers from silkworm cocoons] regular hours are 13 to 14,

in power-loom factories 12. But in hand-weaving workshops a great diversity prevails, the general rule being 12 to 15, according to the season, though in some rare cases the hours are as long as 16 or 17. In bigger workshops such as shipbuilding yards, vehicle, and machine shops, the working hours are far more regular, being in general 10 hours, with one or two hours of overtime. In such chemical workshops as cement, glass, and paper in which work is carried on all through the 24 hours, 12 hours is a regular shift both day and night. In general the regular working-hours in Japanese workshops may be put at 12, with overtime of one or two hours.”

Source: Yamawaki 1903, 423.

Beginnings of the Zaibatsu System

Japan was well on the way to industrialization by the end of the nineteenth century. This was largely because of the government's sales of established factories to a few selected entrepreneurs. In this way, the country's new industrial wealth became concentrated in the hands of a relatively few businessmen. Some of these newly formed businesses were later to evolve into the great family-owned diversified conglomerates known as the *zaibatsu*.

As the government's pilot factories passed into private ownership, a historical accident resulted in a surge of economic activity for Japan. This fortuitous event enabled the new owners to quickly expand their companies, providing economies of scale that made them profitable ventures far more quickly than might otherwise had been the case. The incident that kicked off Japan's rapid industrial growth at this time had to do with the silk industry. Raw silk had been one of Japan's most important exports for many years. Silkworm blight in Europe in the 1860s destroyed most of the French and Italian silk production industry, thereby creating a strong demand for Japanese silk and silkworm eggs.

Japanese silk production had been almost entirely in the hands of peasants in the central highlands. Silk production was typically a cottage industry, much like the English wool spinning and weaving industry of the seventeenth and eighteenth centuries. Farmers augmented their farm incomes by participating in silk production, but only after their regular farm chores were completed. Merchants farmed out production, retaining ownership of the raw material at all stages of

production. With the rise in prices resulting from increased demand, these entrepreneurs were able to move quickly to expand production. Growth in demand also resulted in discovering new ways of winding silk thread by mechanical means, making it cheaper to produce. Lower prices further improved Japan's share of the global market. Eventually, new strains of silkworms were found that produced longer and stronger thread.

Although the blight in Europe faded by the 1870s, Japanese silk reeled by mechanical power proved to be more uniform than other Asian-produced silk, thereby producing a superior thread that was preferred by the fashion industries in both the United States and Europe. Before long, Japan controlled the lion's share of the market for raw silk in the West. By the 1870s, silk made up 36 percent of the value of all Japanese exports; it was still 30 percent of the value in the 1880s. Silk remained Japan's largest single export until well into the twentieth century; as late as the 1930s, it still represented a 26 percent share of total exports. Between the 1880s and 1930s, the acreage of fields devoted to mulberry plants (silkworms only eat mulberry leaves) grew by 2.6 times, and silkworm cocoon production increased seven and a half times (Minami 1986).

Investments in Mining

Mining was another activity that was financed and expanded by the Meiji government. Copper and precious metal mining had been operated successfully by some daimyo prior to the Meiji Restoration; several family zaibatsu were founded on copper mining and smelting fortunes. However, most private operators lacked the investment capital necessary to bring the older, often worked-out or flooded mines back into profitable operations.

Coal, although generally poor in quality, had long been mined in the northern islands, and was available in sufficient quantities to fuel the nation's new railways and steamships. After 1870, government loans and investments enabled mining production to expand, so that after 1900 Japan's iron and steel works were fueled by Japanese coal. As with their investments in manufacturing plants, the government permitted private operators to take control of the country's mining industry.

The Textile Industry

As they had in Great Britain and the United States, textiles provided much of the initial impetus for industrialization during the early Meiji period. Silk production had long been an established industry in Japan. The drop in European silk production resulted in greatly increased

demand for Japanese silk and silkworms. Rising prices resulted in increased production and, more important, widespread application of machine silk-thread reeling. Both private enterprise and government investment in advanced methods and machinery helped the industry to expand to meet demand. By the 1880s, machine reeling had almost completely replaced hand reeling.

For the first decades of the Meiji period, Japan's domestically grown cotton was rare, expensive, and relatively unsuited to power spinning or weaving. By the late 1870s, however, Japanese textile entrepreneurs were importing raw cotton from the United States and India in ever-increasing quantities. In 1878, the Meiji government purchased cotton spinning machinery from Britain. Most of this equipment was resold to domestic industrialists, although a small facility was retained by the government for further experimentation and demonstration of innovative processes. In 1877 there were just 8,000 power spindles in operation in Japan. By 1913, this number had grown to more than 2.4 million power spindles, and cotton textiles had become one of Japan's most important exports.

BUSINESSES STRUCTURE IN MEIJI JAPAN

Structurally, three types of businesses emerged under the Meiji restoration and reformation: (1) large, predominantly heavy industries, many of which evolved into the zaibatsu conglomerates; (2) a large group of small independent businesses, many of which evolved out of the old cottage industries such as textiles; and (3) a group of mid-sized industrial firms that tended to be closely associated with the first group and who often served as subcontractors to the largest firms.

The first group, Japan's largest businesses, mainly produced heavy industrial goods, such as iron and steel, coal, shipbuilding, and chemicals, although communications and shipping were also important members of this group. Many were initially set up by the government and then sold to private investors. These firms had to be large in order to compete effectively in the global marketplace. These were the "nation-building" industries. Because of their rapid growth and the lack of a large pool of educated, skilled workers, the largest of these firms inaugurated a lifetime employment system in order to retain their trained workforce. In management style, these firms tended to be paternalistic, with a sense of being a member of the same family characterizing both management and labor (Morishima 1982).

The second group was a large body of privately owned and operated independent small businesses. Many of these evolved out of the

earlier merchant-traders that appeared during the Tokugawa period. Some had been cottage industry producers of domestic consumer goods, including textiles, leather goods, wood products, and food and beverage items. Because of little consumer buying power during the Tokugawa and early Meiji periods, no large untapped domestic market existed to fuel the growth of these businesses. Tokugawa isolation had cut them off entirely from international markets. Thus, without a large market for their products, these companies were unable to benefit from economies of scale. Sales were limited and profit margins were small. Workers' wages in these firms never approached those in the largest businesses, nor did any life-long employment system exist. Most were destined to remain small.

Also included among these small businesses were the thousands of family-owned retail shops and small supply chain organizations. Together, these evolved into Japan's extremely complex physical distribution system. In addition to the bulk of the nation's retailers, this group also included most of the agricultural sector as well. Most farmers worked extremely small plots, and, until reform occurred under the Meiji Restoration, were generally forbidden from engaging in any activity other than farming.

The third category constituted a growing body of small and medium-sized manufacturing or processing industries. These tended to function as subcontractors for the large industrial concerns. Few of these producers were large or stable enough to offer their workers life-long employment. Wages in these firms were consistently lower than in the big industrial firms. These subcontractors existed mostly in such fields as machine manufacture, shipbuilding, vehicles and electrical goods, and similar manufacturing industries.

These firms were very important to the Japanese economy, lowering the large firms' production costs and thus enabling them to effectively compete in the global market. At the same time, however, they operated under a number of severe handicaps. In the majority of cases, since many of the firms of the first category had been established by the government and remained important for achieving national development and industrialization targets, they enjoyed close connections with the government. This often meant they had access to loans at very low interest rates, as well as significant government subsidies. The subcontracting firms remained completely independent companies, not qualifying for government aid or support. They did receive important technical guidance and some small financial assistance from the central company, and enjoyed something of a captive market. In good times, they did reasonably well, in a few cases growing into large

firms themselves. But in bad times, they bore the full brunt of the larger firm's retrenchment measures, and were often on the verge of bankruptcy (Morishima 1982).

Modern Factories Appear

Modern factories, equipped with the latest machinery powered by steam engines, began to appear in the 1880s in Japan. Initially, these were the nation-building industries, beginning with textiles, then iron and steel production, shipbuilding, and railway construction. Japan's first modern cotton spinning factories were established by the government in 1878, then expanded a year later. This enterprise failed for a number of reasons, however. First, production was not large enough to benefit from economies of scale. Second, Japan did not have enough trained engineers to maintain the machinery and design new equipment. Third, the location selected for the water-powered plant did not supply enough water in the dry months to keep operating.

The lessons learned from those failures were enough to make the next effort, the privately-owned Osaka Spinning Company founded in 1882, successful. The firm trained a cadre of engineers and machinery operators before starting production; they imported a better grade of raw cotton; and, they substituted steam engines for water power. Eventually, this firm operated a plant with 10,000 cotton spinning spindles. Other private ventures followed, so that by 1897 Japan's exports of cotton thread exceeded imports for the first time. Japan captured much of the Asian market that had been dominated by British textile firms.

Japan's modern iron and steel industry grew out of a need to provide cannon for the defense of the port of Nagasaki. The Saga daimyo, responsible for that defense, established the country's first modern reverberatory furnace in 1850 to manufacture weapons, following plans and instructions contained in a Dutch book. Prior to the Meiji Restoration, Dutch traders working out of a compound at Nagasaki had long been the only source of information about the West, and books in Dutch were the daimyos' only source of technological information. The Saga clan, together with the Satsuma and Mito daimyos, also engaged in modern shipbuilding, competing against the Tokugawa shipyard. After the opening of the country to Western influence, European engineers and craftsmen were hired to construct modern iron and steel furnaces, rolling mills, and shipyards, and to train Japanese workmen in their operation.

GROWTH IN EXPORT/IMPORT TRADE

Overall, agricultural goods made up the largest single share of Japan's exports at the time of the Restoration, although their importance would decline rapidly as industrialization took root. In 1870, agricultural products constituted 38 percent of Japan's exports; in 1890, it had declined to just 11 percent, and by the 1930s, only made up some 3 percent of the total. In 1870, Japan's main exports were tea and silkworm eggs and cocoons.

Rice was not exported until after World War II, when consumption of bread and other wheat products replaced much of the rice that had made up the bulk of the Japanese diet. By 1970, rice consumption had decreased to the point where the government cut the rice growing acreage 7.4 percent in an attempt to deal with the surplus. Japan has long augmented local production of wheat, barley, and soybeans with imports (Minami 1986).

As the nineteenth century was coming to a close, the United States had become Japan's largest trading partner. The value of Japan's annual exports to the United States in 1901 had reached ¥72.3 million, and imports exceeded ¥42.7 million. Exports and imports from 1875 to 1901 for trade with Britain, British India, Germany, and China are listed in Table 9.4.

Table 9.4 Value of Japan's exports and imports for selected countries, 1875–1901 (\$ 000)

Country	1875	1880	1885	1890	1895	1900	1901
Britain							
Exports	2,513.0	2,596.7	2,453.2	5,640.00	7,883.1	11,293.0	11,482.5
Imports	14,689.7	16,626.4	12,775.1	26,619.1	45,172.1	71,628.2	50,575.8
Br. India							
Exports	—	123.4	493.2	950.8	4,359.2	8,704.3	9,657.6
Imports	—	1,591.0	3,398.7	8,910.9	12,001.8	23,516.3	42,449.9
Germany							
Exports	19.8	34.9	470.3	846.9	3,340.0	3,555.6	5,251.1
Imports	813.5	1,745.1	1,672.0	6,856.9	12,233.2	29,199.7	28,320.1
USA							
Exports	6,890.1	12,041.2	15,639.0	19,821.4	54,029.0	52,516.4	72,309.4
Imports	1,920.3	2,669.3	2,751.3	6,874.5	9,276.4	62,761.2	42,769.4
China							
Exports	4,186.6	6,320.6	8,242.8	5,223.5	9,135.1	31,876.6	42,925.6
Imports	8,200.4	5,846.2	6,342.2	8,849.7	22,985.1	29,960.7	27,256.9

Source: Yamawaki 1903, 468–472; data from Ministry of Agriculture and Industry.

CONCLUSION

Japan had a long history of adopting the best of what China, Europe, and the United States had to offer. It is also important to recall that in every case, the adoptions were altered to fit the unique characteristics and needs of Japan and the Japanese people. The same type of modified “Japanization” took place with the institutions adopted by the Meiji reformers. Their goal was very rapid modernization; eclectic adoption was one way to go about accomplishing that goal.

From roughly 1870 to the end of the nineteenth century, Japan and the Japanese people were thrust forcibly into the modern age. From a backward, isolated agricultural nation that Commodore Matthew C. Perry forced open in the 1850s, a dedicated group of civil servants and entrepreneurs created a modern industrial power. Their success may be seen in the ability of the newly established military to win a war against a much larger China, and to thoroughly destroy a Russian fleet in a short war against Russia.

More important, the country established a modern manufacturing economy, using the latest and best technology available in the world at the time. This enabled it to surpass many European nations in industrial production, and, by the turn of the century, to become a serious rival to Great Britain and Germany in many manufacturing sectors.

During World War I, Japan was able to avoid any fighting or costly war production. At the close of that war, however, Japan was awarded trusteeship of Germany’s far-flung Pacific colonies. Japan entered the 1930s committed to a policy of further expansion throughout the Pacific region. This policy would lead it to war for control of China’s raw material resources, and eventually into headlong conflict with the United States and Britain for dominance in Asia.

The Meiji emperor died in 1912, making way for the ascension to the throne of crown prince Taisho. Emperor Taisho reigned until 1926, when his son Hirohito came to power. This was the start of the Showa period. Under the Showa emperor, Japan would embark on a period of military adventures and colonial expansion that would end with total defeat after a brutal war against the western Allies—only to see Japan rise from that defeat to build the second strongest economy in the world.

DISCUSSION QUESTIONS

1. Describe how the Meiji government modernized all of Japan’s basic institutions.

2. How did the Meiji government use entrepreneurs to kick-start the economy?
3. Why did the Meiji government decide to use public funds instead of private investors to modernize its transportation network?
4. What are the zaibatsu? How did they affect industry and commerce in Japan?
5. Name and describe the three types of business organizations that emerged during the early years of the Meiji period.

CHAPTER 10



TWENTIETH-CENTURY JAPANESE COMMERCE AND INDUSTRY

The modern Japanese business system evolved through three periods of expansion and retraction in the twentieth century. The first period began in 1896 after Japan's success in the Sino-Japanese War of 1894–95. A large portion of the \$75 million Chinese war indemnity was used by the Japanese government to set up model industrial plants and to provide entrepreneurs in selected strategic industries with subsidies. Industries that benefited most from this early investment included metallurgy, electrical equipment and electrical wire manufacturing, and machinery and machine tool production. With her current account in balance, Japan went on the gold standard in 1897, further stabilizing the modern financial system. This period came to a close in 1920 when, after the end of World War I, foreign producers returned to peacetime economies, resulting in a global glut of consumer and industrial goods. This glut drove down prices and profits in Japan as well as elsewhere, forcing many firms to merge or fail.

The second period in the twentieth-century development of the modern Japanese business system, 1920–1945, coincides with the country's shift to an expansionist colonial and militaristic political policy that led it into war against China in the late 1930s and into war with Great Britain and the United States in the 1940s.

Over the more than two decades of war and expansion, the Japanese business system underwent an extensive rationalization and cartelization process. The business system came to be dominated by a few very large, family-owned, diversified holding companies, the *zai-batsu*. These giant firms controlled production in most of the basic

industries of Japan: mining, heavy construction, shipbuilding, iron and steel production, and banking. They also established a major presence in many other modern industries. These depended upon an extensive network of semi-independent subcontracting firms, with the entire network held together by the holding company, or through a system of ownership of each others' shares. This period saw the Japanese government fall into the hands of ultra-traditionalists and the military, which used the protection of markets and raw material sources as justification for leading the country into the devastating Second World War. Preparation for war in the 1930s resulted in a rapid increase in Japan's GDP.

The third period, often referred to as Japan's second economic miracle, began after 1952 when the postwar occupation ended. Characterized by rates of economic growth much higher than any country in the West with the possible exception of Germany, Japan's economy was sparked by purchases of war materials for the United Nations' peace action in South Korea. This growth was endorsed by the U.S. occupying force, which saw an economically strong and stable Japan as an effective bulwark against communist expansion in Asia. Japanese manufacturers got their first push with Korean War purchases, followed by unprecedented access to the huge U.S. market.

By the 1970s, Japanese textiles, consumer electrical goods and entertainment equipment, motorcycles and automobiles, and eventually machinery and machine tools were competing successfully with the best of American and European manufacturers. Over the next 20 to 30 years, the Japanese business system enjoyed phenomenal growth. By the 1980s, Japan's economic miracle had produced huge trade surpluses with most of the developed world. Japan entered the 1980s with the second or third most powerful economy in the world, and Japanese-style management was being exported along with its high-quality industrial goods.

Japan may have entered into a fourth period during the late 1980s, when its bubble economy collapsed. This forced many firms to rethink their lifetime employment policies, Japanese banks to curtail their aggressive lending practices, and the Japanese government to begin to rethink its expansionist industrial policies (Wood 1994). In 2015, Japan had still not completely regained its high-growth status.

JAPANESE COMMERCE AND INDUSTRY BEFORE 1920

The evolution of Japan's commerce and industry was occurring simultaneously with the formation of the country's political system. Basic

rights of the people were established with the emperor's agreement in 1889 to a formal constitution. Democracy, tempered by retention of controls in the hands of the emperor and the aristocracy, had finally come to Japan. The right to vote was given to all males who paid a minimum income tax; this was something like 1 or 2 percent of the total population. Universal male suffrage was granted in 1925. One of the most important clauses of the constitution formally established the emperor's personage as sacred, and anything said to be done in the name of the emperor could not be discussed or rejected. The constitution also removed the Japanese army from civilian control, granting it independent status.

The following year, 1890, saw the establishment of a two-house legislature, or Diet, elected in the country's first general election. The lower house, representing each prefecture, was directly elected. The upper house was similar to the British House of Lords, with membership drawn from a newly resurrected peerage system. Transition to democracy was not without its difficulties, however. A series of riots that broke out during the run-up to the 1882 election was ruthlessly put down by government troops and resulted in the loss of many lives.

Internationally, 1899 was a watershed year in the development of the Japanese business system. In that year Britain became the first foreign power to renegotiate the odious trade treaties that had been forced upon Japan in the 1860s and 1870s. Other countries soon followed Britain's lead, so that by 1910 Japan had regained complete control over its own tariffs and customs systems. Japan abolished all taxes on its exports and installed import taxes ranging from 5 to 40 percent. The average tax on imports in 1911 was 20 percent (Hirschmeier and Yui 1975).

The Japanese business system entered the twentieth century with a pluralistic structure that was similar to that which had characterized the system since the beginning of the country's modern industrialization in the 1880s. Business was still divided into two broad segments: the large, modern firms in such industries such as iron and steel, and the smaller, traditional industries such as textiles and agricultural product processing, distribution, and retailing. Agriculture, upon which the majority of the economy had been based prior to the Meiji Restoration, lagged far behind the industrial sector in terms of productivity growth and income generation.

Throughout World War I, Japanese industries enjoyed an unprecedented boom period. Global demand soared as the more mature European economies placed embargoes on exports and geared up for wartime production. At home, two wars fought against powerful

neighbors, China in 1894–95 and Russia in 1904–5, had resulted in the rapid expansion of Japan's heavy industries, so that they were prepared to take up the slack when the warring European countries ceased to export. The Yawata Steel Works, which began production in 1901, was typical of the industries benefiting from the war. Between 1914 and 1919, Yawata met the demand for armaments to fight the country's own wars. Japan's first modern naval ships had been produced by British shipyards, but by 1906 domestic yards were building modern naval vessels as large and as powerful as those made anywhere in the world, using high-grade steel from the Yawata Steel Works. Many of the European ships lost to German submarine warfare were replaced by vessels built in Japanese yards using Japanese-produced steel.

Four-part Structural Evolution

By 1915, the Japanese business system had evolved into a four-part structure. At the top were a small number of very large and powerful family owned firms, the *zaibatsu*. After these came a group of joint-stock companies that operated in many of the second-generation industries, such as electrical machinery and chemicals. Often, these followed management practices that were similar to the *zaibatsu*, including lifetime employment for skilled workers. The third group was made up of a great many sole proprietorships. The owner-managers of these firms were typically involved to some degree with the old traditional industries, such as the building trades and textiles. Another, growing group of sole proprietorships were established by inventor-entrepreneurs in the higher technology industries, such as equipment and machinery, cosmetics, publishing, pharmaceuticals, and the like. Most retailing establishments were also sole proprietorships.

A fourth group consisted of rapidly growing firms in the second wave of industrialization. Called the *new zaibatsu*, they tended to be firms requiring large amounts of capital, including chemicals, electrical and transportation equipment, arms and armaments. These grew rapidly after 1900 and, encouraged by the government, underwent extensive mergers and rationalizations after the economic declines in 1920s and 1930s. By and large, these new *zaibatsu* were established with investment capital, either public or private or both, rather than with family money, and were managed almost exclusively by professional managers rather than family members. During the 1930s, portions of this fourth group and the military had adopted similar aims and functioned very closely together.

Two years after the Meiji period came to a close, World War I began in Europe. Japan, a member of an Anglo-Japanese Alliance, declared war on Germany and her allies. Japan immediately took over Germany's interests in China, while German possessions in the central Pacific, including the Mariana, Marshall, and Caroline Islands, became Japanese protectorates (Spector 1985). As European industrial competitors pulled out of Asian markets, redirecting their economies toward war production, Japanese businesses moved in, initiating a tremendous export boom. When the armistice was signed in 1919, Japan's economy had become thoroughly industrialized, the country had acquired a colonial empire, and the Japanese military had proven itself capable of fighting and winning wars against such giants as China and Russia. Japan's military and industrial leaders felt able to take on the world.

JAPANESE COMMERCE AND INDUSTRY AFTER 1920

During the five years of World War I, Japan's industrial production increased five-fold. From a large deficit in foreign trade built up during the first decades of its industrialization, the nation developed a large trade surplus. Almost all businesses benefited from the boom, but shipbuilding showed the greatest expansion. At the beginning of the century, Japanese shipyards produced little more than 10,000 tons a year. In 1919, 600,000 tons of shipping was constructed. Immediately after 1919, shipbuilding dropped to less than 50,000 tons, and never exceeded 150,000 tons until the 1930s.

The boom-to-bust experiences of the shipbuilding industry were mirrored by the bulk of Japanese business after 1920. Only a few of the second-generation industries, such as chemicals and electrical equipment, along with retail trade, continued to grow. Exports plummeted during the early postwar period. Agriculture, while benefiting from new artificial fertilizers and early mechanization, suffered from a precipitous drop in commodity prices. Since more than 50 percent of the total workforce was still engaged in agricultural production, this drop in farm income caused untold misery across Japan's rural areas. On top of this economic disruption, the Tokyo-Yokohama area suffered a devastating earthquake in 1923; nearly 150,000 people died from the quake or the fires that followed it (Kosaka 1992; Dower 1992).

After the 1921 collapse many industries returned to the cartel-like systems they had abandoned during the heady days of the war boom. With European and American competitors returning to Asian markets, the smaller Japanese firms felt they could not compete without

some sort of protection. Cartels were reestablished in the spinning, paper, grain milling, sugar refining, petroleum, fertilizer, mining, railway equipment, and shipping industries. The Japanese government supported these rationalizations and, in fact, forced cartelization in some industries after 1925 when it passed the *Law on Organization of Important Industries*. By 1932, all major industrial sectors were cartelized. Heavy industry was organized into 32 cartels; the chemical industry formed 31; textiles, 11; food processing, 8; finance, 18; and seven in other, less important sectors (Hirschmeier and Yui 1975).

Growth of Japan's Trading Companies

The interwar period in Japan also saw a tremendous rise in the power and influence of Japan's great trading companies. Japan's rapid industrialization had not included total modernization of its marketing and distribution system. Manufacturers concentrated on production and on maintaining supplies of resources. They called on the long-established international trading companies—some tracing their history back to the sixteenth century—to handle the distribution of their final products, as well as to locate and manage acquisition of raw materials. The trading companies soon handled sales and distribution of products in the home market as well as internationally. These companies became so successful that, early in the twentieth century, some of the larger zaibatsu began setting up their own trading organizations, handling not only their own products, but those produced by other manufacturers as well. The Mitsubishi Company's trading operation was established in 1918; Sumitomo's in 1919.

The 1920s were particularly hard on certain elements of the Japanese financial system. This system was organized into three sections or components: insurance companies, a core of very large "city" banks (actually, national banks) that were typically closely tied to specific industries or zaibatsu, and a large number of smaller commercial and savings banks. The government, with its extensive postal savings system similar to Great Britain's, also played a significant role in the financial system.

Insurance firms survived the economic bust relatively unscathed, but Japan's banking system was severely damaged. Commercial banks had been forbidden to make long-term loans to industries. Many were the principal or captive lender to a specific business; they got around this restriction by making short-term loans and continually rolling them over into new loans. Most of Japan's largest industries obtained the bulk of their capital either from within their zaibatsu

system or from their own banks, rather than from the sale of securities on the open market. To secure their lending capital, the banks were forced to borrow for longer periods. During the industrial boom of the 1914–1919 war they borrowed huge sums at high interest rates to finance their borrowers' expansion. The interest rates on the amounts they loaned plummeted, while the rates on the funds they had borrowed remained high. The result was a rash of bank closings over the decade of the 1920s. By 1927, the government felt it had to step in to avoid complete collapse of the system. Many smaller banks were forcibly merged with larger ones. In the end, this served to strengthen the already powerful zaibatsu banks and cement the close relationships between large industries, banks, and the government. By the 1930s, four of Japan's five largest banks were zaibatsu banks.

In many ways, Japan's large family-owned zaibatsu were the most distinctive characteristic of the Japanese business system until after 1945. Consisting of 10 to 20 interlocking business groups, depending on how and when they were measured, the zaibatsu were associations of business ventures dominated by a single family. The largest zaibatsu had begun as early as the seventeenth century as trading or commercial houses formed to dispose of the annual rice crop, or as merchants, acquiring and distributing the many necessities of life to farmers, samurai, and daimyo houses. Initially, their operations were controlled by the house of the first son, the patriarch of the clan, but as they grew they came to rely more and more on professional managers who, under the Confucian ethic, gave their complete, life-long loyalty to the house enterprise (Lockwood 1979).

New Organizational Structures

As Japanese firms grew in size and took on additional operations after the Meiji Restoration, new organizational structures were necessary to effectively and efficiently manage the organizations' far-flung enterprises. Passage of the Company Law in 1893 made the necessary changes possible. The law established three legal forms of business enterprises: the joint-stock limited liability company, the limited partnership, and the unlimited partnership. The zaibatsu reorganized so that by the 1920s, most had become central holding companies controlling a set of joint-stock operating companies. Most if not all of the stock in the holding companies remained in the hands of the controlling family. Holding company ownership of stock in operating companies ranged from minority positions of less than 20 percent to total ownership.

Central to the functioning of the zaibatsu were the organizations' banks. By the sheer size of the conglomerate and because their owners did not require that they make a profit, these banks were able to weather the collapse of the Japanese economy after 1920 and the even deeper plunge of the Great Depression in the early 1930s. During the 1920s, many nonzaibatsu banks failed, taking down with them the small to middle-sized enterprises that depended on them. In 1920, Japan had 2,036 banks. By 1930, this number was reduced to only 895, and by the 1940s only 69 banks remained (Lockwood 1979; Minami 1986).

The Great Depression of the early 1930s caused severe economic and social disruption across Japan, just as it did in Europe and the United States. The pace of business consolidations through mergers and government-forced rationalizations accelerated. Thousands of smaller firms were eliminated, while the zaibatsu, through their great size, financial strength, diversification and the practice of subcontracting, were able to adjust.

Continued industrialization and militarization of the productive economy resulted in significant changes in Japan's exports from 1925 to 1935. The large firms emerged from the depression stronger than they had ever been as global recovery began; the textile industry enjoyed particularly rapid growth from 1933 to 1935. In 1925, 70 percent of the value of Japan's exports was textiles, and nearly 50 percent of these were raw silks (Table 10.1). However, by 1935, the value of textiles had declined to 55 percent of the total, while metals, metal products, and machinery exports increased in value from a combined total of 5 percent to 15 percent. The export

Table 10.1 Shares of Japanese exports, 1925–1935

Commodity	1925 (% of total)	1935 (% of total)
Textiles	70	51
Chemicals	6	10
Metal and metal products	3	8
Machinery	2	7
Miscellaneous	4	7
Others	15	17
Totals	100	100

Source: Hatase 2002.

of raw silk dropped to 25 percent. The greatest change occurred in the exports of other textile products from 16 percent in 1925 to 40 percent of the total in 1935; these included rayon yarns and fabrics and woolens.

Financial power became concentrated in the hands of a few banks, financial institutions, and zaibatsu. Most of these had long maintained strong ties with the government. When a tide of militarism swept into the Japanese government, the zaibatsu, with control of most of the nation's heavy industries, were in position to benefit greatly from government purchases of arms and armaments. The managers of these firms supported the aims of the increasingly powerful army and the country's expansionist policies. This would lead to the forced dissolution of the zaibatsu after World War II, as occupation administrators placed much of the blame for Japan's military adventures on the backs of these firms' managers (Hadley 1974).

As the worst of the depression eased and the economy renewed its growth, the zaibatsu dominated the Japanese business system. Their control of the country's financial, industrial, and trading sectors was in stark contrast to a much weaker but still widespread small-scale pluralistic production sector, which also included agriculture (Lockwood 1979).

A wide disparity had existed in wages and working conditions in Japan throughout its industrialization and military power-building. Growing social tensions were shunted aside as the country expanded its overseas military activities. Japan had acquired Formosa (Taiwan) in 1895 as part of the Chinese war indemnity and officially annexed Korea in 1910. She had joined the Western powers in China putting down the Boxer Rebellion in 1900, and expanded that presence thereafter. Japan established a puppet state in Manchuria in 1932, renaming it *Manchukuo*, effectively taking control of this resource-rich Chinese territory. Japanese firms established mines and factories in all of these annexed territories. Pressure from the League of Nations for Japan's withdrawal from China resulted in Japan's resignation from the league. By 1936, extreme nationalist factions had taken control of the government; the economy was put on a semi-wartime footing, and raw material allocations were strictly rationed by government controls. A year later, Japan and China were at war. Japan's war aims were to gain control of China's enormous natural resources. As a result, government bureaucrats and industry representatives moved into China with the Japanese army.

JAPAN IN THE 1930S AND EARLY 1940S

The period from 1936 to 1945 saw Japan's business system forced to devote itself almost exclusively to the production of goods for the military. Strategic industries, such as shipbuilding and iron and steel production, joined the railways as nationalized enterprises. The military government took on almost complete control of productive capacity. In 1940, Japanese troops, now allied with Germany, moved into French Southeast Asian territories with permission from the French Vichy government. A year later, Japanese war planes attacked the U.S. naval base at Pearl Harbor, the Philippine Islands, the British at Singapore and Hong Kong, and oil-rich Dutch territories in Indonesia. War with the United States and the British empire had begun. At the peak of its military successes, the Japanese empire controlled nearly all of Southeast Asia and much of China, and her armed forces were poised to invade India and Australia.

When the war ended in August 1945, almost all of Japan's productive infrastructure had been destroyed, her merchant fleet sunk, and the economy forced to absorb some six million returning soldiers and civilians, many of whom had been gone from the Japanese home islands for more than 10 years. The occupying forces were particularly interested in ensuring that Japan not be able to wage aggressive war again, and began a series of revolutionary changes in the economic and political structure of the nation. They deemed the zaibatsu's power to be excessive, and blamed them for much of the army's expansionist activities. Controlling families were forced out of the holding companies and zaibatsu operating companies. The conglomerates were then broken up into smaller, independent operations. U.S.-type antitrust laws were enacted to prevent future conglomerations, cartels, and monopolies. Holding companies were forbidden.

The Japanese business system was in an extreme state of flux until outbreak of the Korean War, which, with U.S. efforts to control the spread of communism, resulted in an easing of restrictions on Japanese businesses. A surge of orders followed for goods and services for supporting UN actions on the Korean peninsula. In addition to the billions spent by the UN for war materials, the United States continued to provide more billions in foreign aid to Japan. These financed almost all of Japan's early postwar reconstruction and recovery (Whitehall 1991).

Japan's postwar economic miracle began with America's involvement in the Korean War. The post-World War II economic rate of growth of the Japanese economy increased rapidly in the 1950s, and

was maintained at more than 10 percent a year over most of that decade and the next. By the late 1970s, Japan had built the third largest economy in the world.

A Familiar Pattern

The business system that emerged in Japan after 1952 followed the dual structure that had existed since the beginning of the century. Most of the country's businesses are very small; more than 67 percent of all private firms employ between one and four workers and more than 85 percent of Japan's 856,896 manufacturers employ fewer than 20 workers. Less than two-tenths of 1 percent employ more than 300 workers. In between the many very small and few very large businesses are the middle-sized, subcontracting-type firms. The great majority of these are members of some group of businesses led either by a bank or a large manufacturer, such as Toyota, Honda, Nissan, Matsushita, and Canon. Together, the small and mid-sized firms produce more than half of the products made in Japan. The services sector remains largely underdeveloped in Japan, or continues to operate under cumbersome, archaic conditions, as with the nation's complex distribution system.

Some of the larger firms are reincarnations of the old *zaibatsu*, including Mitsubishi, Mitsui, and Sumitomo, which were allowed to reform after the occupation ended in 1952. Three other large groups are centered on Japan's biggest banks: Fuji, Dai Ichi Kangyo, and Sanwa. Together, these six largest conglomerates make up a major portion of Japan's total assets. These clusters—the *keiretsu*—of industrial, commercial, and financial businesses are characteristic of the Japanese business model. Lincoln and Gerlach (2004, 15) suggest the following definition for *keiretsu*: “clusters of independently managed firms maintaining close and stable business ties, cemented by governance mechanisms such as president's councils, partial cross-ownership, and interlocking directories.” Each group had 20 or more major satellite firms in its network, with as many as 200 or more smaller, less important member firms attached. The enterprise groups were once considered to be as important to the Japanese business system as were the *zaibatsu* during the first half of the century (Dower 1992). However, the dominance of the model has faded as globalization, deregulation, and economic stagnation have forced major changes in the Japanese business system. In 1991, the “Big Six” that dominated the Japanese economy in the postwar period each included from 20 to 46 major member firms; their growth from 1980 to 1993 is shown in Table 10.2.

Table 10.2 The six major Japanese business networks (keiretsu), 1980–1993

Keiretsu	Major firms in 1980	Major firms in 1993
Mitsui group	24	26
Mitsubishi group	28	29
Sumitomo group	21	20
Fuyo group	29	29
Sanwa group	40	44
DKB group	43	46

Source: Lincoln and Gerlach 2004, Fair Trade Commission data.

Importance of Group Identification

Many theories have been put forth to explain the success of the post-war Japanese business system. These range from the social-cultural traits of the Japanese people to a conspiracy of the Japanese government, working with Japanese industry, to dominate the global economy. Neither of these can really explain why the modern Japanese corporation, or *kaisha*, achieved its position of strength in the global marketplace during the short quarter of a century following the end of World War II. Understanding the *kaisha* concept, however, may help to achieve some understanding of Japan's business successes (Abegglen and Stalk 1985).

In Japan, the need for group identification is extremely important. Association with or membership in a particular organization or institution provides much of the basis for self-esteem. Such association or membership excludes others who are not part of the same institution. This is exemplified in the words Japanese workers use when referring to their company: the word *uchi*, which means “my house,” is used to refer to one's place of work or organization, whereas *otaku* (“your house”) refers to another person's place of employment.

In this manner, the word *kaisha* is used to denote a Japanese corporation. In its broader sense it means “my company” or “our company.” However, it means more than this. It connotes the community to which one belongs and that is primary in one's life. It is not synonymous with “corporation” as it is commonly used in English. *Kaisha* is a fundamental social group in Japanese society. Thus, the company does not belong to its shareholders as it does in the United States or Great Britain, but to its employees. The company satisfies the total social existence of a person and, in turn, has authority over

all aspects of the employee's life (Nakome 1974). Changes in the system to increase shareholders' rights have been underway in Japan since 2000.

The practice of considering one's place of employment as personal and as family has roots that reach back long before the Meiji Restoration. When merchants first emerged during the Tokugawa era merchant firms were closely held family operations. The business was more a social group than a simple family, for it included persons who were not related. Together, the group was referred to as an *ie*, or "house." *House* in this context meant both the physical structure in which the business was located and all the people associated with it. The house consisted of a male head of household, his wife, their oldest son and his wife, any unmarried younger sons and daughters. Upon marrying, younger sons typically left the house to set up a branch operation or joined the house of his wife. Husbands of daughters were often adopted into the family (Clark 1979).

The Tokugawa merchant's house was his place of business. Within the house, the entire family and the business were united as one. The head of the house lived on the premises and controlled all the assets of the business as the property of the house. The business's liabilities were the responsibility of all members of the house. As the business grew and more help was needed for its expanding operations, husbands of daughters were often adopted into the family, as were trusted, nonrelated clerks.

This system only developed among merchant establishments, whose activities were restricted to trading, warehousing, and distribution, and banking services. As the lowest of the four classes in the social ranking system that began with samurai, then included farmers, followed by craftsmen, merchants were expressly forbidden to become manufacturers; that activity was reserved for the craftsman class. Near the end of the Tokugawa period, this system was breaking down, and many merchants were making their own merchandise. A number of samurai were also setting up or helping to finance manufacturing enterprises.

The Modern Japanese Kaisha

The modern Japanese kaisha is considered an evolutionary product of the old feudal village (*mura*) community system of loyalties. All employees belong to the company in much the same way ancient Japanese belonged to their village community and later family workers belonged to one house. It exists as a mutual relationship, and is

expressed in the paternalistic way companies look after all aspects of their employees' welfare. It has been called *enlightened feudalism* (Woods 1995, 24).

When Japan's industrialization speeded up after 1900, many growing manufacturing firms found themselves facing severe labor shortages. There was a particularly critical shortage of workers with skills in modern manufacturing and engineering activities. As farm workers left their villages and their families to find employment in Japan's new factories, the old Confucian-influenced, all-embracing community-family loyalty structure could no longer meet the needs of the new society. The largest of the industrial firms adopted paternalistic policies to keep their workers, including life-long employment, company housing, commissaries, and extensive group recreational and learning opportunities. Workers transferred the loyalties they had held toward their families, clans, and communities to the company. In this way, the deep-seated drive for group consciousness was satisfied.

Although only about 40 percent or less of the Japanese workforce was involved in the large-firm, paternalistic system, it remains one of the most characteristic features of the Japanese business system. Regardless of their position in the organization, white collar or blue collar, manager or janitor, Japanese workers tend to hold a personalized relationship to their corporate groups. This may spring from the Confucian concept of striving for harmony in social relationships, personal loyalty, and paternalistic concern for all members of one's "family."

In addition to the importance of group consciousness, other components of the Japanese national character considered to have contributed much to the success of Japanese businesses include: (1) the homogeneity of the society, (2) a nonconfrontational climate of discussion and decision making within businesses, (3) deep personal loyalty to the organization and team, (4) willingness to work hard for long hours to achieve a communal goal, and (5) a national sense of purpose. These are said to have generated helpful government bureaucracies and paternalistic corporate cultures. Japanese employees are said to have a greater commitment to their jobs and, therefore, a considerably higher level of productivity (Lincoln and Kalleberg 1992).

The Role of MITI

The success of the *kaisha* is directly traceable to close cooperation between the Japanese government, corporations, and groups closely associated with businesses, such as trade associations and chambers of commerce, banks, labor unions, and subcontractors. The participants

in this combined effort are said to be managed by the Ministry of International Trade and Industry (MITI).

MITI targets specific segments of industry and subsidizes the efforts of companies to gain dominance in these industries with grants, tax relief, tariff protection, and market sharing agreements. The group then presses into global markets until all effective opposition has been destroyed. This theory holds that after the war and occupation, the Japanese first targeted the textile industry, then the shipbuilding and steel industries, then transportation and consumer electronics. The microchip, computer, aerospace and pharmaceutical sectors were among the next to receive an attack on industry by the agency, which in 2001 was under a new name, the Ministry of Economy, Trade and Industry (METI). It must also be said that as Japan's economy has slowed since the late 1980s, and as American and European firms have become better at meeting competition from Japanese firms, the MITI-led conspiracy theory has lost much of its former attraction.

There is some truth in these explanations, but they do not go far enough to explain why Japanese firms have been so successful (Abegglen and Stalk 1985). MITI has, indeed, been able to target specific industries for special guidance and support. But overall, MITI's policies and the national character theories fail because they do not address the realities of international business. It is companies, not societies or nations, that compete for markets in today's world. Companies, not governments, conduct foreign trade. And companies, not governments, determine whether a society prospers or fails in the global marketplace. The breakup of the former Soviet Union is a good example of what happens when countries try to replace market mechanisms with commands. In the long run, it hasn't worked yet.

Japan succeeded because the Japanese business system was led by a group of particularly talented and dedicated managers at a time when a particular set of circumstances existed to permit the combination of national character and government policies to achieve success beyond the dreams of anyone involved. These managers adopted a competitive focus that was available to all companies in all countries; nothing Japan did was exclusively Japanese. Many of the actions taken were the same actions that first saw the British, German, and then the American business systems to grow powerful in the nineteenth century.

POSTWAR BUSINESS CHANGES

The actions of postwar Japanese managers included four cultural concepts or tendencies. First, Japanese managers are said to have a bias

toward growth that includes taking a long-term approach to return on investments. Second, the entire export sector maintains a preoccupation with the actions of competitors; this results in pressures on the government to erect barriers to entry into the domestic market for foreign competition while at the same time doing all it could to capture export markets.

A third focus is the creation and ruthless exploitation of competitive advantage. This is established by maintaining artificially high prices in the domestic market to offset low export prices, a preoccupation with quality, and by cartel-like industry agreements on market share and exports targets. This has also resulted in many charges of dumping levied against Japanese manufacturers selling abroad at prices that are obviously below the cost of production. The final factor includes close cooperation between the government and private industry on policies that are consistent with the preceding three factors.

The growth bias maintained by Japanese corporations is linked to a nearly overwhelming drive to survive. Japan's *kaisha* have seen the fate of companies that failed to grow faster than their competitors. For example, at one time nearly 50 firms produced motorcycles in postwar Japan. Now, two or three dominate the market. In the late 1950s Honda increased its production 50 percent faster than demand required. Unit production costs dropped dramatically with economies of scale. The five-year goal of the company at the time was to replace Tohatsu as Japan's leading manufacturer of motorcycles. The motorcycle manufacturers who were unwilling to make a similar investment saw their market lead soon taken over by Honda. Tohatsu declared bankruptcy not long afterward and soon 45 other Japanese companies quit making motorcycles.

Another example of a Japanese corporations' willingness to take a long-term approach to investment rather than insisting on immediate returns, is the experience of the Komatsu Electronics Materials (KEM) Company—a subsidiary of the large prewar *zaibatsu* Komatsu, Ltd. Komatsu became a major competitor of the U.S. Caterpillar Corporation in the global heavy construction equipment market. KEM is also an example of the way many Japanese businesses are owned by other businesses; 90 percent of KEM is owned by Komatsu, while 10 percent is owned by Tokuyama, a Japanese chemical company that sells to Komatsu. In 1990, at a low period in the sales of computers, KEM acquired Advanced Silicon Materials, a U.S. company founded in 1984 by Union Carbide Corporation. Advanced Silicon produces pure silicon, the foundation material used in all computer chips. In 1990, Union Carbide believed that growth in demand for computer

chips would be slower than what they felt would produce a rate of return satisfactory to their stockholders, so they sold the company for something like 30 cents on the dollar. Komatsu was willing to wait. They believed that growth would skyrocket. KEM was a major customer of Union Carbide, even closing down their own factory in Japan to be supplied by the Union Carbide plant.

A year or so after the sale of Advanced Silicon Materials to Komatsu, computer sales took off. The demand for KEM's product grew by 35 percent a year for three years in a row, and at 18 percent a year for the next two years. KEM planned to double production and build another plant to produce four times the amount in another US location as well. More than 60 percent of the KEM plant's production was sold to buyers in Europe and Asia. Demand permitted KEM to raise prices; quantity production has lowered costs.

This drive to survive is also tied to standards and values of the Japanese society. Wholesale layoffs by a company in response to weakening demand for a product are a sign of management failure and a loss of prestige. The practice of life-long employment affects some 40 percent of the Japanese workforce, but indirectly influences the fate of many others. It is management's responsibility to increase demand or find another product for which the capacity of the organization can be gainfully used.

For example, the camera company Canon responded to weakening world demand for cameras by diversifying into printers, computers, word processors, facsimile machines, copiers, and semiconductor manufacturing equipment. Today, cameras represent less than one-third of Canon's total sales. The Matsushita Company, known for its consumer electronics and entertainment products, has a business plan that looks ahead, 200 years into the future. In these companies and the many others like them, management decisions and planning all focus on what can be done to produce growth. Sony has moved from a producer of entertainment hardware into movie production and music publishing.

To the *kaisha*, the risk of falling behind a major competitor is considered to be a risk with greater impact than a drop in profits. To fall behind means that future profit will never materialize. In this light, the *kaisha*'s preoccupation with competitors has two objectives. The first is to be better, but never behind. The second is: if one cannot be better, be different. "Being better" means producing better products; this is manifested in the Japanese corporations' postwar compulsion with quality and continuous improvement. "Being different" means finding a niche that is out of the mainstream of competition; this

is exemplified in the high level of investments in R&D by Japanese corporations.

The third management focus is on the creation and exploitation of competitive advantage. Initially, this meant taking advantage of Japan's low-cost manufacturing and maximum use of labor. Today, however, this has shifted to include greater product-line variety—a concept that has gone to the extreme in some instances—and continued emphasis on product quality and technological innovation. These strategic advantages, used with market targeting, are behind the reputation for the Japanese business system's ruthless attack on foreign competition in specific industries. Of course, there is no denying MITI's direct and powerful influence in helping to establish and maintain the country's industrial policy.

Importance of Linkages

A key feature of the Japanese business system has been the tendency of firms of all sizes to be linked together in a cohesive networked group: the keiretsu. The firms in a keiretsu have typically been tied together through a major bank, with all firms depending on that bank for operating and investment capital.

There are three main types of keiretsu. One, the horizontal or intermarket type is a group centered on a large industrial company, with many different unrelated firms as members of the group. This type is also known as an "enterprise group." Some of the firms in the enterprise groups are also members of a second type, the vertical supply keiretsu. This type is like a pyramid of large manufacturers, their suppliers, and their suppliers' suppliers. The large Japanese automobile firms are examples of this type. A third type, the distribution keiretsu, is a descendant of the old merchant or trading house for family business. These are semi-independent subsidiaries, affiliates, or subcontractors who produce more or less exclusively for one large retail customer or a larger producer that is the leader of the group. Other types of networks also referred to as keiretsu are retailers with railroad and amusement parks, large firms and spin-offs affiliated with new industries such as information technology, and bank and non-bank financial networks (Lincoln and Gerlach 2004).

These types of business groups have four features in common. First is their shared sense of community. They "belong" to one another and share common goals, ideals, and strategies. A second feature is their hierarchical organization. A single major firm, either a manufacturer or a bank, dominates the group and its strategic thinking. Lesser firms

fall under this central leader and respond to the leader's directives in much the same way a regional daimyo lord dominated his lesser samurai followers. The third common feature is a tendency for the groups to specialize in a particular field of business or industry. In this way, the scope of the firm tends to be narrow and more focused than might be the case in a typical large American or European corporation. The fourth feature is the practice of buying and selling shares in each other's companies as a reflection of their fealty and loyalty to one another.

Much more so than their counterparts in the United States, for example, Japanese corporations depend on retained earnings to fund a large part of their investment. Rather than selling stock or bonds, they tend to borrow for the rest of their needs. Thus, the *kaisha* depend on greater use of debt financing than almost all their foreign competitors. The high rate of personal savings in Japan, running in excess of 25 percent per year, gives financial institutions the wherewithal to meet the *kaishas'* borrowing needs. Government policy further supports this trend; owners of *kaisha* stock are taxed on dividend income but not on capital gains. Hence, the idea of borrowing and investing earnings receives little opposition from Japanese stockholders.

The personnel policies of most Japanese corporations include a real effort to avoid surges in hiring and firing. In addition, Japanese unions tend to be cooperative company or enterprise unions, rather than industry or trade unions. Typically nonconfrontational, unions focus on seniority benefits rather than working conditions or the like. Other policies include cross-functional training and compensation plans with large variable components (bonuses and profit sharing). In times of a recession, these variable components can reduce labor costs 20–30 percent without layoffs.

CONCLUSION

The future of the Japanese business system is not as clear as it seemed to be during the heady days of growth in the 1970s and early 1980s. The engine driving the growth that enabled the country's second economic miracle to occur was exports of high quality manufactured goods. Today, however, many of the countries with which Japanese businesses had a trade surplus are fighting back with restrictions, limitations, and pressures for Japan to reciprocate by opening its market to more foreign competition. In many ways, the Japanese home market remains largely undeveloped. For years, Japanese consumers tended to spend less and save more than consumers in the United States. When they did make purchases, they were often forced to spend more

than they might have had their market been open to outside competitors. Japan's trade surpluses generated political pressure for a greater balance. At the same time, foreign competitors, such as the American automobile industry, have made the changes needed to bring their products up to Japanese quality standards. As we will see in the next chapter, the inattention given to the consumer market in Japan failed to result in the stimulus to the economy needed when exports sales turned flat during the 1990s.

These improvements, together with the strength of the yen and high production costs in Japan, have resulted in loss of market share for Japanese manufacturers or significant declines in profit margins. To continue to grow as it has in the past, Japan is being urged to allow its domestic market to expand. Only growth in domestic demand, coupled of course with retention of already strong overseas markets, will keep Japan focused on its path to a position as the most powerful economy of the twenty-first century.

During Japan's strongest decades of growth, there were few who would have argued that such a goal as world leadership by Japan would not come to pass. Some went so far as to predict that Japan would "own" the twenty-first century, much as Britain had "owned" the nineteenth century and the United States "owned" most of the twentieth. However, a number of factors have contributed to making that achievement far less likely than it once seemed. One of these is the rise of the Korean and Chinese business systems, as well as those of other Asian newly developed nations.

Many of the markets once dominated by manufacturers in Japan are now produced by Korean, Taiwanese, Chinese, Malaysian, or other Asian competitors, or by branch facilities of Japanese firms located in those countries (McRae 1995; Horn and Cross 2009). A hollowing out of the Japanese business system has been underway for nearly two decades, as Japanese producers move more and more of their production to lower cost locations overseas. Ironically, the United States has become one of these lower cost countries; a significant portion of Japanese automobiles sold in Japan were manufactured in plants in the United States. Today, however, those same cars sold in Japan might be manufactured or assembled in South America, the United States, or Southeast Asia. China is clearly more likely to take the leading economic position in Asia for the rest of the twenty-first century.

A second factor is the combined weight of a series of actions and behaviors that enabled Japanese business to reach its present high position. These include the close cooperation—the exclusion of all outside firms—among Japanese *kaisha*, exclusion of foreign competitors and

foreign investors from the home market, clamping down of domestic demand, a paternalistic and aggressive economic policy, excessive government rules, regulations, and restrictions, price controls, unwarranted subsidies, and practices permitting corruption between the government and business leaders (Ohmae 1995; Wood 1994).

The third set of factors affecting the Japanese business system is the emergence of strong trading blocs, such as the European Common Market or European Union and the North American Free Trade Agreement, which has set up the common market among the United States, Canada, and Mexico. Other Latin American nations are expected to join NAFTA in the near future. These trading blocs have a common external tariff and low or nonexistent internal tariffs. Competitors outside of the bloc are at an economic disadvantage (Thurow 1992; Drucker 2005).

DISCUSSION QUESTIONS

1. Describe the defining characteristics of the three periods through which the modern Japanese business system emerged.
2. Why was 1899 considered a watershed year in the development of the Japanese business system?
3. By 1915, the Japanese business system had evolved into a four-part structure. What were the defining characteristics of these four components?
4. What is the meaning of cartelization? When did it happen to Japan's manufacturers? Why?
5. Trace the growth and importance of Japan's great trading companies.

CHAPTER 11



JAPAN IN THE TWENTY-FIRST CENTURY

Writing in 1979 at a high point of Japan's postwar economic recovery, Harvard professor Ezra F. Vogel saw Japan's trade, business, government, and education systems as models that the United States and Europe would be well to emulate. The successes of the Japanese business system were not caused as much by protectionist policies of the Japanese government as many competitors complained, but rather to what Vogel saw as a more realistic and efficient way of coping in the modern, highly competitive global economy. Vogel pointed to the particular successes enjoyed by Japan's steel, shipbuilding, automobile, and consumer electronic industries. This became what many analysts considered a preferred "third way," a compromise between the unbridled competition of the United States and the overt control of the Communist Soviet Union. Of course at this writing, the Soviet Union is no more and the Japanese economy has been stagnant for more than twenty years.

In 2006 another professor Vogel, this one Steven K. Vogel of the University of California at Berkeley, summarized in just three sentences the remarkable change that had brought Japan's enviable position to an end:

Japan astounded the world with its economic performance not once, but twice. Japan performed its economic "miracle" from the 1950s through the 1980s, and then it produced an equally stunning descent into crisis in the 1990s. In the former period Japan had the strongest economic performance in the industrialized world; in the latter it had the worst. (2006, 22)

WHAT WENT WRONG?

As Ezra Vogel's book was being published, Japan was enjoying at least a large annual trade surplus with the United States and comparable surpluses with the rest of the industrialized world. Vogel claimed that these surpluses were not due to Japan's protectionist policies but were instead a reflection of American and European industries' own wrong path and their "inferior competitiveness and lack of interest in cultivating exports to Japan." Vogel quoted a Japanese research center official's boast that the United States had by then replaced Japan's prewar colonies as the primary supplier of agricultural goods and raw materials. He then added:

It (has been) comfortable to overlook Japan's continued modernization decades after rebuilding from World War II, its effective organization, its genius in adapting technology, its patience in marketing, its disciplined workforce. It is more comfortable not to ask how its businessmen could remain so zealous in selling goods to America if they were basically selling below cost. It is disquieting to admit that the Japanese have beaten us in economic competition because of their superior planning, organization, and effort. To the extent that our government and business enterprises have begun to study their Japanese counterparts, it is often only to gather information that might prove charges of dumping or antitrust violations. One wonders at our lack of interest in profiting from Japanese successes. (1979, 225–226)

The pinnacle of Japan's economic success was reached in the late 1980s, with the nation's pride in the achievements of the economic miracle expressed in Ishihara's 1989 controversial in America but celebrated in Japan book, *The Japan That Can Say No*. In this book Ishihara urged Japan to stop feeling inferior to the United States, and to say no to U.S. government pressures for opening its market to American imports, to eliminate trade barriers, revise its difficult and complex distribution system, and to take steps to voluntarily reduce its trade surplus with the United States. The book's subtitle, "Why Japan will be the First among Equals," summarized Ishihara's beliefs. Japan's lesser equals would be the United States and Europe, although he added that the recent unification of Germany would possibly generate resentment from such other large European countries as France and Britain, thus weakening Europe's economic hegemony. Of course, Ishihara's book was published before the collapse of the stock and real estate markets.

By the end of the 1980s Japanese postwar business successes had become fully entrenched in much of the industrialized world. Writing in 1992, University of Southern California professor S. Mark Young found that Japanese manufacturing methods had taken a “significant role” in U.S. manufacturing, and that American industries were adopting the practices because they helped establish “Japanese pre-eminence” in such areas as automobile manufacturing and consumer electronics (1992, 677). He identified six core characteristics of the Japanese manufacturing system that were being adopted by businesses in the United States and other industrialized nations:

1. The just in time (JIT) manufacturing system, including cross training and team development
2. *Kaizen*, or continuous improvement of a worker’s knowledge, skills, commitment, and productivity.
3. Total quality control (TQC) or total quality management (TQM), with peer pressure to encourage individual workers to identify and report quality problems and make corrections if necessary. Often referred to as “statistical process control” due to statistical analysis and decision making.
4. JIT purchasing, where parts and components are available only as needed to maintain consistent production; minimal inventory is maintained thus reducing production costs; with responsibility of supply maintenance pushed backed to suppliers.
5. Behavioral control through consensual management and worker teams acting cooperatively; includes avoiding union work rules and job classifications that function as barriers to production flow-through.
6. Development of mathematical cost management and performance measurement (evaluation) systems, involving application of management systems, electronic data control, and statistical analysis, and cost management systems that reflect alignment with corporate strategy, value added and non-value added activities, product life cycle costs, and other success measures.

By 1993, the great boom of the 1970s and 1980s for Japanese business was at an end. Japan’s prime minister, Kiichi Miyazawa, acknowledged on January 29, 1993, that the collapse of Japan’s bubble economy had occurred (Wood 1994). Growth for the rest of the century would remain flat. Miyazawa admitted that changes in the economy were needed. As late as 2014, Japan was still trying to find

the right combination of government and private sector reforms to make needed change happen.

The problems faced by smaller firms in the close, long-term supplier networks were also experienced by larger, core firms in the keiretsu system. From the emergence of the keiretsu in response to U.S. elimination of the family-held zaibatsu, Japanese business had been greatly admired for its good relations between management and labor, its efficient use of resources, long-term relationships with a network of closely aligned suppliers, successful adaptation of the Japanese management system—or J-System—to global manufacturing and distribution locations and differences in consumer needs and wants, and continuous emphasis on innovation. However, the peak in the system's success and popularity was reduced significantly following the collapse of Japan's bubble economy. The failure to recover from 20 years of deflation resulted in the Japanese management model losing much of its former appeal (Aoki 2009; Buckley 2009; Horn and Cross 2009; von Staden 2012).

By the late 1990s and into the new century, things had changed for Japanese managers, so much so that by 2010 the Japanese economy underwent its second decade of stagnation with no end in sight. Internationally, the Japanese networked industrial model lost much of its former glow. The Japanese economy was facing an aging population and an unwillingness to modify the banking and industry structure that had generated the recovery miracle. The Japanese industrial system of lean management meant the loss of institutional memory and inefficient services. Hence, managers and bureaucrats looked to past procedures and policies, particularly in financing and their focus on exports. The small number of managers in the government sector wore similar blinders in their analyses of economic problems.

An example of the difference in management focus that characterizes many twenty-first-century Japanese managers is Toyota's clumsy and very expensive handling of a series of alleged technological faults with several of its automobile models, including the highly popular Camry, Corolla, and the Prius hybrid. With annual sales from its global business reach, Toyota is the largest single firm in Japan. Its global 2014 sales were expected to exceed 10 million vehicles, more than any other car maker. The firm was formed in the Meiji era as the Toyoda Automatic Loom Works. Japan's first major export, silk cloth, was largely woven on looms produced by the Toyoda family. Once a part of the Mitsui group, in the 1970s Toyota broke away to become its own keiretsu. In addition to many other businesses, more than 230

primary parts suppliers and nearly 80 production equipment manufacturers exist in the Toyota pyramid.

The behavior of Toyota's management with this problem exemplifies the failure of the firm to adapt to changes in its environment (Fischer, 2010; *Industrial Engineer* 2010a and 2010b). Toyota's management was looking more like the General Motors management of the 1960s, 1970s, and again in 2013 and 2014, than the hugely successful Toyota of the 1980s and 1990s. The behavior of Toyota's senior managers in wake of the U.S. recall problem was certainly not the same attitude that helped to make Japanese management so admired in the 1960s, 1970s, and early 1980s. Robert Cole and Michael Flynn (2009), quoting from an interview conducted nearly 20 years earlier with Nakatsuka Isao, then-director of the total quality management office at one of the original Toyota firms, compared sales successes for U.S. and Japanese automakers. During the interview Isao explained the Japanese automobile industry's commitment to quality and how that commitment had influenced the sales success the Japanese industry was having in the U.S. market: "[Our] most important objective is to deliver superior products to satisfied customers whose trust we must win . . . if we deliver a product to the customer whose quality creates trouble for them, this will affect their trust in us. If we betray their trust, they will not buy our products for a long time!" Cole and Flynn—writing just before the quality problems Toyota and other Japanese automakers encountered a few months later—added that this breakdown in the commitment to providing high quality products was the main reason for the long decline in sales by U.S. automakers, and why the decline was continuing despite the great quality improvement strides U.S. firms had made over the previous 30 years.

The economy of Japan, like that of Japan's economic rivals Great Britain and Germany, had become mature. The heady days of double-digit growth fueled by seemingly ever-expanding exports, were over. The Japanese business system needed to adjust its industrial structure—that is, do away with such costly paternalistic practices as life-long employment and captive banking financing—and to begin preparing for a future of slower growth and continued rapid technological change. In addition, Japan needed to reduce its dependence upon industrial exports, expand the portion of services in its economic mix, take steps to stimulate domestic growth, and to lower its politically dangerous trade surpluses. For many, the 1990s were the semi-official beginning of end of the postwar boom of the Japanese economy. Something of a consensus has finally been reached on the

point that after 20-plus years of economic stagnation the 1993 collapse of the economy may have been a logical result of the inherent structural and ideological weaknesses of the Japanese business system. Moreover, the depth of the collapse was reinforced by the successes Japan enjoyed from the 1960s through the 1980s (Parker 2011; Cowling and Tomlinson 2011; Black and Morrison 2012; von Staden 2012). Another consensus reached among analysts of the Japanese business system is that a complete picture of the system's success or its failures has not as yet been painted.

Box 11.1 A brief history of Japan's "bubble economy"

The term *bubble economy* refers to a period of rapid expansion and sudden collapse in a nation's economy. The rapid growth is often fueled by excessive speculation in the stock or a commodity market. One of the earliest modern bubble economies occurred in Holland in 1637 when investors, fearing a shortage due to a plant disease, bid up the prices of tulip bulbs. The market for tulip flowers and their bulbs led to the creation of a new occupation: professional tulip traders, men who put buyers and sellers of the plant together.

The next historically significant bubble economy occurred in Great Britain with the rapid run-up of prices for shares in the South Sea Company—formed in anticipation of generating the same phenomenal profits enjoyed by the founders of the British East India Company. When the South Sea bubble burst it led to the collapse of the company and passage of an anti-panic bill in 1720. This bill made it almost impossible to form joint-stock companies in Britain for more than 150 years.

The bubble economy in Japan was caused by the collapse of the extreme run-up in prices on the Japanese stock market for real estate. Prices reached an all-time high in 1989. The losses resulted in deflation of the Japanese economy, very low or negative growth in GDP, and high unemployment as producers and sellers had to cut prices to avoid business failure. Economists now refer to the 10 and more years of stagnation of the Japanese economy as the "lost decades." In 2008, a similar real estate bubble crisis occurred in the United States—this time launching a global rather than a regional recession.

The greatest change in Asian business is currently taking place in China, where the economy is growing at a more rapid rate than most industrialized nations—often at double-digit rates. In 2010 China passed Japan to become the second largest economy in the world. Even so, Japan remains a dominant economic power in Asia and much of the lesser developed world with an economy that is behind only that of the United States and China in size and power. Japan's industrial strengths have enabled it to maintain its power well into the twenty-first century, although its lead is maintained by a declining margin.

The very Japanese management practices, such as total quality management, just-in-time inventory systems, concern for employees' welfare, and strong group-firm business relationships that were once eagerly adopted by businesses around the globe are no longer as new as they were in the 1970s and 1980s. Competitors around the globe adopted them to fit their circumstances and use them to compete with Japanese businesses.

By the second decade of the new century, Japan's lost decade had turned into a lost almost 30 years. The record of Japan's annual growth in GDP reveals the flat or negative growth record over the 30 years from 1981 to 2011 and the steep decline from the middle of the 1970s. The very strengths of the Japanese economy that Ezra Vogel and others admired in the 1970s are now considered to have contributed to the malaise of the economy from the 1990s. Writing in 2006, Steven Vogel, for example, concluded that attempts to reform the Japanese economy after the Asian financial crises of the 1990s were constricted by the government's commitment to historic policies, the legacies of its banking system, the supplier-manufacturer loyalty that included following them in international expansion, and the keiretsu network economy industrial system. This thesis would be endorsed by many analysts in the next decade (e.g., see Cowling and Tomlinson 2011; Black and Morrison 2012; von Staden 2012).

GOVERNMENT AS A PARTNER TO BUSINESS

Japanese manufacturing practices were generally admired and emulated by firms in much of the industrialized world in the last two or three decades of the twentieth century. Japanese managers seemed to have solved many of the problems facing many of their global competitors. Their focus on product quality, competitive pricing, just-in-time manufacturing, and other practices contributed to Japan's phenomenal recovery after World War II. Underneath that success was a partnering with the Japanese government by protecting

the domestic market against foreign competition while subsidizing industry's expanding exports of high value added industrial products. The close relationship between businesses and the government was a reflection of the postwar corporate culture in Japan, and particularly important in the dominant network business system, the keiretsu. Understanding of the keiretsu system is best achieved by looking at it as an "intricate web of relationships that links banks, manufacturers, suppliers, and distributors with the Japanese government" (Debnath and Tokuda (2013, 51).

The Japanese government contributed significantly to the early success of the postwar economy, as well as the lingering stagnation of the economy after the Asian economic crises. From the early days of the recovery the government's economic policy focused on encouraging industrial growth by promoting expansion of exports, investing in war-devastated infrastructure, adopting appropriate fiscal and monetary policies, prioritizing industrial sectors in which to invest, and maintaining a stable, pro-business economy (Hoffert 2014). Three important institutions were established to administer government's administrative action: the Construction Ministry, which controlled most infrastructure spending; the Finance Ministry, which among other responsibilities managed the government's tax policy and, from an export policy point, the government's customs and tariffs policies and programs. Clearly the most important early addition to the government's industrial policy was the Ministry of International Trade and Industry (MITI). MITI was reorganized in 2001 as the Ministry of Economy, Trade and Industry (METI). The coordinated industrial expansion and sector growth targets of the ministry worked in the following ways:

The importance of MITI reflected the crucial role of foreign trade in Japan's economy and the determination of the government to oversee the country's economic and political relations with other countries. By deploying foreign exchange allocations, manipulating quotas, and establishing barriers protecting native capital from foreign competition, the government channeled the flow of investment funds. It could also extend or deny tax privileges. It thus had at its disposal a variety of weapons to bring recalcitrant firms into line if persuasion, pressures, or both failed. Generally, it preferred to rely on discussion and to act as much as possible on the basis of a shared government-business consensus. . . . Consensus was possible not only because of the shared aims and interest of government and business but also because of ties between the government and the business community. Often these ties were personal, because the men at the top in the private sector and

those heading the influential and prestigious government ministries tended to share similar backgrounds; both included a high proportion of Tokyo University graduates. (Hoffert 2014, np)

Before 1989 Japan maintained a positive balance of trade. The total value of exports more than doubled from US\$145.6 million in 1983 to US\$330.9 million in 1992, the value of imports only grew from US\$114.0 million to US\$198.5 million over the same period. After adjustments, the total current balance grew from 20.8 million to 117.6 million over this period. Steep drops in the current balance were experienced from 1988 to 1991. A large increase in the value of exports coupled with a small drop in imports in 1992 turned the current balance trend around.

Japan's economic recovery after World War II was based upon an economic policy that aimed to gain world leadership in selected sectors of industrial production and growth in exports of high quality products of Japanese manufacturing. Table 11.1 identifies the top 10 country markets for Japan's exports both in US\$ volume and percentages.

The reestablished network firms would concentrate on local growth; networks would reinforce this focus by eliminating the need for acquisitions to ensure production supplies. Government subsidies would kick-start the recovery process, ensuring the long-term economic objective would be achieved by maintaining a stable and

Table 11.1 Top 10 country markets for Japan's exports in 2012

Rank	Country	Percent of total	Volume (US\$ billion)
1	China	19.0	147.4
2	United States	18.3	140.1
3	South Korea	7.8	62.0
4	Thailand	5.4	43.1
5	Other Asian countries	4.7	37.5
6	Hong Kong	4.3	34.3
7	Germany	3.3	26.5
8	Indonesia	2.6	20.4
9	Australia	2.5	19.6
10	Singapore	2.4	19.4

Source: MIT 2014.

dedicated workforce and protection from foreign competition. Workers' commitment to success would be rewarded by cradle to the grave social protection and life-long employment. Secure profits would be gained through restricting competition through monopoly participation in a network or alliance corporate structure.

The system succeeded as planned during the first three decades of recovery. Authors like Vogel saw this as an alternative economic system to the aggressive competition of the United States and the total state control of Soviet communism. The methods of Japanese managers were studied by Western business leaders and integrated into the curricula of professional management schools.

The chief problem with the government's insistence on maintaining the existing system was that many additional countries had industrialized and become low-cost producers, able to compete in the global market. What Japan needed was to increase domestic demand, and that wasn't happening. The aging population maintained its propensity to save; the insistence of growing exports of high value added manufacturing products had led major manufacturers to make investment in foreign production facilities rather than improvements to their domestic plants. The result was a hollowing out of the Japanese manufacturing base. For the first time ostensibly since the 1950s, Japan suffered from high and increasing unemployment. While government revenues declined, the need to spend on social welfare programs grew. Government borrowing increased. And, despite announced intentions to reform the system, backward-thinking government leaders were unwilling to make the needed changes to a system that had made everyone rich and increased the average life span to the mid-eighties.

FADING OF THE KEIRETSU SYSTEM

The keiretsu intercompany network manufacturer and supplier system that was long considered to be a key contributor to the cost advantage of Japanese manufacturers is no longer as important as it was in the 30 years following World War II. Many observers believed that Japanese manufacturers owed their postwar success to the system. This was particularly true for the Japanese steel, automobile, and heavy machinery industries. By 2009, however, some analysts were suggesting that a number of intrinsic long-term problems were contributing to the collapse of the system. Cross-ownership, joint share holdings, common trademarks, and financing among themselves and low-cost loan financing by a network bank are some of the characteristics of the firms in the system of related organizations that are thought to make

it harder for strong individual companies to lead the way out of the country's economic doldrums.

Lincoln and Gerlach (2004) and Lincoln and Shimotani (2009) have researched reasons for what they consider to be the breakdown in the keiretsu system that began in the 1980s. Among the many factors they found to be contributing to the “withering away” of the system, five stand out: globalization of business, consolidation of the banking system, accounting rule changes, reform of the corporate governance system, and rapid changes in information and technology.

CHANGES IN JAPAN'S ECONOMIC SYSTEM

An important element in the success of Japanese manufacturers has been the willingness of their more important network suppliers to follow them in foreign direct investments (FDIs) in overseas markets. Also driving the willingness to invest abroad is the decision by major manufacturers to outsource parts and supplies. High labor and transportation costs, plus regular fluctuations in currency exchange rates, contributed to major manufacturers' shift from keiretsu partners to more domestic suppliers in their overseas markets. Moreover, as Japanese manufacturers entered foreign markets the requirement for local content opened the door to entry into the Japanese market by domestic competitors. An automobile industry example of offshore expansion is seen in Table 11.2. By the 1990s, nearly 500 independent first-tier firms had opened production facilities abroad to serve foreign production by their keiretsu core manufacturers. However, the first-tier system did not provide equal payoffs for the second, third, or fourth tier subassembly contractors in the system (Holzhhausen 2002). When a global recession coupled with already flat domestic sales hit the industry hard, the major manufacturers countered by cutting costs. This often meant forcing lower prices, with lower profit margins, onto their suppliers' shoulders. Many of these small, typically labor-intensive or small-lot shops, often with 10 or fewer employees, were forced into receivership, further increasing the numbers of unemployed in Japan.

Consolidation in the Banking Sector

Few bank mergers, failures, or sales occurred in Japan until after the collapse of the bubble economy in 1993, leaving many banks with an excessive number of nonperforming loans (Park 2013). The number of major banks remained relatively stable from 22 in 1990 until they

Table 11.2 First-tier suppliers of Japanese automobile manufacturers

Manufacturer	Total number of first-tier suppliers	Number of first-tier suppliers with investments in the U.S.	Investments in the U.S. prior to 1980	Investments in the U.S. made between 1980 and 1988	Investments in the U.S. by suppliers after core firm investment
Toyota	69	24	1	23	21
Nissan	85	43	5	38	37
Honda	40	28	1	27	24
Mitsubishi	24	8	0	8	7
Isuzu	24	3	0	3	0
Mazda	20	10	0	10	8
Others	28	0	0	0	0
Independent firms	180	14	5	9	9
Foreign subsidiaries	12	0	0	0	0
Total firms	482	130	12	118	106

Source: Banerji and Sambharya 1996, data collected from various sources.

declined from 18 in 2000 to 15 in 2001 and 13 in 2002 (Table 11.3). The number of regional banks followed a similar pattern, dropping from 132 in 1990 to 123 in 1999 and to 107 in 2004. The smallest financial institutions, *Shinkin* banks—also known as credit cooperatives—are local area, nonprofit cooperative institutions that accept deposits from their members and make loans to local small businesses. Their numbers declined precipitously from their peak of 451 in 1990 to 298 by 2004 and to 280 in 2007. Not included in Table 11.3 are a number of special financial institutions that serve special groups with long-term working capital, such as agriculture banks and others that serve the shipbuilding industry, petroleum industry, and others (Lincoln and Shimotani 2009).

Several banking crises took place as the 1990s were coming to an end. Three large banks failed in 1997; two long-term credit banks failed in 1998. A wave of mergers began in 2000 as the Japanese economy remained in its doldrums and prices continued to fall. The Japanese government took steps to strengthen the financial industry with passage of a financial rehabilitation plan in 2002. Major banks

Table 11.3 Numbers of mergers, acquisitions and sales of banks by type, 1990–2004

Year	Major banks ¹			Regional banks ²			Shinkin banks ³		
	Total	Mergers	Sale of business	Total	Mergers	Sale of business	Total	Mergers	Sale of business
1990	22	1	0	132	0	0	451	3	0
1991	21	1	0	132	1	0	440	3	0
1992	21	0	0	130	1	1	435	4	0
1993	21	0	0	129	1	0	428	5	0
1994	21	0	0	129	0	0	421	8	0
1995	21	0	0	129	0	1	416	4	0
1996	20	1	0	128	0	0	410	5	1
1997	19	0	1	126	0	1	401	8	0
1998	19	0	0	124	0	3	396	3	0
1999	19	0	0	123	0	1	386	5	1
2000	18	1	0	119	1	1	371	7	9
2001	15	3	0	117	0	0	349	11	5
2002	13	3	0	116	0	0	326	15	6
2003	13	0	0	110	2	0	306	14	0
2004	13	0	0	107	3	0	298	7	0
Totals		10	1		9	8		102	22

Notes: ¹City banks, long-term credit banks and trust banks; ²First-tier and second-tier regional banks; ³Prefecture deposit-taking cooperative banks.
Source: Research Institute of Economy, Trade and Industry 2007.

were forced to follow strict accounting standards and reduce their bad loans by half. Weaker banks were forced to consolidate or be acquired. Healthy banks were encouraged to rescue weaker banks when they became distressed (Hosono, Sakai, and Tsuru 2007). The outcome from the banking crisis and restructuring is fewer, stronger banks. Commercial banks were allowed to merge with investment banks.

Changes in Accounting Rules

Partially as a consequence of the government's efforts to stimulate economic growth and encourage foreign investment, the accounting function of business in Japan has undergone a host of changes since the 1990s. Japan adopted a certified public accountant approach with provision for an audit system in 1948, followed by formal adoption of its postwar accounting principles and rules for financial statements. The new system existed alongside accounting principles first adopted along with Commercial Code standards in effect prior to World War II. The purpose of the new system was to make available more company-value information to potential investors, while the earlier system focused on disclosure regulation and dividend restrictions.

Although modified periodically from then on, the next big change occurred in 1999, when public firms were required for the first time to include in their financial reports the results of affiliates they controlled, regardless of the size of any equity they held in the affiliate. The next big accounting rule change came into effect on April 1, 2001. Corporations were required to report assets at market value rather than at purchase value. This hit banks particularly hard. With the economy still in the doldrums, severely depreciated business values and nonperforming loans revealed many banks to be capitalized at a rate lower than what was needed to support lending. Many keiretsu banks dumped their cross-share holdings—further adding to the slow fading of the system. Accounting change information of interest to foreign investors is included in Box 11.3.

Reforms in Corporate Governance

One of the important changes underway in Japan is implementation of reforms aimed at revitalizing the economy by improving the way businesses are managed and administered. Corporations are regulated by the Companies Act, by the Financial Instruments and Exchange Law, and the Tokyo Stock Exchange's securities listing regulations. However, no all-inclusive corporate governance codes for all businesses

have been adopted. Companies have been tightly controlled, with boards of directors consisting entirely of insiders. Attempts at reforming this system have been underway since the early 2000s as part of the Japanese government's on-going effort to revitalize business in Japan. A key element of the reform is implementing changes in the way standard joint-stock companies—*kabushiki are kaisha* or simply *kaisha* or KK—are governed. A new Companies Act that amends sections of the Commercial Code of 1899 was written in 2005 and adopted in May of 2006 (ACGA 2011). Although the change is not legally binding, an aim of the restructuring law is to have all *kaisha* either “comply or explain” their decision to comply or not. Changes in the governance system included in the act:

- Changes the types of companies that can be created.
- Eliminates the minimum capital requirement.
- Reforms the internal structure of companies, including their size and public or private status.
- Allows companies to extend the term of office for directors and statutory auditors.
- Relaxes requirements for a general meeting to dismiss a director.
- Provided all members agree to a proposal, allows the board to pass a resolution in writing.

The change receiving the greatest attention relates to changes in the composition of boards of directors. Most developed countries require publicly traded stock companies to include a majority of their board members from outside the company. In Japan, that has not been required. Instead, it was common as late as 2013 for boards to be made up of insiders such as company officers, officers of other firms in their network, family members, or house bank personnel; less than 3 percent had boards with a majority from outside the company. With the new governance law, Japanese companies are required to have at least one outside board member.

Box 11.2 Status of accounting standard reforms in postwar Japan

The U.S. Department of State's investment climate report on Japan concluded that reforms in the business system since 1998 significantly improved Japan's accounting standards. The following paragraphs from that report describe the changes and

their impact on business in Japan. The changes have contributed significantly to the fading of the keiretsu system:

“Consolidated accounting has been mandatory since 1999 and ‘effective control and influence’ standards have been introduced in place of conventional holding standards, expanding the range of subsidiary and affiliated companies included for the settlement of accounts. Consolidated disclosure of contingent liabilities, such as guarantees, is also mandatory. All marketable financial assets held for trading purposes, including cross-shareholdings and other long-term securities holdings, are recorded at market value.

“Companies are required to disclose unfunded pension liabilities by valuing pension assets and liabilities at fair value. Fixed asset impairment accounting, in effect since 2005, requires firms to record losses if the recoverable value of property, plant, or equipment is significantly less than book value.

“The greater focus on consolidated results and mark-to-market accounting had a significant effect in encouraging the unwinding of cross-shareholdings and the “main bank” system. Corporate restructuring has taken place, in many cases with companies reducing pension under-funding and banks’ disposal of many low-yield assets.

“The Accounting Standards Board of Japan (ASBJ) and the International Accounting Standards Board (IASB) began discussions on the convergence of Japanese both accounting standards and IFRS practices in March 2005 and, in March 2006, further agreed to accelerate the process of convergence. . . . In December 2009, the FSA issued an order allowing companies to submit their financial statements based on international accounting standards. This order prepares the legal groundwork for a complete switch to IFRS in the future, but no decision has been made on the mandatory introduction of IFRS. Previously, the FSA accepted only Japanese or U.S. standards for consolidated accounting.”

Source: U.S. Department of State 2011.

In June 2014, Japanese Prime Minister Shinzo Abe announced that acceptance of the proposed corporate governance changes by kaisha firms would be the key to the needed revitalization of the country’s moribund economy (Box 11.2). He added that the changes would

usher in a new era of transparency and company stewardship that has long been needed in Japan. The lack of independence of companies' boards of directors has resulted in misappropriation of company funds, hiding losses, owners' malfeasance, and company-political party cronyism, and lower profit margins than common in the United States or the United Kingdom. The new corporate governance will be based on a U.S. model that is referred to as the "Company with Committees" model (Chizema and Shinozawa 2012).

The continuing globalization of capital markets and investors' lobbying for change has contributed to the need for reform of the Japanese corporate governance system. The Japanese government began amending the commercial code in 2001 by providing statutory (internal) auditor boards—*kansayaku*—with a greater role in their corporations while making external auditors more independent (Lee and Allen 2013). Patterned after a system used in Germany, the main function of the (internal) audit board is to monitor the board of directors' compliance with laws and to review internally prepared financial statements; they are not formally charged with representing shareholder or employee interests. Another change made in 2002 introduced the idea of a committee system as an option to the statutory auditor system. A third change came in 2005 with passage of the new Corporation Law.

The new governance system replaces the *kansayaku* system with three committees and a stronger external auditor (Figure 11.1). Members of the *kansayaku* are not part of the board of directors' decision-making or approval processes, although they do sit in on board meetings and some function as advisors to senior officers. They provide business audits rather than accounting audits while also ensuring the firm adheres to relevant laws and regulations (Lee and Allen 2013). Under this system, the audit committee monitored the performance of executives and the board of directors. Functioning much like corporate auditors, the committee proposed new members for the board of directors. They also selected outside certified public accountants and outside auditors. The nomination committee determines possible board members or recommends members for dismissal to the board. The compensation committee establishes compensation and related matter policies for directors and executive managers.

Technological Changes

The close interaction between suppliers and manufacturers did not always produce the new products or innovative production processes

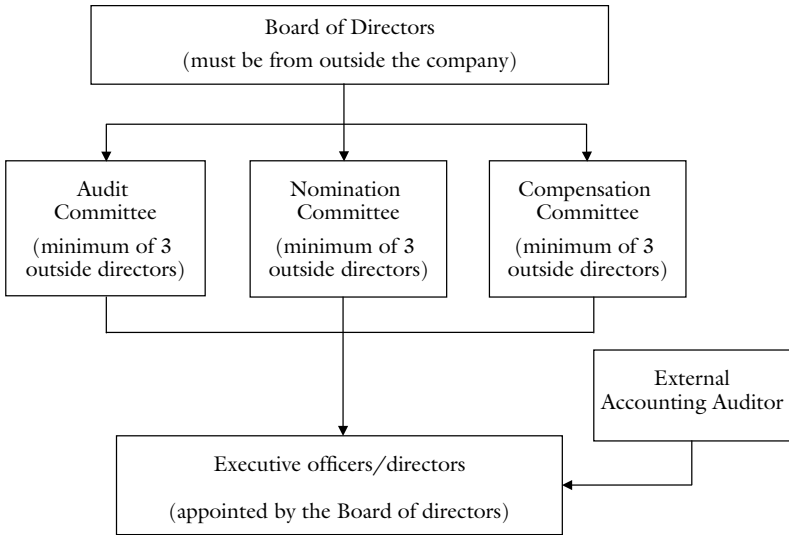


Figure 11.1 Japanese committee corporate governance system.
Source: Chizema and Shinozawa 2012.

many assumed it did. The long-term history of cooperation and consensual relationships that characterized the keiretsu system reduced supplier-buyer confrontation. However, it also had negative repercussions for producers, particularly when the failing economy forced them to reduce their cooperative new product research efforts with suppliers. To reduce the effects of slower sales on their own bottom line, major manufacturers also forced suppliers to reduce their own margins, further reducing spending on new technology. The adverse effects of long-term close relationships described below can also be said to have contributed to the lethargic unwillingness to reform Japan’s political, banking, and industrial policies during the long 20 years and more of slow growth in the economy.

The close interaction of the partners leads to a growing stock of accumulated common knowledge which [could] be easily used to optimize the operation of the partnership in terms of better communication, improved logistics and synchronized production. On the other hand, this stock of knowledge defines the boundaries of action: shared experience and memories can translate in conservative behavior; changes and new ideas which are sure to alter the nature of the relationship are intentionally or unintentionally blocked by the partners. This is particularly important in the development stage where access to advanced knowledge outside the firm or group plays a crucial role. (Holzhausen 2002, 94)

It had long been believed prior to the 1990s that because Japanese investment in research and development was second to none, it would enable its manufacturers and suppliers to remain at the cutting edge of new technologies. Japanese companies' extensive foreign direct investment in factories and distribution networks and other assets, including investments in "soft" industries like music production and commercial films, would also help the Japanese economy to continue to grow and prosper. But after 1993, all of this positive reputation would begin to fade; it was, as Christopher Wood's 1994 book title suggested, *The End of Japan, Inc.* Economic growth in Japan declined to near zero. As late as 2014, Japanese leaders were still trying to find the magic way out of their economy's stagnation. Invigorating consumer spending was hoped to revitalize the economy. However, retailing was facing its own problems; it also looked to overseas markets for resolution.

CHALLENGES FACING JAPANESE RETAILING

Japan's commercial sector has suffered through the same stagnation that the rest of the economy has endured since the 1990s (see Box 11.3). For example, sales at department stores in Japan are nearly half of what they were at their peak in 1991. Similar declines have also occurred at hypermarkets and big box retailers. However, for the many Japanese retailers that have expanded overseas, their successes appear to be one bright spot in the Japanese globalized business scene. The major focus of that expansion since 2000 has been on opening stores in China, where the size of the market and underdeveloped domestic retailing industry make this an extremely important market (Larke 2004; Wilson 2013). A 2013 retail marketing survey named China as the leading developing market for expansion by apparel retailers.

Box 11.3 Surviving Japan's retail crisis

The 2013 Deloitte *Planet Retail* report on the present and future state of retailing in 10 national markets included a section on the short-term prospects of retailing in Japan. Sections of that report are included here:

Japanese retailing may finally be emerging from an "almost 20-year period of gloom" that was linked to the depressed

economy and negative consumer expectations. From 1996 to 2002, retail sales dropped by 9.3 percent and are not expected to reach 1996 levels until 2019, despite a modest revival that began in 2009. Sales have been particularly bad in non-food retailing, with growth in convenience store and drug store sales being the only exception. As of 2012, the top six convenience store chains had 43,500 outlets, and are expected to have nearly 59,000 by 2018. E-commerce sales are still relatively weak, but are expected to grow to 12 percent of sales by 2020 when broadband expansion is complete. In food retailing, margins remain low, deflation has kept prices at or near 1992 levels. Traditionally, this sector has been highly fragmented with many small local outlets. This has been changing, however, as concentration continues.

Japan is facing significant demographic changes that will have a big impact on retailing in the country. Its population is expected to fall by 2.8 percent between 2008 and 2020. The aging population will require heavy pension and medical expenditures in the future. Meanwhile, domestic demand remains weak. The result is an economy that is close to 25 percent smaller than it would have been had the two decades of deflation and stagnation had not occurred.

Source: Deloitte Global Services 2013.

As of 2014, more than 50,000 retail outlets had been opened by in China by Japanese corporations. Online sales are particularly important in China, having reached 6 percent of some retailer's sales, among the highest in the world, where Internet sales typically are less than 1 percent of sales. A key reason for this is Chinese consumers' eager following of the "fast fashion" fashion market trend. "Fast fashion" in apparel retailing is the strategy of rapidly changing fashion styles to encourage consumers to buy more low-cost items in order to keep up with the fashion "trend of the week."

Uniglo is among the Japanese fashion retailers rapidly expanding in China. The firm opened 65 stores in China in 2012, bringing its total to 145. The company announced plans to open 100 new outlets in China each year, eventually reaching at least 1,000 stores in that market. MUJI, the Japanese household items and clothing chain, opened

42 stores in China it its rapidly expanding outlet expansion strategy. In terms of adding store numbers, however, the convenience store model is the leader. Two former U.S. convenience store chains now under Japanese ownership are *Lawson* and *7-Eleven* (*7-11* in China). *7-11* opened its first franchised store in China in 2004; by 2012, it had expanded to 855 stores and by 2014 had opened nearly 2,000 franchise outlets. *Lawson*, which owned its convenience store outlets, has grown at a slower pace, opening 40 stores each in 2012 and 2013 while closing a number of low-profit outlets. In 2014, *Lawson* had a network of 550 stores in China and announced plans to open another 180 stores in 2014.

The path of overseas expansion of Japanese retailers has been said to have occurred over three phases: first, Japanese department stores led the expansion in the 1980s, largely occurring in the West; second, a slowing of large-store expansion with trial efforts by smaller specialty stores in the 1990s in Japan and in nearby Asian markets; and third, the current rapid expansion in emerging markets in Asia and Latin America as trading houses opened nonretail supply facilities in the market into which retailers wanted to expand and the domestic market experienced a long-term “retail crisis” (Larke 2004; Deloitte Global Services 2013).

CONCLUSION

The business system of Japan continues to be one of the most successful of the world’s industrial giants. Its position as the second largest economy in the world may have been taken over by its Asian neighbor China, but it retains a solid hold on its position as the third largest economy. Although Japan no longer has an industry in the list of the world’s 10 largest privately held companies, it still has six private companies in the *Forbes* Top 100 (Table 11.4). In 2005 only one Japanese manufacturer, Toyota, was in the top 100 firms. In 2014, Toyota was joined by Honda, also primarily an international automobile maker and considered by many to be at the head of a keiretsu of its own. The 2014 *Forbes* list included three Japanese banking houses among the top 100 firms.

Despite the continued success of much of Japan’s business sector, concerns about the stagnant economy and industrial sector have been growing. Among the problems facing Japan 20 years after the collapse of its bubble economy are the high cost of importing energy, uncertainty in the supply of electrical power due to closings of nuclear power plants, a shrinking domestic market resulting from an aging and declining population, and the hollowing out of its industrial base.

Table 11.4 Japan's exports and imports by principal commodity, 2004 and 2013 (US\$ thousands)

Item	2004		2013	
	Exports	Imports	Exports	Imports
Mineral fuels	2,477,191	98,635,507	15,726,607	283,817,233
Electrical machinery	122,375,830	56,202,249	124,110,547	106,299,668
Foodstuffs	2,387,421	48,984,150	4,480,793	66,807,478
Chemicals	47,140,242	35,245,180	77,421,418	66,778,353
Manufactured goods	23,066,907 ²	38,260,413	94,625,517	64,413,550
Machinery	116,453,190	126,720,980 ³	137,644,799	61,577,765
Raw Materials	5,694,663	28,429,183	12,458,244	55,291,324
Transport equipment	134,859,324 ¹	12,461,995	168,499,243	28,707,648
Others	25,494,533	45,283,578	84,237,691	105,196,057

Notes: ¹includes motor vehicles, motorcycles, bicycles and transport equipment

²includes only consumer durable and nondurable manufactures

³includes all machinery and equipment less motor vehicles and aircraft

Source: Compiled from various Japanese External Trade Organization JETRO statistics 2015.

Exports have long been an important contributor to Japan's economic growth. However, globalization has led Japanese industry to shift investment away from the home market to low wage and fast growing markets in overseas locations. Cowling and Tomlinson (2012, 12) pointed out the dangers commensurate with this type of industrial policy: "In the long run, the diversion of investment in favor of cheaper overseas sites diminishes both the level and quality of Japan's capital stock, and thus initiates and exacerbates a cumulative process of decline in Japan's industrial regions. The growing evidence is that corporate Japan's overseas investments are primarily a substitute for domestic production rather than to support complementary production activities. A consequence of this has been the dramatic decline in employment within Japan's domestic manufacturing industry over the last decade, with registered manufacturing employment falling from 175.69 million in 1992 to 12.22 million in 2003, and to 9.98 million a decade later, the lowest it has been since 1961." As manufacturing jobs in Japan are being shifted overseas, retailing has followed.

Commerce and industry in Japan have been under tremendous pressure since the Asian financial crises of 1991 and 1997–1998 to change the way manufacturing and value chain operations are managed. The

problems did not begin with the financial crisis; some analysts trace the conditions that led to the more than two decades of stagnant economic growth as far back as the 1970s, when Japanese manufacturing industries began to invest heavily in overseas production facilities. As their major suppliers followed Japan's large manufacturing companies overseas, more and more jobs were lost. By 2013, manufacturing employment in Japan had shrunk by about 40 percent of its peak of 16 million workers in 1992.

Although their importance seems to be declining in the wake of rapid globalization of commerce and industry, the keiretsu network system is likely to remain an important feature of the Japanese business system long into the twenty-first century. The 2014 scope of the global Mitsubishi group can be considered an example of their strength. In June 2014, the group included 400 subsidiaries and 215 affiliates. There were 5,651 employees in the parent firm and a total of 68,383 employees in the parent company and all its subsidiaries. The group consists of seven business groups: global environmental and infrastructure; industrial finance, logistics and development; energy; metals; machinery; chemicals; and living essentials (includes retailing). In addition, a new business service group was formed in 2014. Similar diverse operations controlled by the other major keiretsu are undergoing the same globalization and other pressures that have contributed to the reduced importance of keiretsu networks. The system is too entrenched to disappear entirely.

DISCUSSION QUESTIONS

1. In what way were businesses in the United States influenced by management policies and procedures common in the Japanese business system?
2. Describe how the tight networks of a leading industry, body of captive suppliers, family bank financing, and government administrative guidance by MITA and later METI shaped the keiretsu network system in Japanese commerce and industry.
3. What has been the effect of globalization on Japanese industrial keiretsu?
4. How has Japan's retailing sector been affected by the more than two decades of slow or negative economic growth?
5. China supplanted Japan as the world's second largest economy in 2010. Do you see any industrial nation pulling ahead of Japan's position as the world's third largest economy in the near future? Why or why not?

PART V



U.S. COMMERCE AND INDUSTRY
IN A GLOBAL ECONOMY

CHAPTER 12



U.S. COMMERCE AND INDUSTRY IN CRISIS AND RENEWAL

For most of the nineteenth century and well into the first decades of the twentieth, manufacturing in American was for the most part focused on processing the products of farms, forests, and a few raw materials; most were family businesses (Chandler 1969). American commerce also consisted for the most part of small retailing shops in relatively isolated small towns. The nation's transportation system was only just being established. Most people either walked or traveled by horsepower if they traveled much at all. Travel of any distance was slow, tiresome, and noisy by horse-drawn stage; short journeys on a new railroad network; or, in some privileged locations, on quiet and slow boats on canals or natural waterways. There was little need to travel, since every town had its own small bank, its own doctor, and its own livery stable. The bulk of the country's population resided in the eastern regions of the North American continent (Figure 12.1).

However, a number of important developments were contributing to the increasingly rapid evolution of U.S. business during the last decades of the nineteenth century and first several decades of the twentieth century. First, in the 1880s the nation suffered through a decade-long economic depression that drove many out of business or led to mergers with other firms in the same business. As businesses grew larger the need for employees with accounting, advertising, distribution, purchasing, mass production, and overall management skills increased. Business management came to be recognized as a full-fledged *profession*, one worthy of academic education. University programs in these disciplines as well as the new science and engineering

NORTH AMERICA



Figure 12.1 Map of North America.
Source: The World Factbook, 2013–14 https://www.cia.gov/library/publications/the-world-factbook//graphics/ref_maps/political/jpg/north_america.jpg.

education programs related to the needs of larger and larger businesses. Associated with this transformation in the structure of business in America was a growing shift from central control of all operations to decentralized organizational operations, with branch plants and distribution centers serviced by the growing railroad network.

Another development that began near the end of the 1800s was the beginnings of a surge in a great merger and trust movement. This began with larger manufacturers needing large distribution networks and warehousing facilities. Another development was the emergence of new industries such as the telephone and electric light and power. As more jobs in industries made more money available, consumers began to demand new and better products. This shift occurred despite two world wars in the twentieth century, a severe, decade-long, global depression, and the emergence of the Soviet Union as a world superpower and a political and military competitor with which the United States remained engaged in a 30-year-long cold war.

EFFECTS OF A GLOBAL DEPRESSION

The business system of the United States was hit particularly hard by the onset of the Great Depression of the 1930s. The nation experienced a decline of 21 percent in industrial production—the largest decline of the world’s leading industrial nations. When industrial production is measured from the economic peak of 1929 to the lowest point in 1932, the decline of 61 percent suffered by the United States was again the greatest among the same group of nations. Most of these nations experienced a small increase in industrial production in 1933, led by the United States with its increase of over 15 percent (Table 12.1).

From the peak in 1929 to late 1930, the nation’s GNP declined by 29 percent, spurred by a 78 percent decline in construction. Consumer spending declined by 18 percent and industrial investment by a full 98 percent (McElvaine 1984). This decline in production and consumer purchasing had a heavy impact on the country’s employment. At its lowest point, a quarter of the working population was unemployed.

Although the trend began as early as the 1870s, the depression saw acceleration of the shift to female employment as businesses worked to find ways to reduce their operating costs. By 1930, the number of women employed in clerical occupations was slightly more than half of all clerical workers in country, and was becoming the most important occupation for females. In New York City, for example, nearly half of the 250,000 clerical workers were females (Simon 2001). As the depression continued, average wages for men in the state of New York dropped from a high of \$49.34 per week in 1930 to \$41.52 in 1933. Wages for women were half that of male clerical workers, dropping from \$24.42 in 1930 to 20.63 in 1933. Wages for both men and

Table 12.1 Changes in top-seven countries' industrial production, 1930–1933

Period	Percentage change	Countries
A. 1930	5.1 to 10.0%	Denmark, South Africa, New Zealand
	0.0 to 5.0%	Chile, France, Greece, Norway, Sweden
	-0.1 to -5.0%	Estonia, Romania
	-5.1 to -10.0%	Finland, Hungary, Italy, Japan, Netherlands, UK
	-10.1 to -15.0%	Belgium, Czechoslovakia, Germany
	-15.1 to -20.0%	Austria, Canada, Poland
	-21.0 to -25.0%	United States
	-0.1 to -10.0%	Greece, Japan, New Zealand
	-10.0 to -20.0%	Denmark, Romania, Sweden, UK
	-20.1 to -30.0%	Chile, Estonia, Finland, Hungary, Norway
B. Peak-to-trough	-30.1 to -40.0%	Belgium, France, Italy
	-40.1 to -50.0%	Austria, Netherlands
	-50.1 to -60.0%	Canada, Czechoslovakia, Germany
	-61.0 to -70.0%	Poland, United States
	15.1 to 20.0%	United States
	10.1 to 15.0%	Denmark, Finland, France, Germany, Japan, Netherlands, Romania
C. 1933	5.1 to 10.0%	Chile, Greece, Hungary, Italy, UK
	0.0 to 5.0%	Austria, Belgium, Canada, Estonia, New Zealand, Norway, Poland, Sweden
	-5.0 to -10.0%	Czechoslovakia

Source: Romer 1993, from League of Nations data.

women in clerical occupations were slightly higher in New York City (Table 12.2).

Of all sectors, agriculture and banking were hit particularly hard by the depression. During World War I, the government had encouraged unbridled increases in farm production; not only were the products of American farms important to the buildup in armed forces, they were also feeding many of America's allies. Moreover, prices for agricultural products were uncharacteristically high during this period. To cash in on this windfall, farmers invested heavily in new equipment and additional farm acreage, incurring heavy debt from small, local banks eager to make loans. Farm mortgages doubled from \$3.3 billion in 1910 to \$6.7 billion in 1920, with another \$2.7 billion added over the next five years. Prior to the war, farm production throughout the world increased faster than markets could absorb the surpluses. The perils of overproduction combined with heavy debt began to

Table 12.2 Weekly wages for office workers in New York factories

Year	New York State			New York City Only		
	All (dollars)	Men (dollars)	Women (dollars)	Men (dollars)	Women (dollars)	Women (percentage)
1928	36.37	46.70	24.05	47.98	26.55	45.6
1929	36.94	48.24	24.38	50.45	27.57	47.4
1930	37.48	49.34	24.42	52.80	27.57	47.6
1931	35.49	46.22	23.35	50.90	26.31	46.7
1932	31.86	42.14	20.49	45.92	23.04	47.5
1933	31.85	41.52	20.63	44.85	22.73	46.3
1934	32.45	42.71	21.15	44.03	22.76	47.6
1935	32.71	42.04	21.23	42.84	22.97	44.8
1936	33.05	42.67	21.31	43.99	22.49	45.0

Source: Simon 2001, *Monthly Labor Review* data.

take their toll in the last years of the 1920s. Farm foreclosures were becoming a common occurrence across the Farm Belt, adding to the economic pressures that would culminate in the stock market crash in 1929. With their own economies in shambles and unable to sell their products in American markets, European customers were unable to buy America's surplus farm products at any price.

The rash of bank failures beginning in the late 1920s have been singled out as one of several economic events that triggered the October 1929 stock market crash and the Great Depression that followed (Calomiris and Mason 1997; Basu 2003). Not surprisingly, difficulties in the agriculture sector contributed to the banks' problems. Among the causes that have been suggested for the many bank failures that took place from 1925 to 1933 are the following:

- Banking is inherently fragile as loans are considered assets. When bad loans occur, banks' asset base drops accordingly.
- Banks that failed in the years prior to the Depression did so because they were weak and likely to fail anyway.
- The existence of too many banks made the industry ripe for a shakeout.
- Government's antibranching laws kept weak banks from being able to diversify themselves by opening branches in new, faster-growing markets.

- When branch banking restrictions were eased, too many undercapitalized banks opened too many branches. When capitalization minimums and branch banking restrictions were eased in the 1920s, many new banks were established without sufficient capital to weather the collapse of the economy.
- Runs on weaker banks resulted in panic runs on healthier banks whose ready cash, invested in loans, was unavailable to deal with runs—the process called *contagion*.

Rapid growth in the number of banks in the United States from 1897 to 1921 occurred largely in response to changes in banking laws that reduced the minimal capital required to open a bank. The growth of the economy that followed the depression of the 1870s also spurred growth in the number of banks. Their numbers reached something like 31,000 by 1921, after which they fell consistently until banking reform and deposit insurance began in 1934. From more than 500 failures in 1921, another thousand or so failed each year. Between 1920 and 1932 an average of 1,700 banks failed; the peak year in failures was 1933, when more than 4,000 failed.

EMERGENCE OF NEW INDUSTRIES

Also among the changes occurring in business in the early twentieth century was the rapid growth of a number of new industries along with rapid consolidation of the old industries. Among the new industries with the greatest impact on the United States in the last years of the nineteenth century and first 30 years of the twentieth century were advertising, chemicals and pharmaceuticals, electricity and electrical products, radio broadcasting, petroleum, and motor vehicles.

The Advertising Industry

The move to greater professionalism in commerce and industry meant an increase in the value of knowledge. The growth of industry in the early years of the twentieth century and its dependence on collecting and applying information about the consumer market provides an example of the trend toward a knowledge economy that would appear in the last half of the century. Two important examples of where knowledge came to play an increasingly important role in the pharmaceutical and chemical industries were marketing and advertising. Marketing emerged as a conscious business strategy during the 1920s as a way of gaining market share in the highly competitive era

of mass consumption. The practice of advertising—later recognized as an integral tool of marketing strategy—evolved from earliest notices of the availability of a product or service to a means of gaining the attention of and promoting mass-produced products to the millions of Americans pouring into the nation's industrial cities and towns.

During the first decade of the twentieth century advertisements were mostly informational—as they had been since the Industrial Revolution and the dawn of early newspapers. Usually, sufficient demand existed among the growing middle classes of merchants and entrepreneurs for the limited number of consumer products competing for consumers' attention for products to be sold without excessive effort. Advertising generally had only to tell consumers about the availability of the product for it to move off the shelves. However, after 1910 and particularly after the war ended in 1918, production began to exceed demand. Many new products regularly appeared on the shelves of America's increasing number of retail outlets. As more money was made available to pay for advertisements, a plethora of new media vehicles followed: workers in newspapers, magazines, and radio all depended upon advertising for their livelihood.

The Chemical and Pharmaceutical Industry

The history of the chemical and pharmaceutical industry in the first half of the twentieth century is an example of the growth in new industries and the importance of knowledge. The pharmaceutical industry grew from a scattering of small companies and snake-oil itinerant merchants after the Civil War to become by the first decade of the twentieth century a major component of the American manufacturing economy. Big changes in the industry had appeared as early as the 1880s as firms grew to meet the demand of a rapidly growing population. Firms began to hire scientifically trained personnel to help find and improve products. Others began cooperating with college and university science departments in contract research. By 1910, the largest firms, such as Parke-Davis, E. R. Squibb, DuPont, Smith-Kline, and Lederle had become large firms employing mass production processes. Biological science in the industry was new in 1900, but soon came to be the norm in research and production. Growth in population also drove firms to seek new and more effective drugs. Over the next two decades, industry leaders were employing large numbers of trained chemists, albeit as trained technical workers rather than as scientific researchers. That would have to wait until the World War I (Liebenau 1985).

The Electrical Industry

The birth and infant years of the U.S. electrical energy and equipment industries occurred from 1880 to 1914, roughly corresponding to the Progressive Era of trust busting and beginning of government oversight of business. The industry has four main sectors: generation, transmission, distribution, and application. Early electrical power was produced by some other energy source—wind, water, steam—turning a dynamo that generate direct current (DC) electricity. The first dynamo was invented in France in 1832. Edison saw his first dynamo at the 1876 Centennial Exhibition in Philadelphia. In 1880 he formed the Edison Machine Works to produce dynamos, which were used to drive industrial motors and to produce energy for electric (traction) streetcars. He formed the Edison Illuminating Company in December of 1880; his first generating plant began operations in Manhattan in September of 1882. The complete generating and distributing system produced electric light for one square mile of businesses and residences, using Edison's incandescent filament light bulbs. Light bulbs were the only consumer products available until household appliances were invented in the two decades before World War I. The success of that system essentially ended the use of gaslight illumination. The two companies and several other firms were merged in 1885 to form the Edison General Electric Company. By 1890, alternating current (AC) provided a more efficient and serviceable system. In 1892, Edison's company merged with an AC competitor, the Thomas-Houston Electric Company, to form the General Electric Company (GE). The new company dominated the industry; sales were more than twice that of Westinghouse, its only substantial competitor. Electricity had become a global industry, with growth and new innovative uses and devices driven by monopoly profits gained by sales of the carbon-filament light bulb invented by Edison (Reich 1992).

By the end of the 1890s, GE had used the same trust system perfected by John D. Rockefeller in the petroleum industry to negotiate an agreement with Westinghouse and 16 smaller firms to capture 95 percent of the light bulb business. GE, because of its patents and size, was allotted 50 percent of the business; Westinghouse 12 percent; and the rest was divided among the smaller firms. Prices immediately increased 30 percent. GE then made agreements with the producers of lamp-making equipment and glass bulbs, further increasing its hold on the industry. By the 1920s, electric lamp sales made up about 20 percent of the company's sales, which meant about \$20 million in annual profits. During the depression years of the 1930s, GE lamp

sales actually increased rather than decreased. Lamps were developed for many different special applications, advertising expenditure promoting GE bulbs remained high, and more people were staying at home at night. For the last half of the 1930s, as much as two-thirds of the company's profits were from the electric lamp division.

One of the problems with the carbon filament system was inefficiency; only 5 percent of the energy needed to produce light was produced by the filament. However, with the high monopoly (cartel) profits ensuing, GE did little to find new and more efficient methods. Other firms in the United States and abroad were having success with heating gasses (the fluorescent lights so popular later), while inventors abroad were finding successes with more efficient metal filaments, such as the tungsten lights used for streetlamps. GE was forced to acquire the rights to metal filament bulbs to remain in control of the market. Meanwhile new company leadership in 1922 resulted in greater emphasis on expansion into many different industries and consumer products. In addition to the many heavy industrial products from generators to industrial motors and aircraft engines, GE began producing kitchen stoves, toasters, refrigerators, and industrial versions of the same products. After more than two decades of fighting an antitrust case over the company's dominance of the lamp business, the case was finally resolved in 1953. GE was required to end all of its license agreements, give free access to all its existing lamp patents, and lower other license rates, thus ending the company's control of the U.S. market for lamps.

The Radio Broadcasting Industry

The histories of few industries are as closely related as those of the advertising, electrical, and radio broadcasting businesses during the 1920s and 1930s. Radio depended upon advertising to pay for the people, products, and programs it supported and offered to the public, and upon the electrical industry to produce and distribute the offerings. Prior to the 1920s, the radio industry in the United States was largely the purview of a few research scientists and talented hobbyists (Scott 2008). After 1920, it passed into the hands of large corporations such as General Electric and Westinghouse. That radio communication could be transmitted through the air was demonstrated by Guglielmo Marconi when his 1884 broadcast from Great Britain was heard in the United States (Douglas 1987). Until World War I, Marconi's British-based company dominated radio research and sales in the United States. However, during the war, it was felt that it would

be more appropriate for an American company to be involved. The U.S. Navy and Merchant Marine were particularly interested in U.S. ownership. The navy had sponsored a radio station operated by the American Telephone and Telegraph Company (AT&T) at its Arlington, Virginia, naval base beginning in 1915. Before long, for the first time the Navy was able to achieve immediate long-distance communication with its deployed ships; signals were received in Europe and Hawaii. Unable to move ahead with his American company, Marconi sold his U.S. manufacturing interests to General Electric and others.

In 1913, there were 322 licensed radio amateurs on the air in the United States (White 1996). By 1917, their numbers had grown to more than 13,500. The first radio transmission in the America took place in 1910 with the airing of a New York City opera company performance. The first commercial radio broadcast had to wait 10 years for WWJ in Detroit to come on the air on November 20, 1920. By 1926, there were 671 licensed U.S. commercial stations. Before creation of the Federal Radio Commission in 1927 and later the Federal Communication Commission, the U.S. Department of Commerce was responsible for bringing order to the fast-growing industry.

By the 1920s, large corporations were dominating the radio equipment manufacturing industry, with GE leading in many fields of electricity and radio. GE would soon come to be an important force in the broadcasting industry. After the war, GE formed a partnership with Westinghouse, AT&T, Western Electric, United Fruit, and a few other smaller partners to form Radio Corporation of America (RCA). The senior partner, GE, manufactured the first radios sold under the RCA brand. In time, RCA would expand into most areas of communications and electronics.

Although GE had experimented with radio broadcasting briefly in 1913, it was not until 1921 that it opened its first commercial radio station, WGY, at its manufacturing plant in Schenectady, New York (Schneider 2011). By this time, radio station owners had discovered they could make money selling air time for advertising and for sponsoring radio programs. With their first station a success, GE opened a second station in Oakland, California, in 1923 and a third in Denver, Colorado, in 1924. In 1923, WGY was one of the first stations to broadcast the same program at the same time on the regularly scheduled day of the week, planting the seed of radio networks that would follow. GE's stations joined in forming the network, the National Broadcasting Company (NBC) in 1926. GE and Westinghouse each owned 30 percent of this network. Other independent networks soon followed, including CBS and ABC.

Many small, independent stations failed during the Depression, but the large network-affiliated stations flourished. Radios were inexpensive and radio programs were free. Programs designed for all family members were available, all paid for by advertisers. However, the Depression brought on another surge of Progressive-era trust busting in the country. In another antitrust case was brought against GE, the Supreme Court upheld the decision to “clean up” broadcasting. In 1930, GE and Westinghouse sold their interests in both NBC and RCA. Later, GE also sold its Denver and Oakland stations, keeping only WGY, its home station.

The Oil Industry

The U.S. oil industry can be said to have begun in 1854, when Abraham Gesner patented a process for producing kerosene from coal and, later, from oil. Kerosene was a cheaper and safer means of providing lighting in homes and business than the existing use of coal gas. An almost immediate success, Gesner and others who copied his process found that oil was a better and less expensive feedstock for kerosene than coal. A shallow well funded by George Bissell was drilled in 1859 in Titusville, Pennsylvania, and found oil, thereby jump-starting the country’s first oil boom. Just two years later, the first free-flowing geyser, producing some 3,000 gallons of oil a day, was discovered in the same field. In no time the task shifted from finding oil to storing, transporting, refining, and marketing its main product. An Ohio entrepreneur named John D. Rockefeller and his partner Maurice Clark created the means for solving these problems.

Rockefeller and Clark took advantage of a new rail link from the Pennsylvania oil fields to Cleveland to build what was in 1863 the country’s largest and most efficient refinery for the production of kerosene. Rockefeller bought out his partner in 1865 in an act that was the first step in the eventual forming of the Standard Oil Company in 1870. He secured deals with railroads to carry his products cheaper than competitors, built additional refineries, and either acquired or forced out of business weaker competitors. In just 10 years, Standard would control more than 90 percent of the country’s kerosene refining capacity, including being dominant in the transportation, storage, and marketing of kerosene. When competitors found a way to undercut his rail prices by building a 110-mile pipeline, Rockefeller responded with three of his own.

In 1882, Rockefeller formed a holding company, Standard Oil Trust, with a first issue of 700,000 shares of stock. He then traded

trust shares for those of operating companies Standard Oil owned or acquired, with nearly 200,000 shares issued to him personally. The Standard Oil Trust controlled the oil industry for the next 20 years, and was in place to benefit from the phenomenal growth in oil demand as the automobile became affordable to nearly every family in the country. At its cheapest, the Ford Model T could be had for just \$260. However, just when that success was about to take place, in 1911 the U.S. Supreme Court ruled in favor of the government's antitrust case to unravel the Standard Oil Trust by breaking it into separate corporations.

The structure of the oil industry changed dramatically in just a few years after the breakup of Standard Oil. Great Britain's need to maintain a large navy to protect the sea lanes to its global empire resulted in changing the fleet's fuel from coal to oil. Winston Churchill, First Lord of the Admiralty, was instrumental in the British government taking a controlling interest in what became the Anglo-Persian Oil Company. With their fuel supplies assured, the British Royal Navy would survive World War I. The land war fought by Britain, France, and the United States became the first mechanized war. The allies required vehicles of all types, and nearly all of the fuel to run them was supplied by the United States. The transformation to motor vehicles continued at home after the armistice.

The motor vehicle industry, still in its infancy prior to World War I, grew rapidly during the war and afterward. In the United States, production line innovations, triggered by Frederick Taylor's time and motion studies, and the scientific management movement lowered production costs. As demand for vehicles soared, the demand for fuel followed. In 1919, the United States used 1.03 million barrels per day; in 1929, demand increased to 2.58 million barrels per day. By the 1930s, the major oil fields in the Ohio Valley, Texas, California, and Oklahoma were in near peak production that would slow only with the dawn of the Great Depression. With supply and retail competition increases and demand declines, consolidation of the oil industry began in earnest. Some major oil companies grew through acquisitions and mergers, other expanded through vertical or horizontal integration of the supply chain (Ollinger 1994). Severely curtailed demand during the early years of the Depression resulted in an acceleration of this consolidation of the industry. Only the buildup to World War II and military demand saw prosperity return to the industry.

The most successful efforts at consolidation of the industry were into related fields and sectors of the industry understood by company managers. The petrochemical industry best fits this description. Exxon

was one of the first oil companies to see the connection between developing new fuels needed for aircraft engines and petrochemicals. In the late 1920s Exxon worked with the German chemical company I. G. Farben to study ways that petroleum might be used in Farben's chemical processes. Exxon used this experience to produce high grade fuels during the 1930s and to develop technology for producing synthetic rubber and plastics during World War II and beyond.

The Automobile Industry

The biggest spur to growth of the U.S. oil industry was the invention and public acceptance of the automobile. By the end of the 1920s close to 80 percent of all automobiles in the world were registered in the United States. Automobile registrations would increase faster than population until the 1980s when the two would increase at about the same pace. The annual production of U.S. automobiles in 1920 was close to 2.3 million vehicles, whereas the rest of the world produced 40,000 units. Annual U.S. production increased to 3.7 million vehicles in 1923 and 4 million in 1926. In 1929, 4.9 million American-made automobiles were sold in the United States, with a total of 26.7 million vehicles registered.

The automobile industry, possibly more than most other new industries of the early twentieth century, evolved through a long series of consolidations (Edmonds 1923). The public flocked to this new means of transportation despite the early lack of roadways. Two U.S. producers of automobiles and trucks emerged as global leaders in the industry: General Motors (GM) and Ford. These two firms took different paths toward achieving their goal of industry dominance. GM elected to grow by a combination of horizontal and vertical integration. Their means of achieving that goal was to provide one or more models in all segments of demand. To produce these vehicles they purchased parts from thousands of different suppliers. Ford, on the other hand, grew by extreme vertical integration, starting or acquiring suppliers of everything needed to produce a motor vehicle. Ford went so far as to acquire the means to produce or fabricate the materials needed to make the parts. This included acquiring forests, coal and iron ore mines and the ore carriers to carry the ores, railroads, glass makers, and rubber plantations for tires. The emphasis on cutting production costs as severely as possible enabled Ford to achieve overwhelming dominance in the low-cost segment of the industry with its Model T. Selling for a short time for as little as \$260 made it possible for the Ford Motor Company to capture 95 percent of this market.

The General Motors Corporation

General Motors was established by W. C. Durant in New Jersey in 1908, in time to catch the increase in automobile sales that followed a brief recessing in 1907 and rising farm income. Durant's experience running the Buick Automobile Company helped him see the great future in store for the industry and he wanted to be a big part of it. With profits from sales of Buick cars, Durant acquired Cadillac, Oakland, Oldsmobile, and several smaller auto makers. By 1909, GM had amassed 11 car companies, two truck companies, and eight parts makers. Together, the companies produced 28,500 cars for 24.5 percent of all cars made in the United States that year.

GM underwent reorganizations in 1913 and 1916. They consolidated company holding and reduced the number of vehicle brands made to five automobiles, one truck, and a smaller group of parts suppliers. The next major change occurred in 1918 when GM acquired the Chevrolet Motor Company, a major supplier of lower cost cars. Chevrolet had produced 125,000 cars in 1917 and controlled a number of parts and supplies producers. A major addition of the Fisher Body Corporation in 1919 made it possible for GM to stop purchasing auto bodies from outside suppliers, greatly increasing its earnings. Fisher was the largest maker of auto bodies in the country. The Fisher purchase included the National Plate Glass Company, producer of glass windows for vehicles. The final big change in GM occurred in 1920. Durant was forced out of his company when the DuPont de Nemours maker of chemicals and explosives and a group of bankers led by J. P. Morgan and British and Canadian interests acquired controlling interest in GM. By 1923, GM was producing 400,000 cars a year.

The Ford Motor Company

The Ford Motor Company was incorporated in 1903. At first, the company was primarily an assembler of parts that were made by other companies. However, by 1914, Ford sales were strong enough to enable the company to stop buying motors and other major parts. Henry Ford began his strategy to eventually control all aspects of production: producing iron and steel from the company's own smelters from iron ore and coal mined in its own mines and carried to its River Rouge factory in Detroit by its own ore-carrying ships, using the wood used in auto frames harvested by Ford-owned forests, auto glass from his own plate glass company and, eventually, tires from his own rubber plantations. In the early 1920s, however, world demand for his cars outpaced his ability to produce everything needed to

Box 12.1 Henry Ford, the great innovator

Harvard economic history professor emeritus Stuart Bruchey described Henry Ford in the following mixture of vitriol and admiration in his 1990 book *Enterprise: the Dynamic Economy of a Free People*:

Barely literate, bigoted, and ruthless in his labor relations (said to be the worst in the auto industry), a man ignorant of the complexities of worlds beyond his chosen domain, Ford was nevertheless an extremely important innovator. He may have been the greatest manufacturer of all time . . . As a rule, one car came out of the Ford factory about every 45 seconds. By 1926, when Ford discontinued production of his famous Model T, he had sold 15 million cars, half of the nation's entire output of new cars, more than double that of his nearest competitor, General Motors. In 1923 alone, Ford had made and sold 1.7 million.

make a car. He continued to buy some motors from the Dodge Brothers and car bodies from GM's Fisher Body subsidiary. Parts manufacture and final assembly was farmed out to more than 30 different factories located across the country, in Canada, the United Kingdom, Spain, Denmark, France, and elsewhere. Construction of the River Rouge complex began in 1917. When completed in 1928, it was the largest integrated manufacturing facility in the country, if not the world.

Other than the purchase of the Lincoln Motor Company in 1922 for \$8 million, Ford's early growth strategy was not to grow by mergers and acquisitions, but to do so by vertical integration, and to make that possible by complete domination of a single segment of the market. That strategy was clearly successful; it remained largely unchanged until May, 25, 1927, when the 15 millionth and last Model T rolled off the assembly line. The line remained closed until December, when the first Model A appeared.

Other Car Makers

GM and Ford were not the only U.S. automobile makers during the 1920s. After being ousted from General Motors by the DuPont group, W. C. "Billy" Durant formed a new company in 1921, the Durant Motor Company. Durant attempted to produce a line of cars that

would compete with the GM line, and was partially successful. The company produced six different models, ranging from the \$10,000 Locomobile to compete with GM's Cadillac, Ford's Lincoln, and the British Rolls-Royce, to the \$438 Star. By 1923 there were 106 different car makers in the United States. Some of the better known names included Dodge, Studebaker, Hudson, Packard, and Willys-Overland. Dodge became a model in the Chrysler line, Studebaker and Packard continued through the Depression years to have some success during World War II, and Willys-Overland designed and manufactured the World War II Jeep. The Durant Company, already weakened by slow sales, closed its doors in 1931.

EMERGENCE OF A CONSUMER SOCIETY

Business opportunities changed significantly following World War I, as America evolved from a producer-dominated, agrarian-centered society to one that was becoming consumer oriented. During the interwar period the country became a strong creditor nation. American agricultural and industrial exports exceeded imports in all but the deepest depression years from 1934 to 1939. Exports shifted in importance from farm products to manufactured items, while imports consisted mostly of raw materials. Exports of agricultural products remained important, but less so than before the war, further curtailing farm income. The Depression had emboldened protectionists in Congress, using high tariffs in order to protect American businesses. A tariff war was the result.

Despite the growing importance of world trade, the internal domestic market remained the most important factor in the economic prosperity of the United States, as it had been in the nineteenth century. The national market became even more lucrative as it was brought closer together in the late nineteenth century through advances in transportation and communications. In the twentieth century, automobiles, trucks, airplanes, telephones, and the radio would all help to make distribution more efficient and effective.

The 1920s were a period of impressive economic growth. Wage earners could afford and were buying automobiles, new electrical household appliances, and moving into new homes (Smiley 1996). Despite the general prosperity that characterized all but the agricultural sector during the 1920s, wage rates for factory workers remained relatively stable, except for a short dip in 1921. Female manufacturing workers were earning roughly two-thirds as much as male workers (Table 12.3). Farm workers continued to be at the low end of earning

Table 12.3 Average weekly or daily wages for selected occupations, 1920–1930 (1929 \$)

Year	Weekly: Male skilled manufacturing workers	Weekly: Male semiskilled manufacturing workers	Weekly: Female manufacturing workers	Weekly: Coal mine workers	Daily wage rate: Farm workers
1920	29.16	22.28	15.14	–	2.82
1921	26.19	19.41	14.96	–	1.96
1922	28.73	20.74	16.19	–	2.04
1923	30.93	22.37	17.31	25.51	2.36
1924	30.61	22.45	16.78	23.47	2.40
1925	30.57	22.41	16.78	25.64	2.30
1926	30.60	22.47	16.72	27.51	2.32
1927	31.09	23.22	17.14	23.85	2.32
1928	31.94	23.89	17.15	24.46	2.30
1929	32.60	24.40	17.61	25.11	2.30
1930	29.63	22.47	16.40	22.61	2.21

Source: U.S. Department of Commerce, Bureau of the Census. *Historical Statistics of the United States*, 1976.

scale, with earnings averaging close to \$2.30 per day or \$13.80 for a six-day work week. However, many farm jobs included housing and some meals.

Although immigration had slowed during the Depression years, the population of the country continued to grow, rising from 106 million in 1920 to 141 million in 1946, fueled by the influx of migrants from Central and Southern Europe. These shifts in the origin of immigrants to the United States are shown in Table 12.4. The 1930 census revealed that the number of migrants from Southern and Eastern Europe finally exceeded those coming from Northern Europe. The small totals for migrants from Asia are also included for comparison.

Among the working classes, habits of self-denial, although declining as affluence continued to expand, were still common among the bulk of new immigrants. Advertising needed to break down those attitudes and to assure these consumers that instant gratification was morally acceptable and worthy of their hard-earned dollars. Marketing and marketing research provided advertisers with the knowledge and tools needed to accomplish its new task: advertising had to be *persuasive* as well as informational.

Table 12.4 Region and country of birth of foreign-born Americans, 1850–1930

Region of birth	Year					
	1850	1890	1900	1910	1920	1930
Total foreign-born	2,244,602	9,249,547	10,341,276	13,515,886	13,920,692	14,204,149
Born in Europe	2,031,867	8,030,347	8,881,548	11,810,115	11,916,048	11,784,010
Northern and Western Europe	2,022,195	7,288,917	7,204,649	7,306,325	6,241,916	5,850,256
Southern and Eastern Europe	9,672	728,851	1,674,648	4,500,932	5,670,927	5,918,982
Asia	1,135	113,383	120,248	191,484	237,950	275,665

Source: U.S. Census Bureau 2011b.

As competition for consumers' attention and favor increased after the turn of the century, a few firms began investigating consumers' needs and wants *before* designing and producing new products and to increase the effectiveness of their increasingly large advertising expenditures. The first market research department in a manufacturing company was established by U.S. Rubber in 1916. The Swift meat packing company followed in 1917. For consumer goods manufacturers, style was becoming an important selling tool.

Also helping to serve the needs of the emerging consumer society in the 1920s was an increasing availability of consumer credit. Paying for goods in monthly installments rather than in one lump sum became common. Some companies, such as General Electric and General Motors, established financing subsidiaries to support credit sales. By 1929, installment buying accounted for some 90 percent of sewing machine and washing machine purchases, about 80 percent of the sale of radios, refrigerators, and vacuum cleaners, and 60 percent of all new automobile sales.

CONCLUSION

The 1920s, 1930s, and early 1940s were pivotal years in the evolution of business in the United States. As American companies improved and diversified their produces and reached out to new markets, many found their earlier systems of centralized management proved to be inadequate to handle the growing complexity of their operations. Some leading companies began to adopt decentralized business structures to better deal with that complexity.

Three crises dramatically changed business in America during the first half of the twentieth century: two world wars and a crippling global depression. Out of these came greater oligopoly and significantly altered business operations. Managers who were not owners sought other new and different markets to serve and products to provide. They developed concepts of professionalism in management and supported the provision of professional business management higher education to achieve their aims.

The interwar period also saw the nation nearly forced to its knees when it suffered through 10 years of what became the Great Depression. It began with the 1929 stock market crash and continued until a pre-World War II military buildup that began in 1939. This was before most of the social welfare safety net was established in the 1940s and 1950s. During what has been described as the greatest domestic crisis in the United States since the Civil War, “between 1929 and 1932, 110,000 businesses failed in the United States, and industrial production fell by one-half. By the winter of 1932–1933, at least one quarter of the work force was unemployed—some 14 million people, with many others employed only part-time” (Blackford and Kerr 1990, 321).

Until the last years of the 1930s, American business was unable to reorganize itself and climb out of the deep pit of the Depression, despite the sweeping changes brought on by New Deal reforms. Businesses—and the American public—needed a helping hand to get back to work and the wheels of commerce and industry turning again; they turned to the federal government for that help. For the first time in American history, the federal government began assuming responsibility for the economic health of the nation as a whole—a trend that was to become even more pronounced—and more controversial—after World War II. The mass production skills of America’s manufacturing industry went on to arm the Allies in World War II and to become the world’s largest economy after that war.

DISCUSSION QUESTIONS

1. What were the changes reshaping U.S. commerce and industry after 1900?
2. How did the Great Depression affect the structure of U.S. commerce and industry?
3. What factors in the years before and after World War I contributed to the large number of farm foreclosures in the 1920s?

4. How did the continuing trend in mergers and trusts change the structure of U.S. commerce and industry in the first half of the twentieth century?
5. In what way did consumer spending come to influence the health of the U.S. economy?

CHAPTER 13



POSTWAR INDUSTRIAL LEADERSHIP

The structure of American business began to change dramatically during the first half of the twentieth century. Mergers and internal growth resulted in a few very large corporations with fewer and fewer competitors taking the place of the traditional small, family-owned business that had characterized American business. In 1909, oligopolistic industries controlled production in 16 percent of America's production of industrial goods; by 1929 that control had increased to 21 percent, and by 1930 nearly half of all U.S. industry was controlled by just 200 corporations (McElvaine 1984). The intrusion of government into business management that had emerged in the trust-busting Progressive era and again in the years of the Great Depression was placed on the back burner during the booming years of World War II.

Many of the mergers and trusts that took place during the boom years of the 1920s had been between medium-sized and already large companies. Many of the weakest of these did not survive the Great Depression. As a result, industrial production became increasingly concentrated in the factories of very large businesses. The hundred largest American companies in 1925 controlled 36 percent of the nation's manufacturing assets. By 1931, this had increased to 44 percent.

Still, it must be remembered that even despite this shift to ever larger businesses, small businesses remained an important part of the American system of commerce and industry. Small businesses remained strongest in areas where they could carve out a market niche for their specialty products and in industries in which there were few if any inherent economies of scale. Examples include fine furniture making, leatherworking, garment and jewelry making, and similar operations that were always more labor than capital intensive.

New Management Models

The greater number of consumer goods produced in America after World War I required the institution of new management methods and organizational structures. Even as late as 1910, most large firms still produced only one or two major items for a few key markets. Although the idea of functional departmentalization had become readily accepted, centralized management systems were considered adequate for such product-market focus. Professional officers in the head office could handle the relatively uncomplicated operations of their firms. However, as the companies grew in size to serve ever-larger markets and increased the diversity of their product lines, problems with centralized management structures appeared. The problems of centralized management were revealed in a relatively minor recession in the early 1920s. They would become even more problematic after 1930.

With centralized management all major decisions were made at the head office, where the focus of management decisions was more often than not based solely on financial considerations. Decentralized management retained responsibility for planning for the entire company, but delegated authority over most daily operations to what became semiautonomous divisions. These divisions were typically arranged along product lines. The railroads had pioneered decentralized management in the nineteenth century, but it was not until the 1920s that many major manufacturing firms followed suit. Led by DuPont and General Motors, the more diverse and complex industries adopted decentralized structures.

Firms in industries with diverse and widespread markets that were most likely to have adopted this type of structure include electrical products, led by Westinghouse in 1934 and followed by General Electric in 1950; the chemical industry, which DuPont led with Hercules and Monsanto following in the 1930s. In the power machinery and automobiles industries, International Harvester reorganized in 1943, with Ford and Chrysler following after World War II. Not all large companies adopted decentralized management structures. Standard Oil affiliates and other petroleum corporations, companies in the metals and mining industries such as Anaconda, Kennecott, and International Nickel, retained their centralized structures.

U.S. INDUSTRY DURING AND AFTER WORLD WAR II

The ability of the U.S. manufacturing industry to meet the material needs of the Allies in World War II is clearly seen in the aircraft

Table 13.1 Comparison of WWII aircraft production from 1939 to 1945

Country	1939	1945	1941	1942	1943	1944	1945
United States	2,141	6,068	19,433	47,836	85,868	96,318	46,001
Japan	4,467	4,768	5,048	8,861	16,693	28,180	8,263
Germany	8,295	10,862	12,401	15,409	24,807	40,593	4,540
United Kingdom	7,940	15,049	20,064	23,672	26,263	26,461	12,070

Source: National WWII Museum 2014.

production statistics for the United States, the United Kingdom, Japan, and Germany in Table 13.1. Before the war, the United States produced just close to 2,000 aircraft compared to Germany's 2,265, the Britain's 7,740, and Japan's 1,467. U.S. production rose to 19,433 in 1941, nearly 85,000 in 1943, and more than 96,000 in 1944 (National WWII Museum 2014). U.S. industry also produced close to three times as many tanks (60,973) as Britain (23,202) and Germany (19,926), and 30 times as many as Japan (2,464).

During World War II the U.S. government made significant investments in a wide variety of defense-oriented and consumer goods industries. Investments in these industries made up nearly 65 percent of all war-related spending. Many of those investments were made in areas outside of the traditional Northeast and Central U.S. industrial areas. After the war, most of the factories, shipyards, air fields, and training facilities were sold to public or private companies in the region. The organizations that benefited from those government investments were in a position to contribute to faster economic growth in their regions than would have been possible without the new or expanded facilities (Hooks and Bloomquist 1992). Among the best and most readable histories of the success of American industry's rapid shift to becoming the arsenal of democracy during World War II is Arthur Herman's 2012 book, *Freedom's Forge*. Led by the nation's automobile industry but eventually including all the very large and the smallest manufacturers, American factories out-produced Germany, Japan, and Italy combined.

In 1939, close to half of the country's in-place manufacturing base was in the iron and steel and related metal fabricating industries. Moreover, the technology employed in defense-related materiel was similar to what had been employed in earlier wars. It was, therefore, an industrial war, and the U.S. was the leading industrial

nation. The aircraft, ships and submarines, rifles, machine guns, and cannon of World War II were largely just improvements of the same weapons used in the World War I. These two factors made it relatively effortless to shift from producing goods for the consumer market to manufacturing the weapons of war. The techniques involved in making artillery shells were, for example, not much different than what was needed to produce automobile engines. Tanks were in many ways just larger tractors with guns, and the new factories put up to make them would be easily converted to making automobiles.

All told, close to \$21 billion was invested by the government in physical assets for the war effort. More than \$15 billion was spent in defense industries; close to \$5 billion was invested in helping makers of consumer goods supply the many goods and services needed for military uses. Government financial investments in productive infrastructure prior to and during World War II not only brought the country out of the Great Depression for good, but also contributed significantly to growth after the war.

Hooks and Bloomquist (1992) identified a little-discussed aftereffect of the government's investments in war production facilities and processes. Because of the distinct regional preferences for government investments, after the war the areas benefiting from those investments grew at a disproportionate rate than most other areas of the country. In general, the traditional heartland of the country benefited least from war-related government investments. The data in Table 13.2 show the top five regions that received larger shares of the government's investments during the war. Table 13.3 reveals which areas benefited most and which benefited least after the war as a result of those investments.

Sales of the government's wartime investments to private firms began almost immediately after the end of the war, although some sales and additional investments were made during the early stages of the war in Korea. Of the 238 sales of industrial facilities made right after the war, most were spread across the country; in nearly 75 percent of the total, a single sale was made. In only four areas were there more than four sales: Philadelphia (14), Norfolk (10), Chicago (8), and Detroit (7). Sales tended to be made to firms in areas where that particular industry had been concentrated prior to the war. The petroleum industry is an example: of the 26 sales in this industry, 16 were in Louisiana, Oklahoma, or Texas.

Table 13.2 Partial list of regional war production investments (thousands of 1972 dollars)

All defense-specific industries			All civilian-oriented industries		
Aircraft	Shipbuilding	Ordnance	Aircraft parts	Petroleum	Miscellaneous
Dallas	San Francisco	St. Louis	Chicago	Houston	Philadelphia
208,798	513,895	571,146	741,249	370,738	689,155
Los Angeles	New York	Detroit	New York	Beaumont, TX	Chicago
179,382	494,521	564,562	477,588	241,785	640,646
Detroit	Philadelphia	Chicago	Detroit	Louisville	Pittsburgh
178,958	349,916	464,086	474,449	180,637	422,828
New York	Boston	Minneapolis	Buffalo	Los Angeles	Houston
138,350	289,805	386,069	299,846	169,251	431,987
Atlanta	Norfolk, VA	Kansas City	Cincinnati	Lk. Charles, LA	Salt Lake
108,018	193,629	376,573	290,416	156,787	417,554

Source: Hooks and Bloomquist 1992, from U.S. War Production Board data and other government sources.

Table 13.3 Statistical areas with gains or losses in growth in manufacturing, 1947–1972

	Top 10 winning regions	Relative gain (\$ billions)	Top 10 losing regions	Relative loss (\$ billions)
1	Los Angeles	9.6	New York	-15.80
2	Houston	2.72	Chicago	-6.43
3	Dallas-Fort Worth	2.37	Pittsburgh	-4.40
4	Memphis	2.00	Boston	-4.13
5	Miami	1.73	Philadelphia	-4.04
6	San Francisco	1.60	Hartford-New Haven	-2.64
7	Rochester, NY	1.58	Cleveland	-2.37
8	Phoenix	2.39	Detroit	-2.13
9	Atlanta	1.35	Buffalo	-2.07
10	Nashville	1.26	Providence, RI	-1.34

Source: Hooks and Bloomquist 1992, from U.S. War Production Board data and other government sources.

POSTWAR ECONOMIC GROWTH

The U.S. commerce and industrial sectors enjoyed global dominance in the early years after the end of World War II. Over the next half-century U.S. firms underwent a period of tremendous growth. Goods manufactured in the United States became available throughout the world, enabling more business executives to begin thinking about their businesses in global terms. Americans had created a new type of business firm before the war—the multidivisional, decentralized corporation—to take advantage of new business opportunities in the Roaring Twenties. After World War II they forged additional types of business structures to benefit from the opportunities in the postwar period. American business during the 1950s and 1960s were the largest and most successful businesses in the world (Blackford and Kerr 1990; Bryant and Dethloff 1990). However, at the same time the division between center and peripheral firms was widening. Big business was becoming the dominant pattern in both commerce and industry.

A Period of Unparalleled Growth

The economy of the United States was the envy of the world during the two decades following the war; it enjoyed what was clearly a period of unparalleled economic growth. Between 1945 and 1960, for example, America's GNP rose by 52 percent and its per capita GNP increased by 19 percent. Over the next 10 years, the economy rose an additional 46 percent and per capita GNP increased by 29 percent. By 1969, the United States' share of global industrial output exceeded 42 percent of the world total. It stayed there well into the 1970s.

By the mid-1980s, big businesses in the United States had changed considerably from that of just 30 or 40 years earlier. Above all, they were more diversified. They produced and sold a broader range of products for a wider range of consumer markets both at home and abroad. Many made significant foreign direct investments, in the process evolving into multinational corporations (MNCs). Despite the significant growth, the period was not without its problems; nor was this period to end on a positive note as it had begun.

Postwar Consumer Demand

Driving the economy after the war was a vast array of consumer durables such as automobiles, television sets, and household appliances. Americans had the money to buy it all—and they tried to. Unemployment was low and wages were high and growing higher. What industrial capacity that was not used to supply the increasingly affluent

Table 13.4 Earnings of all firms in five business sectors, 1955–1965 (\$ billions)

Sector	Year						
	1955	1957	1959	1961	1963	1964	1965
Wholesale and retail trade	205,153 ¹	365,436	386,918	389,449	428,849	457,796	489,738
Services	13,875 ¹	45,154	53,479	54,643	68,220	73,386	78,778
Banks and insurance	13,922 ¹	18,126 ¹	32,355	35,160	40,636	45,153	49,703
Real Estate	7,338 ¹	7,860 ¹	13,200	14,417	17,772	19,239	20,634
Manufacturing	601,720 ¹	342,024	371,400	383,357	431,825	466,408	515,848

Note: ¹Data for corporations only; all others are corporate and noncorporate organizations

Source: U.S. Internal Revenue Service 1966.

American society was put to use producing industrial materials for the rebuilding of the economies of the war-torn world.

Increased income together with the earnings of five years of pent-up consumer demand resulted in tremendous growth in the trade and service sectors of the economy after the end of the war. Both the industrial and commercial sectors were enjoying substantial growth from 1955 to 1965. In 1955 the top 500 industrial corporations reported combined sales of \$161.4 billion. During the same period, the nation's 50 largest merchandising firms, including all forms of retailing and wholesaling, reported combined sales of \$25.6 billion. By 1965 the top 500 industrial corporations reported combined sales of \$298.1 billion, while combined sales for the top 50 merchandising firms in 1965 was just a little less than \$49 billion (Table 13.4).

Of the 36 million new jobs created in the United States between 1957 and 1987, a full 90 percent were in the services. Among the many different occupations listed as services to citizens and businesses, this sector includes wholesale and retail trade, transportation, publishing, entertainment, financial and accounting services, legal and medical services, and others. Of the 23 million women who found jobs during this period, 97 percent went to work in the service industries. By 1980, the United States was the world's largest single exporter of services, accounting for 12 percent of the total world export trade.

DIVERSIFICATION, MERGERS, AND TRUSTS

American business diversified along four different paths during the last half of the twentieth century. Some firms diversified through internal development. They added products, product lines, or businesses

from a base in technology or a narrow specialty. For example, internal research led the rubber products manufacturers into related fields of chemicals, plastics, and fibers. Other firms diversified by purchasing companies that complemented their existing lines of business in some way. For example, Continental Can purchased metal lid manufacturers and glass and paper container companies, making it possible for them to offer their customers a wider variety of container choices. Still other companies expanded by buying companies that sold products using the same or similar channels of distribution. For example, American Tobacco became American Brands after acquiring companies that made prepackaged food and beverages sold in the same mass-distribution outlets that sold tobacco products. Finally, other firms elected to grow following a conglomerate diversification strategy. They purchased any type of company they could get their hands on, regardless of its technology or distribution method. They did so convinced that good managers could manage any kind of company.

Conglomerates and multinationals were two variations of big business in the United States at the end of the twentieth century. The development of these business forms was not really new. Rather, they were natural developments and continuations of a pattern in firm growth that began in the mid-nineteenth century. They followed the evolving structure of U.S. commerce and industry of a few, relatively small number of big businesses dominating key segments of the U.S. economy coinciding with large numbers of small businesses. In 1982, small businesses accounted for 38 percent of the nation's GDP. That proportion was maintained at about the same rate through the end of the century. More than 90 percent of all businesses in the United States were and still are small businesses. As a result, small businesses generated the bulk of new jobs. They were particularly important as employers of women, young workers, and minorities. In numbers, small businesses have long dominated the service industry, and continue to be key performers in the retail side of the commerce sector. With the prevalence of off-shore production, the number of small manufacturers and their importance to growth in GDP continued to decline. Taking their place would be a large increase in public-sector spending as the impact of the "age of entitlements" began to be felt in the economy.

Birth of the Conglomerate

Conglomerate growth became increasingly popular during the late 1950s and 1960s. The aerospace company Ling-Temco-Vought (LTV) was an example of a conglomerate organization. As a diversified

conglomerate that traced its history to a Texas electrical contractor that began shortly after World War II, the firm existed from 1961 to 2000. Among its unaligned parts were aerospace products, electronics, wire and cable making, steel manufacturing, sporting goods, an airline, meat packing, car rentals, pharmaceuticals, and others.

As the story of LTV illustrates, they grew by putting together different types of unrelated companies under one corporate umbrella. One company, Norton Simon Industries, started in 1934 when Simon started Val Vita Food Products in an unused orange packing shed in Fullerton, California. He acquired the California tomato processing firm of Hunt Brothers Fruit Packing Company in 1943, forming a new company, Hunt Foods. For the next decade Simon expanded in the canning industry, purchasing a metal can-making plant and a glass container manufacturer. From this base he acquired other food products firms. In the mid-1950s the name was changed to Hunt Foods and Industries to reflect its diversified nature. In the 1960s, Hunt Foods merged with Wesson Oil and Snowdrift; the name was changed to Hunt-Wesson Foods in 1964. In 1968, Hunt-Wesson, the Canada Dry beverage company, and the McCall Publishing Corporation merged to form Norton Simon, Inc., a \$1 billion company with headquarters in New York City. The firm then continued to expand both internally through further acquisitions in the foods industry. The firm was purchased by the Esmark Corporation in 1983 and moved to Chicago; Esmark was a diversified holding company that controlled the Swift & Company meat-packing firm, Playtex, Tropicana, a steel maker, and a car rental firm, among others. Esmark was acquired by the Beatrice food products company in 1984; Beatrice then became a private company in 1985, functioning as the BCI Holding Company. This firm continued to grow during the changes of ownership with sales topping \$2 billion in 1989. In 1990, BCI was acquired by the Omaha food products giant ConAgra (Funding Universe 1997). Swift & Company later became a Brazilian conglomerate.

Conglomerates became increasingly common as the third major merger movement accelerated after 1950. Mergers in manufacturing and mining industries reached a peak of 2,500 per year in 1968; 75 of those mergers were conglomerate types. Still, despite the interest in the approach, it never became the dominant type of consolidation and it became even less popular after the spectacular collapse of several very large groups. A minor recurrence occurred in the 1980s, led by a rash of leveraged buy-outs and the use of junk-bond financing. At their peak, however, only 46 of the 500 largest industrial companies in the United States were conglomerates.

The conglomerate form fell into disrepute in the early 1970s as several failed or were forced to divest large portions of their empires for cash to pay down tremendous debt. The hoped-for synergy did not appear; conglomerates were not any more profitable than any other type of big business, and often one sector's management skills were not readily transferable to others. During the renewed economic growth that occurred in the late 1970s and 1980s, conglomerates contributed only a minor portion.

Growth during the Long Expansion

Businesses in the United States benefited from a long expansion that began in 1991. Economic conditions over more than five years of unprecedented growth saw significant increases in GDP, productivity, profitability, rates of investment, low inflation and unemployment, and more equitable gains in income (Landefeld and Fraumeni 2001). Advances in technology and drops in technology prices resulting from increased competition in computers, cell phones, and Internet browser services were important drivers of growth. These phenomena gave several names for the period: the Internet Age, e-Business Age, the Information Technology Revolution, the Digital Economy, and collectively, the New Economy. Table 13.5 displays the impact on GDP of sales of computers, software, and telecommunications services from 1995 to 2000. Sales of these products and services contributed nearly 1.5 percentage points to the growth in GDP in 2000.

Globalization Spurs Diversification

Just as the tremendous growth in the American economy after World War II fueled additional diversification of business in the domestic market, the expansion of the global economy encouraged worldwide business diversification. A large number of firms were soon considered multinational enterprises (MNEs). To be considered an MNE a firm needed to do more than a million dollars business in each of five or more countries. By the 1970s, at least 3,500 U.S. companies had direct foreign investments in some 15,000 enterprises around the globe. During the decade of the 1970s, however, a decline occurred as more foreign businesses also expanded into the multinational marketplace. Between 1971 and 1975, for example, American multinational corporations divested themselves of 1,359 foreign subsidiaries—nearly 10 percent of the total held by U.S. firms. Most of those divestitures were made voluntarily because of declining profits in the

Table 13.5 Contribution to GDP from sales of computers, software, and telecommunications

	1995	1996	1997	1998	1999	2000	Average 1995–2000
Percent change at annual rate:							
Real gross domestic product	+2.7	+3.6	+4.4	+4.4	+4.2	+5.0	+4.1
Contribution in percentage pts:							
Computers and software ¹	.62	.74	.90	.94	1.04	1.10	.89
Telecommunications services ²	.10	.14	.11	.13	.14	.13	.13
Communication equipment ³	.19	.15	.17	.10	.24	.25	.18
Total:	.91	1.03	1.18	1.17	1.42	1.48	1.20

¹Includes computers, software, and audio and video products

²Includes cable TV and local and long distance telephone

³Includes personal and commercial equipment, net exports, and government

Source: Landefeld and Fraumeni 2001, 27.

foreign markets, although some in developing nations were forced to sell to local owners or were taken over by foreign governments. By 2001, MNCs represented less than 1 percent of all U.S. companies, but accounted for 23 percent of the country's private sector GDP (MGI 2010).

GROWTH IN SELECTED INDUSTRIES

By 2001, the U.S. Bureau of Labor Statistics (BLS) forecast that firms in the computer and data processing services industry (e.g., software, systems design, computer-related consulting) would be the fastest growing industry in the United States, increasing by 86 percent from 2000 to 2010. This was following residential care (expected to increase by 64 percent) and health services industries (to grow by 57 percent). A similar forecast in 2001 predicted that home health care would grow by nearly 49 percent between 2002 and 2022. Other health-related fast growing industries included physical therapists and aides, occupational therapy, medical secretaries, and many other medical/dental special occupations, including biotechnology.

The Healthcare Industry

As the country continues to exhibit an aging population, the health-care and social assistance sectors are expected to continue to be among the nation's fastest growing industries. Sector employment is projected to grow at a sustained rate of 2.6 percent each year until 2022. The industry will add some 5 million new jobs to the economy over the period—accounting for nearly one-third of all the projected growth in employment over the period. Despite the demand for workers, many of these are among the lowest paid jobs in the country. For example, in 2022 the median annual wage for personal care aides will be \$19,910, \$20,820 for home health care aides, \$23,880 for physical therapy aides, and \$31,350 for medical secretaries.

The Manufacturing Industry

By the end of 1960s, the U.S. manufacturing industry was at its peak of postwar progress and global influence. It would remain so until the gasoline crises of the 1970s, when the price of oil quadrupled almost overnight. But at the beginning of the 1960s, the future for American businesses looked exceptionally bright, as Joseph McGuire, then Dean of the University of Kansas's School of Business wrote in 1964 (Box 13.1).

Box 13.1 U.S. business in the affluent society of 1964

Business school dean Joseph McGuire argued in 1964 that: "Our American business system, in the years since the end of World War II, has made our nation truly an affluent society. As we look about us we find that our people are better clothed, fed, and sheltered than the people of any other nation, past or present. We enjoy a wide range of goods and services.

"The abundance which the business institutions of our nation have produced, furthermore, has left its mark upon the American character. It has altered our goals and changed our standards. It has caused us to be mobile, to be consumption-oriented, and to be insecure. It has produced a novel sort of democracy, different from that possessed by other countries of the world. It has not produced a people who can look upon their lot with equanimity and satisfaction. On the contrary, it

has brought forth a horde of social critics to remind us that things could still be better than they are. Some of these nagging voices tell us that things are good indeed, but that they are not so good as they seem.

“We are an affluent society afraid of its own affluency, much in the way that [child actress] Shirley Temple once depicted in *Poor Little Rich Girl*. Yet, instead of worrying about its side effects, we should rejoice in our affluency. We should cast aside guild complexes constructed by our moral “super ego” and be happy in our economic “id” for the latter drive has brought us a greater prosperity than has been enjoyed by any other nation at any other time. What we require is not psychoanalytical introspection, but rather a spreading out of the benefits of our material success. In brief, what we need is a new ideology to fit a successful business society, not a new business society to fit an old ideology.”

Source: J. W. McGuire 1964, 269.

Although the U.S. Department of Labor predicts that manufacturing will have a decline in industry employment of nearly 600,000 from 2012 to 2022, aspects of the sector continue to do well. A 2012 report in *Forbes* (Biery 2012) predicted that several manufacturing sectors would be among the fastest growing from 2014 on. The three fastest growing industries associated with energy development in the upper Midwest: support activities for mining, with a twelve-month 32 percent increase in sales; petroleum and petroleum product merchant wholesalers, 27 percent increase; and industrial machine manufacturing, 25 percent increase. Other fast growing manufacturing industries on the list of top 10 industries include architectural and structural metals manufacturing, metalworking machinery, machine shop products, and machinery, equipment, and supplies wholesalers.

The Retailing Sector

Retailing, while continuing to undergo significant changes, continues to make a significant contribution to the economy of the United States; retail sales were 27 percent of GDP in 2013, up from 26.8

percent in 2012. Total retail sales exceeded \$4.3 trillion in 2012 and \$4.5 trillion in 2013. Total retail sales are projected to be \$5.1 trillion in 2016, \$5.3 trillion in 2017, and \$5.5 trillion in 2018 (Table 13.6).

In the four decades after World War II, retailing in the United States came to be dominated by very large chains. These chains are among the largest businesses in the world. Walmart, the largest chain in the United States with 2013 sales of \$334 billion, is also the largest in the world. Others among the 10 largest U.S. retailers in 2013 included Kroger, \$93.6 billion; Costco, \$74.7 billion; Target, \$71.3 billion; the Home Depot, \$69.9 billion; Walgreen, \$68.1 billion; CVS Caremark, \$65.6 billion; Lowe's, \$52.2 billion; Amazon.com, \$43.9 billion; and Safeway, \$37.5 billion (Elejade-Ruiz 2014). In 2013 Amazon, a purely e-commerce retailer, made the top 10 retailers list for the first time.

This evolution of retailing began with a few small, locally owned and operated trading posts and a few farm stores selling a little of everything the expanding population needed; in the new century, it is now a sector dominated by a relatively few very large retailers

Table 13.6 Annual retail sales, totals and non-store and food service shares 2000–2013 (\$ millions)

Year	Total all retail sales	All nonstore retailing	Food and beverage service
2000	3,287,537	180,453	304,261
2001	3,378,906	180,563	316,638
2002	3,459,077	189,279	330,525
2003	3,612,457	206,359	349,726
2004	3,846,605	228,977	373,557
2005	4,085,746	255,579	396,463
2006	4,294,359	284,343	422,786
2007	4,439,733	308,767	444,551
2008	4,392,750	319,223	456,442
2009 ^a	4,066,822	311,230	452,370
2010	4,288,339	340,902	467,476
2011	4,601,788	376,058	495,798
2012	4,831,131	406,420	524,894
2013	5,011,740	432,759	542,718

^a2009 declines in all sales due to recession

Source: U.S. Census Bureau 2015, <http://www.census.gov/retail/index.html>.

in almost every class of goods sold. The evolution of retailing in America occurred in five clearly discerned stages (Linneman and Moy 2002; Smyyth 2011). The first was the pre-1945, premodern, stage of mostly small independent stores in rural America and a few large department stores in urban areas. The second, postwar period occurred from 1945 to 1975. In this period, rapid growth in all forms of retailing resulted in a fading away of the old “mom-and-pop” stores, and de-retailing of many small towns. Much of the growth in new stores followed the movement of consumers from urban to suburban areas. Many well known stores opened some of the first large stores in suburbia, including Sears, J.C. Penney, Woolworth’s, Kress, and Montgomery Ward. As new malls were built in suburban areas, stores like Macy’s became the large-store anchor, with smaller specialty shops following. By the end of the period, discount stores, hypermarkets, and warehouse clubs were biting deep into the business of the mall department store.

The third stage in the evolution of U.S. retailing, from 1975 to 1990, saw several new models come into maturity, including the Big Box and Category Killer models. Supercenters and warehouse clubs continued to expand. Discount store chains and superstores that offered products and services that covered an entire category range also cut into the range of products sold in department stores. Examples include Office Depot and Staples in the business supply field; Home Depot and Lowe’s in home improvement; CVS, Walgreen, and Rite Aid in pharmacies; Best Buy and Circuit City in electronic equipment; and Walmart, Kroger, Safeway, and Costco in groceries. Another new model that became common in this period was the manufacturer’s outlet store, where seconds or overstocks could be purchased at bargain prices.

The fourth period, from 1990 to 2000, saw a speeding up of the evolutionary process in retailing. This was a period of consolidation in all retail channels with the big chains getting bigger and weaker stores either absorbed or simply disappearing. By the end of the decade, in nearly every channel, a few giants control the bulk of market share. Retailing was overbuilt; old malls were emptying out and the country could no longer support new malls. Few consumers could take the time to leisurely stroll from shop to shop in a large mall. Instead, they flocked to stores like Walmart and Costco where they could purchase everything from hotdogs to automobiles. Existing stores looked for new ways to increase their earnings. One way was to add groceries to their merchandise. Grocery sales represent the closest thing to a dominant commodity across the country’s major retailers; eight of

Table 13.7 U.S. e-commerce total sales and % of total retail sales, 1998–2013 (\$ millions)

Year	Total retail sales	E-commerce retail sales	Share of total sales
2013	4,469,022	260,669	5.8%
2012	4,306,237	229,440	5.3%
2011	4,105,990	199,704	4.9%
2010	3,820,863	170,184	4.5%
2009	3,614,452	145,770	4.0%
2008	3,936,308	141,969	3.6%
2007	3,995,182	136,586	3.4%
2006	3,871,573	113,586	2.9%
2005	3,686,283	91,532	2.5%
2004	3,473,048	72,678	2.1%
2003	3,262,731	57,204	1.8%
2002	3,128,552	44,650	1.4%
2001	3,062,268	34,276	1.1%
2000	2,983,276	27,616	0.9%
1999	2,803,090	14,492	0.5%
1998	2,581,762	4,984	0.1%

Source: U.S. Census Bureau 2014.

the top 10 chains earn some of their sales from groceries, as do 37 of the top 100 chains.

The fifth stage, 2000 to 2010, has been characterized by further consolidation in nearly every retailing channel, globalization of the supply chain, expansion into overseas markets, and by the success of the greatest change to occur in retailing since the Sears catalog: the advent of electronic, nonstore, retailing, or e-commerce. E-commerce has, without a doubt, become big business; sales in 2013 were nearly \$40 trillion, up from \$2.3 trillion in 2012. This accounts for a significant portion of the sector's growth since the turn of the century. As seen in Table 13.7, the share of total sales attributed to e-commerce has increased every year since 1998. The e-commerce share of total retail sales has been projected to continue to grow by double digits, from 16.2 percent in 2012 and 16.9 in 2013. Although that annual growth will decline slightly thereafter, it is forecast to remain above 10 percent per year and to be 11.6 percent in 2018.

CONCLUSION

U.S. commerce and industry has undergone a series of transformational changes since the end of World War II. Deindustrialization has thinned the nation's industrial base from its peak contribution of more than 24 percent of GDP to less than 14 percent in 2013; thousands of high paid industrial jobs have been lost forever as factory after factory in the industrial heartland closed its doors, leaving behind what came to be known as the Rust Belt.

The nation was engaged in two major and several minor wars in the twentieth century, one of which, the war in Vietnam, caused a deep schism in the electorate. Americans suffered through a number of deep recessions, none of which, however, came close to the devastation caused by the Great Depression of the 1930s. Yet prosperity always seemed to return after the fall. Wages were high and getting higher, unions were strong, and the door to middle class life styles opened for millions of Americans. Not all industries experienced the return to the prosperity of the 1980s; many manufacturing industries never recovered, while others did so with fewer workers (Plunkert 1990). The slow shifting of manufacturing jobs to low-wage countries and increasing automation of the factory floor was not seen as a threat to the maintaining of the "American Way of Life" until well into the twenty-first century. Deindustrialization had occurred and the new Information Age industries were not growing fast enough to replace them.

A bright spot in the economy after World War II has been retailing. It has undergone what Linneman and Moy (2002) called a major evolution, rocked by "pop culture, suburbanization, and increased competition." Retailing, following the migration from central cities, changed from an urban to a suburban activity. Retailers have had to contend with an aging population, the growing purchasing power of children, abbreviated retail cycles, greater female workforce participation, and greater competitive pressures. The new trend in fashion merchandising has become "fast fashion," following a pattern of rapidly changing fads influenced by teenaged trendy fashion makers and spread through social media, only to die a quick death and be replaced by the next hot fad, and the next, and the next.

The major life-changing event of the postwar period was adoption of the personal computer by young and old alike. E-commerce now contributes more than 10 percent of annual retail sales and is growing at from 10 to 16 percent a year. This, along with social networking, has both simplified and added complexity to commerce and industry.

DISCUSSION QUESTIONS

1. What factors shaped the tremendous growth in the trade and service sectors of the economy after the end of World War II?
2. Describe the four different paths American businesses followed in diversifying during the last half of the twentieth century.
3. Why did the conglomerate form of diversification fall into disrepute in the early 1970s?
4. Describe the postwar evolution of retailing in the United States.
5. How has the digital revolution changed the structure of retailing in the United States?

CHAPTER 14



U.S. COMMERCE AND INDUSTRY IN THE GLOBAL ECONOMY

The history of the U.S. commerce and industry systems and those of the other three industrial economies described in these volumes has moved beyond the time when their organizational managers only had to worry about competition from other companies in their own countries. Today they must often vie with competitors scattered among the old industrialized countries and powerful new international competitors like the BRICS (Brazil, Russia, India, China, and South Korea). Business in the twenty-first century has reached and passed the half-way point in its first quarter. Already the commercial and industrial firms of the last half of the twentieth century have been transformed to the degree that their like 70 years ago would have difficulty recognizing them. Four sweeping changes have altered commerce and industry forever.

First, the old competitive nation-state industrialized business system under which firms in Europe and the United States struggled against one another to attain economic leadership has been replaced by a global marketplace in which all sectors and societies of the world are interconnected. Businesses can no longer just focus their attention on their own national or regional markets; the systems of manufacturing, marketing, and distributing of goods and services are now global and seldom permanent. The Internet has made doing business with a firm halfway around the globe as simple as if the firm was in the next county. On the other hand, some analysts believe that this new globalized economy may instead be evolving into one in which firms in a small number of closely aligned blocs of trading partners compete

against one another. Individual businesses are seldom called upon to deal with others doing business in their own large trading bloc. Rather, competition may be between blocs such as NAFTA, the EU, and the increasingly important ASEAN and Latin American groups. Drucker (2005) suggested that eventually there may be just six or seven of these blocs competing against one another for markets, with the huge nations of China and India constituting blocks of their own. In that world it will be difficult if not impossible for the business system of one nation to go it alone.

Second, the old industrial economy under which the four countries studied in these volumes rose to their positions of global leadership has been replaced by an information or knowledge-based economy. Now, to gain and maintain leadership, innovation through the application of science and technology are paramount and what you know and how fast you know it is more important than what you know or what you make or sell. Any company can now share equally in the e-business opportunities inherent in the new information economy.

Advances in information and communications technology (ICT) now make it possible for customer values, likes, or purchases to be instantaneously known and reacted to in businesses a world away. In this postindustrial world, the countries with strong positions in ICT, pharmaceuticals, and other knowledge industries will most likely be the leaders of tomorrow. E-government and e-business systems are among these new structures. At the same time, advances in biomedical technology are reshaping people's lives, and in turn, exacerbating the need for new and different forms of governance. Huge sums are being invested around the world on research into new medicines and ways medicines are developed and administered. This research extends to the way the world develops and grows its food (Allen et al. 2002). For some economies, their future will depend on the investments they make today in these and related innovative technologies.

A third major force shaping the economy of the future of commerce and industry in the United States is rooted in the unprecedented changes now taking place in the demographic and social characteristics of the world's populations. These changes include such key uncontrollable forces as the graying of the workforce, very low fertility rates causing zero or negative population growth, and the potential for massive waves of immigration from the poorer regions of the world to areas of greater opportunity. For example, the United States has clearly had difficulty dealing with the more than 12 million undocumented migrants living in all regions of the country. Old political structures and gender traditions are being reshaped as

governments evolve to better manage the demands of their present and future citizens.

The fourth system-shaping force is the environmental impact of industry and the burning of fossil fuels. The effects of global warming are very real, even if they are often ignored or denied by some of the world's business and political leaders. However, since 2000, more of the world's attention has turned to concern about the effects of our use of hydrocarbons as a source of energy and the resulting damage it is having on the environment. Whether countries do or do not change the way they pursue economic growth depends on a rethinking of how the global business system should operate.

THE CONTINUING EVOLUTION OF MANAGEMENT

Prior to the Industrial Revolution, managers and owners usually worked alongside their employees. Businesses were small and focused. Good craftsmen were more important than good managers. There was little or no specialization of tasks. Following the ideas of Adam Smith, work slowly became specialized. Supervision was needed to coordinate progress. Goods were made one at a time by a craftsman or artisan. Workers were apprentices to the master craftsman. The revolution occurred when mechanization was applied to the production process.

In the second revolution, products were mass produced, often on an assembly line. Scientific management was applied to produce greater efficiency and improve productivity. The watchword was interchangeable parts and identical products. Managers who owned little stock or had a personal stake in the success of their firms were hired to support over-worked entrepreneurs for whom building the business had been their one great, overpowering dream. In considering themselves "professionals," these new business leaders were guided by several ideas. First, achieving success in business meant that they would receive the same recognition and financial success as the founders. Second, their success would substantiate the effort and cost invested in formal education and training in business. Moreover, they would become members in an exclusive club; only they possessed the knowledge and technical expertise required to successfully run a big business.

As big business in the United States entered maturity, a separation between those who managed the very large firms that were evolving and those who owned the firms became nearly universal. The result was a revolution in business governance—a managerial revolution.

Stock markets in Europe and Asia are now followed as religiously as those in the United States. As Alfred Chandler (1977) has described, the first management revolution that occurred in the United States changed the way business was managed. The second revolution has required that managers look to global markets and embrace technology in their daily operations.

Being recognized as a professional meant that government and society in general would not equate these individuals with the unscrupulous, money-grubbing, robber barons of an earlier generation. Instead, they could say they operated their firms in ways beneficial to all Americans; their business decisions and actions were carried out to serve society. To accomplish those goals, a profit was essential. There have always been others for whom managing a successful business simply meant making as much money out of the business as possible. However, there have also been men and women in America for whom business has meant producing or providing products of superior quality and making them available at affordable prices. This, they concluded, was itself not a bad philosophy for anyone, and the art and science of business ethics was born. As managers developed codes of ethics, they have assured everyone they and their firms would follow the same standards. Finally, they began to increase their involvement in and support for community affairs and corporate philanthropy.

Contributing to the rise in professionalism among managers in U.S. business organizations has been the professional business schools that were formed in the nation's most prestigious universities. American entrepreneur and industrialist Joseph Wharton established the world's first collegiate school of business at the University of Pennsylvania in 1881. The Association for the Advancement of Collegiate Schools of Business (AACSB), established in 1916, set minimum standards for granting business education program accreditation. The early leaders were soon followed by similar departments and schools in state and smaller colleges and universities.

As business management became more departmentalized, professional managers who were more interested in improving profitability of their diverse businesses replaced the entrepreneurial "empire builders" of the late nineteenth century. This new generation of managers usually had less personal stake in the companies they ran than the business founders had during the formative years. And, as the separation of ownership and management continued, business executives began claiming the mantle of *professionalism*. They maintained that their mission was not simply to make a profit but was rather to serve society. Far-sighted professional managers developed codes of ethics (albeit too often ignored) and began making large corporate

contributions to causes they believed in. They became involved in professional education for business. Some of today's biggest and best universities and their schools of business administration bear their names: Duke, Carnegie-Mellon, and Stanford are examples.

THE ONGOING TRANSFORMATION OF BUSINESS

The evolution of commerce and industry in America is still underway; it now involves the application of computers and the Internet. It is common for new products to be designed on a computer using three-dimensional software. The outcome is saved digitally and sent directly to the appropriate production process. Mass production has given way to customized production.

Rather than one new world economy emerging, these global trends have forced business and political leaders to learn how to cope with one or more distinctly different world economic outcomes. The digital revolution has produced an economy based on information and the technology needed to create and store that information. Information and knowledge disseminated through the Internet is exerting a major influence on businesses. Much of the world's business is now conducted via the Internet; everyone with a personal computer and a smart phone now has access to everyone else in the world with Internet access. Not only does everyone now have access to information, they are also able to create knowledge just as quickly.

Another possible outcome is a world economy dictated by money. This ready flow of information and continual advances in communications technologies have brought about significant changes in the world's system of money and credit. Today, money flows just as easily and as rapidly as information, typically using the same media. U.S. securities are sold overnight and banks transfer balances 24 hours a day to earn interest on large balances. Meanwhile banks and other financial institutions become "too big to fail."

The downside of this outcome is the potential blow to the world's monetary system that the continued weakness of the U.S. dollar brought about by the government's deficit spending and negative balance of payments. The United States is rapidly becoming what a great many domestic and international critics have referred to as the "sinkhole of the world financial economy" as it grows increasingly dependent upon short-term foreign purchases of U.S. securities. The global economy would quickly collapse if foreign buyers of U.S. securities were to dump their holdings for some reason. Because many of these holders are Japanese and European, a collapse of the U.S. economy would drag down much of the rest of the global economy with it. If this were to happen,

businesses would find themselves in the same fix their forbearers suffered through during the Great Depression of the 1930s.

A third outcome is the globalized world of a few very large businesses dominant in every sector of the economy. Our earlier system of many independent businesses competing with one another has evolved into what is today a relatively small number of very large, diversified multinational enterprises that are located anywhere while conducting business everywhere. These few large businesses now control most world trade. The 63,000 largest businesses in the world account for more than 80 percent of the world's production. Most of the world's multinational enterprises (MNEs) are growing outside of the United States. Of the 500 largest multinationals, 185 are U.S. based; 126 are spread across the European Union; and 108 are headquartered in Japan. The United Kingdom, Germany, Japan, and the United States are no longer the exclusive homes of the world's manufactured goods; the newly industrialized nations of the world, particularly China and South Korea, are eagerly taking on that role.

The fourth outcome is what has been described as the potential for a return to a political distrust and aggressive diplomacy in the mold of the Cold War between the West and the Soviet Union. Such a world would be characterized by mercantilist philosophies and saber rattling. Mercantilism is based on the theory that national wealth and power are attained by increasing exports, limiting imports, and collecting as much gold and silver—eventually including paper money backed by precious metals or property was added—as possible. The mercantilist political philosophy emerged in France during the sixteenth century when France needed to find a source of income to fund her wars with Spain, then rich with the plunder of the New World. Most Western nations practiced one form or another of mercantilism until the last half of the twentieth century, when the great experiment in free trade captured the imaginations of the leaders of the industrialized economies. They believed that nations that traded with one another were unlikely to go to war with each other.

The core of mercantilism is protection of one's home markets while exporting as much as possible. And, despite the half-century of trade negotiations held under the auspices of first the General Agreement on Tariffs and Trade (GATT) and now the World Trade Organization, mercantilist protectionism is still alive and well. Today's mercantilism has taken the form of several large blocs of nations with free trade between them and external trade barriers against the exports of countries outside of the bloc. The leading example of the new mercantilism is, of course, the European Union, where 28 nations are rapidly becoming a single market, including a common currency and,

eventually, the free movement of people, goods, and money across all internal boundaries. The EU has made a number of moves to strengthen its cohesiveness, including a European parliament, a European central bank, a European cartel office, and the preliminary steps toward a common defense force.

CHANGES IN SELECTED INDUSTRIES

Corporate investments in research and development provide a good indication of the composition of the industries that continue to invest in their quest to dominate the global business system of tomorrow. An example of how analysts predict which industries are likely to do well in the future and which are likely to fail is the 2010 list published in *Inc.* magazine and repeated in Table 14.1. The industry leading the list of best performers was *voice over Internet protocol* providers (VoIPs), which was predicted to grow by 149.6 per cent by 2019. According to

Table 14.1 Predicted best and worst industries in the United States, 2010–2019

Rank	Best Performing	Growth rate	Rank	Worst performing	Growth rate
1	VoIP Providers	149.6%	1	Wired communications carriers	-52.0%
2	Retirement and pension plans	133.7%	2	Tank and armored vehicle manufacturers	-51.9%
3	Biotechnology	127.6%	3	Vacuum, fan and small household appliance makers	-34.4%
4	E-commerce and online auctions	124.7%	4	DVD, game and video rental	-32.8%
5	Environmental consulting	120.3%	5	Photofinishing	-31.5%
6	Video games	112.9%	6	Lighting and bulb makers	-26.8%
7	Trusts and estates	105.7%	7	Telecommunications resellers	-26.4%
8	Search engines	100.9%	8	Laminated plastics manufacturing	-25.3%
9	Recycling facilities	80.9%	9	Synthetic fiber manufacturing	-24.6%
10	Land development	72.7%	10	Wire and spring manufacturing	-24.5%

Source: Spiro 2010.

the Federal Communications Commission, VoIP “is a technology that allows you to make voice calls using a broadband Internet connection instead of a regular (or analog) phone line. Some VoIP services may only allow you to call other people using the same service, but others may allow you to call anyone who has a telephone number—including local, long distance, mobile, and international numbers. Also, while some VoIP services only work over your computer or a special VoIP phone, other services allow you to use a traditional phone connected to a VoIP adapter” (FCC 2003). Satellite entertainment providers are typical of firms in this business. Not surprisingly, the industry leading the list of predicted worst performing industries was wired telecommunications carriers, expected to decline 52 percent by 2019. Traditional telephone companies are examples of this industry.

MIT’s innovation magazine *Technology Review* annually publishes a global scorecard of corporate investments in research and development. The index considers total R&D spending, spending increases, and R&D as a proportion of sales (Brody 2005). The survey ranks 150 industries in 14 major industrial sectors according to their research and innovation rankings. For example, R&D investments in the biotech industry increased by an average of 69 percent, while telecommunications and computer hardware companies as a group spent less than they did in the past. Computer software companies, led by Microsoft with a 67 percent increase, increased their R&D investments by 20 percent. The energy and the chemical sectors had the lowest ranking. Table 14.2 shows the number of British, German, Japanese, and U.S. R&D investment leaders in each of the 14 industry sectors. Important firms in the industry are also based in other countries that include France, Switzerland, the Netherlands, Korea, Belgium, Italy, Canada, and Sweden. One, the conglomerate Tyco International, has its headquarters in Bermuda.

The *Technology Review* R&D scorecard not only indicates which industries investors believe will dominate their future business sectors, it also gives an indication of which national business systems are likely to hold leadership positions in those industries in the future. For example, the huge sums being invested in research by pharmaceutical companies clearly indicate that this sector will remain a leading industry far into the twenty-first century. Of the top 15 firms on the 150-firm innovation leaders list, eight are in the pharmaceuticals and medical devices sector. Of the 10, five are U.S. firms, two are located in the United Kingdom, two are Swiss, and one, the sector leader, is French. Table 14.3 shows the top 10 innovation leaders in the pharmaceutical and medical sectors.

Table 14.2 Numbers of the top 150 R&D firms by sectors in four counties, 2004

Sector	Number in category	United Kingdom	Germany	Japan	United States
Aerospace/defense	8	2	–	–	4
Biotechnology	4	–	–	–	3
Chemicals	10	–	2	2	3
Computer hardware	8	–	–	4	4
Computer software	6	–	1	–	5
Consumer products	5	–	–	–	2
Electronics/electrical	19	–	–	11	3
Energy	3	–	–	–	1
Heavy machinery	5	–	–	–	3
Industrial conglomerates	5	–	1	–	2
Pharmaceuticals/medical devices	27	2	3	5	12
Semiconductors	12	–	1	1	8
Telecommunications	13	1	1	2	4
Transportation (automotive)	25	–	5	9	4
Totals	150	5	14	34	62

Source: *Technology Review*, September 2005.

Table 14.3 Top 10 innovation leaders in the pharmaceutical/medical devices sector in 2004

Company	Rank	R&D Spending (millions)	Research Focus:
Sanofi-Aventis (France)	1	\$9,483	Cardiovascular, central nervous system, oncology, internal medicine
Merk (US)	5	3,885	13 therapeutic areas including arthritis, asthma, cancer, cardiovascular
Pfizer (US)	6	6,613	18 therapeutic areas including oncology, cardiovascular
Johnson & Johnson (US)	7	5,203	9 therapeutic areas including central nervous system, gastrointestinal
Glaxosmithkline (UK)	10	5,275	Cardiovascular, infectious diseases, gastrointestinal, oncology

(Continued)

Table 14.3 (Continued)

Company	Rank	R&D Spending (millions)	Research Focus:
Novartis (Switzerland)	12	4,207	10 therapeutic areas including metabolic disorders, ophthalmics
Astrazeneca (UK)	13	3,803	Cardiovascular, gastrointestinal, infection, neuroscience, oncology
Roche (Switzerland)	14	4,210	12 therapeutic areas anemia, virology, infectious disease
Eli Lilly (US)	20	2,691	Diabetes, genitourinary disorders, central nervous system
Wyeth (US)	26	2,461	Women's health, cardiovascular, musculoskeletal, gastrointestinal

Source: *Technology Review* 2005.

Box 14.1 Forces behind declining employment in U.S. manufacturing

In 2011, Secretary of Commerce Gary Locke testified in a hearing before the U.S. Senate Committee on Commerce, Science, and Transportation. He discussed changes in the U.S. economy that have contributed to the decline in the number of jobs in the American manufacturing sector:

“First, we have seen a dramatic improvement in productivity in the manufacturing sector, a resulting rapid technological change in how we make products. This was most recently evidenced by the introduction of computerized ‘smart’ production processes. Second, the growth in worldwide manufacturing capacity and trade has presented challenges in a world of every increasing competition . . . overlaid on these two fundamental shifts is the rapid evolution of consumer demand for what is produced—products have ever shorter life cycles and consumers expect new, improved versions to roll out with increasing regularity. . . .

“In 1979, there were 19.4 million manufacturing jobs in the United States. In 2010 there were only 11.5 million workers employed in the manufacturing sector. Moreover, the skill mix

of manufacturing workers has also shifted. The need for highly skilled workers in the manufacturing sector is growing as a result of changes in technology . . . Factories that once needed 1,000 people to build a product can now do it with 100.

“The future of manufacturing will be fundamentally reliant on the ability of U.S. businesses to access and thrive in overseas markets. . . . If we are serious about fighting for American jobs and American businesses, one of the most important things we can do is open up more markets to American goods around the world.”

Source: Locke 2011.

Changes in Manufacturing

Manufacturing has long been a major contributor to the economy of the United States. Although global competition has resulted in its share of economic growth being diminished, it is still important to the economy. Research has shown that one job in primary manufacturing creates 4.2 jobs in the services sector (Baker and Lee 1993; Hersh and Weller 2003; Green and Sanchez 2007; McCormack 2009). However, since the 1970s, the number of workers employed in manufacturing has declined dramatically. According to U.S. Secretary of Commerce Gary Locke (2011), in 1979, the peak year of manufacturing employment, there were close to 21 million workers in manufacturing jobs in the United States; by 2011, that number had dropped to 11.5 million. Manufacturing employment increased somewhat after the 2008–2009 recession so that by the first quarter of 2014, it had reached 12.1 million (BLS 2014). Elements of Secretary Locke’s testimony before a 2011 U.S. Senate committee hearing are included in Box 14.1 and touch on some of the reasons for this decline. An optimistic view of the future of manufacturing in the United States is included in Box 14.2.

Box 14.2 The future of manufacturing in the United States

The future of manufacturing is not in China. Rather, it is, instead, America, according to *Foreign Policy* writer Vivek Wadhwa. “The real threat to China comes from technology. Technical advances will soon lead to the same hollowing out of

China's manufacturing industry that they have to U.S. industry over the past two decades," Wadhwa explained in 2012. A number of firms are already bringing manufacturing back to the United States, finding rising costs and managerial difficulties make China a less competitive production source.

Among the technological developments driving the shift in competitiveness are robotics, artificial intelligence (AI), additive manufacturing, mass customization, nanotechnology, and molecular manufacturing. Advanced manufacturing using robotics is already making it cheaper than using human labor in many industries. Artificial intelligence and mass customization technologies are replacing mass production with customized production using designs downloaded from the Internet; 3-D printers are already providing three-dimensional models for such products as medical implants, clothing, and components for other products. Nanotechnology is producing new types of materials that are stronger, lighter, cheaper, and more energy efficient than traditional material. One example is new carbon fibers with application in the manufacture of aircraft.

Wadhwa included this prediction: "It's a near certainty that robotics, AI, and 3-D printing technology will advance rapidly and converge. American companies are already finding the rising cost of labor, shipping costs, and time lags, and intellectual-property protection to be major issues in doing business in China." The return of manufacturing to the United States is already occurring, and it is likely to continue with the country maintaining its lead in technology.

Source: V. Wadhwa 2012.

An undesirable artifact of globalization has been deindustrialization in most of the former industrial leaders. The United States has been in a long, slow period of deindustrialization since the 1960s, when it first gained recognition as the world's strongest industrial economy. This has been a trend affecting most of the major industrialized nations. The chart in Figure 14.1 traces the sharp decline from when more than 25 percent of all nonfarm workers were employed in manufacturing jobs to 10.2 percent in 2002 and 8.2 percent in 2012. The U.S. Department of Labor predicts a further decline to just 7.1 percent in 2022 (Table 14.4).

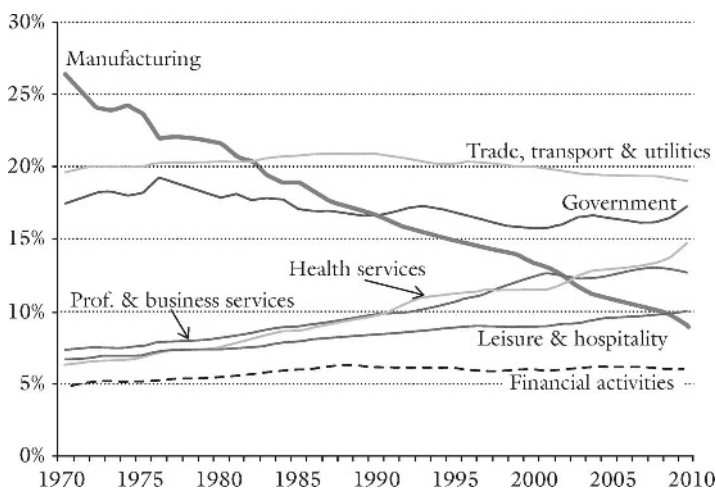


Figure 14.1 U.S. employment by sector, 1970–2010.

Table 14.4 Employment in selected industry sectors, 2002–2014 (in thousands)

Sector and industry	2002	2012	2014 ¹	2022 forecast
Goods producing				
Manufacturing	15,258.7	11,916.9	12,158.0	11,369.4
Construction	6,715.7	5,640.9	6,068.0	7,263.0
Mining	512.3	800.5	918.0	921.2
Selected services				
Wholesale trade	5,652.4	5,672.8	5,884.6	6,143.2
Retail trade	15,025.1	14,875.3	15,366.4	15,966.2
Transportation and warehousing	4,223.8	4,414.7	4,633.4	4,742.0
Information	3,394.6	2,677.6	2,667.0	2,612.4
Financial activities	7,847.1	7,786.3	7,963.0	21,413.0
Professional and business services	15,976.2	17,930.2	19,302.0	4,022.2
Health care and social assistance	13,555.6	16,971.8	18,147.7	21,965.2
Leisure and hospitality	11,986.0	13,745.8	14,651.0	15,035.0
Federal, state and local government ²	21,512.7	21,917.2	21,305.7	22,438.7

Notes:

¹Seasonally adjusted as of August 2014

²Excluding post office and military

Source: US Bureau of Labor Statistics 2013, 2014.

Economists and other researchers have identified a number of what they believe to be principal causal factors for this deindustrialization of the industrialized nations. Green and Sanchez (2007) looked at globalization, technological change, and the decline in unionization. A point related to the effect of globalization often does more than result in the movement of low-skilled, low-wage jobs overseas; it also changes the character of the jobs that remain. These are often high-wage, high-skilled jobs that are less likely to be shifted overseas or to foreign competition. The decline in manufacturing unionization has made it easier for firms to shift jobs to areas where workers have fewer benefits and less job security. Overall, however, the result is the same: fewer manufacturing jobs in the United States.

Kollmeyer (2009) examined three factors contributing to deindustrialization in the major industrialized nations: (1) rising affluence of consumers that has resulted in increasing demand for services and less for manufacturing items, particularly durable goods; (2) the advent of greater growth in manufacturing sector productivity relative to other sectors of the economy; and (3) globalization of commerce and industry, which in turn has resulted in greater trade between industrialized and industrializing countries. Kollmeyer assessed the causality of the three factors for the 18 nations of the Organization for Economic Cooperation and Development (OECD) and for seven individual nations, and found that for the four countries examined here, the factor with the greatest effect on deindustrialization is the increase in affluence among consumers in the United Kingdom, 32.5 percent; Germany, 26.0 percent; Japan, 38.9 percent, and the United States, 40.2 percent.

After a relatively brief period when pent-up demand is satisfied, affluent consumers tend to shift their spending patterns from acquiring manufactured goods such as refrigerators and washing machines toward purchases of services such as medical care and entertainment. As sales drop, manufacturers seek ways to reduce their costs; outsourcing supply to low-cost foreign suppliers or to foreign direct investment of their own factories in overseas. Declining investment in domestic factories is followed by declines in domestic manufacturing employment (Table 14.5). U.S. commerce and industry must continue to adjust if it is going to meet the twenty-first century competitive challenge of larger and faster-growing economies. Following the changes that have taken place in the auto industry since the 1970s provides a broad view of the challenges U.S. manufacturers have had to surmount over in the last 50 years.

Table 14.5 Top 10 world vehicle producers in 1994 (in thousands)

Company	Country	Passenger cars	Light trucks and commercial vehicles	Total
General Motors	U.S.	2,604	1,845	4,450
Ford	U.S.	1,661	2,073	3,734
Toyota	Japan	2,769	739	3,508
Peugeot-Citroën	France	1,770	121	1,892
Chrysler	U.S.	551	1,142	1,693
Renault	France	1,365	261	1,656
Nissan	Japan	1,341	268	1,609
Volkswagen/Audi	Germany	1,516	85	1,601
Fiat	Italy	1,231	127	1,358
Mitsubishi	Japan	891	414	1,306

Source: Fine, Lafrance and Hillebrand 1996.

The Automobile Industry

In the United States and much of the industrialized West the automobile industry is the leading industry in the manufacturing sector; it has been so in America since World War II. However, the 1980s were troublesome years for this sector of the economy. Difficulties would have a major impact on the industry again 30 years later when two of the nation's top three auto makers came close to bankruptcy. It was a high point in what has been a major shift in the industry that began a decade earlier (Fieleke 1982).

The more than doubling of the price of gasoline and shortages during the 1970s changed people's preferences for the large "gas guzzlers" being produced by the Big Three: General Motors, Ford, and Chrysler. Foreign automakers, already producing small, relatively inexpensive, and fuel-efficient vehicles for their home markets, were quick to answer the demand for their products in the United States. The biggest winners of the demand for high-quality, fuel-efficient cars were the Japanese automakers, particularly Toyota, Datsun (later Nissan), and Honda, followed by German and French firms. Two-way trade in automobiles and auto parts grew rapidly. Exports of U.S. cars and parts in 1980 totaled \$16 billion, whereas imports of mostly fully assembled vehicles amounted to \$27 billion. In 1965, nearly 50 percent of the 24 million vehicles produced globally were made

in America. By 1979, the U.S. share had declined to 28 percent; the next year Japan became the world's leading exporter of automobiles.

The growing demand for cars and light trucks manufactured in Japan and Europe continued throughout the rest of the 1980s. During this time, nearly all of the imports were complete vehicles that had been assembled in the producers' home market factories. In a major change in the industrial policy of Japan, Honda, the world's largest motorcycle maker, announced plans in 1980 to begin manufacturing automobiles in the United States. The plant, opened in 1982, would be located in Nashville, Tennessee, far from the Detroit capital of the U.S. automotive industry. At the time, the German company Volkswagen had also been experimenting with assembling cars at its plant in Pennsylvania. Relative competitive positions are shown in Table 14.6.

The U.S. Automotive Industry in the 1990s

By the 1990s, the intrusion of global automobile manufacturers into the U.S. market had progressed far from its first forays, when one of the first boatloads of one Japanese firm exported to the United States failed to pass safety requirements and, rather than ship them back to Japan, were all destroyed. By 1994, the Japanese auto industry was well established in the United States and other national markets;

Table 14.6 The world's top 10 economies, 2009–2019 (GDP in US\$ trillions)

Country	2009	2010	2013	2014	2015 (projected)	2018 (projected)	2019 (projected)
US	14.4	15.0	16.8	17.5	18.9	21.2	22.1
China	5.0	5.5	9.2	10.0	10.4	14.2	14.8
Japan	5.0	5.9	4.9	4.8	5.0	5.5	5.7
Germany	3.3	3.3	3.6	3.9	4.1	4.7	4.9
France	2.6	2.6	2.7	2.9	3.0	3.5	3.6
UK	2.2	2.3	2.5	2.8	3.0	3.5	3.8
Brazil	1.6	2.1	2.2	2.2	2.3	2.8	2.9
Italy	2.1	2.1	2.1	2.2	2.3	2.5	3.6
Russia	–	–	2.1	2.1	2.1	2.4	2.5
India	–	1.7	1.9	2.0	2.2	2.8	3.1
Spain	1.5	–	–	–	–	–	–
Canada	1.4	1.6	–	–	–	–	–

Source: IMF 2015.

three Japanese firms had become members of the top 10 car makers in the world (Table 14.6). Toyota was third, surpassed only by General Motors and Ford.

By this time, through adopting Japanese methods, American car makers had progressed far enough along the quality and reliability path to be considered close to what the Japanese had been achieving for years. The U.S. economy during the 1990s had been displaying high growth and low unemployment, largely as a result of the growth of new businesses in the “dot.com” industry. The demand for small, fuel-efficient cars was fading, to be replaced by a return to demand for larger, more powerful passenger cars and sports utility vehicles (SUVs)—vehicles that were far more profitable for car makers than the smaller cars of the 1980s. The Big Three recaptured some of their lead in the design, manufacture, and marketing of the minivans, SUVs, and large family cars consumers desired. Moreover, as more women were returning to work the growth of two-car families spurred car sales. By 1994, the Big Three had improved their lead in the U.S. market for passenger cars from 61 percent in 1991 to 64 percent in 1994, and GM continued to be the largest auto maker in the world.

Bailing Out the U.S. Car Industry

All was not to remain completely rosy for the industry for long, however. The Big Three now experience increased competition from foreign producers whose new luxury brands nearly drove Cadillac and Lincoln out of the market entirely. Meanwhile, the average price for a new car had increased from \$8,850 in 1981 to \$19,820 in 1991 and \$21,050 in 1999, threatening to take a big bite out of new car sales.

Disaster for the U.S. car industry followed the great recession of 2008–2009. When President Barak Obama took office in January 2009, the U.S. industry was close to complete collapse. The home mortgage debacle and housing bubble collapse hit auto sales hard: a 40 percent drop in auto sales followed the housing decline and the large number of unemployed. Both General Motors and Chrysler needed large infusions of cash to avoid bankruptcy. Beginning in December 2008, the U.S. government had to bail both companies out with billions of taxpayers’ dollars; GM received a loan of \$13.4 billion in 2008 and another \$51 billion in 2009; Chrysler received a loan of \$4 billion in 2008 and another \$8.5 billion in 2009. Only Ford was strong enough to survive the recession without loans from the government. Under the new Troubled Asset Relief Program (TARP), the government purchased both companies’ common stock; the government’s purchase of 500 million GM shares, giving it 31.9 percent of

all outstanding stock in the company. The recovery that followed the deep recession enabled Chrysler to pay of its loans by 2011, six years before they were due. GM paid off its loans in 2013. The government has sold most of its holdings in GM.

The U.S. Auto Industry after 2010

With the help of the government, the Big Three survived the great recession and were in a position to meet a return in market demand that occurred during the recession. Competition remained high, however: the country was now home to 13 auto makers. From 2008 to 2012 their combined production averaged more than eight million passenger vehicles per year (U.S. Department of Commerce 2012). In 2014, every major European, Japanese, and Korean auto maker produced vehicles at one or more U.S. assembly plants, and many exported U.S.-made cars back to their home country. Approximately 2.6 million vehicles made in the United States, valued at close to \$63 billion, were exported in 2012; another \$75 billion in auto parts were exported the same year. Continuing the trend in 2013, for the first time since opening its Ohio plant, Honda exported more U.S.-made cars than it imported from Japan; 108,705 Honda and Acura vehicles were exported, while 88,537 vehicles were imported from Japan.

Box 14.3 The U.S. automobile industry in 2012

The U.S. Department of Commerce issued the following report in 2012:

“The United States . . . is home to 13 auto manufacturers. From 2008 to 2012, [they] produced an average of [more than] 8 million passenger vehicles annually in the United States.

“Since Honda opened its first U.S. plant in 1982, almost every major European, Japanese, and Korean automaker has produced vehicles at one or more U.S. assembly plants. In addition to Honda and the big three U.S. auto companies—General Motors, Ford, and Chrysler—Toyota, Nissan, Hyundai-Kia, BMW, Mercedes-Benz, Mazda, Mitsubishi, and Subaru all have U.S. manufacturing facilities. In May 2011, Volkswagen opened a new U.S. plant, bringing the manufacturer count to 13. In addition, many manufacturers also have engine and transmission plants and are conducting research and development, design, and testing in the United States. The automotive industry,

including dealerships accounts for approximately 3.5 percent of U.S. [GDP]. Motor vehicles and parts manufacturers directly employed 786,000 people [in] 2012.

“There is an extensive network of auto parts suppliers serving the industry. Suppliers produced \$225.2 billion in industry shipments in 2012, accounting for nearly 4 percent of total U.S. manufacturing. According to a study by the Motor & Equipment Manufacturers Association in collaboration with Information Handling Services, the total employment impact of the auto parts industry was estimated at over 3.62 million jobs directly and indirectly nationwide in 2012 - more jobs and economic wellbeing than any other manufacturing sector.

“In 2012, the United States exported approximately 2.6 million vehicles valued at \$63 billion to more than 200 countries around the world, with additional exports of automotive parts valued at approximately \$75 billion.”

Source: U.S. Department of Commerce 2012.

In addition to final assembly plants, many auto makers have engine and transmission plants in the United States. They manufacture parts and components ranging from tires to spark plugs and many of the 30,000 individual parts in a modern automobile (Marsh 2012). Many also operate research, design, and testing facilities in the United States.

In addition to the network of auto manufacturers and dealers, the industry includes a large number of auto parts suppliers and local and regional auto repair shops. Suppliers had sales of \$225.2 billion in 2012, which was nearly 4 percent of all manufacturing in the United States. According to the suppliers association, an estimated 3.62 million jobs were generated directly and indirectly by suppliers—more than any other manufacturing sector. Before the recession, more than a million men and women were employed by the motor vehicle industry. In 2012, the industry, including dealers, employed 786,000 people; in May of 2013, industry employment had increased to 796,600.

PREDICTING THE FUTURE OF U.S. COMMERCE AND INDUSTRY

As these two volumes of the history of the four pioneer industrialized nations have shown, commerce and industry have undergone many

changes over centuries of evolution. The closer one gets to the Modern Age, the more one sees an acceleration in the rate of that change. There is no reason not to expect that rate of change to diminish. This discussion on business history ends with a brief look at what experts in their fields see happening to commerce and industry in the immediate future.

The Future of Retailing

The large U.S. computer maker and computing services provider IBM, together with the New York University Stern School of Business, have conducted a series of studies on the past, present, and future of the U.S. retailing industry. In their 2012 white paper on retailing they describe the four external factors that are contributing to changes now underway in this business sector: economic conditions, demographic changes, consumer behavior, and technology innovations. Possibly the event with the greatest impact on the industry was the 1962 repeal of fair trade laws, thereby making it possible for discount retailers to thrive. Four pioneers of the discount industry opened stores that year: Walmart, Kmart, Target, and Woolco. By 1976, there were more than 100 discount chains operating in the country; by 1992, only 24 remained in business. The 1960s were also the beginning of the box store and category killer operations described earlier.

The baby boom demographic expansion and movement from both rural and central urban areas to suburban communities brought on the next big changes; businesses followed the migration and soon deserted central cities to open stores in large suburban shopping malls. Advances in computer technology were the next factor driving change. The advent of e-commerce has made shopping from home more convenient, faster, and in many ways, easier. The share of retail sales conducted as e-business continues to grow.

The deep recession of 2008–2009 and the aging population have had a great impact on retailing. First, the recession has made everyone realize that the country is “over retailled.” There are too many malls for the buying public and many of them have closed or been converted to other uses. The rate of increases in numbers of stand-alone, big box retailer chain stores has also declined, with stores in marginal locations being abandoned. Looking at the near future for retailing, the IBM-Stern report listed six factors that are continuing to shape U.S. commerce:

- The roughly 80 million consumers in their late thirties in 2012, the so-called millennials, will have a disproportionate influence on product preferences.

- The price mid-range group of shoppers—the middle market—is giving way to shoppers trading up and another group trading down.
- Foreign, emerging market opportunities will provide excellent opportunities for U.S. retailers.
- The over-building of retail space will require consolidation and closer attention to expansion probabilities.
- Great opportunities for shopping on mobile devices will influence personal technology to greater advantage.
- These four Internet institutions will reshape the retail marketplace: Amazon, Google, Facebook, and Apple

The Future of Industry

Each year, CNN Money publishes a list of the world's top 10 economies by GDP in trillions of U.S. dollars and in their growth rates (Table 14.7). The top economy has long been the United States. Moreover, its lead over its closest rival, China, may be growing; in 2013, the \$16.8 trillion U.S. economy was \$7.6 trillion dollars larger than second place China. In 2019 the U.S. GDP is projected to be \$8.3 trillion larger than China's. In 2010, Japan, for decades the second largest economy, slipped to third position after China. The German economy places it consistently in fourth place. In 2013 and 2014, the economy of France was larger than its continental European rival the United Kingdom. However, by 2019 the UK economy

Table 14.7 Contributions to deindustrialization by three causality factors, 1970–2003 (%)

Country and OECD total	Percent drop in manufacturing employment	Percent change Attributable		
		National affluence	Unbalance productivity growth	Trade growth (globalization)
United States	–12.1	40.2	12.9	30.5
Germany	–17.5	26.0	9.7	19.4
Japan	–8.6	38.9	7.3	14.7
United Kingdom	–19.3	32.5	16.0	28.8
OECD-18 average	–12.4	34.3	15.1	24.4

Source: Kollmeyer 2003, 1667.

is projected to outpace that of France by close to US\$ 1 trillion. Four of the five BRICS countries are also among the 10 nations with the largest economies this same period.

Despite the continuing strength of its economy, there is no question in anyone's mind that the United States, along with the rest of the industrialized world, is in the midst of a new industrial revolution. The force behind this transformation is the Internet and the technology that makes the Internet possible. In describing this revolution, Peter Marsh talks about interconnected manufacturing and the global convergence of skills and abilities in the manufacturing-capable countries. This makes it possible for U.S. companies in the computer business to concentrate on research, design, and marketing of products that are assembled in technologically and quality savvy low-wage countries from parts and components made in a variety of other low-wage countries. It also makes it possible for the U.S., Japanese, German, and French automobile industries to assemble automobiles almost anywhere in the world from parts such as motors, transmissions, and computer controls in a few countries with special technical capabilities. Also, discovering and producing many new products in the industries of tomorrow requires connecting the innovative skills of people in such different technologies as biotechnology, electrical and electronic engineering, physics, software, engineering, nanotechnology, and others. The changes underway in the global manufacturing business require a transformation in the thinking of managers accustomed to mass production. The process is evolutionary and fast paced. As Marsh explained, "as companies evolve they realize their products and processes will work better if they treat technology as a 'systemic' resource—built up from knowledge in dozens of areas—rather than as a collection of individual ideas. . . . In the new industrial revolution, the prizes for developing new ideas, collaborating with partners and applying the results in new products will be greater than ever before" (Marsh 2012, 41).

Which industries will benefit from this new technology-driven industrial revolution? Robotic technology, 3-D printers, and numerically controlled machine tools are helping to make this the age of mass-specialization, the extreme example of this is what *Wired* magazine editor Chris Anderson (2012) called *hyperspecialization*. It is not the end of mass production; rather, there is room for both approaches. There is a market for more expensive, custom designed and manufactured products, just as there is a market for standardized, low cost products. He explained that

General Motors and General Electric aren't disappearing . . . the new era will not mark the end of the blockbuster, but the end of the *monopoly of the blockbuster*. More innovation, in more places, from more people, focused on more narrow niches. Collectively, all these new producers will reinvent the industrial economy, often with just a few thousand units at a time—but exactly the right products for an increasingly discriminating consumer. For every [off shore producer] with a half-million employees making mass-market goods, there will be thousands of new companies with just a few targeted niches. Together they will reshape the world of making. (Anderson 2012, 229; emphasis in the original)

CONCLUSION

In 1982, Loyola University philosophy professor Thomas Donaldson answered a question he had asked earlier in a *Journal of Business Ethics* paper: What is business in America? His answer is included here as a suggested capstone to this book and could easily be addressed to the business leaders of the countries included in this brief two-volume history:

And so we are brought to the crux of our discussion. Having asked the question, “What is business in America?” we have sketched a rudimentary answer. American business is an evolutionary system influenced by a series of historical forces, and owes its success to such varied factors as inventiveness, good government, and good luck. It possesses enormous power—over employees, political processes, and other countries—but it is a power which, to date, is backed by no fully coherent philosophy. American business lacks a guiding conception of its own direction, and this is its pressing need. If the question, “What is business in America” has an answer, it is one which points directly to a second question, namely, “Where should business in America be going?” (Donaldson 1982, 266)

American commerce and industry are in the midst of tremendous change in the first half of the twenty-first century. At the same time, the strength of its economy, low inflation, positive population growth, and entrepreneurial spirit will enable it to survive these challenges. For commerce, a large and growing market, a highly educated and mobile population, combined with the willingness of industry leaders to try new retailing strategies, promise a stable future, but one in which changes will occur at a rapid pace. No retailer, regardless of its size or popularity, can afford to remain complacent. The long list of familiar stores that no longer operate can be expected to grow.

U.S. manufacturing is a bright spot in the economy. Although the number of manufacturing jobs has declined close to one-third since the 2008 recession, unemployment continues to decline. As wages in foreign countries increase and the price of transportation grows, many manufacturers can be expected to bring some, if not all, of their manufacturing activity by to the United States. The many Japanese and German auto makers and their home country suppliers who find it desirable to make vehicles in the U.S. constitute just one example of offshore suppliers locating manufacturing plants in the United States. The influence the computer and Internet e-commerce have on manufacturing will continue to stimulate growth in these sectors.

DISCUSSION QUESTIONS

1. Explain why the economic systems of the last half of the twentieth century are being transformed by sweeping changes affecting the world economy.
2. What socioeconomic trends have been suggested as causes of deindustrialization?
3. Name and discuss the four potential economic outcomes described in this chapter.
4. What happens to consumer spending patterns when citizens become more affluent?
5. How will commerce and industry in America meet the challenges of the twenty-first century?

ABOUT THE AUTHOR

David E. McNabb, Pacific Lutheran University School of Business professor emeritus, is the author of seven books and coauthor of two others, including two comprehensive research methods texts. The first edition of his *Research Methods in Public Administration and Nonprofit Organizations* was awarded the 2004 John Grenzebach Research Award for Research in Philanthropy. He continues to teach at colleges and universities in the United States and internationally. He is an adjunct professor at Olympic College. He has been an adjunct professor in Public Administration at The Evergreen State College, the University of Maryland–University College, the University of Washington–Tacoma, Olympic College, the Stockholm School of Economics in Riga, Latvia, a visiting professor at the American University in Bulgaria, and a Fulbright Senior Specialist in Latvia. He earned a bachelor of arts degree from California State University–Fullerton, a master’s in communications from the University of Washington, and a PhD in administration and marketing from Oregon State University.

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