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6 Did J. P. Morgan's Men Add Value?

An Economist's Perspective on Financial Capitalism

J. Bradford De Long

6.1 Introduction

The pre–World War I period saw the heyday of "financial capitalism" in the United States: securities issues in particular and the investment banking business in general were concentrated in the hands of a very few investment bankers—of which the partnership of J. P. Morgan and Company was by far the largest and most prominent—who played substantial roles on corporate boards of directors. This form of association between finance and industry had costs: it created conflicts of interest that investment bankers could exploit for their own profit. It also had benefits, at least from the owners' perspective:[1] investment banker representation on boards allowed bankers to assess the performance of firm managers, quickly replace managers whose performance was unsatisfactory, and signal to investors that a company was fundamentally sound.

The Morgan-dominated "money trust" thus filled an important monitoring role in the years before World War I. In 1910–12 the presence on one's board of directors of a partner in J. P. Morgan and Company added about 30 percent to common stock equity value. The overwhelming proportion of this increase in value came from the fact that Morgan companies performed better than others similarly situated.

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1. As opposed to the workers' or consumers' perspective. Some of the increased value came from improved productive efficiency. Some came from an increased ability to exercise monopoly power.

Some share of the increase in value almost surely arose because investment banker representation on the boards of competing companies aided the formation of oligopoly. But the development of similar institutions in other countries that, like the Gilded Age United States, experienced exceptionally rapid economic growth—Germany and Japan are the most prominent examples—suggests that a large share of the value added may have arisen because "financial capitalism" improved the functioning of financial markets as social capital-allocation mechanisms.

This paper is organized as follows. Section 6.2 lays out the major issues that arise when taking an economist's perspective on the turn-of-the-century "money trust." Section 6.3 presents Progressive and finance historian perspectives and argues that they leave the most interesting questions unaddressed. Section 6.4 lays out the money trust's contemporary view of itself, and interprets it in a way that promises to resolve the anomalies pointed out in section 6.2. Section 6.5 argues that the money trust's view of itself is by and large supported by the available quantitative evidence. Section 6.6 considers two very brief case studies, International Harvester and AT&T. Section 6.7 considers extensions and related issues, and section 6.8 offers conclusions.

6.2 An Economist's Perspective on the Money Trust

In the years before World War I, a corporate security flotation worth more than \$10 million invariably passed through one of a very few investment banks—J. P. Morgan and Company; Kuhn, Loeb, and Company; the First National Bank; the National City Bank; Kidder, Peabody, and Company; and Lee, Higginson, and Company.[2] The partners and directors of these institutions were directors, voting trustees, or major stockholders of corporations with a total capitalization—debt plus equity—including subsidiaries, of nearly \$30 billion (Brandeis 1914). In perspective, this sum bore the same relation to the size of the U.S. economy then that \$7.5 trillion bears today: it amounted to one and a half years' national product and 40 percent of the country's produced capital (Goldsmith 1954).

The investment banking oligarchs profited immensely from their middleman role. Typical fees on mergers and restructurings ranged between 4 and 10

2. When questioned by Samuel Untermyer, chief counsel and guiding spirit of the investigating Pujo Committee (chaired by Louisiana representative Arsène Pujo), First National Bank chairman George F. Baker was "unable to name a single issue of as much as \$10,000,000 . . . that had been made within ten years without the participation or cooperation of one of the members" of the small group of dominant investment banks (Pujo Committee 1913b). Securities issues then amounted to about \$500 million a year.

percent of the capital value of the businesses involved.[3] The commissions on U.S. Steel were as large a share of the economy then as $15 billion would be today. Today Wall Street's investment banking firms are strained to the limit by deals that are, in proportion to the size of the economy, only one-tenth as large.

Wall Street finance before World War I was thus several orders of magnitude more concentrated than it has been at any time since. This concentration of finance was a major political flashpoint. Progressives feared this money trust in finance as an evil much more dangerous than any monopoly in an individual industry. The financial dominance of the money trust allowed it to charge high fees and so levy a destructive tax on the productive classes, and the high profits earned by the money trust were distributed to buy influence to keep its dominance.[4] Historians of financial markets have exhibited a strong revisionist tendency to reject the Progressive critique: many have argued that, since there were few barriers to entry in finance, monopoly power was impossible to exercise and that the dominance of Morgan and the other oligarchs should be viewed as reflecting their excellence at innovation and as financial entrepreneurs.

Progressives write the history of American finance around the turn of the century as a series of frauds and conflicts of interest (Brandeis 1914; Untermyer 1915; Pecora 1939). Finance historians and biographers tend to write it as a series of individual acts of entrepreneurial vision: J. P. Morgan at the Morgan partnership (see Hovey 1912; Satterlee 1935; Allen 1949; Chernow 1990) and Jacob Schiff at Kuhn, Loeb (Adler 1921, 1928) saw the opportunity for a certain merger or restructuring or reorganization before anyone else, carried it through, and reaped the rewards of ingenuity and enterprise (see also Redlich 1951).

But from an economist's standpoint neither of these ways of telling the story fully captures how it really happened. Ingenuity and enterprise produce high profits in the short run, but such high short-run profits then attract imitators and competitors. The imitators and competitors copy the organizations and operating procedures of the first-moving innovators, and compete away the initial high profits. *Sustained* high profit rates and sustained market dominance require not only ingenuity and enterprise but also substantial "barriers to entry." Sustained high profits are possible only if there are factors that make

3. The lower figure comes from the investment banker share of the very straightforward International Harvester merger. The upper figure comes from the investment banker share of U.S. Steel. It does not include the investment banker share of previous combinations bringing together various subparts of the future U.S. Steel.

4. Many historians have often been more approving of the large financial organizations and deals of the Gilded Age. See Chandler (1990). In addition, Gerschenkron (1962) argued that the heavy capital requirements of modern technologies required large firms and larger banks. Davis (1963, 1966) wondered whether Great Britain's economic decline might be linked to its failure to develop "finance capitalist" institutions.

it costly for competitors to enter the business, and difficult for competitors to match existing firms' capabilities.

Yet neither Progressives nor finance historians have addressed what such "barriers to entry" were. No one has maintained that Morgan and Company and Kuhn, Loeb earned mere "normal" rates of return on their capital in the years before World War I. Such high profits should have induced much of the potential competition to become actual—or, at a bare minimum, the threat of new entry and subsequent competition should have induced Morgan and Company and its peers to moderate their fees—unless the existing investment banking firms had organizational capabilities and competitive advantages that new entrants could not effectively match.

From an economist's standpoint, therefore, the combination of no visible barriers to entry, sustained dominance by a tight oligarchy of firms, and extraordinarily high profit rates is anomalous. On the progressive reading of the situation, the Morgan partnership and its peers should have earned high profits in the present while experiencing a rapid erosion of market share—as did U.S. Steel, Morgan's dominant firm in the steel-making industry, which earned high profits but experienced a very rapid erosion of its market share to Bethlehem Steel and others in the years before the Great Depression. On finance historians' reading, competition between the Morgan partnership, its investment banking peers, and additional potential investment banking competitors should have kept Morgan and Company from earning sustained supernormal profits in the first place.

Thus the key to understanding American finance around the turn of the century is to find an answer to the following question: What were the barriers to entry that prevented new firms from matching the capabilities of Morgan and Company and its peers? There must have been some way that they created value for customers that potential competitors could not match. The story of American finance at the turn of the century cannot be coherently and completely told without detailing the origins and functioning of the Morgan partnership's competitive advantage.

This paper tries to specify the source and nature of Morgan and Company's competitive advantage. In the process, it puts some empirical meat on the theoretical bones of the relationship between finance and industry. And it tries to untangle the question of what the money trust actually was.

Such a study is of obvious historical interest. Morgan and Company must have had some striking competitive edge in order to maintain its dominance over American finance at the turn of the century: if not, such a profitable business should have seen the rapid arrival of new competitors to reduce the magnitude of the wealth to be earned. The Morgan-headed "money trust" remained a fixed point for more than a generation, while all was in flux around it.

Such a study could be of direct interest to those concerned with the regulation of today's securities markets. Perhaps the forces that allowed Morgan and

Company to become the focus of the turn-of-the-century capital market are still at work today. In such a case, how the turn-of-the-century market functioned carries information about how today's markets ought to function.[5]

The conclusions reached on the source of the money trust's competitive advantage are most hospitable to a view of the relation between finance and industry often identified with Lester Thurow (1986). The Morgan partnership and its peers saw themselves—and other participants in the pre-World War I securities industry saw them—as filling a crucial "monitoring" and "signaling" intermediary role between firms and investors in a world where information about firms' underlying values and the quality of their managers was scarce. In such a world it was valuable for a firm to have the stamp of approval from Morgan and Company (with its established reputation) and to have its managers watched over by Morgan's men from their posts on the board of directors. The presence of Morgan's men meant that when a firm got into trouble—whether because of "excessive competition" or management mistakes—action would be taken to restore profitability. The presence of one of Morgan's men may also have reassured investors that a firm appearing well-managed and with bright prospects actually was well-managed and did have bright prospects.

On this interpretation, the structure of information is the key to understanding turn-of-the-century Wall Street. Individual investors are, essentially, without reliable information about firms' prospects and their managers and without power to adequately monitor and control the executives who manage the firms in which they invest. By serving as an honest (albeit expensive) broker, a dominant investment bank can channel investors' funds into and choose executives to run firms, collect high fees, and yet on net provide value to investors. In such a situation, a firm's reputation as an honest broker becomes a very important asset—an asset that must be safeguarded by actually being an honest broker, and an asset that a potential competitor will find it very hard to match.

High concentration in investment banking may have played a role in supporting "financial capitalism." A firm with a large market share may reap large benefits from a good reputation. If reputations as honest brokers are sufficiently fragile, a firm with a large market share will find it most profitable in the long run to strive to be above suspicion in every short run: it will not imperil its reputation for the sake of higher short-run profits in any one deal as long as the finance industry's future and its own market share appear secure.

5. On the other hand, perhaps styles of management, means of gathering information, and shareholders' ability to discipline rogue management have all changed sufficiently that capital market institutions that were effective in 1900 would be ineffective today. A look, however, at Germany and Japan—which appear to have kept many "finance capitalist" institutions throughout the past century—leads one to suspect that institutions that were effective in 1900 would still be effective in 1990. These issues are briefly touched on in section 6.7.

By contrast, a firm with a small market share may well decide to "cash in" its reputation by luring investors into a profitable deal that is unsound—as Standard Oil magnates H. H. Rogers and William Rockefeller may have done with the Amalgamated Copper Corporation (Lawson 1906). With a small market share, the future returns expected from a reputation as an honest broker might also be small, and less than the present benefits from exploiting to the fullest one unsound deal. If investors follow this chain of reasoning and conclude that a firm with a small market share has little incentive to be an "honest broker," such small firms will find themselves unable to compete with Morgan and Company or with Kuhn, Loeb, for no one will trust them not to sacrifice their long-run reputation for immediate profits. The large market share of the Morgan partnership and its expected future profits served, in a sense, as a performance bond that the Morgan partnership could post, but that other, smaller potential competitors could not.

The disadvantages of financial concentration stressed by Progressives were certainly present. Conflicts of interest were frequent and potentially severe. Often "Morganization" meant the creation of value for shareholders by the extraction of monopoly rents from consumers: if Westinghouse and General Electric share controlling directors, their competition is unlikely to be too intense.[6] And First National Bank chairman George F. Baker sat on the boards of six railroads that together carried 80 percent and owned 90 percent of Pennsylvania anthracite. But there were positives on the other side—positives apparently strong enough to support Morgan dominance over potential competitors for more than a generation. The breaking of financier control over managers in the interwar period raised a new worry: is it better for managers to be unmonitored and effectively their own bosses than for them to be responsible to financiers (Berle and Means 1932)?[7]

6.3 Progressive and Finance Historian Perspectives on the Money Trust

Concern over this "money trust"—the concentration of the business of issuing the securities of large corporations in the hands of a few investment

6. An explicit watchword in Morgan reorganizations was "community of interest": as long as the Pennsylvania Railroad held a large block of Erie Railroad stock, the Pennsylvania would suffer if its actions undercut the profits of the Erie. On the other hand, as Kolko (1963) points out, industries in which financiers could preserve monopoly by strangling competitors at birth were almost nonexistent. And Brandeis allowed that "lately . . . the Westinghouse people were complaining that the General Electric's competition was unfair" even though Lamont was a director of one and Steele a director of the other (see Lamont 1913).

7. An issue present but unnoted in the Pujo report. On the one hand, the report stresses how shareholder apathy allows investment bankers to exercise dominant roles in choosing directors with only a minority of the stock. On the other hand, it calls for direct election of directors and managers by the small shareholders. The possibility that shareholder apathy combined with the elimination of financial capitalism would produce destructive managerial autonomy is not considered.

banks led by the Morgan partnership, and the associated presence of investment bankers on boards of directors—dominated public policy debate over the securities industry for the first third of this century. The debate was resolved only by the Great Depression. The presumed link between the stock market crash and the Depression left the securities industry without political defenders. The Glass-Steagall Act broke the links between board membership, investment banking, and commercial banking–based management of asset portfolios that had marked American finance between 1890 and 1930 (Seligman 1982).

In retrospect, it is surprising that "financial capitalism" in America lasted so long, given the heat of the political hostility to it. The money trust was subject to two major congressional investigations, the first in 1912–13 by a special House committee chaired by Arsène Pujo and counseled by Samuel Untermyer (triggered by the approach of a presidential election and Minnesota congressman Charles Lindbergh's denunciation of the money trust; see Huertas and Cleveland 1987);[8] the second in 1932–33 by the Senate Banking Committee counseled by Ferdinand Pecora.

6.3.1 The Progressive Perspective

Progressives like Louis Brandeis were sure that the Morgan and Company–headed money trust exercised enormous control over industry, and that such control was a bad thing. Brandeis, ever sensitive to conflicts of interest, saw the money trust as a "concentration of distinct functions . . . beneficent when separately administered [but] . . . dangerous . . . when combined" (Brandeis 1914, 6). The money trust's possession of monopoly power in the business of issuing securities imposed an unreasonable tax on all companies raising money in the capital market. And the links between corporate boards, investment bankers, and portfolio managers—First National Bank head George F. Baker was on the board of AT&T and the prime mover behind AT&T's appointment of Theodore N. Vail as its president; Morgan partner George W. Perkins was also a director of New York Life, which invested heavily in securities underwritten by the Morgan partnership—created a serious conflict of interest. Corporations sought to get as much for their securities as possible, and saving institutions sought to obtain high returns.

Investment bankers like Baker and Perkins were thus in a position to sacrifice the interests of one set of principals to the other—or to increase the spread they received as middlemen.[9] Perkins, testifying before Pujo and Untermyer, believed that he could determine whether a deal had come to him in his capac-

8. Lindbergh's son Charles, the aviator, was to marry the daughter of then Morgan partner Dwight Morrow, later U.S. ambassador to Mexico.

9. For Brandeis, the freezing of individual initiative because few dared to run the risk of crossing Morgan appears to have been an equally serious problem. As Brandeis said to Lamont, "You may not realize it, but you are feared, and I believe the effect of your position is toward paralysis rather than expansion" (Lamont 1913).

ity as vice-president of New York Life or as partner of Morgan and Company and bargain accordingly. Others disagreed, including National City Bank president Frank Vanderlip, who wrote, "There were times . . . when I opposed underwriting fees because I felt they were too high. As a director [of the Union Pacific] I believed my obligation of trusteeship ran to the stockholders, and not to [railroad president E. H.] Harriman. I have in mind recollections of occasions when it was pointed out to me, in a hurt tone, that the City Bank was sharing in those underwriting profits that I thought were too fat" (Vanderlip and Sparkes 1935, 204–5). The Progressive position on how to cure the evils of the money trust called for the systematic prohibition of all such conflicts of interest. Such a prohibition, Brandeis argued, would "not be an innovation. It will merely give full legal sanction to the fundamental law . . . that 'No man can serve two masters'. . . . [N]o rule of law has . . . been more rigorously applied than that which prohibits a trustee from occupying inconsistent positions. . . . And a director of a corporation is . . . a trustee" (Brandeis 1914, 56).

Progressives thus believed that the money trust's dominance over finance and its exploitation of conflicts of interest reinforced one another. Exploitation of conflicts of interest generated funds necessary to reward those who cooperated with present deals. And fear of the power of the money trust to freeze one out of future deals restrained potential competitors.[10] But firms sought Morgan at least as much as the reverse. For example, it is difficult for the Progressive interpretation to account for the eagerness of the McCormick and Deering interests to involve the Morgan partnership in their merger into International Harvester if the partnership's raison d'être was the exploitation of conflicts of interest.[11]

6.3.2 Finance Historian Perspectives

By contrast, many finance historians today argue that there never was a "money trust" in Brandeis's sense.[12] Vincent Carosso, for example, whose knowledge of the history and day-to-day workings of the Morgan partnership is unequalled, argues that investment bankers did not have a lock on their traditional clients. He argues instead that there was "very frequently interfer-

10. Brandeis said that his belief in the power of the money trust came "from my own experience. . . . I found that the policy of the New Haven . . . was loading it down so that . . . it could not possibly bear the burden. . . . I went to some of the leading Boston bankers. . . . I said—'If this thing continues, the New Haven is going to be bankrupt. Won't you please act in this manner and call Mr.Morgan's attention to it.' Their reply . . . was that they would not dare to . . . that the New Haven was Mr. Morgan's particular pet, that he resented any interference . . . and that it would be as much as their financial life was worth to try to poke their fingers in" (Lamont 1913).

11. The McCormicks, at least, did worry about involving the Morgan partnership. They feared that their interests would be sacrificed to those of U.S. Steel, but decided to go ahead anyway with the merger on Morgan's terms. In fact, Morgan partner George W. Perkins did make some attempts to sacrifice International Harvester interests to those of U.S. Steel and the Morgan partnership (see Carstensen 1989, and section 6.6).

12. In this they take a different tack than earlier historians like Fritz Redlich (1951).

ence or attempted interference" in banker-client relationships, as Kuhn, Loeb head Jacob Schiff told Samuel Untermyer (Carosso 1970; Pujo Committee 1913b).[13] Carosso further points out that Untermyer knew that there was no "unlawful industrial combination" in finance, and could only proceed by redefining "money trust" as a "loose, elastic term" meaning a "close . . . understanding among the men who dominate the financial destinies of our country and who wield fabulous power . . . through their control of corporate funds belonging to other people" (Carosso 1970, 139). He concludes that Untermyers was unable to demonstrate "the existence of a money trust . . . even in the sense in which . . . [he] defined it" (ibid., 151), for investment bankers did not "purposely act together; and even if they had, they would have been unable to impose their will upon the other directors . . . always more numerous than the representatives of Wall Street" (ibid., 151–52).

In a similar vein, Huertas and Cleveland (1987) argue that the industry in which Morgan and his peers were engaged was contestable: anyone could accept a block of securities, and then knock on doors until he found willing buyers who would take the placement. They see Pujo Committee counsel Untermyer, at least, as guilty of bad faith in his investigation.[14] For "aspiring politician" Untermyer, Huertas and Cleveland say, the "appointment was a godsend."[15] But unfortunately, "not knowing . . . such an opportunity would come his way, Untermyer had stated in November 1910 . . . [that] 'monopolies and substantial domination of industries . . . could be counted on the fingers of your hand,' and he [had] attacked 'political partisans who seek to make personal and Party capital out of a demagogic appeal to the unthinking' " (Huertas and Cleveland 1987; citing Kolko 1963, 359 n. 53).[16]

13. The majority of the Pujo Committee interpreted Schiff's evidence differently than Carosso, focusing instead on Schiff's assertion that he did "not think that another banking house of the standing of J. P. Morgan and Company would accept an offer of the Union Pacific Company to negotiate its securities while it [Union Pacific] was in the hands of Kuhn, Loeb, and Co." The committee concluded that there was little competition in the business of underwriting securities for large companies in the sense of attempts by competitor investment banks to disrupt existing banker-client relationships (Pujo Committee 1913c; Untermyer 1915). The minority report took the Morgan partnership's view (Pujo Committee 1913a).

14. On the other hand, no one (with the exception of New York, New Haven, and Hartford president Mellen, who suggested Brandeis was working for Boston interests who wanted to loot the railroad) has challenged Brandeis's good faith.

15. Reading the transcripts of the hearings makes one more favorably disposed toward the finance historian view. It is easy to dislike Untermyer and Pecora, the counsels of the two congressional investigations. Neither had a "theory of the case." In Untermyer's 1907 hearings Morgan is first pilloried for having issued clearing-house loan certificates during the panic of 1907 (thus illegally assuming the role of a central bank) and then pilloried for not having issued enough clearing-house certificates (Pujo Committee 1913b). Both Untermyer and Pecora (1939) appear more interested in generating headlines than in laying the factual groundwork for legislation in the public interest. It is much easier to like and respect Brandeis, and to respect Morgan.

16. It is also possible that Untermyer's conversion to progressivism was partly driven by a desire for revenge against the Rockefeller interests, which had outmaneuvered him in dealings surrounding the formation of Amalgamated Copper. Huertas and Cleveland do not address such issues, perhaps because this sword would cut both ways. James Stillman's successor as City Bank

But the finance historian perspective is as incomplete as the Progressive perspective. Progressives could not account for why owner-managers outside of Morgan influence would ever wish to enter it. The historians of finance do not account for the Morgan partnership's high profits. On their reading, market discipline left the Morgan partnership little freedom of action. But such market pressures should have led Morgan and Company to moderate its fees as well.

6.4 The Money Trust's Perspective on Itself

Morgan's supporters and ideologues at the time—for example, the writer and journalist John Moody, founder of Moody's Investment Service—would have rejected the finance historian position that there was no money trust and did reject the Progressive position that the money trust survived by exploiting conflicts of interest. Instead, Moody argued that there was a functioning money trust and that its existence was a good thing: supervision of firm managers by financiers was necessary given the need of enterprises for capital and the need of investors for trustworthy intermediaries to handle the selection of firms in which to invest (Moody 1904, 1912).

Without domination of boards of directors by the investment banking oligarchs, there would be no effective way for scattered individual shareholders to monitor the performance of corporate managers. Only investment bankers could effectively monitor firm managers, and so the presence of investment bankers on boards signaled to ultimate investors that the firm management was competent and industrious. Some executives preferred to avoid Morgan control if possible. Richmond Terminal executive W. P. Clyde, for example, was alleged to have told Morgan in a private meeting that "I've bought Richmond Terminal at 7 or 8 and sold it at 15 twice in the last few years. I see no reason why I shouldn't do it again." And he tried to block the inclusion of the Richmond Terminal within the sphere of Morgan's influence.

Moody's positive view of the money trust was not his own invention. His view was more or less the consensus view held by the securities industry and was a commonplace in the early literature on investment banking. Willis and Bogen's early investment banking textbook, for example, argued that the

> investment banker, intimately concerned as he is with the affairs of the corporation for which he has sold bonds, since the continued meeting of the obligation on these bonds is essential to the maintenance of the investment banker's prestige, often takes . . . a voice in control as a matter of

president, Frank Vanderlip, judged City Bank deals in which William Rockefeller appeared on both sides as "the means of some of the worst abuses that occurred in Wall Street" (Vanderlip and Sparkes 1935). Huertas and Cleveland do not pursue the tangled relationships between Untermyer, the Rockefeller interests, and the National City Bank (Lawson 1906).

> course. . . . This kind of power over the affairs of the borrowing enterprise represents the correlative of the moral responsibility which he has assumed toward the holder of the bonds or stock he has sold. . . . [T]his management function . . . gives the buyer . . . an assurance that the banker has knowledge of what is being done by the borrowing concern, and also of better management . . . [and] explains why investors . . . place so much stress, in purchasing securities, on the character and reputation of the house of issue. . . . The history of American business has hitherto been marked by a steady increase in the influence of the investment banker for these reasons. (Willis and Bogen 1929, 31).

The same assessment was made more pithily by New York, New Haven, and Hartford president Charles Mellen, in a private conversation with journalist C. W. Barron: "I wear the Morgan collar, but I am proud of it" (Pound and Moore 1931, 273).[17]

This assessment of the situation was also the official view of the industry. Morgan himself is quoted as giving the answer "Your railroad? Your railroad belongs to my clients" to railroad executives who did not know their place. The partnership of Morgan and Company responded to Pujo by writing an open letter giving their view of the functioning of the securities market. This pamphlet (primarily written by Morgan partner Henry Davison) argued that the reason the partnership had control over investors' funds was "thousands of investors . . . seeking . . . securities . . . have neither the knowledge nor the opportunity for investigating a great . . . enterprise" (Davison 1913, 18). They "look to a banking house to perform those functions and to give its stamp of approval." Morgan and Company's approval had become "a large factor which inspires confidence in the investor and leads him to purchase." The practice of banker representation on boards

> has arisen not from a desire on the part of the banker to manage the daily affairs of the corporation or to purchase its securities more cheaply than he otherwise would; but rather because of his moral responsibility as sponsor for the corporation's securities, to keep an eye upon its policies and to protect the interests of investors in the securities of that corporation. . . . Inquiry will readily develop the fact that the members of the leading banking houses . . . are besought continually to act as directors . . . and that in general they enter only those boards which the opinion of the investing

17. A statement made in private and off the record—Barron's notes of his conversations were later found, edited, and published. A similar impression of Mellen's relationship to Morgan is given by Brandeis (in Lamont 1913), who recalls that he "hit upon a matter . . . of manifest advantage to the [New Haven rail]road, and through a friend I submitted it to Mr. Mellen. Mr. Mellen sent back word that he would submit it promptly to Mr. Morgan. . . . Mellen's reply was that Mr. Morgan did not think well of the matter. . . . At my behest, my friend went back to Mr. Mellen . . . asking if he would not submit it to Mr. Morgan once more. Mr. Mellen said—'What, go to Mr. Morgan a second time on a matter, after he has already expressed his opinion on it? No one would even dream of it!' "

> public requires them to enter, as evidence of good faith that they are willing to have their names publicly associated with the management. (Ibid., 17)[18]

Morgan and Company, moreover, argued that their influence over investors' choice of securities was not dangerous because it was disciplined by the market. If the firm lost its reputation for "character"—placed investors in securities that were profitable to it but offered poor returns—or another firm acquired a reputation as a superior judge of risk, Morgan control would disappear:

> The public, that is the depositors, are the ones who entrust bankers with such influence and power as they today have in every civilized land, and the public is unlikely to entrust that power to weak or evil hands. Your counsel asked more than one witness whether the present power held by bankers . . . would not be a menace if it lay in evil hands. . . . The only genuine power which an individual . . . can gain is that arising from the confidence reposed in him . . . by the community. . . . [M]en are entrusted with such heavy responsibilities because of the confidence which their records have established, and only so long as their records are unblemished do they retain such trusts. These . . . axioms . . . apply . . . more emphatically . . . to banking than to any other form of commerce. To banking the confidence of the community is the breath from which it draws its life. The past is full of examples where the slightest suspicion as to the conservatism, or the methods of a bank's management, has destroyed confidence and drawn away its deposits overnight. (Ibid., 25–26)

The investment bankers thus claimed that their oligarchy and their presence on boards had three benefits: First, investment banker representation on a board warranted that the firm was managed by capable and energetic executives. Promising and well-managed businesses would thus be able to issue securities on more favorable terms with investment banker representation.

Second, investment banker representation provided an easy way to learn about the performance of managers and to dismiss them if they failed to measure up. The investment banking oligarchs provided an effective mechanism for monitoring executives and replacing those who performed badly; in Morgan and Company's view such monitoring and supervision were more easily performed on the board than off it.

Third, the concentration of the business improved the functioning of the market. The wealth and dominant position of the Morgan partnership de-

18. Lamont provided Brandeis with a similar justification of Morgan representation on boards, saying that "as you realize, we have generally drifted onto these various railroad and industrial boards because we had first undertaken to place a large block of the corporation's securities with our clients, and we felt a sense of responsibility to those clients which we fulfilled by keeping an eye upon the corporation in which they had invested. We have felt that that was a strong factor in enabling us to market these securities, and while the responsibility was a very onerous one, nevertheless, we shouldered it. Don't you think there is quite a little in that point?" Brandeis agreed that it was an important point but saw no reason why bankers needed to exercise control rather than merely gather information (see Lamont 1913).

pended on its reputation for "character." A firm with a large market share could never be tempted to sacrifice its reputation for the sake of the profits of any one deal because such an unsound deal could destroy its reputation as an honest broker—the Morgan partnership said that its reputation could disappear "overnight." A firm with a small market share might sacrifice future reputation for present profits.

It is somewhat ironic that firm defenders of private privilege, property, and capitalism like Moody and Davison wound up advocating a system for the assessment and allocation of investment that appears in many respects, from an early-twentieth-century perspective at least, "socialist." The forty-five employees of Morgan and Company approved and vetoed proposed top managers, decided what securities they would underwrite, and thus implicitly decided what securities would be issued and what lines of business should receive additional capital. Savers followed their advice. And the net effect appears similar to what would be done by a centralized investment planning directorate. The major difference is that the judgment of Morgan and his partners was substituted for that of some bureaucracy in deciding which investment projects were to be undertaken.[19] Instead of being decided by a market, the allocation of investment and the choice of firm managers was decided by a hierarchy, albeit a loose one (and one that felt itself subject to market discipline in the long run, in which the partnership can gain or lose its reputation for "character").[20]

The Morgan partnership's stress on the importance of its reputation provides an answer to the question of what was the money trust's competitive edge. High profit rates could coexist with ease of entry into investment banking because there was no rapid way for new firms to acquire that "reputation" that was the Morgan partnership's chief institutional asset. Progressives never supplied an answer to the question of why firms and investors continued to use the Morgan partnership, given the high fees it charged and the fact that you could never be sure when you hired Morgan and Company that it would

19. This is not quite right. On the one hand, Morgan and Company were shareholders' agents, not the public's. On the other hand, Morgan and Company had a strong incentive to run an efficient operation and make the "correct" investment decisions from shareholders' point of view: they faced competition from Kuhn, Loeb, from National City, and from others. Bureaucracies, by contrast, have many other objectives than the accomplishment of their legally mandated mission.

20. This identification of an investment banking partnership's reputation as an honest broker as (from the resource allocation side) a valuable social asset and (from the market structure side) a sizable barrier to entry raises the question of how the Morgan partnership acquired its reputation in the first place. It appears to have grown up slowly. The London banking house of George Peabody and Company specialized in selling American state bonds to European investors. Peabody and Company was very anxious that the bonds it sold turn out to be good investments—even contributing "campaign contributions" to Daniel Webster to induce him to make speeches for debt repayment (Chernow 1990). After J. S. Morgan joined Peabody and Company, the house branched out from state government bonds to selling American railroad securities to European investors. The reputation gained was then also applied by J. S. and J. P. Morgan to selling American railroad securities to American investors, and then by J. P. Morgan to selling American industrial securities to American investors (Navin and Sears 1955).

act in your interest when your interest came into conflict with the interests of its other clients. Finance historians never explained the sources of the money trust's high fees. Morgan and Company did give an answer to both questions: firms and investors come to us because they know that we have been honest brokers in the past—and they know that they can trust us because we have too much invested in the business to risk by failing to be honest brokers in the present.

The negative effects of financial capitalism stressed by Progressives are not blotted out by these investment banker arguments that the structure of pre-Depression American finance served useful economic purposes.[21] The conflicts of interest identified remain conflicts of interest; the high fees and relative absence of competition for different firms' business remain a tax on the provision of capital to the industrial sector. But the financial capitalists saw themselves as creating value, at least for shareholders. And given that a reputation as a competent analyst and an honest broker is difficult to develop and can be a valuable social asset, domination of turn-of-the-century financial markets by the Morgan partnership and its peers may have been better than the alternative.

6.5 The Value of Morgan's Men

Examination of the cross-sectional pattern of the market values of Morgan-influenced corporations supports the claim that Morgan influence was associated with enhanced value. According to the lists compiled by the Pujo investigation, in 1912 Morgan or his partners sat on the boards of twenty manufacturing, mining, distribution, transport, or utility companies that had actively quoted common stocks—three utilities, nine railroads, and eight other companies. Data on these twenty companies, and on sixty-two other control companies of similar size, were collected for 1911 and 1912 from *Poor's Manuals* of railroad, industrial, and utility securities.[22]

Table 6.1 reports regressions of the average relative price of the firm's common stock (relative to its book value) on whether the firm's board of directors

21. For Brandeis, at least, the key objection was in large part not economic but political and psychological. Brandeis tends to speak not of efficiency and productivity but of experimentation and individualism. He told Lamont that he saw J. P. Morgan's power as "dangerous, highly dangerous. The reason, I think, is that it hampers the freedom of the individual. The only way that we are going to work out our problems in this country is to have the individual free, not free to do unlicensed things, but free to work and to trade without the fear of some gigantic power threatening to engulf him every moment, whether that power be a monopoly in oil or in credit" (see Lamont 1913).

22. Partners in Boston investment banks like Lee, Higginson, and Company or Kidder, Peabody served on too few boards of directors apart from Morgan partners to allow for the quantitative estimation of a "Lee" or a "Kidder" premium. Kuhn, Loeb did not insist on holding board memberships in corporations under its influence, so it is more difficult to track the extent of its active involvement in monitoring corporations. For these reasons this section deals with J. P. Morgan and Company alone.

Table 6.1 The Value of Having a Morgan Partner as a Board Member

Independent Variables					
Morgan Partner[a]	Utility Company?	Other Variables		Adjusted R^2	SEE
0.259				0.021	0.834
(0.161)					
0.270*	0.281			0.038	0.830
(0.161)	(0.197)				
0.253*	0.107	−1.834*	Earnings/price	0.270	0.730
(0.144)	(0.175)	(0.304)			
0.375*	0.441*	1.680*	Log book/par value	0.180	0.777
(0.151)	(0.186)	(0.374)			
0.055	0.155	0.569*	Log earnings/book	0.236	0.726
(0.102)	(0.124)	(0.073)			

Source: As described in text.

Note: Dependent variable is log of average 1911–12 stock price relative to book value (eighty-two observations, including twenty Morgan companies). Standard errors in parentheses.

[a]Corporate board contains a partner of J. P. Morgan and Company.

*$P(t) < .05$ (one-tailed).

included a Morgan partner and on control variables. The first thing to note is that standard errors are large: the set of Morgan companies contains only twenty, and the spread of returns within this set is very large. Since these twenty companies are the only source of variation for identifying the Morgan influence coefficients, gathering more data would not lead to a more precise estimate of the Morgan influence coefficient.

One implication of the high standard errors on the Morgan influence coefficient is that its estimates are very sensitive to the treatment of outliers. The International Mercantile Marine Company's common stock had a return of −25 percent per year over the decade before World War I. Had this promotion been a success, the estimates of the Morgan influence coefficient would have been higher by an additional 15 to 20 percent. Similarly, if the New York, New Haven, and Hartford's price had collapsed in 1911 rather than two years later (Staples 1954), the estimated Morgan influence coefficient would have been from 5 to 8 percent less.

The first row of table 6.1 shows that corporations with a Morgan partner on their boards of directors have a logarithm of common stock q—the ratio of the common stock's market value to the book value of common stockholders' equity—higher than other companies by 0.259, corresponding to a 30 percent increase in the common stock's market value. This coefficient is imprecisely estimated: an analyst who began with completely diffuse prior beliefs about this coefficient and examined row one would conclude that there were nine chances out of ten that the true effect on the stock price of having a Morgan partner sitting on the board of directors was positive, but would be confident only that there were two chances out of three that the true effect was between 10 and 40 percent.

The second row adds a dummy variable for whether the company is a utility. Utilities have higher ratios of price to book value than railroads or industrials in this period.[23] Inclusion of the utility dummy does not materially affect the size of the Morgan influence variable, but does push it across the line of statistical significance at the.05 level (although there are still only two chances in three that the effect is between 10 and 40 percent of common stock value).

The estimated impact of adding a Morgan partner does not seem out of line if one considers how much Morgan's financial services cost. For International Harvester—a simple and straightforward deal—the investment bankers' share was about 4 percent of the capital value floated (equal in value to 8 percent of the post-1906 common stock). For U.S. Steel the investment bankers' share was 10 percent (in value 30 percent of the common stock). Such large fees can be justified—if they can be justified—only if the unique value added by this particular group of financiers is substantial. If the Morgan influence coefficient does reflect a true increase in value, not just the result of chance, then investment banking fees appear to take up a sizable chunk, but not all, of the increased value.

Row three shows that the Morgan influence coefficient is not affected by the inclusion in the regression of the corporation's earnings/price ratio. If Morgan companies were selling for higher prices on the stock market because Morgan influence allowed the exploitation of monopoly power, we would expect Morgan companies to have a high earnings/price ratio: earning in the present would be high, but prices would not rise in proportion because investors would look forward to the long-run erosion of monopoly power in the face of new entry. In this case, we would find in row three that companies with high earnings/price ratios had high ratios of price to book value, and that inclusion of the earnings/price ratio reduced the Morgan influence coefficient. This is not so, but this test is weak: all that can be said is that the cross-sectional data do not speak strongly for the hypothesis that Morgan influence raises shareholder value because it allowed the exercise of monopoly power.

Row four shows that the Morgan influence coefficient is not materially affected by the inclusion in the regression of the ratio of common stock book to par value. This ratio is a measure of the corporation's accumulated surplus. It is thus a proxy for the long-run growth of the company—of how much earnings have been in excess of dividends since the creation of the firm's current capital structure. If Morgan influence was associated with high value because Morgan limited his long-run associations to profitable and rapidly growing companies, then inclusion of the ratio of book to par value should reduce the size of the Morgan influence coefficient. Instead, the Morgan influence coef-

23. Experimentation with a railroad dummy variable found no significant effect.

ficient rises. In row four, there appear to be two chances in three that the true effect is between 25 and 70 percent.

Row five shows the effect of adding the return on capital—the ratio of earnings to book value—to the regression. The estimated Morgan partner coefficient declines to almost nothing (it is always imprecisely estimated). Figure 6.1 plots the data underlying the regression in row five. The gray lines mark the average values of the log price/book and earnings/book values for non-Morgan companies. They divide the graph into quadrants.

Figure 6.1 shows why the estimated Morgan influence coefficient becomes indistinguishable from zero in the row five specification. Of the twenty Morgan companies, fifteen have higher market prices relative to book values than the average non-Morgan company. All fifteen of these also have higher ratios of earnings to book value than the average non-Morgan company. Three Morgan companies have both lower than average prices and lower than average earnings—the Chicago-Great Western, the Erie, and the Southern railroads. Two Morgan companies have higher than average earnings but lower than average prices—the Baldwin Locomotive Company and the International Mercantile Marine.

This suggests that, to the extent that Morgan partners added value, they did so by making the companies they monitored more profitable, not by significantly raising the share price paid for a company of given profitability. It also accounts for why inclusion of the earnings/book value reduces the estimated Morgan influence coefficient so severely. In this sample, having a high price/book value, having high earnings/book, and having a Morgan partner on the board of directors are all strongly associated. Given that a firm has a high ratio

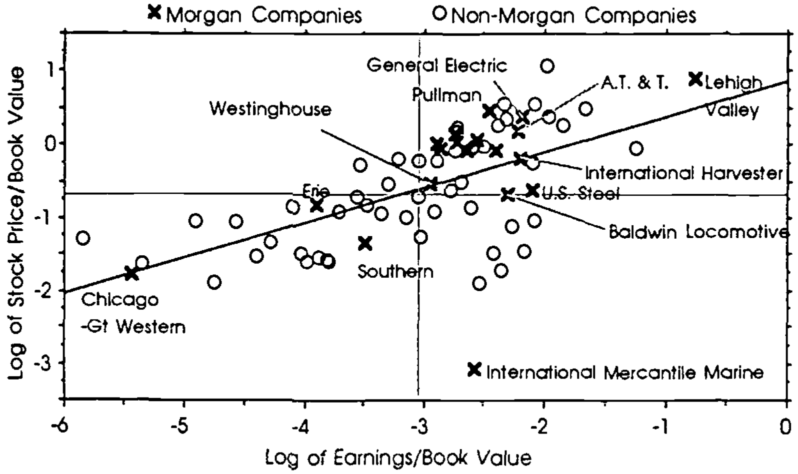

Fig. 6.1 Relative prices and earnings of Morgan and non-Morgan companies, 1910–12

of current earnings to book value, there is not much additional information about its relative stock price that can be deduced from the fact that it also has a Morgan partner on its board of directors.

It is particularly striking that Morgan companies have high ratios of earnings to book values, given that Morgan companies are reputed to have had abnormally high book values. One of Brandeis's most frequent criticisms of money trust practices was the overstatement of book values through "watering" the stock. Book values in "Morganized" companies thus represented not the cost of the business's physical assets but instead investment bankers' assessments of its earning power (Dewing 1914). Stock watering inflates book values and moves Morgan companies down and to the left in figure 6.1. It is thus very noteworthy that the Morgan-influenced companies are nevertheless clustered in the upper right-hand corner of the figure.

The regression in row five of table 6.1 is subject to differing interpretations, however, and is "fragile" in the sense of resting to a large degree on the performance of the outlying extremes of Morgan's financial empire. A key role in generating the estimates is played by the one extreme negative outlier: the International Mercantile Marine Company. The conclusion that the Morgan influence does not increase the price paid for companies of given profitability is reversed if one uses nonparametric tests that downweight extreme observations—in this case the International Mercantile Marine.

Figure 6.1 also shows that, of the twenty Morgan-influenced companies, fifteen have higher stock prices than would be predicted by the estimated regression line for the non-Morgan companies. Such a division would happen by chance only one time in a hundred if the Morgan influence were truly zero. Thus this nonparametric view can reject the null hypothesis that the Morgan touch did not matter for the median company—even in the specification of row five—at the .01 level. But the performance of the International Mercantile Marine Company was so bad as to make the quantitative estimate of the geometric average Morgan influence coefficient indistinguishable from zero.

Table 6.2 presents nominal rates of return realized on common stock investments in "Morganized" corporations. For corporations that acquired a Morgan board member after 1895, rates of return are calculated from that year to 1913. For corporations that had Morgan board members as of 1895, rates of return are calculated from 1895 to 1913.

In table 6.2 there is no sign that stockholders received, on average, less than fair market returns—as measured by the returns earned by Cowles's (1938) extension backward in time of the Standard and Poor's composite portfolio—on their investments in newly Morganized companies. There is no sign of any deterioration in the quality of the reorganizations undertaken: investors in Westinghouse and in Baldwin Locomotive toward the end of the 1900–1913 period realized rates of return that were higher than those realized earlier. And there is no sign that the Morgan name was used to trick investors

Table 6.2 Stock Market Rates of Return on "Morganized" Companies

Company	Date Morganized	Cumulative Return to 1913	Rate of Return (%)	Stock Market Return [b]	Commercial Paper Return[b] (%)	Excess Returns[a] (%) Commercial Paper	Stock Market
		Nonrailroad					
Adams Express	1895	3.66	7.21	7.96	4.61	2.60	−0.75
AT&T	1908	1.52	8.37	7.96	4.61	3.76	0.41
Baldwin Locomotive	1911	1.56	22.23	7.96	4.61	17.62	14.27
General Electric	1895	15.63	15.27	7.96	4.61	10.66	7.31
International Mercantile Marine	1902	0.07	−24.85	7.96	4.61	−29.46	−32.81
International Harvester	1902	2.23	7.30	7.96	4.61	2.69	−0.66
Public Service Corp of New Jersey	1911	1.14	6.64	7.96	4.61	2.03	−1.32
Pullman	1895	8.82	12.09	7.96	4.61	7.48	4.13
U.S. Steel	1901	2.59	7.94	7.96	4.61	3.33	−0.02
Westinghouse	1908	2.57	18.85	7.96	4.61	14.24	10.89
Average			8.46	7.96	4.61	3.85	0.50
(standard error)			(4.04)				
		Railroad					
Atchison, Topeka, and Santa Fe	1895	13.54	14.48	7.96	4.61	9.87	6.52
Erie	1896	1.88	3.73	7.96	4.61	−0.88	−4.23
New York, New Haven, and Hartford	1895	2.53	5.16	7.96	4.61	0.55	−2.80
Reading	1897	10.09	14.45	7.96	4.61	9.84	6.49
Southern	1895	2.18	4.33	7.96	4.61	−0.28	−3.63
Average			10.90	7.96	4.61	6.29	2.94
(standard error)			(2.47)				

Source: As described in text.

[a]Relative to diversified investments in commercial paper and in the stock market.

[b]Average nominal returns earned over 1890–1914 by stock market investments, as estimated by the Cowles Commission backward extension of the Standard and Poor's Composite portfolio, and by investments in high-grade commercial paper.

into buying unsound and overpriced unduly "watered" stock:[24] the prices at which the Morgan syndicates offered common stock in Morgan-influenced companies appear to have been on average fair prices.

Together, tables 6.1 and 6.2 support the Morgan partnership's claim that it played a productive and valuable role in the corporations it influenced. Stockholders in Morgan corporations do not appear to have overpaid for their investments. Morgan companies sold at higher multiples of book value than other companies, and they did so not because of the advertising value of the Morgan name but because they earned higher returns on capital.

Regressions, of course, cannot sort out the causal chain. It could be that the addition of a Morgan partner to the board leads to the replacement of bad and the shaping-up of good managers. It could be that Morgan partners joined the board only if they had confidence in the management, and that Morgan and Company were skillful investors but had no effect on the performance of the economy as a whole.

Event studies of the short-run effect on asset values of the announcement of Morgan interest in a company could sort out the chain of causation and reveal investors' expectations of the value of the Morgan touch. But too many "Morganized" companies were closely or privately held before the Morgan interests took a hand. Their pre-Morgan values cannot be ascertained. We know what such event studies would show: owners must have expected to reap profits from reorganizations and restructurings even net of the Morgan partnership's commissions or they would not have invited the Morgan partnership in. But our inability to perform event studies on our sample means that we do not know how much investors thought the Morgan touch was worth.

The next section tries to shed some light on these questions of causation by examining what Morgan influence really was, and trying to determine how the Morgan partnership exercised its monitoring and control functions in the cases of individual operating companies (table 6.3).

6.6 International Harvester and AT&T

In both of the cases considered here, investment bankers played an active and powerful but limited role. They took pains to ensure that the firms had the right managers but otherwise left the management alone. It is not fair to criticize these two case studies on the grounds that they examine successes—that in other firms investment banker intervention failed to create value. As section 6.5 has shown, the typical Morganized firm was, in fact, a success. It produced higher stock market values without inducing investors to overpay. It is, however, fair to criticize these two case studies as examples in which value may have been created primarily as a result of the creation of monopoly power: the relative roles of monopoly and efficiency in the "Morganization

24. A hypothesis advocated by Dewing (1914).

Table 6.3 Companies under Morgan Influence on the Eve of World War I

Adams Express Co.	New York, New Haven, and Hartford Railroad
AT&T	Northern Pacific Railroad
Atchison, Topeka, and Santa Fe Railroad	New York Central Railroad
Baldwin Locomotive Co.	Pere Marquette Railroad[a]
Chicago–Great Western Railroad	Philadelphia Rapid Transit Co.
Erie Railroad	Public Service Corp. of New Jersey
General Electric Co.	Pullman Co.
International Agricultural Co.[a]	Reading Railroad
International Mercantile Marine Co.	Southern Railroad
International Harvester Co.	U.S. Steel Co.
Lehigh Valley Railroad	Westinghouse Co.

[a]Not included in regressions; satisfactory data unavailable.

premium" cannot be determined in a fashion convincing enough to overcome prior beliefs.

6.6.1 International Harvester

An opening to consolidate the farm machinery industry appeared at the beginning of the 1900s. The McCormick firm—established by the inventor of the reaper, Cyrus H. McCormick—had been under heavy competitive pressure from the rapidly expanding Deering firm. William Deering's children were much less interested in running their firm and establishing competitive predominance over McCormick. The three sons of the founding McCormick—Cyrus, Stanley, and Harold—were also eager to see a reorganization of the industry. But each family was also strongly averse to handing control of their firm over to the other (McCormick 1931; Carstensen 1989).

There did appear to be substantial economies of scale to be gained by integrating the firms' production operations. U.S. Steel head Elbert Gary (a close adviser of the Deering family) told the McCormicks that he estimated that the stock of the amalgamated firm would be worth 35 percent more than the stock of the two separate firms. Moreover, he attributed this gain to efficiency, writing that "this increase would not be fictitious but real value, owing to the fact that by a combination they would secure stability of prices and diminishing expenses even though they did not secure increased average prices" (Garraty 1960, 128).

If monopoly power did allow the new, integrated firm to increase its average prices, the extra profits from amalgamation would of course be higher. J. P. Morgan and Company felt that such monopoly power would easily be gained, and that as a result the McCormicks should not worry that using Wall Street money to combine the firms would harm their reputation with their farmer customers: after all, the Morgan partners remarked, the farmers had no choice but to buy farm machinery.

Morgan partner George W. Perkins explained to the brothers the terms under which Morgan and Company would take charge of the deal. Perkins emphasized that "Morgan would . . . insist on choosing all officers and directors of the new company" and that "this point . . . Morgan and Company have found indispensable in making their combinations" (Garraty 1960, 133). The McCormicks, the Deerings, and the owners of two other, smaller firms included in the new International Harvester Corporations took all the stock of the new company; since no issue of securities was required, Morgan and Company charged less than their normal fee—they took only 3 percent of the company up front in fees. After organization, Morgan and Company retained ultimate control over the firm. All stock was committed to a voting trust, the trustees of which were one McCormick, one Deering, and Perkins.

The McCormicks had some doubts about committing themselves to the hands of the Morgan partnership. They feared that Harvester interests would be subordinated to those of U.S. Steel or to the Morgan partnership in general (Carstensen 1989). Their fears were well founded: Perkins did place International Harvester money on deposit with the Morgan bank interest-free, and he did unsuccessfully attempt to have International Harvester sell steel properties developed by the Deerings to U.S. Steel for a fire-sale price.[25]

For the first few years of its operation, the performance of International Harvester was disappointing. Rationalization of the firm's product lines was blocked; integration of production proceeded only very slowly (U.S. Department of Commerce 1913). In 1906 Perkins removed remaining McCormick and Deering family members from management and replaced them with salaried professionals. The younger Cyrus H. McCormick alone remained as head of the company. According to Garraty (1960), "the younger element in the company" was advanced to positions of greater influence, and thereafter International Harvester's performance was more satisfactory.

6.6.2 AT&T

Banker influence on AT&T can be clearly seen in one action: the return to the Bell System and accession to power of Theodore N. Vail. Vail had been hired for the telephone company by Alexander Graham Bell's father-in-law, Gardiner Hubbard, at the end of the 1870s. He performed very well as general manager of American Bell and as president of its long-distance subsidiary during the initial expansion of the telephone network to the urban East and Midwest (Paine 1921; Danielan 1939).

In 1887, however, Vail resigned. A growing dissatisfaction "with his posi-

25. The McCormicks took offense. Their lawyers wrote that Perkins was (unconsciously) biased in favor of the U.S. Steel interests, and that this unconscious bias was even worse than dishonesty, for "a dishonest man is at least prudent." The McCormicks wanted the Deering steel properties to be purchased by International Harvester at fire-sale prices and then sold to U.S. Steel for what the traffic would bear (see Carstensen 1989).

tion at this period was due . . . to the company's reluctance to spend money in keeping the service at maximum" and rapidly expanding the network. Vail had wished to pay low dividends and to plow retained earnings back into the rapid creation of a single comprehensive national telephone network. The major stockholders and their nominees, for example John E. Hudson, president of American Bell from 1889 to 1900, had a different view. They saw that they owned a money machine; they thought this money machine should pay high dividends. After a clash of views Vail left the company, unwilling to be the chief implementer of competitive strategies with which he disagreed. The 1887 annual report made no mention of his resignation or indeed of his services to the company at all, suggesting a high degree of strain and bad feelings (Brooks 1976).

After the expiration of Bell's key patents, Hudson's presidency, and to a lesser extent that of his immediate successors, saw a steady loss of market share to a large group of alternative, local telephone networks. American Bell did pay high dividends. American Bell did not, however, move to consolidate its nationwide natural monopoly.

A general consensus within the reorganized Bell System, now headed by AT&T, toward a shift to renewed rapid expansion developed in the first years of this century. Frederick Fish (president of AT&T from 1902 to 1907) went to the markets to raise money for renewed expansion.

The subsequent securities issues gave the investment bankers their opening. The company's massive financing requirements, and the fact that it had become difficult to raise money as the panic of 1907 drew near, brought the Bell System close to default. The investment bankers' price for continuing to finance the company was that its next president should be someone they trusted: Theodore N. Vail. First National Bank president and Morgan ally George F. Baker had been very impressed with Vail's performance in other dealings. Vail's past record at the telephone company was well known. And who better to head up a company now devoted to rapid nationwide expansion than a man who had been advocating such a competitive strategy twenty years earlier?

Vail did for AT&T what he was installed to do. He oversaw its expansion to a true nationwide telephone system. And he turned out to be very skillful at keeping the government and public convinced that AT&T was a productive natural—and not an exploitative artificial—monopoly. In the choice of Vail, as in the creation of International Harvester, investment bankers appear to have exerted their influence in a positive direction both from the perspective of shareholders' long-run interest and from the perspective of the long-run economic growth of the United States.

Other case studies could be chosen to paint a different picture. The International Mercantile Marine Company was a failure from the beginning, and the Charles Mellen-run New York, New Haven, and Hartford Railroad was denounced as unsound and monopolistic by Louis Brandeis for nearly a decade, at the end of which it did indeed collapse.[26] But the performance of Morganized firms was in general good—not bad—and in these two not unrepresentative cases of good performance the Morgan partnership did play a significant role in selecting managers.

6.7 Extensions

6.7.1 Financial Capitalism in Comparative Perspective

Around the turn of the century Germany and Japan also saw the growth of their securities markets take on a "finance capitalist" pattern. Consider first imperial Germany. In 1914 its largest banks—such as the Deutsche, the Dresdner, and the Darmstädter—dominated the German capital market. Founded in imitation of the French Crédit Mobilier, these banks made it a business principle from the very outset to maintain permanent representation on the boards of directors and to hold a significant number of shares of the companies they promoted.[27]

The role played by the great banks in monitoring and supervising corporate managements was an accepted part of German financial theory in the years before World War I (Riesser 1911). There was a clear sense that this "monitoring" role was a very valuable one. Riesser, for example, saw the German banks as valuable because of "both the continuity of their existence and regard for their 'issue credit,' i.e., the permanent ability of maintaining among the German public a market for new securities issued under their auspices," which "insured a permanent interest on the part of these banks in the [health of the] newly created [corporations] as well as in the securities which they were instrumental in placing on the market (Riesser 1911, 367; see also 343).

In Japan, the prewar *zaibatsu* and their more diffuse postwar *keiretsu* replacements appear to have played a similar role, in which once again the pat-

26. In his conversation with Brandeis, Lamont tried very hard to distance Morgan and Company from the New York, New Haven, and Hartford, protesting "but Mr. Brandeis, we don't attempt to manage railroads. . . . Nobody realizes better than we that that is not our function. We give the best counsel that we can in the selection of good men, making mistakes sometimes, as in the case of Mellen, but on the whole doing fairly well, and we give our very best advice on financial policy. . . . [The] expansion of the New Haven was due, and solely due, to Mr. Mellen's own policy and initiative, and . . . the mistakes which Mr. Morgan and his fellow directors made . . . [were] not of initiation, but of almost blindly following and endorsing Mellen's policies. Mr. Morgan had that large nature which led him almost blindly to have faith in a man when once it was established" (Lamont 1913).

27. Many have argued that the influence exerted by the great banks on industry was substantial: the Deutsche Bank had its representatives on the boards of 159 companies in 1912. Great banks were at once promoting syndicates and originating syndicates, acceptance houses, and sources of short- and long-term commercial credit. In the words of Feis (1964, 63), "the holders of shares in a German Great Bank were participants in an investment trust (among many other things). . . . The risks arising from immobilization of resources" through their commitment to the development of industry "the banks met . . . through their large capital . . . their retention of control [and] . . . subsidiary companies especially founded for this purpose."

tern of influence of finance over industry is reminiscent of Morgan and Company (Hoshi, Kashyap, and Scharfstein 1989). The bank and the trading company of a given enterprise group exercise influence over the policies and senior personnel appointments of the affiliated companies. However, this influence is usually held in abeyance "unless the member company is in difficulties" (Dore 1987; also Thurow 1986).

It is clear that in the United States and in Germany the existence of "finance capitalist" institutions played a significant role in the expansion of managerial capitalism. Investment banker willingness to choose and monitor managers appears to have aided founding families that were attempting to withdraw from active management of their businesses and to diversify their holdings (Atack 1985; Chandler 1990).

Chandler (1990) draws a sharp contrast between wide share ownership distributed by investment banks and salaried managers in Germany and the United States, and the more "personal capitalism" in which founding families preserve substantial equity stakes and managerial positions that prevailed in Great Britain.[28] Yet he also downplays the role of investment banks, especially in the United States where the partnerships were very small business organizations and large deposit banks played a minor role (see White 1983 and 1989; Burr 1927). It may be that investment banks played a key role in allowing founding families to transform their corporations into the professionally managed organizations with diversified stock ownership that were to dominate the twentieth century. Founding families may have been unwilling to sell out and retire from the business unless they could get a fair price. Without a J. P. Morgan to implicitly warrant their property, obtaining a "fair" price from the founding family's perspective may have been difficult. It is possible to speculate that turn-of-the-century finance capitalists played an important role in catalyzing the development of the managerial hierarchies whose importance is stressed by Chandler (1990).

The relative industrial success of Germany, Japan, and Gilded Age United States has its counterpoint in the relative industrial decline of turn-of-the-century Great Britain. As Lewis (1978, 130) puts it, at the end of the nineteenth century "organic chemicals became a German industry; the motor car was pioneered in France and mass-produced in the United States; Britain lagged in the use of electricity, depended on foreign firms established there, and took only a small share of the export market. The telephone, the typewriter, the cash register, and the diesel engine were all exploited by others." Industry after technologically sophisticated industry in which one would have expected British industry, by virtue of Britain's larger industrial base and head start, to have a strong position was dominated by producers from other, follower countries.

28. For an insider's view of the pattern of investment banking relationships under such a system of "personal capitalism," see O'Hagan (1929).

Alongside Britain's relative industrial decline went a tremendous surge of capital exports. In 1913 Great Britain's net interests, profits, and dividends from overseas investment amounted to 9.3 percent of gross domestic product. Accumulated balance-of-payments surplus over 1885–1913 amounted to perhaps £2,620 million—110 percent of 1913 gross domestic product. Nominal net overseas assets are equal to the sum of accumulated surplus, the initial position, unrealized (real) capital gains, and inflation, and so may well have been much larger than accumulated surplus. Britain in 1913 had considerably more than an entire year's gross output invested abroad, and its net overseas assets may well have exceeded its total net domestic stock of reproducible capital.

Riesser criticized the pre–World War I organization of British banking and finance because it lacked an equivalent to the monitoring system performed by the industrial cliques in Japan, the great banks in Germany, and the Morgan partners in the United States. He argued that the "complete divorce between stock exchange and deposits . . . causes another great evil, namely, that the banks have never shown any interest in the newly founded companies or in the securities issued by these companies, while it is a distinct advantage of the German system, that the German banks, even if only in the interests of their own issue credit, have been keeping a continuous watch over the development of the companies, which they founded (Riesser 1911, 555).

It is possible to speculate that Britain's surge of overseas investment, its relative industrial decline, and its absence of financial capitalist institutions all go together. If "financial capitalist" institutions did in fact play the role in guiding and warranteeing investments that I have argued they played, the absence of such institutions in Britain may have been a factor contributing to its anomalous combination of healthy domestic savings with anemic domestic investment, large overseas investments, and relative industrial decline. Relative industrial decline in Britain may have played a part in leading financial capitalists to focus their energies elsewhere. J. P. Morgan's father spent at least as much time working in London as in New York. The causal chain seems likely to run in both directions—finance capitalism may help economies grow fast, and fast-growing economies may develop "finance capitalist" institutions—and which direction is the stronger is an open question.[29]

6.7.2 The Decline of Financial Capitalism in the United States

Perhaps the Morgan-dominated "finance capitalist" pattern of the 1900s was peculiar to that age, and subsequent changes—chiefly the wider diffusion

29. This line of criticism has been taken up and amplified by many who have seen the financial centers in the City of London as having failed industry. For example, see Ronald Dore (1987). The argument was originally made by Lance Davis (1963). Today (as in the past) the Deutsche Bank votes the shares of many German stockholders, stockholders presumably believing that the bank will do a better job of voting their shares than they would.

of available information to individual stockholders—have eroded the informational advantage of financiers that sustained "finance capitalism" in the early years of this century. Perhaps the history of U.S. financial markets in the twentieth century should be written as a history of how informational and technological changes drive organizational shifts. Perhaps as the twentieth century passed, the importance of private information declined, the ability of investors to do their own security analysis grew, and managers' compensation schemes placed greater weight on stock options and were more closely aligned with shareholders' interests. In this case it would not be surprising if the service of monitoring managers provided by Morgan and Company became worth less and less as the century passed.

Yet there is reason to doubt such an interpretation. Historical accounts of the erosion of financial capitalism in the first half of the twentieth century have not focused on informational and technological changes that made J. P. Morgan obsolete.[30] Instead, historical accounts emphasize relatively autonomous political events and psychological shifts in the attitudes of small investors toward the stock market. As historians like Sobel (1965) see it, the first stage in Morgan's impending decline came in the aftermath of the World War I door-to-door bond selling campaigns, as Charles Mitchell of the National City Bank came to recognize that a financial empire does not have to be built by slowly creating a reputation as a shrewd judge of investments but can be built through direct salesmanship by uninformed representatives (Peach 1941; Cowing 1965; Huertas and Cleveland 1987).

The second stage is the popularization of the benefits of common stock ownership during the 1920s (as urged, for example, by Smith 1924). The belief that everyone should invest in common stocks, coupled with Mitchell's high-pressure sales campaigns and the growing possibility that the New Era might really be a new era of permanent prosperity, helped fuel the stock boom of the 1920s and made Morgan's or Kuhn, Loeb's willingness to stand behind a security issue no longer of prime importance. Many investors were willing to bet along with Samuel Insull that he was a financial genius even without Morgan's or Kuhn, Loeb's implicit warranty.

The third stage in the decline of "financial capitalism" saw the creation of the Securities and Exchange Commission and the forcible divorce of bankers who had the capital to take substantial long-term positions in firms from their

30. Another reason to doubt such an interpretation is that much current thinking in finance argues that the conflict of interest between owners and managers is still a central feature of finance today. Jensen's (1989) admittedly extreme estimate of these gains in the last decade pegs them as worth more than half of the total cash dividends paid by the corporate sector. It is possible to argue that informational and technological changes gradually made "financial capitalism" and an active market for control obsolete in the first half of this century. It is more difficult to argue that such changes made "financial capitalism" obsolete in the first half of this century, and that subsequent changes in information and technology have made "financial capitalism" viable once again in the 1980s.

places on boards of directors from which they could easily monitor managerial performance (Seligman 1982).

This story, traditionally told by historians, is not a story of a shift in the balance of information flows, or in the form of the efficient organization of the relationship between finance and industry. The SEC took the form that it did largely because the populists in Congress had always believed in Untermyer's and Brandeis's critiques of how the bankers used other people's money, not because Untermyer's and Brandeis's critiques had suddenly become more correct than they had been in 1910 (ibid. 1982). The Glass-Steagall Act was passed because of the Great Depression, not because of an increase in ultimate investors' ability to assess and monitor firms. And organizations like the National City Bank and, later, Merrill Lynch appear to have prospered not because they were the best judges of the worth of securities, but because their door-to-door methods were able to directly tap savings that would otherwise have flowed into the life insurance and banking systems, and would presumably have reached the capital market in the hands of more sophisticated money managers.

6.8 Conclusions

Many issues have not been addressed. Surely the most important unaddressed issue is the balance between J. P. Morgan's adding shareholder value by improving efficiency as opposed to by creating monopoly. This question is close to unresolvable. No one disputes that the robber barons sought monopoly; no one disputes that the robber barons took advantage of economies of scale. The relative weight to be given these two factors is very hard to assess. And in no case is the evidence strong enough to convincingly overcome prior beliefs of as much strength as historians typically hold on this issue.

This paper, however, has addressed one major element of the Progressive critique of the turn-of-the-century organization of American finance: that financiers' presence on corporate boards of directors allowed them to impose an unwarranted tax on industry by exploiting for their own benefit conflicts of interest. The Progressives' fear was well founded: there were conflicts of interest, and investment bankers did exploit them. But there is also evidence that from shareholders' and owners' standpoints these negatives of financial capitalism were outweighed by positives.

This paper has also pointed out a substantial lacuna in finance historians' interpretations of turn-of-the-century Wall Street. Historians of finance have argued that the Morgan partnership was subject to the discipline of the market, yet they have not explained how active competition is consistent with the very high profits achieved by Morgan and Company. The answer is that the market did not discipline the Morgan partnership in the short run: Morgan and Company was not under pressure to cut its fees in order to keep a possible deal from going to another investment banker. But the market did discipline the Morgan partnership in the long run: the only reason that Morgan and Company were able to keep doing deals and charging high fees was their reputation for good judgment and for giving the ultimate investors in their deals good value. Preservation of this reputation was the primary goal of the partnership and left it with little room to abuse its short-run market power by leading its clients into unsound deals.

In general, a strong argument in economics rests on three supports: First comes a coherent theoretical base laying out the strategies available to and the interests of market participants. Second is concrete evidence that actual individual investors, managers, and bankers understood and acted according to the theoretical logic of the situation. And third comes statistical evidence that such a pattern of action is found not just in isolated anecdotes but is standard operating procedure in the situation.

In this paper the theoretical logic for interpreting Morgan's edge in terms of its hard-to-match reputation as an honest broker and a skillful analyst of risk is clear. Many observers at the time thought that the stamp of approval of Morgan and Company was worth its handsome price and gave confidence. And the large-scale correlation between "finance capitalist" relationships and rapid growth remains intriguing and suggestive. The third support is slightly weaker: there were relatively few Morgan-influenced companies on the eve of World War I, including both successes and disasters. It is not possible to obtain precise estimates of the quantitative value of the Morgan touch, but it is highly likely that it was valuable and that Morgan's influence led to corporations that made higher profits.

Since the decline of the House of Morgan, concern over the relationship between finance and industry in America has centered on two themes. The first is the concern expressed by Berle and Means (1932) that corporate managers had become accountable to no one and would divert corporate wealth and assets to their own selfish purposes. The second is the fear that today investment projects are assessed not by far-seeing investment bankers with a keen sense of fundamentals but by an erratic and flighty stock market committed to the short term. In Keynes's (1936, 160) words: "The spectacle of modern investment markets has sometimes moved me towards the conclusion that to make the purchase of an investment permanent and indissoluble, like a marriage, except for reason of death or other grave cause, might be a useful remedy for our contemporary evils. For this would force the investor to direct his mind to the long-term prospects and to those only." Both of these ills seem to call for large-scale financial institutions to take an interest in firm management by establishing and holding large long-term positions in individual companies. It is an irony that today many of the intellectual children and grandchildren of the Progressives appear to call for a return to "financial capitalism."

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Comment Charles F. Sabel

In the spirit of this conference, De Long's ingenious effort to show that J. P. Morgan and Company served the interests of the investing public and its corporate clients while blocking competitors from sharing its rich fees marks the shift of intellectual perspective from Alfred D. Chandler, Jr.'s, Harvard Business School history of the corporation to what might precipitously be called the New Cambridge Business History. What both schools have in common is the intention to show that even those powerful economic institutions of Gilded Age America, which Populists and Progressives believed had dangerously escaped the control of competition, were subject to a higher discipline. For both, this discipline put pursuit of self-interest in the service of the economy as a whole.

Where they differ, profoundly, is in their understanding of how this discipline worked. Chandler focuses on the way the efficient use of mass-production and continuous-process technologies, manifest particularly in economies of scale, governed the construction and extension of the industrial corporation. Bankers are so far removed from the formative influence of production technology that they can play only a subordinate part in his history,

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except when (as in the notorious case of U.S. Steel) they or their representatives foolishly interfere with managers' pursuit of the economies of high throughput production.

De Long reflects, in contrast, the temper of the new intellectual times. For his generation of historians, technology is at least as malleable as constraining. Managers may be professionals, but they have selfish interests that can endanger even their own organizations. He is concerned, therefore, with the way the resolution of problems of corporate governance, and especially principals' problems in controlling their agents, form economic institutions that would not exist in a perfectly competitive world. He is drawn, naturally enough, to the study of investment banking as an archetypal case, because the same informational advantages that make an investment bank attractive to its customers invite the bankers to self-dealing and deception. De Long's central argument is that a reputation for honesty, which could only be acquired slowly but lost in a careless or deceitful flash, protected J. P. Morgan against competitive challenges. It also protected the firm's customers against abuses of its dominant market position. A closer look at this argument offers an occasion for noting some of the opportunities, but also the risks, presented by the application of ideas drawn from the new information economics to a fundamental problem of business history.

The following comment is in four parts. The first considers De Long's contention that Morgan did good by its clients and the investing public. It stipulates that, although De Long's arguments are even more dubious than he concedes, there is still sufficient evidence of respect of others' interests to justify curiosity about the question, Why didn't Morgan cheat (more)? The second argues that an explanation based on any straightforward interpretation of the restraining powers of a reputation for reliability is contradicted by the presence of two conspicuously rotten business deals in De Long's small universe of Morgan firms, and that his efforts to explain away the discrepancy as a statistical artifact only make the incongruities more evident. Closer examination of the two bad deals suggests that J. P. Morgan and Company did value its reputation for sound performance, but that the meaning of that concern cannot be grasped by reputation models of corporate behavior that presume that the problems of economic coordination are principally problems of judging the trustworthiness of potential partners.

The third section, therefore, sketches an alternative view of Morgan and Company as a maker of the market for companies—an institution, that is, that shaped the conditions under which industrial assets could be recombined. This view arguably explains everything explained by the reputation model, including the importance of the firm's reputation to its success. But it explains as well the failure of Morgan's business fiascoes to produce the catastrophic results that the reputation model anticipates. Sketchy as it is, this alternative view calls attention to the large class of barriers to entry and restraints on market leaders that result neither from economies of scale nor the costs of establishing a reliable way of signaling trustworthiness. Furthermore, it suggests how to address a question obscured by the reputation view: How do the different ways equally trustworthy makers of markets in corporate control go about their business affect the industrial organization that result?

In a world of manifestly imperfect markets but growing (if unequally distributed) wealth, it is tempting to explain material advances by identifying a mechanism that yokes those with economic power to block progress to the cart of productive efficiency. In the age of mass production, technologically determined economies of scale turned this trick for the Harvard Business School historians (and Karl Marx). In an age that seems to require more and more collaboration within and among firms, regardless of size, it is easy to suspect that the need to acquire and protect a reputation for trustworthiness as a precondition for competitive survival could play a similar disciplinary role. The concluding part offers, by way of summary, some reasons for historians of business to resist this and analogous temptations.

Who Benefited from Morgan and Company's Services?

If the Progressives were right and Morgan and Company prospered by abusing its economic power, De Long has nothing to explain. Hence his first step is to put the lie to the Progressive view. But even leaving aside the undoubtedly important effects of the firm's international financial activities, and taking the partners' rewards for granted, it is hard to know how wide a net to cast in assessing the firm's performance. An expansive interpretation would assume that Morgan and Company played a decisive role in shaping the American railroad and steel industries. An assessment of the firm's effects would then require an evaluation of its part in the rise and subsequent decline of these industries. A restrictive interpretation would treat Morgan and Company as the provider of specialized financial and consultant services to large corporations. An assessment of the firm's role could then be limited to contrasting the performance of the firm's most important clients with the performance of a comparable but unaffiliated group of corporations. Insofar as the limited finding that Morgan clients outperformed other, similar companies would be sufficient to discomfit the Progressives, De Long reasonably enough concentrates the second and more tractable evaluation. Later, however, we will see that there is a price to pay for his cursory consideration of the first.

Thus De Long compares the stock market performances in 1911–12 of twenty companies—three utilities, nine railroads, and eight others—whose boards of directors included J. P. Morgan or one of his partners, with sixty-two firms of similar size that had not been "Morganized." He finds that the ratio of the market value of a firm's common stock to its book value is about 30 percent higher in Morganized companies than in the unaffiliated ones. This price premium is explained in his estimation by the Morgan firms' superior rates of earnings measured as a percentage of book value. "To the extent that Morgan partners added value," De Long writes, "they did so by making the companies they monitored more profitable." If the performance of the worst-performing company is—implausibly, as we shall see—discounted, then it appears further that at any given level of profitability investors were willing to pay an additional premium for Morgan stocks, presumably because they expected the earnings of such companies to be more secure or to grow faster than those of other equally profitable ones. Finally, the average nominal rates of return on the stock of Morganized companies between 1895 (or the year, if later, in which a Morgan director went on the client's boards) and 1913 correspond to the average rates of return of the market as a whole during that period as gauged by standard indices.

Here I want to enter two of many possible qualifications to these claims. First, as De Long notes at least three times, it is impossible to determine from his calculations the extent to which Morganized companies achieved superior profitability by exploiting monopoly power that their very formation created, rather than by achieving efficiency gains. In many cases typical of the period, furthermore, it will be extremely difficult to distinguish those sources of profitability without undertaking a detailed study of the particular industries and firms at issue. Given economies of scale, the creation of optimally sized production units may require just the kind of concentration of ownership that clears the way to extraction of monopoly rents; and once a firm has the possibility of pursuing either strategy, its actual course of action, as the history of U.S. Steel shows,[1] depends on the managers' ideas of "fair" competition, their expectations regarding the behavior of regulatory authorities, and their concepts of efficiency.

Second, it turns out to be no easier to say precisely what Morganization was than to say what effects it produced. Was inclusion of a Morgan partner on a company's board a necessary and sufficient condition for Morganization? What about firms that hired Morgan and Company to underwrite their securities, but neither chose nor were obliged to offer a directorship to one of the firm's partners? Is their performance distinguishable from that of corporations where Morgan direction was more direct? Or take those instances, which De Long hints at in a footnote (note 20), where Morgan partners served on boards together with partners from other leading investment banks. Were these Morganized in the same way as the others? Did their stocks command a premium because two absolutely trustworthy monitors were on the scene? Or did the presence of rival groups signal the potential for expensive struggles for control? Or, finally, is it possible to distinguish the performance of Morganized firms in which Morgan directors played an active role (as at International Harvester and A.T. & T.) from those—and there surely must have been some—where the Morgan presence was merely nominal? Perhaps American investors only took notice of an investment bank's possible influence on company per-

1. Alfred D. Chandler, Jr., *Scale and Scope: The Dynamics of Industrial Capitalism* (Cambridge: Harvard University Press, 1990).

formance when a Morgan partner went on the company's board, and whenever one of Morgan's men did so, he monitored with alacrity. But it would be nice to know this, or know it cannot be ascertained.

These two lines of criticism strike me as damaging to De Long's project only if he is supposed to be undertaking an estimation of the beneficial effect of investment banking on the U.S. economy in the decade before World War I. If, as I think is plainly nearer the truth, his aim is to show that J. P. Morgan and his clients made surprisingly little use of their undoubted power to bilk the (stock-owning) public, then neither the problem of distinguishing monopoly from efficiency gains nor the broad-bush treatment of Morganization constitute unsurmountable objections, and we are obliged to examine De Long's explanation of their restraint.

Reputations and Fiascoes

The essence of De Long's explanation of Morgan's prosperous restraint is the idea that some kinds of success can be a safeguard against excess and a defense against imitation. The relevant example is a reputation for reliability or trustworthiness, hard to acquire because no one will entrust a party without such a reputation with a task that supposes trust; but the only way to build the reputation is to execute such tasks in a trustworthy way. The long, slow way out of this trap, as De Long suggests in his résumé of Morgan and Company's origins (note 18), is to demonstrate such able fidelity in the execution of modest assignments that the next client will be reassured enough by the performance to offer riskier work, and so on. Once acquired, finally, the reputation is so valuable that it will not be jeopardized for the gains of any single deception.

Seen this way, it is easy to understand how Morgan and Company, which traded on trust, became a prisoner of what could theoretically have been a calculating display of honesty. Because the reputation was costly to acquire, it constituted a barrier to entry for potential competitors, and it was this barrier that protected Morgan's extraordinary fees and his control of a dominant market position. Modern historians of finance such as Carosso are therefore wrong to think that competition among investment banks rendered talk of a "money trust" a polemical, Progressive exaggeration. But because this same reputation was worthless if abused, Morgan actually had to deliver value for money, and here the Progressive view that the money trust answered only to itself is also incorrect.

This view has three things going for it. It breaks an intellectual stalemate by establishing new stylized facts—there was a money trust in the sense of dominant forms with indubitable power over their clients, but not in the sense of uncontrolled conspiracy—and reconciles them with elegant analytic categories. In doing this, it recasts debate in a way that reveals deep affinities between the new theory and the views of informed contemporaries. An early textbook on investment banking in the United States, De Long notes, already contains the core of the reputation model.[2] Better yet, the same categories that break an intellectual logjam and reestablish more intimate contact with views of key actors also respond to the hopeful promptings of our own times to find a mechanism that disciplines self-interest in the absence of (nearly) perfect competition or technological constraints.

Take it as a sign of pessimism of the intellect and without for the moment further theoretical justification that I believe any theory that good is too good to be true. In this case, at any rate, I am convinced that it is. The reason is simply that, as De Long himself notes, two of the twenty Morganized forms were extremely unsuccessful. Indeed they were in principle unsuccessful enough to ruin the value of the firm's reputation—if, as De Long asserts, that reputation was the equivalent of a performance bond, and hence forfeit if the company did not perform.

Both of the failures were notorious in their time. The first was the International Mercantile Marine Company (IMM), more commonly called the Morgan shipping trust. It was formed in 1902 under Morgan's direction, through the combination of various British and American shipping lines in association with several German carriers also active on the North Atlantic route. The combine never came close to meeting its bankers' expectation that it would consolidate and extend its grip on the growing passenger and freight traffic between Europe and the United States. Among many other problems, Morgan had not foreseen that, when transport was by sea rather than by rail, unscheduled or tramp carriers could enter the trade whenever demand picked up, forcing the scheduled shippers to leave port with empty cargo space even in good times. Morgan, moreover, allowed the IMM to pay exorbitant prices for its constituent properties; the firm's disappointing revenues therefore went mostly to service its fixed debt, with next to nothing left for the owners of its common stock.[3] That stock lost on average one-quarter of the previous year's value each year during the decade before World War I.

The second failure was the bête noire of the Progressives: the New York, New Haven, and Hartford Railroad. J. P. Morgan was native to Hartford, and his family had been associated with the road's predecessor lines for generations before he was elected to the company's board in 1891. His original intention may have been to simply establish an orderly partition of market shares between the New Haven and its northern competitor, the Boston and Maine. But by 1903, when he helped secure Charles Mellen's appointment as the New Haven president, he had become enamored of the idea of creating an integrated regional transport system, including not only the Boston and Maine but also coastal steamship lines and interurban electric trollies. It was Mel-

2. H. Parker Willis and J. I. Bogen, *Investment Banking* (New York: Harper and Brothers, 1929), cited in De Long's paper.

3. Vincent P. Carosso, *The Morgans: Private International Bankers, 1854–1913* (Cambridge: Harvard University Press, 1987), 81–86, 91–93.

len's ruthless acquisition of a 36 percent interest in the Boston and Maine in 1907 that began the long feud between Louis Brandeis—the most sophisticated of the Progressives—and the Morgan interests. But it was the exorbitant price that Mellen paid for his new properties (and the bribes required to facilitate their sale) that brought the grand plan to fall. From 1903 to 1913, the road's bonded debt alone increased from $14 million to an insupportable $242 million. By 1913, in fact, the board of directors forced Mellen to resign. But by then the railroad was so strapped for cash that maintenance of track and rolling stock was reduced below acceptable standards. After a long series of widely publicized accidents, which further enraged its critics, deeply embarrassed the Morgan banks, and alarmed its ridership, the firm omitted its dividend in December of that year.[4]

If investors bought the stocks of Morganized companies on the basis of the reputation model of investment banking, then the failure of these two companies should have caused them to sell all of their stocks. Either Morgan and Company was ignorant of management's missteps and excesses as the partners claimed with respect to Mellen's more lurid activities. But then Morgan and Company was negligent in its responsibility to monitor the behavior of its clients. Or the firm connived with management in operations that put the bank's interests ahead of not only stockholders but many of its business partners as well. But if Morgan and Company felt secure enough behind the screen of its reputation to cheat even once, why should it not cheat again and again? Reputations will not serve as barriers to entry or restraint on self-dealing if they can be spotted without being ruined.

De Long is plainly at loose ends with respect to the cases. His inclination, in effect, is to explain away the IMM case by reestimating the Morgan effect on stock prices with nonparametric tests that discount outliers. But the whole point of reputations in business as he defines them is that they are supposed to insure against the occurrence of (negative) outliers. Evading the problem only calls attention to it.

Facing the fiascoes squarely, on the contrary, shows in my view that the difficulties in De Long's explanation of the Morgans' success are in the particular model of reputation he applies, not in the deeper intuition that trust and reputation plays an important part in explaining the firm's behavior. In fact, what is most surprising about the fiascoes, other than that they occurred at all, is that most of Morgan and Company's mistakes were honest mistakes—misjudgments about business conditions rather than efforts to deceive—and that the firm went to considerable lengths to limit the losses that resulted. As an example of an honest misjudgment, take the matter of overpayment for the constituent properties, a consideration in both the IMM and New Haven cases. The purchase prices reflected expectations about the growth rates of future earnings, as was commonly (and reasonably) the case. When earnings

4. Ibid., 354–56, 607–12.

grew at the expected rate, as in the case of U.S. Steel, things went well, when not, then not. But Morgan's two disastrous predictions arguably resulted from a mindless extrapolation of past experience in the railroad and other industries: witness the failure to anticipate the effects of new entrants such as tramp steamers and later automobiles[5] into markets that the firm wanted to dominate through control of existing properties. If there was deception here, it was as much self-deception as anything else. With regard to the limitation of losses, consider the example of the complex financing of $45 million of New Haven debt, which Morgan undertook at an indeterminate risk to itself and which alone prevented the road from failing or being placed in receivership. Or note that prominent Morgan directors remained on the board of the IMM and continued their efforts to make success of the venture until 1932, when, as world trade collapsed, the bank severed its ties with the company.[6]

Morgan and Company was thus very concerned to protect its reputation for reliability and integrity, even when its reputation defined as a performance bond was forfeit. Why? One way to respond to that question without abandoning the reputation model on which De Long's essay is based would be to define more precisely to whom the bank considered itself as owing its reputation, and how that obligation had to be honored. This means elaborating the view of the bank as an honest broker or—stretching the point in a way that De Long frequently does—honest monitor, balancing the needs of its customers and the investing public. It could be defined instead as, say, a reliable member of the club of financial intermediaries, answerable above all to fellow members. In that case, stock prices might fall without doing irreparable damage to the firm's reputation, but outright failure of one of its companies, including significant write-offs of bonded debt, would. I believe that the more such a notion is elaborated, the closer it comes to a plausible view of all the stylized facts—including now the fact of failure—in which reputation turns out to be a necessary but insufficient condition for explaining Morgan and Company's success. But that is the long way around. The next part starts with a sketch of this more comprehensive view and then distinguishes it from the core idea of the reputation model, however elaborated.

Morgan and Company as Market Makers

Economic historians usually know, even if economists often do not, that markets do not arise spontaneously. The background rules of exchange, such as contract law or the rules governing liability, as well as the distribution and meaning of control over property, depend on the cumulative outcome of interminable conflicts particular to each economy. Where, as in the advanced capitalist countries, markets have long existed, however, the emergence of the most fundamental rules of exchange appears so inevitable and those rules

5. Ibid., 389.
6. Ibid., 609–10, 491.

change so slowly and with such an air of self-evidence that markets appear to create themselves.

To make a market in the sense I intend here is a more deliberate act. It is to create and maintain orderly conditions under which controls over assets of particular kinds can be exchanged and combined in novel ways. Market making in this sense depends on and may require elaboration of the background rules of exchange in a particular economy. But (assuming that all transactions are voluntary) it also depends on the capacity to imagine some way in which redeployment of assets would make at least some parties to the exchange better off while worsening the condition of none. Those who make markets, therefore, must be able to value assets in various conditions and discover how to redeploy them in the most valued way.

What I want to suggest is that Morgan and Company achieved its dominant position in U.S. banking by making a market in the control of transportation and industrial companies, that the power to make such markets depended on respect for boundary conditions on the outcomes of market transactions and was in this sense self-limiting, and that a reputation for integrity was a necessary but far from sufficient condition for the exercise of this power. J. P. Morgan and his partners seem to have glimpsed the possibilities of this role and acquired the expertise to exploit it during the 1880s as they pursued the family's established business of selling American railroad securities to investors in the United States and Great Britain. By the beginning of that decade, Morgan was abandoning the earlier strategy of financing only well-established railroads,[7] and underwriting the debt for the construction or completion of "unbuilt" roads, whose value fluctuated depending on changing estimates of the costs, progress, and probable returns of the work-in-progress as well as the general condition of the financial markets. To manage these risks the firm had to learn to use its own resources and syndicates of underwriters, which it rapidly formed to buffer securities in roads such as the Oregon and Transcontinental against market turmoil.[8] The new expertise in the management of the securities markets drew the firm by middecade into the reorganization of bankrupt or faltering lines. As in the case of the Philadelphia and Reading in 1886, these restructurings required creation of the usual financial apparatus, the careful assessment of the road's affiliated properties (coal in this instance), and renegotiation of its leases on connecting lines. But also and more importantly, the restructuring created an agreement with the road's chief competitor (the Pennsylvania Railroad) to divide traffic in the region so as to "maintain paying rates," organization of an anthracite coal pool to stabilize prizes in *that* industry, and formation of a three-man committee (effectively headed by Morgan) representing the five-year voting trust that had final authority over management's decisions during the period of reorganization. The debt of the reor-

7. Ibid., 221–22.
8. Ibid., 249–53.

ganized line proved easily marketable precisely because Morgan and Company knew the road's finances in detail and because key revenue flows had been rendered more predictable by the reorganization itself. This experience, together with the reorganizations of the Baltimore and Ohio and the Chesapeake and Ohio in this same period must have confirmed what J. P. Morgan plainly suspected: The reorganization of companies was remunerative in itself and the ideal way to maintain a dominant position in the market for corporate securities. But the reorganization of a company depended on the reorganization, in whole or part, of its and allied industries.[9] From here the industrial reorganizations of the following decades were just around the corner.

I underline three aspects of this market-making activity in support of the contention that it was self-disciplining and created barriers to entry that included but were not limited to a reputation for integrity and reliability. First, the vast possibilities for self-dealing inherent in market making were checked at least in part by the obligation of reorganized companies to service their bonded debt. If Morgan and Company tolerated overpayment for the constituent properties of the new combines, whether because of greed or because of good-faith misjudgment of their potential profitability, then, as we saw, this could be detected and penalized by the financial markets. The Morgan power to reorganize firms opened the door to great riches, but as the frantic efforts of equivalent modern investment bankers such as Kohlberg, Kravitz, and Roberts to keep debt service on their companies current reminds us, it is not a license to steal. Morgan, recall, became an expert in industrial reorganization by first becoming an expert in the reorganization of bankrupt railroads. If he could not keep companies he created out of bankruptcy, what was he good for?

Second, the ability of Morgan and Company to make a market in firms depended on possession of highly specialized kinds of knowledge and disposition over diverse but complimentary resources, including political influence, all of which constituted barriers to entry into the market for corporate reorganization. To envision corporate restructuring as Morgan and Company did was to imagine simultaneously not only redistribution of properties and the means of financing and redistribution but also a new market order and a governance structure for monitoring it. To evaluate assets, it was necessary to consider their use in different settings, which required imagination of new governance structures, which required elaboration of new kinds of property, access to pools of capital, and so on. It was the combination of all these capacities, not any one alone, that I think allowed Morgan and Company to dominate the market for corporate reorganization. Participants in that market turned to the firm, it seems to me, not because it was more trustworthy than other securities dealers, but precisely because it could do things securities

9. Ibid., 259–66.

dealers could not—and this because it possessed, as investment bankers would say today, a technology that the others lacked. To see how specialized this technology was, recall the near disastrous results when Morgan and Company applied it to new problems, as in the case of the IMM and the New Haven. If it was dangerous for the leading maker of the market in corporate reorganization to move from one industry to another, imagine how forbidding it must have seemed to enter the general line of business in the first place.

Third, to say this does not imply that a reputation for integrity did not also operate as a barrier to entry to the Morgan and Company's field of operations or as a check on the firm's dealings. I already noted that the firm was only as good as its ability to insure that Morganized companies serviced their debt, and in fact went to extraordinary lengths to avoid bankruptcies. My point is simply that a reputation for knowledgeable integrity alone leaves a lot unexplained about Morgan and Company's place in the banking industry. Indeed, it is only when that reputation is interpreted in the light of the partners' widely acknowledged role as experts in corporate reorganization that the firm's ability to prosper despite the miserable performance of several Morganized common stocks becomes comprehensible. Morgan made companies, effectively warranted them against failure, and stood behind the warranty; and the securities industry evidently knew it. But it could not make companies because it was or was reputed to be more trustworthy than its competitors, any more than it could have done so if it had a less savory reputation than they.

For a Less Constraining View of Constraints in History

As I noted at the outset, Chandler and De Long both intend to explain the general discipline that puts economic power to productive use when perfect competition does not. For Chandler, the disciplinary mechanism is technology; for De Long, the need to acquire and maintain a reputation for trustworthiness. Here I want to extend and conclude the discussion by indicating how pursuit of such arguments, whatever their precise form, leads to a characterization of economic constraints that obstructs understanding of how different economies change in history.

The difficulty is that, to be believable as a parsimonious explanation of constraint in any particular time or place, arguments of this type have to create the impression that they hold everywhere and always. They suggest, indeed, that economies will prosper to the extent that their institutions conform to the demands of the alleged constraints; and insofar as it also presumed—as it typically is—that pursuit of individual self-interest slowly pushes whole economies in the direction of prosperous outcomes, views of this kind wind up suggesting that all industrial economies will adopt similar, efficiently constrained forms of organization. Chandler's *Scale and Scope,* as well as his earlier project with Herman Daems,[10] argues, for example, that successful

10. Alfred D. Chandler, Jr., and Herman Daems, *Managerial Hierarchies* (Cambridge: Harvard University Press, 1980).

corporations in industries with economies of scale developed similar managerial structures, first in the United States and then in Germany, France, and Great Britain. Analogously De Long argues that the superior long-term performance of economies—Germany, Japan, and American in the Gilded Age—monitored by "financial capitalist" institutions, such as the Morgan bank, as compared to economies (Great Britain) that did not develop them is strong circumstantial evidence that those institutions contributed significantly to productive efficiency. His concluding remark that the intellectual "children and grandchildren" of the Progressives, and notably Lester Thurow, are discovering the virtues of a financial system that their doctrinal forebears reviled reinforces the impression that he believes "financial capitalism" to be a transhistorical—meaning "right," the quotation marks being, in this case, my doing—solution to the problem of allocating capital in an industrial market economy.

One obvious shortcoming of this view is that it reduces the practically and theoretically pressing question of why some economies fail to develop the institutions needed to meet the highest competitive standards to the question, What noneconomic disturbances retarded growth? For if by assumption the creation of such institutions is the natural outcome of the individual pursuit of self-interest under the appropriate economic (market and technological) conditions, then only some exogenous, noneconomic perturbances can obstruct what Adam Smith called the "natural progress of opulence."[11] Thus Chandler follows Donald Coleman in explaining the failure of pre-World War I British firms to expand and move into new industries as the result of management's attachment to a gentlemanly disregard for growth, a "value" so strong and attractive that it dominated the behavior of even those managers who were not gentlemen. The failure of U.S. corporations to keep pace with their Japanese competitors is attributed to their unprecedented, imprudent, and implicitly fainthearted attempt to escape the growing international competition of the 1960s by diversifying into unrelated businesses—attractive because of their high growth rates but so unfamiliar as to be treacherous to control—rather than defending their areas of core expertise.[12] In the same spirit, De Long explains the destruction of "financial capitalism" in the United States in the interwar years as the result of a rise in populist sentiment in Congress, the panic created by the Great Depression, and the success of marginally scrupulous door-to-door salesmen of stocks and bonds who "were able to directly tap savings that would otherwise have flowed into the life insurance and banking systems, and would presumably have reached the capital market in the hands of more sophisticated money managers." What are economic historians doing if they spend half their time appealing to some aspect of high economic theory to explain why things should go right and the other half pointing to things beyond the economy to explain why they do not?

11. Adam Smith, *The Wealth of Nations* (New York: Modern Library, [1776] 1937), book 3, chap. 1.
12. Chandler, *Scale and Scope*, 292, 622.

A second, related shortcoming is that views of generally efficient and very constraining constraints make it impossible to pose, let alone answer, questions about the ways the institutional embodiment of a particular economic regime—"financial capitalism" or mass production—influence the subsequent development of an economy. In the logic of De Long's argument, "financial capitalism" in Gilded Age America is theoretically indistinguishable from "financial capitalism" in pre–World War I Germany. Yet there plainly were important differences between the two. The forty-five employees of Morgan and Company had to steal time for monitoring from the time needed for deal making; and monitoring, perhaps predictably, got short shrift after the initial period of reorganization.[13] The meandering policies of U. S. Steel—now putting a price umbrella over its competitors, now driving them to the wall through rationalization and cost cutting—is the emblem of the bank's distant control.

The Deutsche and other German great banks did notably more monitoring. For one thing, they themselves grew by amalgamation with regional banks that had often grown up with the largest firms in their respective local economies. For another, the great banks had so many industrial participations—as De Long observes, Deutsche directors alone sat on the boards of 159 companies in 1912 (note 27)—that their officials could become experts in the substance of particular industries.[14]

Perhaps, as seems likely to me, this difference had an effect. Perhaps differences in monitoring had negligible effects on corporate structure. The only way to decide is to take seriously the possibility that it might have. This requires regarding the bank not just as trustworthy, but as trustworthy at doing something in a particular setting. Following the earlier discussion of an alternative view of the Morgan bank, this something might be making a market for the control of firms in Germany and the United States. The advantage of this formulation is that it captures the core constraints common to what might be called the property-transition regime specific to each country without making those constraints determinative of outcomes. Put another way, an analysis of this kind makes it possible to avoid a fruitless distinction between universal compulsions and local, historical accidents without reducing economic history to chronicle writing or sterile application of high theory.

One of the great opportunities, as I see it, of the new economic information broadly understood is precisely to understand the way the views and strategies of the economic actors as structured by the economy's manifold connection to

13. Carosso, *The Morgans*, 486–87. IMM was, significantly, the exception. Here the partners continued to watch matters closely, although to little effect (ibid., 486,491).

14. J. Riesser, *The German Great Banks and Their Concentration in Connection with the Economic Development of Germany* (Washington, DC: Government Printing Office, 1911); Martin Gehr, "Das Verhältnis zwischen Banken und Industrie in Deutschland seit Mitte das 19. Jahrhundert bis zur Bankenkrise von 1931 unter besonderer Berücksichtigung des industriellen Grosskredits," inaugural diss., Faculty of Law and Economics, Eberhard-Karls-Universität zu Tübingen, Germany, 1959.

political and social life shape economic outcomes—and, I cannot help adding, *vice versa*. Stopping short of that will mean merely reproducing old results and old statements in new language. Because, like De Long, the New Cambridge Business Historians are drawn by the aesthetic of theoretical parsimony yet alive to the historicity of economic development, they can play an important part in making sure that the occasion is not lost. I suspect that in the end their reputation will depend not least on their success in that.

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