

Entrepreneurs and Bankers: The Evolution of Corporate Empires

... powerful corporate entrepreneurs transformed the nation's economy during the thirty-five years following the Civil War. At the war's end (1865), the large majority of American manufacturing was carried on by small businesses serving a local market. Relatively few manufacturers thought in terms of a national market...

All that changed within a single generation.

One revolution was in transportation and communication. Between 1865 and 1890, railroads grew from 35,000 miles of track to 167,000 miles. By the 1880s, the nation had an elaborate network of steel rails, with a common gauge, connecting all major population centers. Technological advances improved the power of locomotives, the safety of braking systems, and the carrying capacity of freight trains. Technological advances in communication came not only from high-speed mail trains but also from expansion of the pre-war telegraph system and the introduction of telephones beginning in the late 1870s. Improved transportation and communication permitted ambitious entrepreneurs to think in terms of a national market.

A second revolution was in the financing of railroads and other new industrial corporations. Building railroads was expensive—more so than almost any other business. Railroad executives soon came to rely on investment bankers to assist in raising capital. By the late 1880s, John Pierpont Morgan had emerged as the nation's leading investment banker. Son of a successful banker, young Morgan was educated in Europe, began working in his father's bank in London, then moved to a bank in New York. Railroads had a voracious appetite for funds, but Morgan's investors wanted to put their money where it would be safe and provide a reliable return. Morgan therefore tried to stabilize the railroad business. When companies came to Morgan for funds, he often insisted on reorganization to simplify corporate structures and combine separate lines into larger, centrally controlled systems. He also often insisted that a representative of the House of Morgan be added to the company's board of directors, so that the company would continue to follow policies that would provide a safe and reliable return on Morgan's investment. Some began to call this process "Morganization," (today it is referred to as an interlocking directorate) and "Morganized" lines included some of the largest in the country. A few other investment bankers followed similar patterns. By the early 1900s, such reorganization had created twelve large railroad systems that controlled more than half of all the country's railroad mileage, and twenty others that operated most of the rest. The largest systems were interlocked with each other into a half dozen massive networks, each affiliated with a leading New York banking house. By then, Morgan had already turned his attention to other industries, especially steel.

A third revolution was in the size and structure of manufacturing. The career of Andrew Carnegie in the steel industry provides an example. ...

Carnegie's motto was "Cut the prices; scoop the market; run the mills full"—that is, set prices low enough to undercut his competitors and always run his plants at full capacity so that his capital investment produced the highest possible return. He took every opportunity to cut costs so that he might show a profit while charging less than his rivals. In 1864, steel rails sold for \$126 per ton; by 1875, Carnegie was selling them for \$69 per ton. Driven by improved technology and Carnegie's competitiveness, steel prices continued to fall, reaching less than \$20 in the late 1890s. By then, the nation led the world in steel production.

Carnegie's steel plants stood at one end of a long chain of operations that he owned outright or controlled through partnerships: iron ore mines, ships that transported iron ore across the Great Lakes, railway lines, coal lands, ovens to produce coke (coal treated to burn at high temperatures), and plants for turning iron ore into iron and steel. Bringing together all these operations under one company is called vertical integration—and it was something new to American manufacturing. Control over the sources and transportation of raw materials guaranteed a reliable flow of crucial supplies at predictable prices—and may also have denied raw materials to competitors. Carnegie and other leading entrepreneurs saw technology as another competitive device, permitting the production of better quality goods at lower prices. In 1901, Carnegie sold his company to J.P. Morgan who then combined Carnegie's operations with other steel companies he had invested in, creating United States Steel, the country's first corporation capitalized at more than a billion dollars. ...

Where Carnegie Steel sold his steel mostly to other large companies, Standard Oil sold mostly to final consumers. Standard Oil, run by John D. Rockefeller and his partners, revolutionized the petroleum industry. At the time, the major product of oil refining was kerosene, used primarily for home lighting. Rockefeller, in 1863, invested in a refinery in Cleveland, Ohio, then the center of petroleum refining—a business relatively easy to enter but highly competitive. Like Carnegie, Rockefeller was an aggressive competitor. He usually sought to persuade his competitors to join the cartel he was creating. Failing that, he would try to drive them out of business.

By 1881, Rockefeller and his associates controlled some forty oil refineries, accounting for about 90 percent of the nation's refining capacity, giving them a monopoly (monopoly means "one seller") over refining. Monopolizing one step in the manufacturing process is also called horizontal integration. In the 1880s, Standard moved to vertical integration by gaining control of oil fields, building its own transportation facilities (including pipelines and oceangoing tanker ships), and creating its own marketing operations. By the early 1890s, Standard Oil had achieved virtually complete vertical and horizontal integration of the American petroleum industry—something unusual in American business. Standard's monopoly proved to be short-lived, however. With the discovery of new oil fields in Texas and elsewhere, new companies tapped those fields and quickly followed the path of vertical integration.

By the early 1880s, Rockefeller and his partners controlled companies in several states, but state laws required companies to operate only in the state in which they were chartered. To centralize decision-making in all their holdings, they created the Standard Oil trust, a new organizational form. Rockefeller and his partners who held shares in the individual companies exchanged their stock for trust certificates issued by Standard Oil. Standard Oil thus controlled all the individual companies, though technically it did not own them. Having centralized decision-making, Standard Oil consolidated its operations by closing more than half of its refineries and building several larger plants that incorporated the newest technology. One outcome was greater efficiency—the cost of producing petroleum products fell significantly, as did prices paid by consumers. Soon, new laws in New Jersey permitted corporations chartered there to own stock in other companies. So Rockefeller set up Standard Oil of New Jersey as a holding company for all the companies in the trust. Though the trust was only a temporary expedient for Rockefeller, the term trust quickly became synonymous with monopoly and then was applied to any large industrial enterprise.

Rockefeller retired from active participation in business in the mid-1890s. By then, Standard Oil no longer had a monopoly, but the "Rockefeller interests" (companies dominated by the Rockefeller family) had become highly diverse and even more powerful. They included the

National City Bank of New York (an investment bank second only to the House of Morgan), railroads, mining, real estate, steel plants, steamship lines, and other industries. ...

As these new corporate empires emerged and came to public attention, some Americans began to become apprehensive about the degree of power they had. State laws had long regulated the activity of companies, but there were virtually no such laws at the federal level. On the other hand, some railroad companies received generous subsidies from the federal government in the form of land grants and loans. And, as companies grew larger, accounts soon emerged about their political activities. One of the earliest involved the construction of the Union Pacific Railroad, an early recipient of a generous federal subsidy. Its owners had created a construction company, the *Credit Mobilier*, to actually build the railroad, so that they could pay themselves handsomely for building their own tracks. To protect this arrangement from congressional scrutiny, the company sold shares secretly and at low prices to key members of Congress, so that they could share in the company's inflated profits. News of the arrangement became public in 1872. ...[M]any Americans became convinced that "the trusts" had corrupted politics. A famous cartoon from 1889 showed the US Senate as tiny figures at desks, dwarfed by gigantic moneybags with human heads looming over them, each moneybag labeled with the name of a trust; the title of the cartoon was "The Bosses of the Senate."

Beyond their worries about the corruption of politics, increasing numbers of Americans became concerned that the new corporate giants were manipulating their business to benefit a few but to exploit most they dealt with. Railroads were a special concern, since so many Americans were dependent on them to carry their produce to markets or to bring them supplies for their businesses. In the early 1870s several states passed laws prohibiting railroads from discriminating in their freight rates. In 1886, however, the US Supreme Court struck down such state laws on the basis that states could not regulate railroads that were part of interstate commerce. Partly in response, Congress passed the Interstate Commerce Act in 1887, but it proved ineffective in regulating railroads. Concern over the monopoly power of Standard Oil and other large companies caused Congress, in 1890, to pass the Sherman Antitrust Act, which prohibited "every contract, combination in the form of a trust or otherwise, or conspiracy, in restraint of trade or commerce." However, when the Justice Department tried to prevent formation of a monopoly over sugar refining, it was blocked by the US Supreme Court on the grounds that manufacturing took place within a state and that the Constitution granted Congress authority only over interstate commerce. Not until the administration of President Theodore Roosevelt, in 1901–1909, did the federal government begin to regulate big business and secure the dissolution of business combinations found to be "in restraint of trade or commerce."

Americans disagreed over the accomplishments of these corporate empire builders. Some accepted them as benefactors of the nation. Others agreed with E. L. Godkin, a journalist at the time, who compared one railroad tycoon to a medieval robber baron—a feudal lord who robbed all travelers who passed through his domain. Subsequent historians have also disagreed. Some point out that many corporate empire builders of the late nineteenth century were unscrupulous, greedy, exploitative, and antisocial, and that some of them bribed public officials to get what they wanted. Looking at only such deeds or misdeeds of individuals does tell us something about both the economy and the public morality of the time, and helps us understand the public anger that eventually led to federal regulation. However, understanding the larger economic changes of the era requires more than an examination of individual behavior, whether despicable or praiseworthy. We need, instead, to seek to understand the ways that their activities transformed the economy. We need to understand the new corporate structures that they created, that usually survived the individual entrepreneur who created them, and that came to dominate the national economy in the twentieth century. We need to understand, too, that, in

the process of building their individual empires and accumulating vast personal wealth, these entrepreneurs made the United States the most powerful nation in the world by the beginning of the twentieth century.

Robert W. Cherny is a professor of history at San Francisco State University. His books include California Women and Politics: From the Gold Rush to the Great Depression (2011) with co-editors Mary Ann Irwin and Ann Marie Wilson; American Politics in the Gilded Age, 1868–1900 (1997); San Francisco, 1865–1932 (1986), with William Issel; and A Righteous Cause: The Life of William Jennings Bryan (1985, reprint 1994).

Note: The complete essay can be accessed at:
<http://ap.gilderlehrman.org/essays/entrepreneurs-and-bankers-evolution-corporate-empires?period=6>