Other texts are similar. There seems to be almost no correct information in any college history text on the impact of Mellon's tax cuts, or on the New Deal tax hikes. Yet the tax records have been available for almost sixty years. And studies of these records by Roy and Gladys Blakey, Benjamin Rader, James Gwartney, and Thomas Silver have also been available for some time. This situation is especially perplexing because Schlesinger has written well-respected books on the 1920s and 1930s, and Garraty has written widely in economic history. Expertise in the field, in fact, does not seem to correlate with presenting accurate information. Irwin Unger, for example, is also an economic historian, and even won a Pulitzer Prize for a book on the Greenback era. Yet in his textbook, *These United States*, he writes:

> [Harding] allowed Secretary of the Treasury Andrew Mellon, a Pittsburgh industrialist and one of the world's richest men, to pursue "soak-the-poor" policies. Like most business people and many politicians of this era, Mellon believed that the nation's well-being depended on the proper climate for business investment and incentive. Convinced that the high corporate and personal income taxes imposed in 1917 and 1918 to finance the war were hampering enterprise, he persuaded Congress to eliminate the wartime excess-profits tax and to reduce income tax rates at the upper levels while leaving those at the bottom untouched. Between 1920 and 1929 Mellon won further victories for his drive to shift the tax burden onto the backs of the middle and wage-earning classes.[48]

It's hard to know who would have been more startled by Unger's account: Mellon or the lower-income taxpayers, who saw both their income and excise taxes drastically cut during the 1920s. George Santayana once said that those who do not learn from the past are condemned to repeat it. But how can we learn what happened in the past if historians either will not teach it or do not know it? National debates over tax cuts occurred in the 1960s, 1980s, and in 1990, but how can we debate a subject intelligently if we are misinformed about the facts?

Andrew Mellon never made an investment without knowing the relevant facts; his business success demonstrated his grasp of financial situations. In similar fashion, modern politicians, businessmen, and historians would do well to learn the facts of American tax history before they try to plot its future.

CHAPTER SEVEN

Entrepreneurs vs. The Historians

> A nation must believe in three things. It must believe in the past. It must believe in the future. It must, above all, believe in the capacity of its people so to learn from the past that they can gain in judgment for the creation of the future.
>
> —Franklin D. Roosevelt

One reason for studying history is to learn from it. If we can discover what worked and what didn't work, we can use this knowledge to create a better future. Studying the rise of big business, for example, is important because it is the story of how the United States prospered and became a world power. During the years in which this took place, roughly from 1840 to 1920, we had a variety of entrepreneurs who took risks and built very successful industries. We also had a state that created a stable marketplace in which these entrepreneurs could operate. However, this same state occasionally dabbled in economic development through subsidies, tariffs, regulating trade, and even running a steel plant to make armor. When the state played this kind of role, it often failed. This is the sort of information that is useful to know when we think about planning for the future.

The problem is that many historians have been teaching the opposite lesson for years. They have been saying that entrepreneurs, not the state, created the problem. Entrepreneurs, according to these historians, were often "robber barons" who corrupted politics and made fortunes bilking the public.[1] In this view, government inter-

vention in the economy was needed to save the public from greedy businessmen. This view, with some modifications, still dominates in college textbooks in American history.

American history textbooks always have at least one chapter on the rise of big business. Most of these works, however, portray the growth of industry in America as a grim experience, an "ordeal" as one text calls it. Much of this alleged grimness is charged to entrepreneurs.[2]

Thomas Bailey, in *The American Pageant*, is typical when he says of Vanderbilt: "Though ill-educated, ungrammatical, coarse, and ruthless, he was clear-visioned. Offering superior service at lower rates, he amassed a fortune of $100,000,000."[3] If this second sentence is true, to whom was Vanderbilt "ruthless?" Not to consumers, who received "superior service at lower rates," but to his opponents, such as Edward Collins, who were using the state to extort subsidies and impose high rates on consumers. This distinction is vital and must be stressed if we are to sort out the impact of different types of entrepreneurs.

I have systematically studied three of the best-selling college textbooks in American history: *The American Pageant*, by Thomas Bailey of Stanford University; *The American Nation*, by John Garraty of Columbia University; and *The National Experience*, by John Blum of Yale University, Edmund Morgan of Yale University, Willie Lee Rose of Johns Hopkins University, Arthur Schlesinger, Jr., of the City University of New York, Kenneth Stampp of the University of California at Berkeley, and C. Vann Woodward of Yale University. These works have been written by some of the most distinguished men in the historical profession; all three books have sold hundreds of thousands of copies.[4] In all three, John D. Rockefeller receives more attention than any other entrepreneur. This is probably as it should be. His story is a crucial part of the rise of big business: he dominated his industry, he drastically cut prices, he never lobbied for a government subsidy or a tariff, and he ended up as America's first near-billionaire.

The three textbooks do credit Rockefeller with cutting costs and improving the efficiency of the oil industry, but they all see his success as fraudulent. In *The National Experience*, Woodward says that:

> Rockefeller hated free competition and believed that monopoly was the way of the future. His early method of dealing with competitors was to gain unfair advantage over them through special rates and rebates arranged with the railroads. With the aid of these advantages Standard became the largest refiner of oil in the country. . . . In 1881 [Standard Oil] controlled nearly 90 percent of the country's oil refining capacity and could crush any remaining competitors at will.[5]

In *The American Nation*, John Garraty commends Rockefeller for his skill but adopts roughly the same line of reasoning as does Woodward:

> Rockefeller exploited every possible technical advance and employed fair means and foul to persuade competitors first in the Cleveland area and then elsewhere either to sell out or to join forces. . . . In truth, most of the independent refiners that Standard Oil destroyed by unfair competition had previously turned down offers to merge or sell out on terms that modern students consider generous. . . . Thus order came to the petroleum business. Competition almost disappeared; prices steadied; profits skyrocketed. By 1892 John D. Rockefeller was worth over $800 million.[6]

In these views the cause and effect are clear: the rebates and "unfair competition" were the main causes of Rockefeller's success; this success gave him an alleged monopoly; and the alleged monopoly created his fortune. Yet as we have seen, Rockefeller's astonishing efficiency was the main reason for his success. He didn't get the largest rebates until he had the largest business. Even then, the Vanderbilts offered the same rebates to anyone who shipped as much oil on the New York Central as Rockefeller did. In any case, the rebates went largely to cutting the price of oil for consumers, not to Rockefeller himself.

Perhaps even more misleading than the faulty stress on the rebates is the omitting of the most important feature of Rockefeller's career: his thirty-year struggle with Russia to capture the world's oil markets. Not one of the three texts even mentions this oil war with Russia.

Three facts show the importance of Rockefeller's battle with the Russians. First, about two-thirds of the oil refined in America in the late 1800s was exported. Second, Russia was closer than the U. S. to all European and Asian markets. Third, Russian oil was more centralized, more plentiful, and more viscous than American oil. If Rockefeller had not overcome Russia's natural advantages, no one else could have. America would have lost millions of dollars in exports and might have even had to import oil from Russia. The spoils of victory—jobs, technology, cheap kerosene, cheap by-products,

and cheap gas to spur the auto industry—all of this might have been lost had it not been for Rockefeller's ability to sell oil profitably at six cents a gallon. The omitting of the Russo-American oil war was so striking that I checked every college American history text that I could find (twenty total) to see if this is typical. It is. Only one of the twenty textbooks even mentions the Russian oil competition.[7]

Obviously textbooks can't include everything. Nor can their authors be expected to know everything. Textbook writers have a lot to cover and we can't expect them to have read much on Rockefeller. Unfortunately, they also don't seem to be very familiar with the books on Vanderbilt, Hill, Schwab and other entrepreneurs.[8] None of the twenty texts that I looked at describe the federal aid to steamships and the competition between the subsidized lines and Vanderbilt. Similarly, none of the textbooks mentions Schwab's triumph over the government-run armor plant in West Virginia. The story of the Scrantons is also absent.

Some of the textbook authors do talk about Hill and his accomplishments. In fact, large sections of Bailey's, Garraty's, and Woodward's books tell us about the transcontinental railroads. But the problem of the government subsidies is often not well-reasoned. Bailey, for example, admits that Hill was "probably the greatest railroad builder of them all." Bailey even displays a picture of all four transcontinentals and says that Hill's Great Northern was "the only one constructed without lavish subsidies." But from this, he does not consider the possibility that federal subsidies may not have been needed. Instead, he says, "Transcontinental railroad building was so costly and risky as to require government subsidies." As we have seen earlier, however, when the federal aid to railroads came, so did political entrepreneurship and corruption. Bailey describes some of this boondoggling and blames not the government, for making federal aid available, but the "grasping railroads" and "greedy corporations," for receiving it.[9]

Bailey later applauds the passing of the Sherman Anti-trust Act and the creation of the Interstate Commerce Commission.

> Not until 1914 were the paper jaws of the Sherman Act fitted with reasonably sharp teeth. Until then, there was some question whether the government would control the trusts or the trusts the government. But the iron grip of monopolistic corporations was being threatened. A revolutionary new principle had been written into the law books by the Sherman Anti-Trust Act of 1890, as well as by the Interstate Commerce Act of 1887. Private greed must henceforth be subordinated to public need.[10]

As we have seen, however, the efficient Hill was the one who got hurt by these laws: The Hepburn Act, which strengthened the Interstate Commerce Commission, throttled his international railroad and shipping business; the Sherman Act was used to break up his Northern Securities Company.

Not all historians accept the modified robber-baron view dominant in the textbooks. Specialists in business history have been moving away from this view for at least twenty years. Instead, many of them have adopted an interpretation called the "organizational view" of the rise of big business. Where the authors of these textbooks say that entrepreneurs cheated us, organizational historians say that entrepreneurs were not very significant. Business institutions, and their evolution, were more important than the men who ran them. To organizational historians, the rise of the corporation is the central event of the industrial revolution. The corporation—its layers of specialized bureaucracy, its centralization of power, and its thrust to control knowledge—evolved to meet the new challenges in marketing, producing, and distributing goods. In this view, of course, moral questions are not so relevant. The entrepreneur's strategy was almost predetermined by the structure of the industry and the peculiarities of vertical integration. The corporation was bigger than the entrepreneur.[11]

The organizational historians have contributed much to the writing of business history. Their amoral emphasis on the corporation is a refreshing change from the Robber Baron model. Yet, this points up a problem as well. Amoral organizational history has a deterministic quality to it. The structure of the corporation shapes the strategy of the business. In this setting, there is little room for entrepreneurship. Whatever happened had to happen. And if any entrepreneur had not done what he did, another would have come along and done roughly the same thing.

This point of view is perhaps most boldly stated by Robert Thomas:

> Individual entrepreneurs, whether alone or as archetypes, *don't matter*! (Thomas's emphasis) And if indeed they do not matter, the reason, I suggest, is that the supply of entrepreneurs throughout American history, combined with institutions that permitted—indeed fostered—intense competition, was sufficiently elastic to reduce the importance of any particular individual. . . . This is not to argue that innovations

don't matter, only that they do not come about as the product of individual genius but rather as the result of more general forces acting in the economy.[12]

Thomas illustrates his view in the following way:

> Let us examine an analogy from track and field; a close race in the 100-yard dash has resulted in a winner in 9.6 seconds, second place goes to a man whose time is 9.7, and the remaining six runners are clustered below that time. Had the winner instead not been entered in the race and everyone merely moved up a place in the standings, I would argue that it would only make a marginal difference to the spectators. To be sure they would be poorer because they would have had to wait one-tenth of a second longer to determine the winner, but how significant a cost is that? That is precisely the entrepreneurial historian's task, to place the contributions of the entrepreneur within a marginal framework.[13]

It is only when we extend Thomas' logic that we see its flaws. For, in fact, small margins are frequently the crucial difference between success and failure, between genius and mediocrity. To continue the sports analogies, the difference between hitting the ball 311 feet and 312 feet to left field in Yankee stadium is probably the difference between a long out and a home run. The difference between a quarterback throwing a pass forty yards or forty-one yards may be the difference between a touchdown and an incompleted pass. When facing a ten-foot putt, any duffer can hit the ball nine or eleven feet; it takes a pro to consistently sink it.

In the same way small margins can reveal the differences between an entrepreneur, with his creative mind and innovative spirit, and a run-of-the-mill businessman. John D. Rockefeller dominated oil refining primarily by making a series of small cuts in cost. For example, he cut the drops of solder used to seal oil cans from forty to thirty-nine. This small reduction improved his competitive edge: he gained dominance over the whole industry because he was able to sell kerosene at less than eight cents a gallon.

A better illustration would be the small gradual cost-cutting that allowed America to capture foreign steel markets. When Andrew Carnegie entered steel production in 1872, England dominated world production and the price of steel was $56 per ton. By 1900, Carnegie Steel, headed by Charles Schwab, was manufacturing steel for $11.50 per ton—and outstripping the entire production of England. That

allowed railroad entrepreneur James J. Hill to buy cheap American rails, ship them across the continent and over the ocean to Japan, and still outprice England. The point here is that America did not claim these markets by natural advantages: they had to be won in international competition by entrepreneurs with vision for an industry and ability to improve products bit by bit.[14]

It would be silly for someone to say that if Carnegie had not come along, someone else would have emerged to singlehandeldly outproduce the country that had led the world in steel. Yet some organizational historians say exactly this. They are right in claiming that the rise of the corporation made some of Carnegie's success possible. But Carnegie was the only steel operator before Schwab to take full advantage of this rise. They are also right in saying that the environment (*e. g.* location and resources) plays some role in success. But Carnegie rose to the top *before* the opening of America's Mesabi iron range. American steel companies began outdistancing the British even when the Americans had to import some of their raw material from Cuba and Chile, manufacture it in Pennsylvania, and ship it across the country and over oceans to foreign markets.

This is not to denigrate the organizational view, but only to recognize its limitations. By focusing on the rise of the corporation, organizational historians have shown how corporate structure pervaded and helped to shape American economic and social life. However, the organizational view, like all other interpretations, can't explain everything. Specifically, it tends to ignore or downgrade the significant and unique contributions that entrepreneurs made to American economic development.

The "organizational" and "robber baron" views both have some merit. The rise of the corporation did shape economic development in important ways. Also, we did have industrialists, such as Jay Gould and Henry Villard, who mulcted government money, erected shoddy enterprises, and ran them into the ground. What is missing are the builders who took the risks, overcame strong foreign competition, and pushed American industries to places of world leadership. These entrepreneurs are a major part of the story of American business.

Many historians know this and teach it, but the issue is often muddled because textbooks tend to lump the predators and political adventurers with the creators and builders. Therefore, the teaching ends up like this: "Entrepreneurs cut costs and made many contri-

butions to American economic growth, but they also marred political life by bribing politicians, forming pools, and misusing government funds. Therefore, we needed the federal government to come in and regulate business."

Historians' misconceptions about entrepreneurs have led to problems in related areas as well. This is nowhere more apparent than in the studies of social mobility, which have become very popular among historians during the last twenty-five years. Naturally, historians of social mobility have not operated in a vacuum. They have often been influenced by the prevailing historical theories denigrating the role of entrepreneurs and championing the role of government regulation. Put another way, if America's industrial entrepreneurs were a sordid group of replaceable people, then they could not have helped, and may have hindered, upward social mobility in cities throughout America. This is the implicit assumption in many social mobility studies conducted in the last twenty-five years.

Influenced by these prevailing views, many historians have argued two basic ideas about social mobility under American capitalism. First is the notion of low social mobility for manual laborers. In *Poverty and Progress: Social Mobility in a Nineteenth Century City*, Stephan Thernstrom finds that "the common workman who remained in Newburyport, [Massachusetts, from] 1850 to 1880 had only a slight chance of rising into a middle class occupation." As for the captains of industry at the opposite end of the spectrum, the second idea is that they usually got rich because they were born rich. This again suggests little mobility. For example, William Miller, recorded the social origins of 190 corporation presidents between 1900–1910. He found that almost 80 percent of them had business or white collar professionals as fathers. More recently, Edward Pessen has argued that 90 percent of the antebellum elite in New York, Philadelphia, and Boston was silk-stocking in origin.[15]

Fortunately, more careful research has discredited this negative view of social mobility. Newburyport, for example, was a stagnant town during the thirty years covered by Thernstrom's research. If new industries were rare and if opportunities were few, then, of course, we would expect social mobility to be low. Michael Weber sensed this and did a study of social mobility in Warren, Pennsylvania, an oil-producing boom town from 1880 to 1910. In Warren, population multiplied every decade as market entrepreneurs created

a climate for opportunity and growth. Growth and opportunity seem to have gone together: Warren residents were much more upwardly mobile than those living in Thernstrom's Newburyport.[16]

Flaws are also apparent in William Miller's analysis of the social origins of America's corporate elite in 1910. Miller traced the background of 190 corporate presidents and board chairmen. But as diligent as his research was, he could not discover the social origins of 23 (12 percent) of these men. Miller draws no inference from this lack of evidence. If they left no record, however, the fathers were probably artisans at best, crooks at worst. Furthermore, 60 percent of Miller's industrialists came from farms or small towns (under 8,000 population). This almost certainly makes their fathers country merchants rather than urban capitalists. And the ascent from son of a country merchant to corporate president is indeed sensational. Miller's statistics do not "speak for themselves": they need careful thought and imaginative interpretation.

Newer studies suggest this too. For example, Herbert Gutman found that most of the successful locomotive, iron, and machinery manufacturers in Paterson, New Jersey, started work as apprentice craftsmen or iron workers. Also important is Bernard Saracheck's analysis of a group of entrepreneurs similar in size and prestige to Miller's sample. Saracheck went to "published biographies and company histories" to get a large list of entrepreneurs in a wide range of industries. His group was much more upwardly mobile than Miller's group. Almost one-half of Saracheck's entrepreneurs had fathers who were workers or farmers. Of course the business ties from father to son link many of Saracheck's men, too.[17] But shouldn't this be expected? The key point here is that an open and growing system produces fluidity: manual laborers often became skilled workers or clerks and, for some, there was room at the top.

We still need to explain the contrasting results of Miller and Saracheck. Many of Miller's men were presidents of textile corporations or railroads, both of which were older and even declining fields by 1910. As economist Ralph Andreano has noted, Miller's sample neglected men from newer, more rapidly growing industries such as oil, beverages, and publishing—where Jews and immigrants often excelled.[18] Saracheck included a wider range of businessmen than Miller did; and perhaps for this reason he got a more upwardly mobile group. Again we get the strong tie between rapid growth (this time in industries, not cities) and upward mobility. The work

of Edward Pessen has supported the idea that it was easy for rich men and their children to keep their wealth and influence over time. After studying New York City, Philadelphia, Brooklyn, and Boston, Pessen concluded:

> The rich with few exceptions had been born to wealth and comfort, owing their worldly success mostly to inheritance and family support. Instead of rising and falling at a mercurial rate, fortunes usually remained in the hands of their accumulators, whether in the long or the short. . . . Antebellum urban society [and, by implication, postbellum urban society] was very much a class society.[19]

Is there any way to reconcile the stability of wealth found by Pessen and others[20] with the fluid mobility of the Scranton elite? One problem, of course, is with technique and method. Defining who constituted a "leader," an "entrepreneur," or an "industrialist" varies from study to study. A bigger problem is the scope of the research of Pessen and others. In studying the continuity of wealth and talent in families over time, Pessen and others rarely look at all family members, only those who were successful. In fact, if my Scranton research is on target, the successful seem to be the exception, not the rule.

First glances can be deceptive. In Scranton, for example, James Blair and brothers Thomas and George Dickson held three of the five directorships of the First National Bank in 1880. In 1869, James Linen, a nephew of Thomas and George Dickson, married Blair's daughter, Anna; in 1891, Linen became president of the bank for a twenty-two year stretch. To the casual observer, such an occurrence illustrates overpowering continuity of leadership. However, if one looks at all eight sons of Blair and the two Dicksons, a sharply etched picture of failure clearly emerges. Seven of their eight sons never darkened the door of a corporate boardroom; under the eighth, the Dickson Manufacturing Company disintegrated. Continuity from father to son may actually have been the undoing of the business. Futhermore, H. A. Coursen, like bank president James Linen, married a daughter of James Blair; yet Coursen remained a small retailer with no apparent economic influence. In the city of Scranton, at least, the scions of power were not the men their fathers were. Before historians can assert the continuity of economic leadership or family wealth, they must study all the children of the rich, not just the rare conspicuous successes.

A few historians have already been doing this. Lee Benson has studied the Philadelphia economic elite in the 1800s and finds it to be fluid with much upward and downward mobility at all levels. Fredric C. Jaher also finds the "upper strata" in several industrial cities to be very fluid. Stanley Lebergott has studied corporate leadership in America and cites a high rate of discontinuity from father to son.[21] Naturally those born into wealth are, on the whole, more successful than those born into poverty. But to say this is merely to confirm what applies to all societies at all times. Yes, wealth counts; but so do talent, vision, initiative, and luck.

The classic question asked by those historians who study social stratification is this: "Who gets what and why?" We can see how many historians err when they assume that the rich got rich by being robber barons and stayed rich by keeping the corporation in the family and keeping newcomers out of their group as much as possible.

There is another realm of misunderstanding, too: some historians have implied that the economic pie was fixed. This is a weakness in many historical studies of social stratification. Edward Pessen, for example, tells how only one percent of the population held about forty percent of the wealth in many industrial cities in the 1840s. His research is careful, and he insists this share increased over time. Along similar lines, Gabriel Kolko has recorded the distribution of income from 1910 to 1959. He points out that the top one-tenth of Americans usually earned about thirty percent of the national income and that the lowest one-tenth consistently earned only about one percent.[22] This may be true, but Pessen and Kolko also need to emphasize that the total amount of wealth in American society increased geometrically after 1820. This means that American workers improved their standard of living over time even though their percentage of the national income may not have increased. We must also remember that there was constant individual movement up and down the economic ladder. Therefore, the pattern of inequality may have persisted, but the categories of wealth-holding were still fluid in our open society. Finally, it needs to be stressed that one percent of the population often *created* not only their own wealth, but many of the opportunities that enabled others to acquire wealth.

To sum up, then, we need to divide industrialists into two groups. First, were market entrepreneurs, such as Vanderbilt, Hill, the Scrantons, Schwab, and Rockefeller, who usually innovated, cut costs,

and competed effectively in an open economy. Second, were political entrepreneurs, such as Edward Collins, Henry Villard, Elbert Gary, and Union Pacific builders, all of whom tried to succeed primarily through federal aid, pools, vote-buying, or stock speculation. Market entrepreneurs made decisive and unique contributions to American economic development. The political entrepreneurs stifled productivity (through monopolies and pools), corrupted business and politics, and dulled America's competitive edge.[23]

The second point is that, in the key industries we have studied, the state failed as an economic developer. It failed first as a subsidizer of industrial growth. Vanderbilt showed this in his triumph over the Edward Collins' fleet and the Pacific Mail Steamship Company in the 1850s. James J. Hill showed this forty years later when his privately built Great Northern outdistanced the subsidized Northern Pacific and Union Pacific. The state next failed in the role of an entrepreneur when it tried to build and operate an armor plant in competition with Charles Schwab and Bethlehem Steel. The state also seems to have failed as an active regulator of trade. The evidence in this study is far from conclusive; but we can see problems with the Interstate Commerce Commission and the Sherman Anti-trust Act, both of which were used against the efficient Hill and Rockefeller.

A third point is that the relative absence of state involvement—either through subsidies, tariffs, or income taxes—may have spurred entrepreneurship in the 1840–1920 period. One of the traditional arguments cited by some businessmen, especially the political entrepreneurs, is that a tariff or a subsidy given to a new industry will help that industry survive and eventually flourish against foreign competition. What really happened, though, is that, when Collins and Cunard got subsidies from their government, they did not become efficient steamship operators; instead, they became lavish wastrels and soon came back asking for larger subsidies, which they then used to compete against more efficient rivals.

In the case of protective tariffs, neither George Scranton or John D. Rockefeller needed them in establishing their steel and oil companies. The Scranton group very profitably built America's first large quantity of rails in a time of a low tariff on British iron imports. Also Rockefeller never needed a tariff (though a small one did exist) on his way to becoming the largest oil producer in the world.

The American government also resisted the temptation to tax large incomes for most of the 1840–1920 period. Low taxes often spur entrepreneurs to invest and take risks. If the builders can keep most of what they build, they will have an incentive to build more. It is true that the state lost the revenue it could have raised if it had taxed large incomes. This was largely offset, however, by the philanthropy of the entrepreneurs. When the income tax became law in 1913, the most anyone had to pay was seven percent of that year's income. Most people paid no tax or only one percent of their earnings. In the years before and after 1913, however, John D. Rockefeller sometimes gave over 50 percent of his annual income to charitable causes. He almost always gave more than ten percent. Hill, Vanderbilt, the Scranton group, and Schwab were also active givers. Sometimes they gave direct gifts to specific people. Usually, though, they used their money to create opportunities that many could exploit. In academic jargon, they tried to improve the infrastructure of the nation by investing in human capital. A case in point consisted of the many gifts to high schools and universities, north and south, black and white, urban and rural. Cheap high-quality education meant opportunities for upwardly mobile Americans, and was also a guarantee that the United States would have quality leadership in its next generation. Vanderbilt University, the University of Chicago, Tuskegee Institute, and Lehigh University were just some of the dozens of schools that were supported by these five entrepreneurs.

Libraries were also sources of support. Not just Andrew Carnegie, but also Hill and Rockefeller were builders and suppliers of libraries. The free public library, which became an American institution in the 1800s, gave opportunities to rich and poor alike to improve their minds and their careers.

Finally, America has always been a farming nation: Rockefeller attacked and helped conquer the boll weevil in the South; Hill helped create dry farming and mixed agriculture in the North. America's cotton and wheat farmers took great advantage of these changes to lead the world in the producing of these two crops.

All of these men (except for Schwab) tried to promote self-help with their giving. They gave to those people or institutions who showed a desire to succeed and a willingness to work. Rockefeller and Hill both paid consultants to sort out the deadbeats and the gold

diggers. They sympathized with the needy, but supported only those needy imbued with the work ethnic.

Each entrepreneur, of course, had his own variations on the giving theme. Vanderbilt, for example, plowed a series of large gifts into Vanderbilt University and helped make it one of the finest schools in the nation. He almost never gave to individuals, though, and said if he ever did he would have people lined up for blocks to pick his pockets. Schwab, by contrast, was a frivolous giver and had dozens of friends and hangers-on who tapped him regularly for handouts. Rockefeller concentrated his giving in the South and the Midwest; the Scranton group and Schwab focused on the East; Hill gave mainly in the Northwest.

Even without an income or an inheritance tax, these entrepreneurs, and others, had trouble handing down their wealth to the next generation. This was true in part, of course, because they gave so much of it away. As we have seen with the Scranton group, though, most entrepreneurs did not have sons with the same talents the fathers had. Vanderbilt's son William was a worthy successor, but the rest of his children showed little aptitude for business. Hill's three sons did not come close to matching their father's accomplishments; one son, Louis, followed his father as president of the Great Northern, but Louis' career was lackluster. The *Oregonian* of Portland called him "impulsive"; not so much a railroad man, but "a painter of some ability."[24] Charles Schwab and his wife were childless, which was probably fortunate because he squandered over $30 million and died a debtor. Rockefeller's only son, John D. Jr., became a full-time philanthropist. Granted, the senior Rockefeller's five grandsons were all multimillionaires, but their economic influence was much less than that of their grandfather. Sometimes the descendants of these original entrepreneurs parlayed their family names and what was left of their fortunes into political careers. During the 1960s, two of the grandchildren of John D. Rockefeller and one of the great grandchildren of Joseph Scranton were governors of New York, Arkansas and Pennsylvania.[25]

If we seriously study entrepreneurs, the state, and the rise of big business in the United States we will have to sacrifice the textbook morality play of "greedy businessmen" fleecing the public until at last they are stopped by the actions of the state. But, in return, we will have a better understanding of the past and a sounder basis for building our future.

Notes to Chapters

Notes to Chapter One

Commodore Vanderbilt and the Steamship Industry

[1]The literature on the "Robber Barons" controversy is extensive. For a good description of the various arguments, see Glenn Porter, *The Rise of Big Business, 1860–1910* (Arlington Heights, Ill.: AHM Publishing Corporation, 1973).

[2]No recent historian has systematically traced the history of the American steamship industry. Two older histories are David B. Tyler, *Steam Conquers the Atlantic* (New York: D. Appleton-Century Co., 1939); and John G. B. Hutchins, *The American Maritime Industries and Public Policy, 1789–1914* (Cambridge, Mass.: Harvard University Press, 1941).

[3]Modern historians have usually de-emphasized entrepreneurs in describing American industrial development. For a more detailed look at this dichotomy between political and market entrepreneurs, see my book *Urban Capitalists* (Baltimore: Johns Hopkins University Press, 1981). See also Maury Klein, "The Robber Barons," *American History Illustrated* (October 1971), 13–22.

[4]Fulton's monopoly rights are clearly spelled out in a pamphlet entitled *The Right of a State to Grant Exclusive Privileges in Roads, Bridges, Canals, Navigable Waters, etc. Vindicated by a Candid Examination of the Grant from the State of New York to and Contract with Robert R. Livingston and Robert Fulton for Exclusive Navigation* (New York: E. Conrad, 1811). For a good description of the steamboat monopoly, see Maurice G. Baxter, *The Steamboat Monopoly: Gibbons v.Ogden, 1824* (New York: Alfred A. Knopf, 1972), 3-25. See also John S. Morgan *Robert Fulton* (New York: Mason/Charter, 1977), 178–88.

[5]Baxter, *Gibbons v. Ogden*, 25–26; and Robert G. Albion, "Thomas Gibbons" and "Aaron Ogden," *Dictionary of American Biography*, 20 vols. (New York: Charles Scribner's Sons, 1928–37). 7:242-43; 8:636-37 (hereafter cited