

## Chapter 1

# THE AMERICAN ECONOMY PRIOR TO 1920

### The American Economy At The Turn Of The Century

In the twentieth century the United States has dominated global economic activity. From the turn of the century into the 1970s, our manufacturing and service industries were the marvels of the world; firms and countries wishing to obtain the most advanced technologies in television, telecommunications, or computers, for example, immediately thought of the United States. To many observers that edge was lost sometime during the 1970s, and some of the dynamism in our economy disappeared during the following decades. But prior to that, even during the Great Depression, the United States set the standards.

In 1914, on the eve of the First World War, the United States was the world's preeminent industrial power, responsible for over half of the world's industrial output. It was a dynamic, growing, and (by the standards of the time) high-wage economy, and this land of opportunity's siren call had been answered by millions of immigrants. The flood of immigrants which began in 1840 continued through 1920 as an average of 1,000 immigrants entered the United States each day over that 80 year period. These immigrants augmented a growing industrial labor force. Though conditions in the ghettos of the eastern and midwestern industrial cities sometimes fit the gloomy portraits drawn for this period, most of the new arrivals could remember far worse. And here, they realized, existed an opportunity to move upward and improve themselves.

The farmers were also optimistic. With the end of the regional expansion of agriculture at the turn of the century, the increases in agricultural production slowed down; at the same time demand rose with the increases in the export of American foodstuffs. As a result, farm prices and farm incomes rose, and by the mid-1920s American farmers would view 1910 to 1914 as the golden age of American agriculture.

Businesses had also changed. In many firms the heroic owner/entrepreneur of the nineteenth century was being replaced by technical specialists and managers, and ownership was being divided and subdivided through shares of corporate stock. Frederick Taylor and others were creating a new science of management to bring rigor and rationality to the administration and organization of production in the new big companies. Business associations were

being formed to protect and advance their interests against those of labor unions, politicians, and other businesses, as illustrated by the formation in 1912 of the U. S. Chamber of Commerce. As the 1920s approached, more and more business leaders came to believe that logical, careful planning could not only stabilize and ensure the growth of their firms but also stabilize and control the entire economy.

A new era of financial affairs had also dawned. The New York Stock Exchange had been fully transformed into an industrial stock market; it created a national market for industrial securities and helped to solidify the development of a national capital market for the larger firms. The financial leaders, such as J. P. Morgan, had risen to a position of prominence much to the dismay of industrial leaders like Henry Ford.

In the years leading up to 1914, those who were dissatisfied with business behavior generally turned to government intervention to correct the perceived wrongs of the marketplace.<sup>1</sup> The failure of state granger laws to control the railroads led to the Interstate Commerce Act of 1887, though this was, at first, not a very effective control. Concern about the rise of business monopolies brought on the Sherman Antitrust Act of 1890. The Elkins Act of 1903, the Hepburn Act of 1906, and the Mann-Elkins Act of 1910 dramatically expanded the powers of the ICC and allowed it to truly control the railroads. The Standard Oil and American Tobacco decisions of 1911 established the "rule of reason" in controlling monopolistic behavior, and the 1914 Clayton and FTC Acts specified the types of behavior that businesses could and could not engage in and also provided for a federal agency to administer the provisions of the acts.

There were other reactions to the excesses of big business in the late nineteenth century. One early indication of this came in the labor relations between large firms and their workers. As firms grew larger, they became increasingly impersonal, with more layers of middle-level managers and supervisors between the owners/executives and the workers. Industrial workers pushed for shorter hours and better (mainly safer) working conditions and resisted wage cuts often attempted by firms due to the general fall in prices. Workers organized two short-lived unions, the National Labor Union (1866-72) and the Knights of Labor (1878-86), and finally the skilled craftsworker's trade unions were organized into the American Federation of Labor, which continued through the interwar period. For the most part court

**TABLE 1.1  
SELECTED ECONOMIC STATISTICS, 1913-20**

Year	Real GNP Per Capita	Percent Unemployed	Rate of Price Change		Money Stock, M2	Federal Outlays As A Percent Of GNP	Active Duty Military Personnel
	(1)	(2)	CPI (3)	WPI (4)	(5)	(6)	(7)
1913	\$1,351	4.3%	2.4%	1.1%	\$15.73	1.81	154,914
1914	1,267	7.9	1.3	-2.2	16.39	1.88	165,919
1915	1,238	8.5	1.0	1.7	17.59	1.87	165,919
1916	1,317	5.1	7.3	20.9	20.85	1.48	179,376
1917	1,310	4.6	16.1	31.8	24.37	3.24	643,833
1918	1,471	1.4	16.1	10.9	26.73	16.57	2,897,167
1919	1,401	1.4	13.9	5.5	31.01	21.96	1,172,602
1920	1,315	5.2	14.7	10.9	34.80	6.95	343,302

Source: *Historical Statistics of the United States: Colonial Times to 1970* (Washington, D.C.: U.S. Government Printing Office, 1976). Col. (1) 1958=100. Cols. (3) and (4) 1967=100. Col (5) billions of current dollars.

decisions went against laborers and labor unions before 1914.

In 1913 Senator Arsene Pujo released his committee's report condemning a "money monopoly" in the United States. The committee, after several years of study, concluded that the powerful bankers of the nation's financial centers, such as J. P. Morgan, James Stillman, and George Baker, controlled the nation's credit, exacting excessive interest charges. And by their presence on the boards of a number of large corporations, the Pujo Committee also found that these bankers effectively brought about the monopolistic behavior of those businesses.

One result of the committee's activities was an impetus for the passage of a law creating a central bank to control the stock of money and credit in the United States. Concern with the "money monopoly" led to the creation of 12 regional central banks rather than one, and industrialists and farmers as well as bankers were to be represented on these Federal Reserve Boards. By providing a lender of last resort and a new national currency in the form of the Federal Reserve Note, it was hoped that banking crises would be forever ended.

The industrial transformation and expansion of the American economy in the postbellum period had created great disparities in income and wealth. As a means of reducing income inequality and as a fresh source of federal revenue, the Civil War income tax was revived in 1894. After lengthy deliberations and with some hesitation, the Supreme Court ruled that one part of the tax was unconstitutional and,

therefore so was the entire tax.<sup>2</sup>The continued growth of the federal government and concern with reducing income inequality finally led to calls to amend the constitution to allow a federal income tax. Adroit channeling of pension outlays and military spending to states where there was a record of opposition to the income tax allowed the amendment to be ratified in 1913.<sup>3</sup> Immediately Congress began consideration of a revenue bill to use this new tax. The Underwood Tariff included the new income tax with, in retrospect, very low but slightly progressive rates on the highest income recipients.

The enactment of a federal income tax opened the door to a much more important role for the federal government in redistributing income, while the laws strengthening the regulatory powers of the Interstate Commerce Commission and the 1914 amendments that enlarged and strengthened the 1890 Sherman Antitrust Act forecast the federal government's emergence as a regulatory agency. These developments were leading the United States further away from the classical liberal concept of government as a "nightwatchman."

### **The American Economy During The First World War**

In 1914 Europe erupted into war as various military alliances inexorably drew the nations into battle. Few people, including Americans, were untouched by the war. Though the United States did not enter the war until April of 1917, in the nearly three year interval there was a huge increase in foreign, mainly Allied, demand for some American manufactures and

foodstuffs. U.S. exports of chemicals, dyes, drugs, iron and steel, munitions, meat, wheat, and flour all rose enormously. Farm prices and farm incomes rose dramatically. Munitions manufacturers, such as Du Pont, experienced dramatic increases and their firms undertook great expansion projects.<sup>4</sup> Overall, however, the economy did not expand during this period. As Table 1.1 shows, the real per capita GNP achieved in 1913 was not reached again until 1918. Unemployment was higher in 1914 and 1915 than in 1913, but it had virtually disappeared by 1918. Driven by the rising export demand and increases in the stock of money, price inflation began increasing in 1916 and was still quite high in 1920.

This enormous expansion in American exports further increased the export surplus. In the 19th century the United States had periodically imported large amounts of capital and became a debtor nation. But for the ten years prior to 1914 the United States had an export surplus of about \$400 to \$500 million a year. This export of capital had started the transformation of the United States from a debtor nation to a creditor nation. The onset of the First World War accelerated this trend as Allied nations, particularly Great Britain and France, collected the American assets their citizens owned and sold them in the United States to obtain the dollars needed to buy American products. By 1917 the U.S. export surplus reached \$3.5 billion, and the United States had been fully transformed from a debtor to a creditor nation.<sup>5</sup>

As the Allied governments ran out of the dollars they needed to buy American goods, they asked for permission to borrow in the United States. President Wilson was reluctant to approve this because the United States was officially neutral, but he finally gave in. J. P. Morgan and other investment banking houses then began to sell large amounts of British, French, and Russian bonds to American private investors. With the entrance of the United States into the war, the government floated the First Liberty Loan of 1917. From this and subsequent loans, \$10 billion was made available to the Allied governments, and private lending to the Allies stopped.

### ***American War Preparations***

Although the United States did not enter the war until April of 1917, it had been clear that war was coming; preparations had begun well before then. In 1916 Congress passed the National Defense Act to expand the armed forces. The Shipping Act of 1916 organized and formed the Merchant Marine, which was to be controlled by the U.S. Shipping Board. A Naval Consulting Board composed of private experts and businessmen was established, and from this a

Committee on Industrial Preparedness was spun off. In 1916 this committee was changed to the Council for National Defense. It was fully funded by the federal government and for all practical purposes was an official federal government agency.<sup>6</sup>

### ***Economic Mobilization: The Command Economy***

With the entrance of the United States into the First World War, the federal government passed a number of acts to mobilize resources for war. These acts transformed much of the economy from a market-based into a “command economy.”<sup>7</sup> The primary control legislation for this command economy was the Lever Food and Fuel Control Act, which provided for the power to federally license businesses, requisition commodities, take over factories directly, and even fund the infant Federal Bureau of Investigation. This act also gave the government the power to establish minimum crop prices, especially for wheat, and authorized “meatless” days so that the nation could conserve meat.

The Food and Fuel Production Act established the U. S. Fuel Administration to control the output of coal and fix its price. The War Industries Board was established on July 8, 1917, to make priority allocations in manufacturing, fix prices, and coordinate government purchases of manufactured products. However, it did not initially prove as successful as was hoped; in the spring of 1918, Bernard Baruch was named to head the WIB, and it was given more power to coordinate war industries. The only power it did not have was the power to fix prices. The U. S. Grain Corporation was organized to buy food and other commodities, fix prices, and store surpluses. The U. S. Housing Corporation used government money to supply housing for defense workers. The Emergency Fleet Corporation was created to organize shipyards, materials, and labor to build a huge fleet of ships. The War Finance Corporation used federal funds to underwrite bank loans to private industry.

The government’s control of the economy went far beyond anything previously considered in the United States. The start of war found U.S. rail transportation in a chaotic state. The increased activity had used up all of the excess capacity, and there was a general surge in the flow of freight traffic toward the major East Coast ports. Complicating matters were attempts by various government agencies to give each of their shipments the highest priority for quick transport to the coast. Freight cars and loaded and unloaded freight piled up at key junctions such as the rail yards in Pittsburgh. Attempts at cooperation by competing railroads drew

letters warning of antitrust action from the Attorney General.<sup>8</sup>

The railroads also faced financial problems. The Adamson Act of 1916 had forced the railroads to offer an eight-hour day with no drop in daily pay to avert a threatened nation wide strike by rail unions. Because of inflation caused by the war, rail labor unions demanded wage increases while shippers expressed their strong opposition. The ICC, which had not approved rate increases after the passage of the Adamson Act, could not find a way to mediate among the conflicting demands.

On December 26, 1917, President Wilson issued a proclamation enabling the federal government to take the reins of the nation's railroads. His son-in-law, William G. McAdoo, was appointed director of the newly created United States Railroad Association (USRA). The USRA was able to coordinate shipments and train movements and clear the freight car logjams in East Coast ports because it was no longer hampered by the antitrust laws against cooperative action; as well the USRA and McAdoo had the power to assign priorities to the different federal agencies demanding priority shipments. The USRA increased wages for railway workers several times, including one increase of nearly 40 percent. They ordered 100,000 new freight cars and 2,000 new locomotives for the various railroads. The result was an enormous increase in railroad outlays, especially in labor expenses, and increasing amounts of federal subsidies to keep the railroads operating.

In 1918 the federal government assumed command over the nation's telegraph and telephone systems, placing them under the jurisdiction of the Postmaster General.<sup>9</sup> One of the justifications for government takeover of the telephone system was that it could be operated more efficiently that way. But within weeks the Postmaster General instituted service connection charges, which state public service commissions had blocked in the past. Rates were sharply increased—long distance charges went up 20 percent—in spite of protests. A Supreme Court ruling confirmed that the Postmaster General had the power to order such rate hikes. When the telephone systems were returned to private ownership, it was found that government operation had resulted in a deficit of more than 13 million dollars of which 4 million came from AT&T's surplus and the rest from the Treasury. Everyone was glad to see the government get out of the operation of the telephone system. Congressman James B. Atwell of Louisiana, who had proposed the original resolution for federal takeover of the telephone and telegraph systems, introduced another resolution apologizing to the American people and to Congress for what he had

done. John Brooks said, "The ghost of government ownership was laid; agitation for it disappeared in popular and orthodox political circles."<sup>10</sup>

The government's need for large numbers of uniform items led to a further move toward standardization in production. The production of uniforms during the Civil War had led to the first systematic measurements for clothing, shoes, hats, and so on; the First World War pushed this much further. "One of the most effective ways of increasing the quantities of necessary manufactures was found to be the standardization of products and the reduction in the number of sizes and designs."<sup>11</sup> The standardization was first pushed in the production of weapons and munitions and then extended to consumer goods. To preserve steel, the steel in women's steel-boned corsets was eliminated. The amount of thread per spool was increased. The types of typewriter ribbons were reduced from 150 to 56, and the number and sizes of plows reduced from 376 to 76. George Soule argues that "Everything from baby carriages to coffins was standardized and simplified. Altogether 1,241 savings of this kind were effected."<sup>12</sup>

#### *Agriculture and Industry During the War*

Although there was some increase in agricultural production during the war, most of the increase occurred during the prewar period from 1914 to 1917. The overall index of agricultural output actually shows a slight decline from 100 in 1914 and 1915 to 92 and 96 in 1916 and 1917, respectively. The index of agricultural output rose to 101 in 1918. What continued to rise at a faster rate were the prices of agricultural products. With the rising prices, boards, such as the Sugar Equalization Board, were established to attempt to control and stabilize the prices of agricultural commodities. Wholesale food prices at the beginning of 1917 were 50 percent above the 1913 levels; by August of 1917 they were 80 percent above 1913 levels. The physical volume of food exports in 1917-18 was 77 percent greater than the yearly average for 1914-17, and the 1919 volume was 51 percent greater than that for 1918.

The increases in the prices and output of agricultural commodities varied. The greatest gains came in the prices of grains, especially wheat and rye, and in hog prices. Cotton gained the least. Controlling prices created coordination problems. For example, an important ingredient in cooking was lard (or hog fat). Initially hog production—particularly lard production—began to fall. It was found that the price of corn had risen more than hog prices, and farmers were therefore decreasing hog production and selling off their stocks. To increase pork and lard production, the price of hogs relative to the price of

corn had to be raised. The Food Administration could not directly set the prices for hogs; however, it could significantly influence these prices, because about 30 to 40 percent of all pork produced in the United States was purchased for the army, navy, Belgian Relief, and the Red Cross by the Food Administration. These officials obtained an agreement from the meatpacking companies that if they (the packers) received higher prices from the Food Administration, they would pass these on in the form of higher hog prices to farmers. Although the process did not work smoothly and required numerous adjustments, it was successful in raising hog prices relative to corn prices and thereby increasing pork and lard production.

Like agriculture, most of the increase in manufacturing had occurred by the time the United States entered the war. The sectors that grew more were those associated with war production, such as the steel and munitions industries. Products that had formerly been imported from Germany, such as dyestuffs and chemicals, accounted for another growth area. Automobile production and sales had been growing rapidly as Ford's mass-production assembly line techniques allowed it to lower prices and expand production from 460,000 cars in 1913 to 1,750,000 in 1917; however, war demands reduced automobile production in 1917 and 1918. Associated with the rising use of the car were expansions in the number of oil wells, refineries, petroleum pipelines, gasoline stations, and automobile garages. The production of rubber products, particularly automobile tires, also rose sharply. From 1914 to 1917, state and local governments undertook considerable paved road construction, most of which was financed by bond sales.

For the most part after 1917, the gains that occurred in industrial output were in products associated with the war, and these were largely offset by declines in the production of other products. There was a rise in manufacturing construction and investment in machinery and equipment, but these were more than offset by the dramatic declines in housing construction.

With the onset of war, the U. S. Shipping Board established the Merchant Marine and moved to increase American shipping capacity to offset the reduction in British shipping. The existing shipyards in the United States mobilized to produce more cargo ships, and production rose from 384,899 tons in 1916 to 821,115 tons in 1917 and 2,602,153 tons in 1918. To increase production more rapidly, new government shipyards were constructed in Wilmington, North Carolina; Newark, New Jersey; and Bristol and Philadelphia, Pennsylvania. Bureaucratic red tape slowed progress; and the first

ships from the new yards were launched on December 18, 1918, just as President Wilson sailed for Europe to discuss the terms of peace. Though the Merchant Marine's size had been increased, most of the ships created during the war were not well suited to the commercial requirements of peacetime.

### *Labor during the War*

In the late nineteenth century and the first decade of the twentieth, labor unions and other labor representatives had systematically called for restrictions on immigration into the United States. Though many reasons were presented, the overriding concern was to reduce the expansion of the labor force and raise wages. From 1905 through 1914, an average of one million immigrants a year entered the United States. With the onset of the war in Europe, immigration dramatically declined. From 264,000 immigrants in 1916, the number declined to 81,000 in 1917 and 41,000 in 1918. The combination of the dramatic reduction of immigration and an increased demand for labor led to rising real wages. During the war the federal government required that firms with government contracts establish an eight-hour day, something that labor had long called for. This and the excess demand for labor led to the general establishment of the eight-hour day and 44-hour week by the end of the First World War. The establishment of Selective Service and the compulsory draft helped reduce the supply of and augmented the excess demand for labor.<sup>15</sup>

There was a shift in migration within the United States as well. The rising demand for labor in industrial activity led to a migration of workers from the farms to the cities, which caused the farm population to fall much more rapidly than previously. Women entered the labor force in relatively large numbers to move into retail and commercial employment as men were drawn into the war and into the factories. Labor recruiters also turned to the south to recruit blacks, both from the rural areas and from the southern cities. The first large migrations of poor southern blacks and whites to northern cities occurred during the First World War and led to increases in southern wage rates, though southern wages fell in the 1920s.<sup>14</sup> This exodus from the South led to racial tensions in the North as bloody race riots occurred in East St. Louis in 1917 and in Chicago in 1919.

Unions received an important boost as the federal government encouraged firms to recognize unions and promoted bargaining between firms and unions to reduce labor strife and increase output. In 1918 the War Labor Board was created to adjudicate labor disputes. During the war, it handled 1500 compulsory arbitration cases. The War Labor Policies Board was created to establish general policies and

guidelines on hours, wages, and working conditions. Though there were 6,000 strikes during the war, most were of very short duration.<sup>15</sup>

The result was that both the nominal and real wages of laborers rose. Salaried workers found it much more difficult to get their salaries adjusted, and salaries generally rose less than wages. Interest rates and rates of return on capital generally did not increase as much as the rate of price inflation did, so real interest income from capital (bonds, stocks, profit, and so on) generally fell, leading to a trend toward equalization in the personal distribution of income during the war.

### ***Financing the War***

The federal government relied upon a combination of borrowing and taxes to finance the war effort. About one third of the costs of the war were raised through current taxation, with the rest financed through borrowing or future taxation. The total cost of the war was \$35.5 billion, of which \$9.5 billion was lent to the governments of Allied nations. In all, \$24 billion was borrowed through bond issues, of which about 71 percent was subscribed to by individuals and the remaining 29 percent subscribed to by financial institutions. The First Liberty Loan was issued in April of 1917. There were three more Liberty Loan issues, with coupon interest rates ranging from 3.5 to 4.5 percent. The last bond issue was in 1919, after the war had ended, and was called the Victory Liberty Loan issue.

The relative amount raised through current taxation was much larger than in previous wars. Prior to 1914 the federal government had relied mainly on tariffs for revenue. The new individual and corporate income taxes allowed the government to raise additional revenue by dramatically increasing income taxes and broadening the base of those who paid them. By 1913 the maximum individual income tax rate was 7 percent on taxable incomes of over \$1,000,000. In 1918 the maximum rate was 77 percent on taxable incomes of over \$1,000,000, and individuals with taxable incomes of \$6,000 faced a higher tax rate, 13 percent, than any individual at any income level had faced in 1913.

### ***The United States at the End of the First World War***

The United States emerged from the First World War as the strongest economic power in the world. Virtually overnight it had been transformed from a debtor to a creditor nation, a position it retained until the early 1980s. The flow of gold to pay for war-related exports had left the United States holding the majority of the world's monetary gold stock. These

changes would bring about the adoption of an altered form of the gold standard in the twenties.

With the end of the war, President Wilson moved quickly to end the federal boards that had controlled the economy during the war, although some industrialists and bureaucrats wished to see them continued. In 1919 the Commerce Department attempted to establish a government-private arrangement to fix prices, but Wilson quickly squashed this.<sup>16</sup> The government also pulled back from its support of labor unions, and strike losses, particularly in the steel industry in 1919, led to a loss of union membership. But permanent changes had occurred. Membership in the Industrial Workers of the World (IWW) had dwindled due to its pronounced anti-war position, while the American Federation of Labor (AFL) which had supported the war, was considerably strengthened. When the New Deal adopted the analogy of the depression as war and resurrected war-era institutions to combat the depression, some of the AFL unions were ready to seize this opportunity to revitalize the labor movement. And laborers could see the wage gains that had been made during the war when immigration was choked off; when immigration increased sharply in 1919, there was a much stronger and more concerted movement to get Congress to limit immigration. As a result, America's open door to immigrants ended in 1921.

The war had given the U.S. government the opportunity to dramatically increase its new personal and corporate income taxes. By 1919 the upper 30 percent of all income earners were subject to income taxes. Though the rates were lowered in the twenties as the federal government ran continued budget surpluses, the maximum marginal rate was 25 percent, far higher than the 7 percent of 1913. With the onset of the depression, just as during the First World War, the rates were increased dramatically. By the end of the twenties, many states had followed the federal government's lead and adopted personal income taxes. As Jonathan Hughes has stated, the income tax rates and yields of 1918 were "the initial yield of the Sixteenth Amendment. It was the small beginning of a fiscal revolution that would change the American economy beyond the wildest dreams of those who pushed for the Sixteenth Amendment as a needed social reform."<sup>17</sup>

In the opinions of most observers, the Federal Reserve System had also passed its first test. It had made it much easier for the government to finance the war, though one of the costs was a much higher rate of price inflation. Indeed, in 1919, when the federal government needed to sell the last Liberty Loan issue, "the Fed" was pressured into keeping interest rates low to facilitate bond sales. To do this,

the stock of money was allowed to grow rapidly, setting off an inflationary boom. Once the Fed adopted a much more restrictive monetary policy with the end of the federal government's bond sales in late 1919, this boom collapsed. But, to most observers the Fed had shown that it could control monetary affairs and therefore, many hoped, the business cycle as well.

Finally, there were many who had been impressed with the wartime controls. Many industrialists liked being sheltered from price competition. Others believed that careful planning and centralized coordination would work for the economy as well as it worked for big businesses and believed that the First World War demonstrated this. When the Great Depression engulfed the economy at the beginning of the thirties, proposals to resurrect wartime control boards appeared. Roosevelt compared fighting the depression to fighting a war, and the old controls boards were resurrected and given new names. For example, the War Industries Board became the National Recovery Administration and the United States Grain Corporation became the Commodity Credit Corporation.<sup>18</sup> Many of the people who had served on war boards were recycled to serve on New Deal agencies. In a sense the First World War was a training ground for Roosevelt's New Deal programs of the thirties, and the lessons learned in 1917 and 1918 would not be forgotten in the prosperous twenties.

### Selected References

- Brooks, John. *Telephone: The First Hundred Years*. New York: Harper and Row, 1975.
- Bruchey, Stuart. *Growth of the Modern American Economy*. New York: Dodd Mead and Company, 1975.
- Davis, Lance E., Richard A. Easterlin, William N. Parker et al. *American Economic Growth: An Economists' History of the United States*. New York: Harper and Row, 1972.
- Faulkner, Harold U. *The Decline of Laissez Faire, 1897-1917*. New York: Holt, Rinehart, and Winston, 1951.
- Fearon, Peter. *War, Prosperity and Depression: The U.S. Economy, 1917-1945*. Lawrence, KS: University of Kansas Press, 1987.
- Fogel, Robert W. and Stanley L. Engerman, eds. *The Reinterpretation of American Economic History*. New York: Harper and Row, 1971.
- Hawley, Ellis W. *The Great War and the Search for a Modern Order: A History of the American People and Their Institutions, 1917-1933*. New York: St. Martin's Press, 1979.

- Higgs, Robert. *The Transformation of the American Economy, 1865-1914*. New York: John Wiley & Sons, 1971.
- \_\_\_\_\_. *Crisis and Leviathan: Critical Episodes in the Growth of American Government*. New York: Oxford University Press, 1987.
- Hughes, Jonathan. *The Governmental Habit: Economic Controls from Colonial Times to the Present*. New York: Basic Books, 1977.
- \_\_\_\_\_. *American Economic History*, 3d ed. Glenview, IL: Scott, Foresman and Company, 1990.
- Lebergott, Stanley. *The Americans: An Economic Record*. New York: W. W. Norton, 1984.
- Lee, Susan Previant and Peter Passell. *A New Economic View of American History*. New York: W. W. Norton, 1979.
- Porter, Glenn. *the Rise of Big Business, 1860-1910*. New York: The Thomas Y. Crowell Co., 1973.
- Rosenberg, Nathan. *Technology and American Economic Growth*. New York: Harper Torchbooks, 1972.
- Soule, George. *Prosperity Decade: From War to Depression, 1917-1929*. New York: Holt, Rinehart, and Winston, 1947.
- Taylor, George Rogers. *The Transportation Revolution, 1815-1860*. New York: Holt, Rinehart, and Winston, 1951.
- Walton, Gary and Hugh Rockoff. *The History of the American Economy*, 6th ed. Englewood Cliffs, NJ: Prentice-Hall, 1990.

### Notes

- <sup>1</sup>. However, there are those who argue that much of the Progressive Era's legislation to regulate business was inspired by businesses wishing to escape from the reins of competition rather than by the Progressive Era reformers. In particular, see Gabriel Kolko, *The Triumph of Conservatism: A Reinterpretation of American History, 1900-1916* (New York: The Free Press, 1963). Much of this discussion is drawn from the following studies: Robert H. Wiebe, *The Search for Order: 1877-1920* (New York: Hill and Wang, 1967); Ellis W. Hawley, *The Great War and the Search for a Modern Order: A History of the American People and Their Institutions, 1917-1933* (New York: St. Martin's Press, 1979), chapter 1; Stanley Lebergott, *The Americans: An Economic Record* (New York: W. W. Norton and Co., 1984), chapter 31; and Charles H. Hession and Hyman Sardy, *Ascent to Affluence: A History of American Economic Development* (Boston: Allyn and Bacon, Inc., 1969), chapter 22.
- <sup>2</sup>. See Robert Higgs, *Crisis and Leviathan: Critical Episodes in the Growth of American Government* (New York: Oxford University Press, 1987). Other sources for this discussion of the federal income tax

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- are as follows: Bennett D. Baack and Edward John Ray, "Special Interests and the Adoption of the Income Tax in the U.S.," *The Journal of Economic History*, 45 (September 1985): 607-26; Jonathan Hughes, *The Governmental Habit: Economic Controls from Colonial Times to the Present* (New York: Basic Books, 1977); Roy G. and Gladys C. Blakey, *The Federal Income Tax* (New York: Longmans, Green and Company, 1940); Jonathan Hughes, *American Economic History*, 2d ed. (Glenview, IL: Scott, Foresman and Co., 1987), chapter 23; and Lebergott, *The Americans: An Economic Record*, chapter 31.
3. Baack and Ray, "Special Interests and the Adoption of the Income Tax in the U.S."
  4. Most of the material on the first World War comes from the following sources: Harold U. Faulkner, *The Decline of Laissez Faire, 1897-1917* (New York: Holt, Rinehart, and Winston, 1951), chapters 12 and 13; George Soule, *Prosperity Decade: From War to Depression, 1917-1929* (New York: Holt, Rinehart, and Winston, 1947), chapters 1-3; Peter Fearon, *War, Prosperity, & Depression: The U.S. Economy, 1917-1945* (Lawrence, KS: University of Kansas Press, 1987), chapter 1.
  5. Cleona Lewis, *America's Stake in International Investments* (Washington, D.C.: The Brookings Institution, 1938), 352.
  6. George Soule, *Prosperity Decade: From War to Depression, 1917-1929*, 10-12.
  7. For a discussion of this see Jonathan Hughes, *American Economic History*, 2d ed. (Glenview, IL: Scott, Foresman, and Co., 1987), chapter 23. This concept is developed in more detail in Jonathan Hughes, *The Governmental Habit: Economic Controls from Colonial Times to the Present* (New York: Basic Books, 1977); and in Ronald Radosh and Murray N. Rothbard, eds., *A New History of Leviathan: Essays on the Rise of the American Corporate State* (New York: Dutton, 1972).
  8. Much of this discussion of the railroads up to 1920 is drawn from K. Austin Kerr, *American Railroad Politics, 1914-1920* (Pittsburgh: University of Pittsburgh, 1968).
  9. Soule, *Prosperity Decade*, 33 and 42.
  10. John Brooks, *Telephone: The First Hundred Years* (New York: Harper and Row, 1975), 159.
  11. Soule, *Prosperity Decade*, 17.
  12. Ibid.
  13. See Soule, *Prosperity Decade*, 36-38; and Robert Higgs, *Crisis and Leviathan: Critical Episodes in the Growth of American Government* (New York: Oxford University Press, 1987), chapter 7.
  14. See Gavin Wright, *Old South, New South: Revolutions in the Southern Economy Since the Civil War* (New York: Basic Books, 1986), 201-202.
  15. Soule, *Prosperity Decade*, 65-67.
  16. Robert F. Himmelberg, "The War Industries Board and the Antitrust Question in 1918," *The Journal of American History*, 52, (June 1965), 59-74.
  17. Hughes, *American Economic History*, 414.

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<sup>18</sup>. For a discussion of this see William E. Leuchtenberg, "The New Deal and the Analogue of War," in John Braeman et al., *Change and Continuity in Twentieth Century America* (New York: Harper and Row, 1967).