A Short History of American Capitalism

Chapter 7

CAPITALISM DOMINANT, 1865-1920

Between 1865 and 1920, the United States became the world's leading industrial capitalist nation. There was nothing inevitable about this development. Two principal obstacles blocked the way, each of them arising from capitalism itself: (1) a growing working class which increasingly insisted on sharing the fruits of industrial production and (2) competition among existing firms, originated over the years 1790-1865, grew extreme. (The former will be discussed in the next chapter.)

During the earliest phases of industrialization, as we saw above, "American industry … was … characterized by … local [miniature] monopolies protected from competition with each other by high transportation costs.[1] By 1850, the average industrial plant in the country employed only seven workers. (See above, Chapter 5, p. 17.) A year later, "more than half of all British industrial enterprises had five or fewer employees."[2] At mid-century, the internal American market for manufactures was still smaller than that of the British. In no real sense was there much competition between two of the leading industrial countries of the world.

In the thirty-five years after the end of the Civil War, competition permeated American industry. In only a few industries were there dominant firms; instead, numerous small and medium-size companies populated the country. Competition took the form of price-cutting. As James Livingston observed, most capitalists during these years feared that "'ruinous competition', overproduction, and price deflation had created a secular trend toward a stationary rate, in which profit incentives and their civilizing corollaries would disappear."[3] Livingston also reported that

> [National Bureau of Economic Research] data show … that between 1870 and 1900 there were more months of contraction than expansion. Moreover, per capita output and growth in labor productivity declined persistently from 1870 until the turn of the

> century; interest rates (nominal and real), commodity prices, and yields on capital fell just as precipitously throughout the late nineteenth century.[4]

Thus, most capitalists found little about which to celebrate during these "Gay Nineties", despite the fact that during that decade the United States surpassed Britain in total industrial production.

By no means was full-scale monopolization unknown before the 1890s. As early as the 1850's railroad pools were in operation. After the Civil War, they continued to be organized. In 1879, for example, the "Joint Executive Committee" was organized in Chicago, the nation's railroad center.[5] The formation of monopoly in manufacturing "began gradually in the 1870s in … iron and steel processing, oil refining, agricultural implements … meat packing, and sugar refining."[6]

Each instance of monopolization was based on the special characteristics of the case. Thus, 95 percent of the best anthracite coal is located in five Pennsylvania counties. By controlling access to and egress from this compact area, several railroads controlled by J.P. Morgan and Company in turn could act as the effective policy-maker of the anthracite industry. In 1880, over 28 million tons of anthracite coal was produced from these holdings; 20 years later the amount had doubled.[7] Yearly output was fixed in accordance with "harmony" among the various owners, under the guidance of J.P. Morgan.[8] The Beef Trust was operated by major meat-packing corporations who, among other things, made secret agreements to fix the prices they would offer for cattle. They did not bid against each other.

Control of patents was a later technique of monopolization. John Gates, chairman of the American Steel and Wire Company, argued that bestowal of a patent entitles the patentees to receive a super-profit on the patented item.[9] For a number of years, General Electric fought Westinghouse via their patent holdings. After a time, they formed the GE-Westinghouse Board of Patent Control to protect their joint interests; the board operated from 1896 to 1911. Meanwhile, in 1903, "Emil Rathenau, the founder of AEG [the German counterpart of GE] reached an agreement with General Electric in America to divide their world markets; AEG would continue to be preeminent in Europe; GE, in America."[10] On the other hand, a principal figure in the U.S. Steel Corporation explained how he and his opposite numbers in England, Germany, Belgium, France, and Austria had failed to reach a monopolistic agreement on division of the world wire market mainly

because he (John W. Gates) insisted on too high a quota for his firm.[11]

The depression of 1873-1879 was the last crisis of a highly competitive American economy. Producers responded to falling prices by trying to keep output level or even increasing it. During the depression of 1893-1897, however, industrial producers were better able to protect their position. As indicated above, there was widespread experimentation with monopolistic arrangements. The general result is evident. During the earlier depression, for example, prices of metal and metal products fell an average of 14.9 percent a year and those of farm products 3.3 percent. Twenty years later the percentages were 3.2 and 4.0.[12]

In 1867, the country's leading business journal lectured manufacturers on the financial advantages of reducing output rather than prices during economic slumps: "Manufacturers appear to have regulated their production by the capacity of their works rather than by the capability of consumers; and the result has been the supply of goods has been so far in advance of the demand as to place the determination of prices in the hands of the buyers, causing upon many descriptions of goods very heavy losses."[13] Manufacturers seem to have learned the lesson and applied it increasingly during the late 1890's and early 1900s. During these years industrial mergers proliferated, as follows:[14]

Year	*Mergers*	*Year*	*Mergers*
1895	4	1900	21
1896	3	1901	19
1897	6	1902	17
1898	16	1903	5
1899	63	1904	3

"More than half of the consolidations absorbed over 40 percent of their industries," notes Naomi Lamoreaux, "and nearly a third absorbed in excess of 70 percent."[15] These mergers aimed at achieving monopoly positions over resources or markets; typically, they involved firms that had been competitors. Another motive for the mergers was to create large promotional profits for those persons who initiated and managed the merger.[16] These profits could be transacted in the shape of shares of new stock. In general, the mergers did not result in improved efficiency in producing any commodities since the mergers were "horizontal", that is, they involved companies producing more or less the same products at more or less the same technical efficiency.

Robert Grosse has written that "monopolistic agreements among pig iron producers were unknown until the depression of 1873-79, and even these were ineffective."[17] In these early years, small furnace capacities and modest market demand had limited firm sizes to around what was barely optimum technically. By 1880, however, producers of Bessemer steel—who of necessity incurred very high fixed costs for machinery—were organized into extremely large firms. These high costs put a premium on the elimination of competition in the industry; monopolistic agreements gained prominence during the 1880s. By 1901 they led to creation of the U.S. Steel Corporation. U.S. Steel did not attempt to create a complete monopoly in the industry. It "set prices at a level that would earn profits for its weaker competitors, but not so high as to antagonize customers."[18] In other words, the corporation was interested in stabilizing the industry so as to maintain its own position of dominance. One avenue to that goal was the corporation's ownership of the rich iron ores in the Lake Superior district which gave U.S. Steel a competitive edge and which it refused to share with any other firm in the industry. Another mechanism was the holding of so-called "Gary dinners" during 1907-1909, which involved steel industry leaders. A participant in the dinners, named after Elbert H. Gary, chairman of the board of directors of the U.S. Steel Corporation, noted that the guests were summoned in order to discuss problems arising out of the depression of these years. Gary was said to stress that industry policy should be based "on a disposition to help one another, instead of trying to get business at the expense of one another and at prices below actual cost."[19] The advice was heeded, and the dinners eventuated in the formation of the American Iron and Steel Institute, a long-lasting trade association. One historian writes that "the Gary dinners were remarkably successful in preventing price cutting."[20]

During the 1860s and 1870s, the annual rates of growth of business capital (plant and equipment) were 3.9 percent and 4.8 percent. In the 1890s, notes Josef Steindl, the rate began a very long-term drop which was uninterrupted even as late as the 1930s. Another approach to this same area is to study the rate of output of fixed capital per worker. Referring to the years after the Civil War, Robert Gallman reports that "in the postwar period [until 1899] the rate does not rise above the rate for 1859-69. ... The rate of increase of fixed capital output was subject to sharp retardation and this is especially evident for the period after 1869."[21]

Monopoly made significant headway only starting in the mid-

1880s. By that time, as just noted, the rate of growth of business capital was being checked. Indeed, the advance of monopoly led to that checking process by raising profit margins of the larger firms, expanding excess capacity, and thereby restricting investment.[22] Regarding this growth of monopoly as a concomitant of capitalism, we can say with Lewis Corey that "unlike England … the American industrial revolution and the upswing of capitalism measurably coincided in time, the conditions of one modifying those of the other."[23]

The leap toward monopoly during the decade of the 1890s produced a system of corporate capitalism.

> In 1891-92 an industrial company with a capitalization in excess of $10-million was still extremely rare. In 1902, by contrast, nearly a hundred industrial corporations had attained that size. … In 1899 incorporated companies made up only 13.6 percent of all manufacturing establishments, yet they already employed 65 percent of all wage earners in manufacturing. By 1905 industrial corporations in manufacturing—now 23.6 percent of all establishments in the sector—controlled 82.8 percent of all capital, employed 70.6 percent of all wage earners, and accounted for well over 70 percent of value added.[24]

This transformation resulted from a series of deliberate steps taken by a ruling class on the make. It was particularly through control of the financial system that this class succeeded in establishing its rule.

The merger movement consisted not of an assortment of specialists in producing manufactured commodities but of financial experts who commanded either the capital itself or the avenues for gathering the capital. Thorstein Veblen described the essentials of the system: "The banking community took over the strategic regulation of the key industries, and…also the control of the industrial system at large."[25] Control of the key industries was "lodged in the hands of that group of investment bankers who constitute in effect a General Staff of financial strategy and who between them command the general body of the country's credit resources."[26] During the first years of the 20th century, a new assumption pervaded higher financial circles: " The banking system could and should be the headquarters of an investment system based on cooperation among large firms."[27] Here is an example of how the new system operated.

In the years 1885 and 1905, the annual income of life insurance

companies in the United States was $525-million and $2.9-billion, respectively.[28] These funds were derived from premiums paid by holders of the insurance policies, and needed to be invested promptly so as to yield an income for the companies to pay for the deaths of their insured persons. Five firms owned two-thirds of the assets of all life insurance companies: Metropolitan, Prudential, Mutual, Equitable, and New York Life. The last three owned fully one-half the assets of all life insurance companies. In 1870 less than three percent of these assets were stocks and bonds; by 1900, that figure had risen to nearly 38 percent. Five years later, securities held by New York Life constituted 74 percent of its total assets; of Equitable, 57 percent; and of Mutual, 54 percent.[29] Which securities did the insurance companies buy? Primarily, those sold (i.e., underwritten) by six dominant New York investment banks, led by J.P. Morgan and Company. Such securities were issued by industrial corporations and others which had close relations with the dominant investment banks. According to Douglass North, "it was clearly a one-sided arrangement in which the great bulk of the advantages accrued to the investment banker rather than to the insurance company."[30]

Crucial to this entire arrangement was the requirement that the insurance companies control their own back yard. This was accomplished by deep company involvement in political and governmental affairs. "The three big insurance companies occupied key positions in financing the [New York state] Republican machine (and to some extent the Democratic one also) and guaranteed not only friendly legislators but cooperative [state] insurance departments as well."[31] Between 1895 and 1905, a New York Life lobbyist was paid at least $1,312,197.16 to guard against passage of hostile legislation.[32] The New York State Department of Insurance functioned as a subdivision of the industry:

> Formally the department was supposed to regulate insurance companies in the public interest. Actually the department was intimately related to the dominant political machine and responsive to the long-run functional requirements of the major companies. … The net effects of the actual policies of the regulatory body were (1) to enable the large companies to easily evade regulations when it was important for them to do so and (2) to insure continuous dominance by the large companies.[33]

Few economic historians have shown as graphically as Douglass North how significant a contribution was made by government to the

short- and long-term development of the life insurance industry. The Big Three insurance companies ruled their industry in a manner closely reminiscent of that of U.S. Steel, a Morgan firm.

Vast amounts of capital were needed to finance the installation of expensive heavy equipment and buildings to house the rapidly expanding industrialization. In addition, capital was required to develop various natural resources, especially in minerals. Accessibility by the new giant firms to adequate capital permitted them to drive their costs of production downward. The highest labor costs were incurred in shops or operations where skilled labor predominated. Whenever possible, machinery was substituted. In addition, craft union work rules were outlawed throughout industry after industry. Nevertheless, as James Livingston notes, "output per industrial worker calculated in dollar amounts declined 5 percent from 1874-83 to 1884-93, as earnings per industrial worker increased about 4 percent."[34] Heightened mechanization aimed to eliminate the worker advantage. This was accomplished during the transition from the production of wrought iron to steel.

David Jardini reports that in one firm "by early 1892, only 3.0 manhours of labor were required for each ton of steel produced, compared to 29.7 man-hours required for each ton of wrought iron in 1887."[35] In the same company, total labor costs constituted 30.5 percent of wrought-iron production but only 21.6 percent of steel output.[36] Jardini classified the skill levels of workers in the firm's plants on a scale from 0 to 10. The lowest value was applied to jobs requiring less than six months of training (unskilled), the highest value to jobs needing 60 of training or more. During 1885-1887, the average skill-level range of wrought-iron workers was 3.81-3.85. During a longer period, 1887-1896, the mean skill-level range of steel workers was 1.57-1.98.[37] Jardini explains:

> Almost three-quarters of the jobs in the steel department were in skill ranges 0 and 1, which represent occupations requiring less than twelve months of training. … While the mean skill level of workers in the … [iron] plant hovered around 3.8, the mean skill level of the steelworkers never reached 2.0."[38]

Between 1890 and 1910, steelworkers' earnings rose by half while their productivity tripled.[39] This pattern of exploitation was highly reminiscent of the experience of New England textile workers a half century earlier.

Technological change and a drive for greater profit per worker laid

the basis for a lengthening of the workday in the steel industry. In 1892, Andrew Carnegie's Homestead Works in Pennsylvania conducted an anti-union campaign (see next chapter) which resulted in an ending of unionism in the plant. Very rapidly thereafter, the twelve-hour workday and seven day workweek became norms in the entire industry.[40] Jonathan Rees notes that "less than a third of the departments in most mills required continuous operations."[41] Not even in this minority of departments, however, did continuous operation require that particular workers continuously operate the same machine for twelve hours. (Steelworkers in England and France, whose production methods were highly modern, worked fewer hours than their American counterparts.) A high official of the U.S. Steel Corporation claimed in 1912 before a Congressional committee that electrification of steel operations had greatly lightened the physical burden of steelmaking and thus presumably made it less laborious.[42] By 1911, 45,248 men worked the 12-hour, seven day week in U.S. Steel's mills. Nine years later, the number had risen to 85,000.[43] In the industry as a whole, in 1910 over half of all steelworkers worked the long week; eleven years later up to two-thirds of employees did so.[44] It should be recalled that an era of highly skilled specialist workmen in steel had never existed.

Capitalism advanced in the South, both in industry and agriculture, but without any special technological feature. (See the next chapter for a discussion of developments in agriculture.) During the 1880s, railroad-building in the South took on a new urgency. In a number of cases, African-Americans were employed in construction as well as operating and service capacities. It was, however, the cotton-textile industry that became the principal industrial engine of capitalist growth. By the 1890s, New England textile mills began to close shop and move to the South. The magnet for such movement was the availability of a great reservoir of cheap labor—the poor whites. The rulers of the post-Civil War South—more or less the same ones who had ruled before the war—still controlled cotton agriculture. Vital to continuation of that control was command over the labor of the emancipated enslaved workers. To have staffed the textile mills with these workers would have created a competition between farm and cotton mill; wages would surely have risen. Thus, poor whites were employed: They were told the new jobs were exclusively designed for them; blacks were not permitted to work in the mills. In return, the poor whites were expected to remain content with the slenderest of

rewards. And textile owners did not need to fear the development of any radical sentiments of class conflict among the grateful workers.

Douglas Dowd points to the result: "In 1900 the work week in the South was sixty-eight to seventy-two hours; in New England, it was fifty-six to fifty-eight."[45] Another indicator is Phillip Wood's observation that "North Carolina had 12.5 percent of the nation's cotton millworkers but accounted for 61.1 percent of those working more than sixty hours per week."[46] He notes also:

> In 1890 the average wage rate for males in North Carolina was 163 percent that of females and 281 percent that of children. By 1900 these figures became 138 percent and 211 percent, respectively, largely as a result of the fall in the average rate for males.[47]

Such were the leading attractions of textile economies: a bonus to employers of a longer work week; the sweeping presence of such work-weeks in North Carolina; and falling wage rates for male operatives, even during a period of industrial expansion. Toward the end of the 19th century, politically organized employers were able to deprive both white and black workers of political power in the state, thereby strengthening the rule of capital.[48] A well-informed Englishman visiting the South in 1902 was told "of children of twelve running a dozen automatic looms each for eleven or twelve hours a day; of girls of twelve drawing-in warps; of fathers carrying their children to the mill in their arms." In Winston-Salem, North Carolina, "half of the people in the mill seemed to be between nine and fourteen years of age, and I was told that they worked sixty-nine hours a week"[49]—almost as many hours as many adult steelworkers in Pittsburgh.

By 1914, child-labor laws forbidding work before the age of 12 had been passed throughout the South. As W.J. Cash notes, however, "Not a single Southern state made any serious provision for enforcement; not one set up more than the shadow of an inspection service."[50] (It should be kept in mind that all these mill children were white.) Extensive child labor helped significantly in yielding profit rates ranging from ten to 30 percent in North Carolina textile mills.[51]

Before 1900, the 139 research laboratories in the United States were not actually engaged in research. "Rather, they were engaged in a variety of routine and elementary tasks such as the grading and testing of materials, assaying, quality control, writing of specifications, and so forth."[52] When it came to making steel during the second half of the nineteenth century, "none of the scientific ideas used by

Bessemer … and Thomas were more recent than 1790. …"[53] Generally speaking, as John Bernal pointed out, "when a process is not understood but is known to work there is always a real danger in any variation however apparently supported by theory."[54]

Industrial research dates in the United States from around 1900. It originated in science-sensitive industries, that is, industries whose fund of theoretical knowledge was clearly inadequate to make further progress, whose problems were not being solved in universities, and yet whose entire fortunes could be upset by a major technical breakthrough. Such, for example, was the situation in the electric lighting and the telephone industries around 1900. In part, the effort was successful; important technical advances came from these industrial laboratories. Nevertheless, even in the electric lighting field crucial technical advances continued to be purchased or leased from European sources. And many fundamental technical advances came from independent inventors or from gifted enterprisers who lacked genuine laboratories.

Corporate interest in research extended beyond technical advance for its own sake:

> A company often established an industrial research laboratory for market protection as well as for innovation, and as a result the work there was aimed at maintaining corporate market position through broad-ranging patent-gathering activity as well as at achieving particular scientific or technical goals.[55]

Nevertheless, by far most patents before World War I were produced by independent inventors having no connection with companies.[56] While undoubtedly only large firms could afford to establish full-scale laboratories, "it remains difficult to provide convincing empirical support for the view that large firms contribute disproportionately to technical advance."[57] This was especially the case before 1914. More than one large firm closed down their laboratory because quick profits were not resulting from investments in scientific personnel and equipment. "To them," wrote Henry D. Lloyd in 1894, "science is but a never-ending repertoire of investments stored up by nature for [investment] syndicates."[58]

During the third quarter of the 19th century, the scientific community reflected its origins in an economic elite:

> Most professional scientists came from professional or upper-middle-class families. Three-fifths of the scientists listed in the

> *Dictionary of American Biography* were sons of professionals, as against one in seventy-five of the general population. Nearly another fifth were sons of entrepreneurs.[59]

Thus, America's scientists shared similar social origins with contemporary politicians, judges, industrialists, and other propertied folk. This came in handy, at the least, when scientists were making their way into economic and political affairs, as they necessarily did. Bruce reports:

> Government employed nearly a third of the leading antebellum scientists. ... By 1860, twenty-nine of the thirty-three states had sponsored [geological] surveys at one time or another. ... Twice as many leading scientists worked for the federal government, 1846-76, as worked for the states . ...[60]

It should be noted that before the Civil War, West Point constituted the leading producer of engineers in the country.

Geologists, declares Bruce, "ran a greater risk than other scientists of contracting the itch to be rich."[61] State government geological surveys pointed to probable sources of valuable minerals while capitalists hastened to exploit the deposits. The market for geological knowledge expanded rapidly and numerous geologists became investors. Many early engineers, who came from social circumstances similar to those of scientists, commonly had "a proprietary interest in the projects in which they were engaged."[62]

Numerous contemporaries inflated the role scientific research played in American industry, none more wantonly than W.J. McGee. In 1898 he wrote:

> In truth, America has become a nation of science. There is no industry, from agriculture to architecture, that is not shaped by research and its results.[63]

This volley was preceded by an even less accurate one: "Fully half of the progress of the world, during the last fifty years, has been wrought through the unprecedented energy of American enterprise and genius, guided by American science."[64] In fact, American science was a small and tender shoot. In 1899, a band of American physicists formed the American Physical Society; they could count no more than 37 members. Two years later, when the physics department at Columbia University invited the world-renowned scientific figures J.J. Thomson and Ernest Rutherford to join them, "neither would think of going to so isolated a place as New York City."[65] The picture in

industrial science was not greatly different. Thus, in 1919, research and development accounted for only 0.1 percent of Gross National Product.[66] In fact, a year earlier a careful observer reported:

> It is nowadays generally only the very large establishment which is in a financial and technical position to handle big things in the way of patents or scientific discoveries of great economic value. Time was when such discoveries were the free gifts of the scientists to the whole class of industrial capitalists.[67]

The picture changed only gradually.

After the Mexican-American War, the Treaty of Guadalupe Hidalgo (1848) required the American courts to respect Spanish and Mexican practices with regard to ownership of sub-surface mineral deposits. Those age-old practices, derivative from European practices, required government be awarded all rights to such deposits. In turn, the government could grant mining rights to private individuals in exchange for royalty payments. Thus, land could not be sold or granted to private parties for farming if it was known to contain minerals. State supreme courts after 1848, however, deliberately violated the Guadalupe Hidalgo Treaty by declaring "public access to minerals … [to be] a privatized property regime giving exclusive—and invaluable—subterranean rights to the owner of the soil above."[68] This opened the way for mining corporations to engage in large-scale mining that utilized technologies that were highly destructive to a physical environment which they "owned". So Peter Reich declares:

> Such large-scale extraction deforested the area to provide mine reinforcement and fuel, polluted the air with mills and smelters, and contaminated the water through dumped tailings. Destruction of vegetation, erosion, and debris accumulation from hydraulic mining has also been well documented.[69]

A very high price in environmental degradation was paid for by the advance of large-scale mining, especially in California.

The late 19th and early 20th centuries are frequently referred to by economic historians as the age of Big Business. W.E.B. Du Bois regarded the label as "a misleading misnomer."[70] In his view:

> Its significance lay not simply in its size. It was not just little shops grown larger. It was an organic super-government of mankind in matters of work and wages, directed with science and skill for the private profit of individuals.[71]

By 1900 or so, it had not yet achieved the status of a "super-government". Undoubtedly, however, it was well on its way.

Capitalist interests were served on all levels of government.

Referring especially to large-scale corporate entities, Gerald Nash writes that during 1860-1900, "powerful new business groups exerted extraordinary influence on state and local governments."[72] Even the big businesses that began to emerge in the 1870s and 1880s were located in municipalities. Governments in company towns were almost completely dominated by the dominant firm or firms. Thus, a vice-president of Bethlehem Steel Co. was the mayor of Bethlehem, Pennsylvania while a member of a company's private police force in North Clairton was also mayor of the town.[73]

Local taxes were exceedingly light on the largest enterprises. A crucial step in this process was local assessment of property as a base for taxation. In Montana, where the Anaconda Copper Mining Company accounted for 90 percent of the copper produced, local tax assessors tended to accept the firm's valuation estimates, thus enabling the company to determine its own tax rate. Louis Levine commented:

> This practically leaves the assessment of mines in the hands of the owners of the mines and reduces the supervision of the taxing authorities of the state over mine assessment to almost nothing.[74]

Profits grew accordingly. Between 1905 and 1917, the company "earned a sum equal to 150 percent of its outstanding capitalization and paid in dividends a sum equal to its capitalization. ..."[75] Meanwhile, higher tax rates were levied on farm land and other forms of property. James O'Connor notes, likewise, that "in some cities (e.g., Houston) major industries themselves fix the value of their properties for tax purposes."[76]

Many laws were administered according to political criteria. This was preeminently the case with measures requiring inspection of factories for safety and other matters:

> In small towns, particularly in company-dominated communities, the inspector had virtually no chance of obtaining convictions against the major employer. In other areas the judges were often sympathetic to the objectives of the law but hesitated to levy more than a reprimand.[77]

The owner of the largest bank in Montana was also the territorial governor. During 1886 he began developing coalfields in the territory in which the Vermont capitalist Frederick Billings invested

$125,000.[78] He cooperated closely with the owners of the Northern Pacific Railroad.

Between 1860 and 1900, the federal government gave the states some 72-million acres of land for transferral to small farmers. "In general, state administration often violated legislative intent" and speculators were allowed "to amass vast tracts of land."[79] (The reader will note that it was during these years that both federal and state authorities successfully opposed distributing "40 acres and a mule" to the freed slaves.)

With the advent of large-scale, mechanized mining in California, Nevada, and elsewhere in the West, mining capitalists became deeply involved in state politics. "At Nevada's constitutional convention the large mining interests constituted a controlling block, and continued to do so in later sessions of the legislature."[80] Throughout western states, governments distributed "corporate mining charters, codified mining law, and granted [the industry] direct subsidies."[81]

In North Carolina, industrial and agricultural capitalists combined to strip the poor of their political rights. State constitutional provisions as well as election laws were re-written to deprive both black and white poor of their vote. After the end of reconstruction in 1877, the legislature enacted numerous regressive taxes, including a general property tax which bore most heavily on holders of small properties. "Almost every piece of property owned by blacks, however insignificant, was taxed."[82] As the poor lost their vote, they also were saddled with unequal schooling taxes:

> The system of educational financing was highly regressive. Blacks paid higher taxes for education than did whites, poor whites paid higher taxes than rich whites, and the law was designed to prevent any redistribution between "rich" and "poor" counties. After 1900 the ratio between per capita expenditures on education for blacks and those for whites fell by 53 percent in ten years, and there was increasing inequality between per capita expenditures in rich and poor counties.[83]

Sweeping disfranchisement accompanied the triumphant advance of capitalism in the South. The consequent deprivation spread far beyond racial boundaries.[84]

When Woodrow Wilson first ran for president, in 1912, he declared that "the masters of the government of the United States are the combined capitalists and manufacturers of the United States."[85] At the center of this process lay control of the principal political parties

and the political machines, organized under direction of party bosses. "Living to a great extent on the corporations, bossism burst into full bloom in the States where big capitalist interests were concentrated, where [railroad] companies were most numerous, such as New York, New Jersey, Pennsylvania . . . ."[86] The bosses, however, did not run the "whole show":

> Often the high officials of the companies sat on the important party committees and pulled the strings from them. They equipped and kept up political Organization for their own use, and ran them as they pleased, like their trains.[87]

Just after the Civil War, a leading business magazine regretted "that legislation should be made mercenary" but opined that businessmen "pay our 'backshish' to the lobby-chief whom we meet, rejoice that it is no higher, and regard it as one of the conditions of human society. . . ."[88]

Directly bribing individual members of legislative bodies became onerous since their tastes differed and their numbers were large. In time, corporations saw their way to economies: instead of purchasing individual votes they began buying entire elections through campaign contributions. As Ostrogorski comments: "Capitalism . . . buys what is for sale, men as well as materials."[89] Only the mode of purchase changes. Thus, in 1888 the general manager of the American Iron and Steel Association wrote the chairman of the U.S. Senate Finance Committee offering a campaign contribution to the Republican party of some $40,000 if the tariff rate against foreign steel rails could be raised from $14.00 to $15.68.[90]

Matters of broader capitalist class concern did not necessarily require cash payments. In 1890, for example, Congress passed the Sherman Anti-Trust Act to forbid industrial conspiracies in restraint of interstate commerce. An amendment had been offered to assure that the new measure would not be applied against unions. Senator Sherman successfully led the fight against the amendment, arguing that it was not necessary.[91] (Five years later, the U.S. Supreme Court in fact approved the application of the law to Eugene V. Debs in relation to the Pullman Strike.) Under the high court's later ruling in the *Steel Case* (1920), only "unreasonable" restraints of trade were outlawed. In another case, a giant firm was held to be engaged in commerce—and thus exempt from the bars in the Act—rather than in industry. So much of the law was construed out of existence that one economic historian characterized part of it as a "charade".[92] In the decade

between the organization of the U.S. Steel Corporation and filing of the federal anti-trust case against the company, the firm absorbed 180 one-time independent enterprises.[93] This in itself was held not to be "unreasonable". New anti-trust laws passed in 1914 (Clayton Act and Federal Trade Commission Act) more or less incorporated Supreme Court holdings of the years 1890-1914.[94]

Big Business was not only accompanied by the growth of Big Government; it had a large part in producing Big Government. From the Interstate Commerce Act (1887) to the Federal Reserve Act (1913) and similar measures, federal regulation was installed under the aegis of giant corporations.[95] Regulation was called upon when business itself proved unable to manage the economic system without developing "destructive" competition.

During the years 1865-1920, American natural resources underwent enormous "development", or, in plainer English, depletion. At a meeting of the American Forestry Association in 1893, the editor of a leading trade journal, *North Western Lumberman*, warned against the shortsightedness endemic in commercial lumbering. The lumberman "was not in the business for a lifetime, much less for the benefit of future generations." He would retire from the business whenever the timber supply gave out. "In the future," the editor concluded, "there will be a decidedly intimate relation between forestry and the lumbering industry, but it will be when the hum and clatter of the great commercial mills will have nearly died away, as then there will be but few great bodies of timber from which such mills may be fed."[96]

Earlier in the 19th century, according to historian Martin Ridge, the Great Lakes lumber industry paid almost nothing for its raw material: "The fact that lumber was virtually a free good on the frontier made profits significant."[97] Even when formal laws and regulations governing the industry were adopted, enforcement was lax or non-existent. In the Pacific Northwest, shortly after 1900, the industry grew rapidly. Coos Bay, Oregon witnessed a boom in lumbering:

> Rumors of an impending timber famine and presidential withdrawals of the forest reserves brought lumbermen from the Great Lakes states and other potential investors from centers of eastern capital. Company land agents played fast and loose with

> federal and state land laws in order to "block-up" huge acreages of valuable timberland, especially in western Oregon.[98]

Warnings by foresters of impending shortages were ignored:

> Neither federal nor state governments heeded the warnings. Private harvesting practices continued unrestrained.[99]

The continuation of such practices created a deadening uniformity of boom-and-bust for people working in the industry.[100]

Around 1913, resource abundance characterized the American industrial scene. This led to large exports of these resources as well as U.S. development of products that exploited many of the same minerals:

> Copper, coal, zinc, iron ore, lead and other minerals were at the core of industrial technology for that era, and in every single case the United States was the world's leading producer by a wide margin. In an era of high transport costs, the country was *uniquely* situated with respect to almost every one of these minerals. ...[101]

Often, as in the South, iron and coal deposits were located near ample supplies of cheap black agricultural labor who readily learned the mining trades. This was especially the case in Alabama, Tennessee, and Georgia.[102]

The West became an exemplary magnet for eastern and foreign capital. "The onset of the copper boom in Arizona indicated that the region had become an integral part of the larger continental and transatlantic world of industrial capitalism."[103] Thousands of eastern and midwestern workers and middle-class persons sought to make their mining fortunes in the region. Most, however, ended up as factory workers. In Colorado, the trend was as follows:[104]

Year	Manufacturing Establishments	Average Number Wage Earners in Manufacturing
1869	154	600
1879	439	4,500
1889	904	11,300

In 1880, slightly less than half of Colorado's non-agricultural wealth was owned by persons outside the state. And, "undoubtedly

the banks of the West and East controlled the mining and railroad industries of Idaho."[105] In short, much of the region became little more than an "economic province" of the industrial East; Arrington includes under this rubric early Montana, Nevada, Colorado, and Wyoming.[106]

British investors were bold only in their hopes of rewards; in practice they took few chances. Thus, from 1860 to 1880, rail bonds issued in the United Kingdom were distributed as follows:[107]

Developed regions	69%
Developing regions	22%
Undeveloped regions	9%

Herbert Brayer, in discussing foreign capital in New Mexico and Colorado, referred to "this short-term-high return" concept [which] was the guiding principle of a large portion of the English, Scottish, and Dutch investors who purchased American securities following the Civil War."[108] It also guided American investors. Brayer nevertheless calls the absentee-ownership operation as a whole "disastrous to European investors and … stagnatory to southwestern development. …"[109]

Wasteful mining techniques were a further consequence of such investment perspectives. In 1916, Charles Steinmetz, chief engineer of the General Electric Company, declared:[110]

> The vast natural resources made it possible to use what we had not produced, and thereby led to an average consumption, an average standard of living, beyond that of any other country. This is a rather serious problem, as it means that our nation has largely been living on its capital and not on its income, and thereby acquired habits of the spendthrift.

Little heed was given to Steinmetz's views.

During early American economic history, government and business were customarily closely interrelated. With the rise of regional and national industries, loosely-linked capitalists constituted increasingly powerful lobbies for legislation on matters of direct economic interest such as tariffs and taxes. As industrialists and financiers bought up political parties and politicians, in the late 19th century, more intimate relationships evolved, many of them directly related to major aspects of government policy and programs.

Military power was one such area. During the years 1866-1891,

wars against the Western Indians were conducted by the Army. Lands with underlying mineral resources were particular targets for wresting from Indian peoples; agricultural and range lands were seized by troops. Continued Indian control interfered with the extension of railroads and thus stymied the development of mining industries as well as settlement. Federal military expenditures rose sharply: "Gilded Age armies were nearly twice the size of those in the decade before the Civil War, and army appropriations in unadjusted dollars almost tripled."[111] Paul Koistinen continues: "After the Spanish-American War, the annual average peacetime strength of the army was over three times greater than in the period 1872 to 1897, and average annual budgets in unadjusted dollars were almost four times as large."[112] (Large costs were incurred in the federal policing of labor strikes; see the next chapter for further details.)

Naval expansion was even more extensive. During the 1880s, the U.S. Navy stood 12th in the world; some 20 years later, it stood second;' and by 1915-1916 it was on the verge of leadership.[113]

> To build a new navy of steel, steam, armor, and modern ordnance required a production team of civilian governmental officials, naval officers, and industrialists, especially for the manufacture of armor and ordnance. In one way or another, that production team has remained in existence through today. And in that coalition are located the origins of the military-industrial complex.[114]

Close and continuing cooperation helped produce a sense of identity between military and industry: "As the officer corps professionalized in both the army and the navy, and especially in the latter, it took on an upper-class bias."[115]

When World War I broke out in August 1914, the United States declared its neutrality but became a prime source of war materials for England and France. Allied war orders started arriving at the moment that an economic recession struck the U.S. By 1915, Allied orders had become a major element in the country's economic recovery. When Allied credit was all but exhausted, therefore, and this threatened an end to war-production recovery, the Wilson administration was faced with a threat of recession again. Secretary of the Treasury William G. McAdoo wrote the President:"To maintain our prosperity, we must finance it. Otherwise, it may stop and that would be disastrous."[116] The Allies were then permitted to sell bonds within the United States and funds were raised to continue the economic stimulus.

During 1915-1916 a strong movement took shape to augment

American military forces. The movement, most prominent among upper-class circles in the Northeast, was actually a rehearsal for eventual entry into the war. A parallel movement evolved to mobilize the economy for war. "The leading economic preparedness advocates shared two critically important convictions: Private businessmen and professionals had to direct the mobilization of the economy, and the basic structure of the nation's economic system had to be preserved during the process."[117] Both in the preparedness phase as well as during actual military hostilities, private authority over the economy prevailed. Actually, however, under federal supervision in wartime, private businesses were able to be even more privately controlled than previously. This was because "governmental" supervision was often exercised by the private businessmen who had been appointed to governmental procurement and administrative authorities. The result was a conflation of public and private elements.

The consequences were best characterized by historian Koistinen:[118]

> Private economic power, if exercised shrewdly and at times ruthlessly, can be strengthened enormously through public operations. ... Industry was using public authority with few safeguards against abuse. ... Private businessmen served as government officials and often had a role in awarding contracts to themselves and their colleagues. ... Conflicts of interest and other abuses were rife throughout the W.I.B. [War Industries Board] ... Almost without exception, the commodity sections and the war service committees constituted an organic unity in which any division between public and private interests was obliterated. ... And the WIB was dominated by a business ideology dedicated to the notion that industries, individually and collectively, deserved as much favorable treatment and protection as they could possibly get while they mobilized the economy for war. ... Never in the nation's history was so much public power placed in private hands with so few checks. ... [The W.I.B. was] a board that carelessly and grossly mixed private and public interests and functions. ... The possibilities for plunder were endless.

Profit records show the material consequences were enormous.

In the steel industry, the ratio of profits to invested capital sextupled in 1917 over the average of 1912-1914; U.S. Steel's profits rose from $46-million in 1914 to $585-million three years later. After-tax profit rates of 21 copper firms doubled between 1913 and 1917. In 1917 alone, "copper firms were annually returning in profits a

range of 70 to 700 percent of invested capital."[119] Stock prices skyrocketed: Bethlehem Steel stock rose from a pre-war average of $25 to $700 in 1916. That same year Bethlehem stockholders received a 200 percent dividend. During 1915 alone, U.S. Steel's stock increased from 48 to 120 and General Motors from 78 to 750. Ordnance stocks for nine firms rose by 311 percent in one and a half years.[120] Stuart Brandes notes that such increases were restricted largely to products directly used by the military: "This was in sharp contrast to stocks that served the civilian market—between 1914 and 1918 the stock market as a whole dropped by 60 percent in real value."[121]

The end to hostilities did not conclude the pro-industry policies of the federal government which now found itself with vast inventories of vital industrial materials. Instead of dumping them onto the market at one time, which would have severely depressed prices of copper, leather, and other supplies, agreement was reached to sell off limited quantities over a comparatively gradual period. This was, in effect, a government subsidy for industrial producers of the surplus commodities which included lumber and aircraft engines.

The significance of World War I, however, went far beyond profit margins and stable prices. The American capitalist class had tasted political power as never before. Sitting at the levers of the political economy of war, industrialists learned the potentials of the economic system when it was integrated into a governmental system. Big government and big business could thrive together. World War I was the first test case.

SUMMARY

As the American economy became predominantly capitalist, competition permeated American industry; price-cutting was rife while economic contraction outstripped expansion. Industrialists turned to monopoly as a cure wherever opportunities arose. By the turn of the century, a few large firms exercised market control in selected industries: anthracite coal mining, meatpacking, iron and steel, oil refining, and sugar refining, among others. The depression of 1873-1879 turned out to be the last crisis of a highly competitive American economy. Large-scale industries tended afterwards to reduce output and thereby support sagging prices and profits. Investment bankers exercised overwhelming control in monopolized industries, including the life insurance industry where monopolists negotiated political connections that proved lucrative.

Heightened mechanization accompanied monopolization. In the steel industry, labor costs fell. Between 1890 and 1910, steelworkers' earnings rose by half while their productivity tripled. Another source of increased profits came from the lengthened workday. By 1920, 85,000 U.S. Steel workers labored for 12 hours per day for seven days a week. This number had risen from slightly over 45,000 nine years earlier. In the South, the cotton textile industry expanded greatly with poor whites as the exclusive cheap labor reservoir. The textile workday was far longer in the South than in New England. Young children were employed in very large numbers despite state laws forbidding much of this; the southern states were unanimous in failing to enforce the child-labor laws.

Industrial research emerged on the national scene around 1900 but its actual research activities were extremely limited. The range of scientific problems explored in industrial laboratories was exceedingly elementary. When quick profits did not follow, a number of corporations closed down their laboratories.

Capitalist interests were served on all levels of government. Governments in company towns were almost completely dominated by the larger firm(s). Local taxes were light on the largest enterprises. In many cases, it was the industrial corporations rather than the tax collectors that determined the value of their own property for tax-assessment purposes. The "private" and "public" domains were intimately intermixed. The owner of the largest bank in Montana was also the territorial governor. During 1886 he began developing coalfields in the territory in which Vermont capitalist Frederick Billings invested $125,000. He cooperated closely with the owners of the Northern Pacific Railroad. When Woodrow Wilson first ran for president, in 1912, he declared that "the masters of the government of the United States are the combined capitalists and manufacturers of the United States."

World War I further developed the industry-government tie. War orders from England and France had, by 1915, eliminated the economic recession of 1914-1915. Allied funds, however, soon gave out and the Wilson administration was faced with a threat of recession again. Secretary of the Treasury William G. McAdoo wrote the President: "To maintain our prosperity, we must finance it. Otherwise, it may stop and that would be disastrous." Wilson then authorized the sale of Allied bonds in the United States and prosperity continued. In April of 1917, the U.S. entered the war. Major industrial interests profited greatly. Sitting at the lever of the political

economy of war, industrialists learned the potentials of capitalism when it was integrated into the governmental system.

NOTES

1. Jeremy Atack, "Industrial Structure and the Emergence of the Modern Industrial Corporation," *Explorations in Economic History*, 22 (1985), p. 37.

2. Robert S. Duplessis, *Transitions to Capitalism in Early Modern Europe* (Cambridge University Press, 1997), p. 308.

3. James Livingston, *Origins of the Federal Reserve System. Money, Class, and Corporate Capitalism, 1890-1913* (Cornell University Press, 1986), p. 33.

4. *Ibid*., pp. 37-38. Richard DuBoff puts it somewhat differently: "Between 1867 and 1900, the economy went through eight complete business cycles". *Accumulation and Power. An Economic History of the United States* (M.E. Sharpe, 1989), pp. 41-42.

5. Thomas S. Ulen, "Railroad Cartels Before 1887: The Effectiveness of Private Enforcement of Collusion," pp. 125-144 in Paul Uselding, ed., *Research in Economic History*, Vol. 8, 1983. For another case, see testimony of Isaac H. Sturgeon in U.S. Congress, 49th, 1st session, Senate, Select Committee on Interstate Commerce, *Report*, Appendix, Report No. 46, Vol. 2, pp. 161-162, Serial set number 2356, 1885.

6. Paul Uselding, "Manufacturing, " p. 410 in *Encyclopedia of American Economic History*, vol. 1.

7. Louis Hunter, *A History of Industrial Power in the United States 1780-1930*, Vol. II (University Press of Virginia, 1985), p. 415. See also U.S. Congress, 50th, 2nd session, House of Representatives, Report No. 4147, *Labor Troubles in the Anthracite Regions of Pennsylvania, 1887-1888* (Government Printing Office, 1889), pp. 649-650. Serial Set Number 2676.

8. See *Labor Troubles in 1886*, 649-650.

9. *United States Industrial Commission*, I., p. 1010.

10. Thomas P. Hughes, *Networks of Power. Electrification in Western Society, 1880-1930* (Johns Hopkins University Press, 1983), p. 179.

11. *United States Industrial Commission*, I, pp. 1017-1018.

12. Calculated from data in U.S. Bureau of the Census, *Historical Statistics of the United States, 1789-1945* (Government Printing Office, 1949), p. 231. See also Carl P. Parrini and Martin J. Sklar, "New Thinking About the Market, 1896-1904: Some American Economists on Investment and the Theory of Surplus Capital," *Journal of Economic History*, 43 (September 1983), pp. 559-578; and Austin H. Spencer, "Relative Downward Industrial Price Flexibility, 1870-1921," *Explorations in Economic History*, 14 (1977), pp. 1-19.

13. Hunt's *Merchants' Magazine*, December 1867, p. 419.

14. Naomi R. Lamoreaux, *The Great Merger Movement in American Business, 1894-1904* (Cambridge University Press, 1985), p. 2.

15. *Ibid*.

16. See the testimony of a prominent merger promoter, William H. Moore, in *United States Industrial Commission*, I, pp. 959-960.

17. Robert N. Grosse, *The Determinants of the Size of Iron and Steel Firms in the United States, 1820-1880* (doctoral dissertation, Harvard University, 1948), p. 271.

18.Lamoreaux, *Great Merger Movement*, p. 176.

19. Joseph G. Butler, Jr., *Recollections of Men and Events. An Autobiography* (G.P. Putnam's Sons, 1927), pp. 153-156. Butler was a large stockholder in the Youngstown Sheet and Tube Company, and served on its board of directors.

20. Lamoreaux, *Great Merger Movement*, p. 118.

21. Robert E. Gallman, *Commodity Output in the United States, 1839-1899*, p. 50.

22. Josef Steindl, *Maturity and Stagnation in American Capitalism* (Basil Blackwell, 1952), pp. 191-192.

23. Lewis Corey, *The Decline of American Capitalism* (Covici Friede, 1934), p. 278.

24. Livingston, *Origins of the Federal Reserve System*, p. 56.

25. Thorstein Veblen, *Absentee Ownership and Business Enterprise in Recent Times* (1923) (Transaction Publishers, 1996), pp. 338-339.

26. *Ibid*. Joseph Schumpeter denied the existence of bank control over industry but presented neither evidence nor argument; see his *Business Cycles*, (McGraw-Hill, 1939), I, note, page 405. For material supporting Veblen, see Harold U. Faulkner, *The Decline of Laissez-*

Faire, 1897-1917 (Rinehart, 1951), Chapters 2 and 8.

27. Livingston, *Origins of the Federal Reserve System*, p. 229.

28. Douglass C. North, "Life Insurance and Investment Banking at the Time of the Armstrong Investigation of 1905-1906," *Journal of Economic History*, 14 (Summer 1954), p. 210.

29. *Ibid*., p. 212.

30. *Ibid*., p. 226.

31. Douglass C. North, *The Large Life Insurance Companies Before 1906: A Study of Their Growth, Their Domination of the Industry, and Their Alliances with Investment Banking As Revealed by the Armstrong Investigation of 1905-1906* (doctoral dissertation, University of California, Berkeley, 1952), p. 27.

32. *Ibid*., pp. 30-31.

33. *Ibid*., pp. 176 and 183. See, also, Douglass C. North, "Capital Accumulation in Life Insurance Between the Civil War and the Investigation of 1905," pp. 240, 247, 249, 252, and 253 in William Miller, ed., *Men in Business* (, 1962).

34. James Livingston, "The Social Analysis of Economic History and Theory: Conjectures on Late Nineteenth-Century American Development," *American Historical Review*, 92 (February 1987) 69-95.

35. David Jardini, "From Iron to Steel: The Recasting of the Jones and Laughlins Workforce Between 1885 and 1896, " *Technology and Culture*, 36 (April 1995), p. 283.

36. *Ibid*., footnote 19, p. 285.

37. *Ibid*., pp. 288-289.

38. *Ibid*., p. 289.

39. Jonathan Rees, *Managing the Mills: Labor Policy in the American Steel Industry, 1892-1937* (doctoral dissertation, University of Wisconsin-Madison, 1997), p. 119. UMO#9728024.

40. *Ibid*., p. 85.

41. *Ibid*., p. 205.

42. See testimony by Percival Roberts, Jr. in Weinberg, *America's Economic Heritage*, II, p. 151.

43. Rees, *Managing the Mills*, p. 210.

44. *Ibid*., pp. 140 and 203.

45. Douglas F. Dowd, "A Comparative Analysis of Economic Development in the American West and South," *Journal of Economic History*, 16 (December 1956), p. 569.

46. Phillip J. Wood, *Southern Capitalism. The Political Economy of North Carolina, 1880-1980* (Duke University Press, 1986), pp. 43-44.

47. *Ibid*., p. 45.

48. *Ibid*., p. 104.

49. T.M. Young, *The American Cotton Industry* (Scribner's, 1903), pp. 55-56.

50. W.J. Cash, *The Mind of the South* (Knopf, 1941), pp. 225-226.

51. Wood, *Southern Capitalism*, p. 49.

52. Nathan Rosenberg, "The Commercial Exploitation of Science by American Industry," p. 26 in Kim B. Clark and others, eds., *The Uneasy Alliance* (Harvard Business School Press, 1985).

53. J.D. Bernal, *Science and Industry in the Nineteenth Century* (Routledge & Kegan Paul, 1953), p. 110.

54. *Ibid*., p. 166.

55. Leonard S. Reich, "Science," p. 291 in *Encyclopedia of American Economic History*, Vol. I.

56. *Ibid*., pp. 291-292. A wealth of practical examples can be found in Rayvon D. Fouché, *The Dark Side of American Technology: Black Inventors, Their Inventions, and the African-American Community, 1875-1925* (Doctoral dissertation, Cornell University, 1997).

57. Nathan Rosenberg, "Technology," pp. 307-308 in *ibid*.

58. Henry Demarest Lloyd, *Wealth Against Commonwealth* (Harper, 1894), p. 510.

59. Robert V. Bruce, *The Launching of Modern American Science 1846-1876* (Knopf, 1987), p. 261.

60. *Ibid*., pp. 167-168.

61. *Ibid*., p. 141.

62. Peter Meiksins, "Engineers in the United States: A House Divided," p. 65 in Meiksins and Clovis Smith, eds., *Engineering Labour: Technical Workers in Comparative Perspective* (Verso, 1996).

63. W.J. McGee, "Fifty Years of American Science," *Atlantic Monthly*, 82 (1898), p. 320.

64. *Ibid*., p. 308.

65. Gordon F. Hull, "Fifty Years of Physics - A Study in Contrasts," *Science*, 104 (September 13, 1946), p. 241.

66. John W. Kendrick, "Productivity," p. 164 in *Encyclopedia of American Economic History*, I.

67. Herman Cahn, *Capital Today. A Study of Recent Economic Development*, 3rd edition (Charles H. Kerr, 1918), p. 313.

68. Peter L. Reich, "Western Courts and the Privatization of Hispanic Mineral Rights Since 1850: An Alchemy of Title," *Columbia Journal of Environmental Law*, 23 (February-March 1998), p. 57.

69. *Ibid*., p. 86.

70. W.E.B. Du Bois, "The Negro and Socialism," p. In Helen Alfred (ed.), *Toward a Socialist America* (Peace Publications, 1958).

71. *Ibid*.

72. Gerald D. Nash, "State and Local Governments," p. 517 in *Encyclopedia of American Economic History*, II.

73. Rees, *Managing the Mills*, p. 128.

74. Louis Levine, *The Taxation of Mines in Montana* (Huebsch, 1919), p. 77.

75. *Ibid*., p. 91.

76. James O'Connor, *The Fiscal Crisis of the State* (St. Martin's Press, 1975), p. 217.

77. Daniel Nelson, *Managers and Workers. Origins of the New Factory System in the United States 1880-1920* (University of Wisconsin Press, 1975), p. 133.

78. Carroll Van West, *Capitalism on the Frontier. Billings and the Yellowstone Valley in the Nineteenth Century* (University of Nebraska Press, 1993), pp. 175 and 177.

79. Nash, "State and Local Governments," pp. 518-519.

80. Carl J. Mayer and George A. Riley, *Public Domain, Private Dominion. A History of Public Mineral Policy in America* (Sierra Club Books, 1985), p. 71.

81. *Ibid*., p. 70.

82. Wood, *Southern Capitalism*, p. 109.

83. *Ibid*., p. 124. See also Louis R. Harlan, *Separate and Unequal: Public School Campaigns and Racism in the Southern Seaboard States 1901-1915* (University of North Carolina Press, 1958) and Robert A. Margo, *Disenfranchisement, School Finance, and the Economics of Segregated Schools in the United States South, 1890-1910* (Garland, 1985).

84. See Michael Goldfield, *The Color of Politics. Race and the Mainsprings of American Politics* (New Press, 1997), p. 167.

85. Woodrow Wilson, *The New Freedom* (Doubleday Page, 1913), p. 57.

86. M. Ostrogorski, *Democracy and the Organization of Political Parties*, two volumes, translated by Frederick Clarke (London: Macmillan, 1902), II, p. 197.

87. *Ibid*., p. 183.

88. *Hunt's Merchants' Magazine*, August, 1866, pp. 92-93.

89. Ostrogorski, *Democracy*, II, p. 196.

90. James M. Swank to Sen. William B. Allison, September 26, 1888, quoted in A.L. Volwiler, ed., "Tariff Strategy and Propaganda in the United States, 1887-1888," *American Historical Review*, 36 (1930-1931), pp. 95-96.

91. Henry Demarest Lloyd, *Men, the Workers*, edited by Anne Withington and Caroline Stallbohm (Doubleday, Page, 1909), fn., page 138. See also, Gerald Friedman, *State-Making and Labor Movements. France and the United States, 1876-1914* (Cornell University Press, 1998), pp. 179-180.

92. William N. Parker, *Europe, America, and the Wider World. Essays on the Economic History of Western Capitalism*. Vol. 2: *America and the Wider World* (Cambridge University Press,1991), p. 300.

93. See 1948 ruling in *U.S. v. Columbia Steel Co., et al.*, 334 U.S. 495, 68 St.Ct. 1107, footnote 3 of dissent by Justices Douglas, Black, Murphy, and Rutledge.

94. Lamoreaux, *Great Merger Movement*, p. 178.

95. See Martin J. Sklar, *The Corporate Reconstruction of American*

Capitalism, 1890-1916. The Market, the Law, and the Politics (Cambridge University Press, 1988), pp. 21, 163, 425, and 429 and Richard Sylla, "The Progressive Era and the Political Economy of Big Government," *Critical Review*, 5 (1992), pp. 534, 544, and fn. 50, pp. 556-557. See also Richard Kozul-Wright, "The Myth of Anglo-Saxon Capitalism: Reconstructing the History of the American State," p. 105 in H.J. Chang and B. Rowthorn, eds., *The Role of the State in Economic Change* (Oxford University Press, 1995).

96. Met. L. Saley, American Forestry Association, *Proceedings ... of the World's Fair Congress* (Washington, D.C.: The Association, 1894), pp. 147-148 and 150.

97. Martin Ridge, "Westward Movement," p. 581 in *Encyclopedia of American Economic History*, II.

98. William G. Robbins, "Timber Town. Market Economies in Coos Bay, Oregon, 1850 to the Present," *Pacific Northwest Quarterly*, 75 (1984), p. 148.

99. *Ibid*., p. 152.

100. *Ibid*., p. 155.

101. Gavin Wright, "The Origins of American Industrial Success, 1879-1940," *American Economic Review*, 80 (September 1990), p 661.

102. See Larry A. Greene, "Blacks," p. 1006 in *Encyclopedia of American Economic History*, III.

103. William G. Robbins, *Colony and Empire. The Capitalist Transformation of the American West* (University Press of Kansas, 1994), p. 89.

104. Everett S. Lee and others. *Population Redistribution and Economic Growth, United States, 1870-1950*, Vol. 1, *Methodological Consideration and Reference Tables* (American Philosophical Society, 1957), pp. 683-684 and 692.

105. August C. Bolino, *An Economic History of Idaho Territory, 1863-1890* (doctoral dissertation, St. Louis University, 1957), p. 334.

106. Leonard J. Arrington, *Great Basin Kingdom — An Economic History of the Latter-day Saints, 1830-1930* (Harvard University Press, 1958).

107. John J. Madden, *British Investment in the United States, 1860-1880* (National Bureau of Economic Research, 1957), p. 53.

108. William O. Brayer, *William Blackmore, A Case Study in the Economic Development of the West*, I (Bradford-Robinson, 1949), p. 335.

109. *Ibid*., p. 7.

110. Charles P. Steinmetz, *America and the New Epoch* (Harper, 1916), p. 23.

111. Paul A.C. Koistinen, *Mobilizing for Modern War: The Political Economy of American Warfare, 1865-1919* (University Press of Kansas, 1997), p. 59.

112. *Ibid*., p. 95.

113. *Ibid*., pp. 19, 28, and 39.

114. *Ibid*., p. 103.

115. *Ibid*., p. 101.

116. *Ibid*., p. 129.

117. *Ibid*., p. 160.

118. *Ibid*., pp. 138, 180, 200, 212, 213, 228, and 289.

119. Stuart D. Brandes, *Warhogs. A History of War Profits in America* (University Press of Kentucky, 1997), p. 164. Profit, stock, and dividend figures in this paragraph are taken from Koistinen's book unless there are direct quotations from Brandes.

120. *Ibid*., p. 136.

121. *Ibid*.