The ‘Berle and Means Corporation’ in Historical Perspective

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I. INTRODUCTION

_The Modern Corporation and Private Property_ begins with a startling characterization of the business world of the 1930s. “Grown to enormous proportions,” the first paragraph states, “there may be said to have evolved a ‘corporate system’—as there was once a feudal system.” And the emergence of this system had fundamentally transformed the role of the corporation in society. The corporations at its core were so large and influential that their behavior impacted “the life of the country and every individual.” And yet, their enormous scale meant that they were financed by “the wealth of innumerable individuals,” nearly all of whom had become completely passive investors with no role in their governance: ownership was separated from control.\(^1\) To Berle and Means, this meant that traditional concepts of the corporation were no longer adequate. A new concept of the corporation was needed, and this new concept might imply that the interests of the community ought to be incorporated into corporate conduct.

The arguments of _The Modern Corporation_ are framed as quite historically specific. The book argues that the rapid growth of large businesses over recent decades had produced something “beyond the imagination of most statesmen and business men at the opening of the present century.”\(^2\) And it explicitly contrasts the corporate system of the 1930s with corporations from earlier eras. The reader is told, for example, that ownership and control were unified within nineteenth century corporations, and that large quasi-public firms with thousands of shareholders gradually began to displace smaller enterprises and dominate many sectors of the economy over time.


\(^2\) Id. 3.
In spite of the importance of history for the argument of *The Modern Corporation*, book presents only a cursory sketch of the historical processes that led to the emergence of the corporate system, and no clear account of the timing of developments such as the separation of ownership from control among major corporations. In part this reflects the difficulty of researching the early history of the American corporation, and the paucity of surviving business records from the nineteenth century. But it also may reflect the intuitive notion that the major corporations of the 1930s were so much larger, and so different, from early business enterprises that it was hardly necessary to document the differences in detail. That the rise of the corporate system and the separation of ownership from control were recent developments likely seemed obvious. Much of the subsequent literature on the evolution of the corporate form accepted the historical claims of Berle and Means.

Yet the evolution of the American business corporation was more complex and varied than that intuitive characterization would imply. Many corporations chartered in the late eighteenth and early nineteenth centuries were in fact quite large, and the lists of their initial subscribers sometimes included more than a thousand names. By the early nineteenth century, securities exchanges had opened in several American cities, facilitating trade in the stock of many of those enterprises, and helping to diffuse the shares among larger numbers of investors. And there is evidence that problems related to what Berle and Means called the “divergence of interest between ownership and control” were present as well. For example, the history of American railroads includes scandalous episodes of insiders entrenching themselves at the expense of the other securities holders. And the shareholders of mid-nineteenth century manufacturing

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3 See, e.g., *id.* at 4.


7 BERLE & MEANS, *supra* note 1, at 112.

8 See, e.g., Charles F. Adams, Jr., and Henry Adams, *Chapters of Erie, and Other Essays* (1871).
corporations complained that the directors of those enterprises engaged in self-dealing, and manipulated proxy voting to entrench themselves in their positions. The corporations of the 1930s were different from those of earlier eras, but it is not clear whether those differences were consistent with the claims of Berle and Means.

This paper presents new evidence on the evolution of the business corporation in America, and on the emergence of what is commonly termed the ‘Berle and Means corporation.’ Drawing on a wide range of sources, I investigate three major historical claims of *The Modern Corporation*: that large corporations had displaced small ones by the early twentieth century, that the quasi-public corporations of the 1930s were much larger than the public corporations of the nineteenth century, and that ownership was separated from control to a much greater extent in the 1930s compared to the nineteenth century. I address each of these claims with new data, and present analyses of nineteenth century corporations that mirror Berle and Means’ analysis of the corporations of the 1930s.

In order to determine whether large corporations displaced small enterprises, I document changes in the total number of business corporations in the United States over time. If large corporations had indeed taken the place of small ones by the 1930s, then the total number of business corporations should have fallen. I next investigate whether the large enterprises chronicled in the *The Modern Corporation* were in fact larger than the public companies of the nineteenth century by documenting the scale of public companies sampled from different points in the nineteenth and early twentieth centuries. And finally, I analyze the ownership structure of public companies from the 1820s, 1870s, and 1930s, to investigate whether there were changes in the degree to which ownership was separated from control over time.

The conclusions of this analysis revise the historical claims of *The Modern Corporation* in important ways. First, large corporations did not displace small corporations, as claimed by Berle and Means. The early twentieth century in fact witnessed a flourishing of the small business corporation, as reflected in rapid growth in the total number of corporations. The huge manufacturing firms and utilities

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9 *E.g.*, J.C. Ayer, *Some of the Usages and Abuses in Our Manufacturing Companies* (1863).
that are the focus of *The Modern Corporation* apparently coexisted with large and growing numbers of very small corporations, rather than displacing them.

On the other hand, consistent with the argument of the book, I find that the quasi-public corporations of the 1930s were indeed significantly larger than their predecessors from either the nineteenth century or the earlier decades of the twentieth century, both in absolute terms, and relative to average incomes. Berle and Means were correct in their judgment that the largest businesses of their time had achieved a scale that was historically unprecedented.

But even though they were larger than their predecessors from earlier eras, it does not necessarily follow that ownership was separated from control within those enterprises to a greater extent. Berle and Means clearly argue that the “surrender of control” among investors that resulted from the diffusion of shareholding was a “new aspect” of the corporation in their time.\(^{10}\) Yet direct comparisons between the ownership structures of the 200 corporations chronicled in their book with those of public companies from earlier eras reveals that the separation of ownership from control was not a modern phenomenon. In fact ownership was separated from control to a *lesser* extent among the 1930s corporations of Berle and Means than among the public companies of the 1870s, and even the 1820s. In some important respects, the Berle and Means corporation emerged well before Berle and Means claimed that it did.

One implication of this finding is that the problems and contradictions identified by Berle and Means as consequences of the separation of ownership from control were likely much more common throughout the history of the corporation in America than their book suggests. The turn of the twentieth century witnessed the emergence of corporations whose enormous scale was historically unprecedented. Yet public companies with relatively large numbers of investors and little if any concentrated shareholding were present from at least the early nineteenth century. It is likely that there was never a period in which ownership and control were unified, at least among publicly traded companies.

Another implication of this finding is that the arguments for a new conception of the corporation presented in *The Modern Corporation* apply to public companies of all eras, past and future, rather than just

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\(^{10}\) BERLE & MEANS, *supra* note 1, at 4.
the big businesses of the 1930s. If we accept that the separation of ownership from control transforms the property relationships embodied by the corporation and the range of interests that should be considered in governing corporate conduct, then the questions raised by *The Modern Corporation* are not historically specific, and are relevant to the general concept of the public corporation.

II. BERLE AND MEANS ON NINETEENTH CENTURY CORPORATE HISTORY

*The Modern Corporation* does not present a full account of the history of the American business corporation. Instead, several chapters begin with descriptions of early corporations, and then present a sketch of how they changed over time, in order to contrast the modern corporate system with historical enterprise, and place the book’s characterizations of modern corporations in historical context.

Chapter 1 of book 1 presents a description of the rise of what is termed the corporate system, which includes a brief discussion of its nineteenth century beginnings. Berle and Means characterize nineteenth century corporations as small enterprises in which ownership and control were unified:

The typical business unit of the 19th century was owned by individuals or small groups; was managed by them or their appointees; and was, in the main, limited in size by the personal wealth of the individuals in control.\(^{11}\)

Chapter 1 of book 2 further elaborates on this characterization, arguing that the agents to whom management was delegated were carefully monitored by the owners, who possessed strong rights of control:

We have the picture of a group of owners, necessarily delegating certain powers of management, protected in their property rights by a series of fixed rules under which the management had a relatively limited play … The management of the corporation indeed was thought of as a set of agents running a business for a set of owners, and while they could and did have wider powers than most agents, they were strictly accountable and were in a position to be governed in all matters of general policy by their owners.\(^{12}\)

It is important to note that some of the language surrounding these passages suggests an acknowledgement that there could have been exceptions to these generalizations; their description of a “typical business” might allow for atypical businesses with other characteristics. Indeed, Berle and Means concede that some

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\(^{11}\) *Id.* 4.

\(^{12}\) *Id.* 125-6.
large corporations emerged in the early nineteenth century in textile manufacturing in New England, and the significant scale and diffuse ownership of mid-nineteenth century railroads. But particularly for the early nineteenth century, they argue that in general, ownership was not separated from control: “the number of shareholders was few; they could and did attend meetings; they were business-men; their vote meant something.”

Although they do not provide a clear account of the timing of the transition, Berle and Means argue that later, large corporations began to emerge. The new enterprises displaced the old, smaller ones, creating a new corporate system:

These units have been supplanted in ever greater measure by great aggregations in which tens and even hundreds of thousands of workers and property worth hundreds of millions of dollars, belonging to tens or even hundreds of thousands of individuals, are combined through the corporate mechanism.

Berle and Means argue that those great aggregations achieved a scale that was historically unprecedented, and obtained control over an ever growing share of economic activity. Economic and political power was concentrated to a great extent within a relatively small number of giant corporations.

And control of those corporations was, in turn, held by a relatively small number of people. Many of the new enterprises had tens or even hundreds of thousands of shareholders, who were completely passive. This fundamentally changed the traditional conception of property rights associated with stock ownership, and severed the connection between corporate ownership and control:

The corporate system appears only when [the] private or “close” corporation has given way to an essentially different form, the quasi-public corporation: a corporation in which a large measure of separation of ownership from control has taken place… The property owner who invests in a modern corporation so far surrenders his wealth to those in control of the corporation that he has exchanged the position of independent owner for one in which he may become merely recipient of the wages of capital.

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13 Id. 125, fn. 14.
14 Id. 4.
15 Id. 5.
In fact even the stockholder’s claim on the wages of capital may be lost, as controlling insiders—
either the managers, or minority owners—may use their powers to enrich themselves at the expense
of the other securities holders:

If we assume that the desire for personal profit is the prime force motivating control, we
must conclude that the interests of control are different and often radically opposed to those
of ownership; that the owners most emphatically will not be served by a profit-seeking
controlling group. In the operation of the corporation, the controlling group even if they
own a large block of stock can serve their own pockets better by profiting at the expense of
the company than by making profits for it.\footnote{Id. 114.}

But the implications of these historical developments were much broader to Berle and Means than
simple conflicts of interest between the shareholders and corporate insiders. The transformation of the
economy from one in which production took place within small enterprises operated by owner-managers, to
one completely dominated by a handful of large corporations controlled by managers were not significant
owners, and were also not accountable to the owners, constituted a fundamental change. This change
“destroy[ed] the basis of the old assumption that the quest for profits will spur the owner of industrial
property to its effective use,” and consequently “destroy[ed] the very foundation on which the economic
order of the past three centuries has rested.”\footnote{Id. 9, 8.} Berle and Means conclude that a new concept of the
corporation that could account for these changes was needed.

III. HISTORICAL CLAIMS OF BERLE AND MEANS: NEW EVIDENCE

As the foregoing discussion makes clear, The Modern Corporation presents a brief account of the
rise of a new corporate system. This corporate system, as described in the book, was the product of three
developments: (A) the displacement of small firms by large corporations; (B) growth in the scale of quasi-
public corporations; and (C) the separation of ownership from control as a result of the growth in corporate
scale. In what follows, I introduce new historical evidence regarding each of these claims, and analyze how
well they characterize the historical evolution of the American business corporation. I present a cursory
A. DISPLACEMENT OF SMALL CORPORATIONS

*The Modern Corporation* establishes clearly that in the 1930s, large quasi-public companies accounted for a substantial fraction of economic activity, and dominated many sectors of the economy. But the book’s account of the rise of the corporate system describes the new aggregations as “supplanting” smaller corporations, or older private companies “giving way” to newer public ones.  

In order to evaluate this claim, and to gain a sense of how broadly applicable the claims of *The Modern Corporation* are to the governance of corporations generally, it is necessary to trace out the history of the number of business corporations in the United States. If large enterprises displaced small ones, then one should expect to observe a reduction in the number of small corporations, and therefore in the total number of corporations.

Unfortunately, comprehensive data on the number of business corporations in the United States does not exist for the years prior to the Revenue Act of 1916, which created the modern income tax system and corporate income tax. However, some American states, particularly those with large numbers of business corporations, collected detailed records of operating corporations as part of their systems for the collection of corporate taxes. These states’ counts of their own business corporations provide suggestive evidence of the early evolution of the use of the corporate form. Beginning in the 1870s, Massachusetts, a state in which the corporate form found very heavy use, began to collect and publish detailed data on its

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18 *Id.* 4, 5.
Figure 1: 
Corporations Per Million Persons, 1820-1930

This figure presents the number of corporations per million persons from 1918-1930 for the United States, for 1870-1910 for Massachusetts (with data presented a five-year intervals), and for 1826 and 1868 for New York. All population data are from the decennial census, linearly interpolated. Data for the states are scaled by those states’ populations. The sources and methods used to produce the figure are presented in the Appendix.

corporations; New York, another prolific creator of early corporations, established capital taxes in earlier periods that resulted in the collection of records of its corporations. A rough account of the evolution of the number of American business corporations can therefore be constructed from comprehensive federal data for the years following 1916, from Massachusetts data for 1870-1916, and from New York data, which are available for some years prior to 1870. In order to account for the fact that the economy and population grew considerably over time, the total number of corporations will be scaled by the total population of the United States, or of the relevant state, from the same year, as obtained from the federal census.

Figure 1 presents these data graphically. The point farthest to the right is for 1930, the year of much of the corporate ownership data in *The Modern Corporation*. In that year, there were about 519,000 business corporations in the United States; scaling this number by the total population (about 123.2 million people) results in a ratio of about 4,200 corporations per million people. This number was likely the highest
in the world, and shows that American businesses were quite unusual in their propensity to utilize the corporate form, particularly among small enterprises.21

Moving backward in time, the data for the United States shows rapid growth over the previous twelve years (1918-1930). When we turn to the period 1870-1910, for which we have data for Massachusetts (scaled by its population), the pattern of rapid growth in the use of the corporate form continues back to the year 1900 or so, which represents something of an inflection point. For the years 1870-1900, growth in the use of the corporate form was far slower. Then for the early nineteenth century, the New York data shows less frequent use of the corporate form, and slower growth in its use.22 Since the use of the corporate form in New York in the early twentieth century was generally consistent with that of the nation as a whole, the years after 1868 must have seen tremendous growth in the number of corporations in New York.23

An obvious question that arises regarding these data is the representativeness of the states of Massachusetts and New York. In fact those states were among the most prolific creators of business corporations in the early nineteenth century.24 This implies that the figure likely overstates the number of corporations for the nineteenth century compared to the nation as a whole, from which it follows that the growth in the number of corporations in the years of the late nineteenth or early twentieth century must have been even more rapid for the nation as a whole.

We can conclude from these data that in contrast to the claim that small corporations were somehow displaced or made irrelevant by the rise of big business, the number of small businesses grew

21 Leslie Hannah, A Global Corporate Census: Publicly Traded and Close Companies in 1910 68 ECONOMIC HISTORY REVIEW 553 (2015) (shows that in 1910, the only year for which such evidence has been compiled, corporations in the United States accounted for 59 percent of total worldwide corporations).
22 The total number of corporations in New York in 1867 was 1,367, which is about the same as the number of corporations in Massachusetts in 1871. The much greater population of the State of New York accounts for the lower level of the ratio for that state.
23 See the Appendix.
24 See, e.g., Eric Hilt, Early American Corporations and the State, in CORPORATIONS AND AMERICAN DEMOCRACY 48 (2017) (showing that the number of charters granted to business corporations in early nineteenth century New York was larger than the average for the United States); and Eric Hilt, Corporate Governance and the Development of Manufacturing Enterprises in Nineteenth-Century Massachusetts, in ENTERPRISING AMERICA: BUSINESS, BANKS AND CREDIT MARKETS IN HISTORICAL PERSPECTIVE 78 (2015) (showing that the number of charters granted to business corporations in early nineteenth century Massachusetts was larger than the average for the United States).
quite rapidly in the early twentieth century—the rise of the large corporations at the heart of the book was in fact accompanied by a flourishing of small private companies. The corporate system chronicled by Berle and Means apparently co-existed with other corporate systems of smaller and much more numerous corporations.

B. GROWTH IN THE SCALE OF QUASI-PUBLIC CORPORATIONS

We turn now to an analysis of how the scale of quasi-public companies evolved over time. Much of the analysis of *The Modern Corporation* is devoted to documenting the ownership of the 200 largest American corporations in 1930. The ideal way to investigate changes in the size of quasi-public companies would be to compile data on the 200 largest American businesses in earlier time periods, and document the changes in their average size. Unfortunately, insufficient records exist for nineteenth century corporations to compile such data. Instead, I begin by analyzing the size of the very largest corporation in existence in the United States at various points in time, which can be determined with a reasonable degree of confidence. Focusing on the single largest company may not reveal much about the typical quasi-public company, but it does provide a rough sense of the scale that large corporations had achieved. I then analyze samples of publicly traded companies from different historical time periods. These firms are quite representative of the public corporations of their eras, but may not be directly comparable to Berle and Means’ sample for the 1930s, which consists of the 200 largest corporations, irrespective of whether they were publicly traded.

In order to make the relative sizes of different business corporations comparable over time, I scale the value of their assets by the contemporaneous value of national income per capita. For example, if a business had $1 million in assets in 1840, and income per person in 1840 were $100, then the ratio of the two would be 10,000. This would imply that the total value of the assets of that business was 10,000 times that of average annual income, or put another way, it would take the incomes of 10,000 average individuals to purchase all the assets of the business. This ratio therefore has a natural connection to the degree of
Figure 2:
Scale of the Largest Existing Corporation in the United States:
Total Assets/GDP Per Capita, in Millions

This figure presents the changes in the scale of the largest existing business corporation in the United States, measured as total assets relative to GDP per capita. For example, the second point from the left, the Second Bank of the United States in 1831, is 1.3 million, meaning that the value of its total assets at that time ($112.7 million) was equivalent to 1.3 million times the value of GDP per capita in the United States at that time, which was $86. For sources and data, see the Appendix.

diffusion of ownership one would expect to see. And as both values are obtained at the same point in time, calculating their ratio requires no adjustment for changes in the price level.

Figure 2 presents the ratio of the total assets of the largest business in the United States to nominal income at various points in time. The seven corporations that reached the status of largest in the country are: the First Bank of the United States (total assets observed in 1801), the Second Bank of the United States (1831), the Baltimore and Ohio Railroad (1855), the Pennsylvania Railroad (1872), the Union Pacific Railroad (1888), U.S. Steel (1902), and AT&T (1930). The data in the figure exhibit a dramatic increase in the twentieth century, with U.S. Steel’s assets of $1.5 billion being equivalent to more than 5.5 million times income per capita in 1902, and AT&T’s assets being equivalent to nearly 9 million times income per capita in 1932. Consistent with the argument of Berle and Means, the largest public companies had
achieved a scale that was historically unprecedented in the early twentieth century. The growth in the scale of the largest enterprises far surpassed the growth of income per person.

It is worth noting that the Second Bank of the United States, with total assets of more than $100 million, was quite large by any standard, and in fact more than 1 million times the value of income per capita during its era. Seen in this context, the political controversies surrounding that institution are not surprising. But this suggests that Figure 2 likely understates the contrast between twentieth century corporations and their predecessors in the early nineteenth century. Whereas there were many large firms that nearly rivaled U.S. Steel and AT&T in size in the twentieth century, the second- and third-largest corporations in existence in the early 19th century were likely orders of magnitude smaller than the First and Second Banks of the United States, which were highly unusual enterprises.

A broader set of comparisons can be made using samples of public companies. Here I focus on public companies from contexts in which ownership records are available from archival sources. These include companies whose shares were traded on the New York Stock & Exchange Board (the predecessor to the NYSE) in 1825-26, the corporations traded on the Boston Stock Exchange in 1872, NYSE-listed corporations from 1901, and the Berle and Means sample of the 200 largest corporations in 1930.

Figure 3 presents the average value of total assets for public companies scaled, as in Figure 2, by contemporaneous income per person. Consistent with the data for the largest existing corporations, these data show a dramatic change in the twentieth century. But here the growth is even more dramatic, and in order to present the range of values on a single graph, the data are presented in logarithmic scale. Whereas the total assets of public companies in the 1820s and 1870s were equivalent to about 13,000 and 15,000 times income per person, those of 1900 were equivalent to more than 300,000 times income per person, and those of 1930 were equivalent to 870,000 times income per person. This is again quite consistent with the argument in *The Modern Corporation* that the quasi-public company achieved unprecedented scale in the early twentieth century.
Figure 3:
Scale of Publicly Traded Corporations in the United States:
Total Assets/GDP Per Capita, in Millions (Log Scale)

This figure presents the changes in the scale of publicly traded corporations in the United States. The numbers plotted in the figure are the average values of total assets for public companies scaled by GDP per person.

We conclude from these data that Berle and Means were correct in their characterization of the growing scale of quasi-public corporations over time. Compared to their 200 firms in 1930, public companies from the nineteenth century were considerably smaller, even if their scale is measured relative to income per person.

C. THE SEPARATION OF OWNERSHIP FROM CONTROL

We next turn to one of the most important arguments of The Modern Corporation, that ownership separated from control among quasi-public companies in the early twentieth century. Berle and Means do not give a precise date for this development, but their description of the history of the corporation implies that it was relatively recent. I therefore compare the degree of separation of ownership from control with those of samples of quasi-public companies from historical periods.
Berle and Means’ conception of the separation of ownership from control is not necessarily amenable to precise measurement. Except in cases where they found that a legal device was used to maintain control, they identified the party or parties in control of an enterprise from the distribution of ownership itself. For example, firms whose largest owner held more than half of the shares were designated as being under majority control, firms whose largest owner held less than half of the shares were designated as being under minority control, and firms with no substantial owners were designated as under management control. The degree of separation of ownership control was inferred from the size of the ownership stake of the controlling party; the smaller its size, the greater the degree of separation. Although in principle it may be possible to assign historical corporations into the Berle and Means categories of control from their ownership lists, doing so would introduce some uncertainty into the analysis. For example, the surviving records may not reveal whether control was held by some kind of legal device. In order to avoid such questions, I instead focus on the degree of ownership concentration as a measure of the separation of ownership from control, which is directly comparable across samples of companies.

Berle and Means present other data related to the separation of ownership from control as well. For example, they emphasize the enormous numbers of shareholders among the largest corporations of their time, and also the low degree of managerial ownership. Such data are also available for historical companies, and will be presented here.

I begin with an analysis of the total number of shareholders of public companies, focusing on the same samples of companies presented above. These data are presented in Figure 4. As with the figures displaying the size of corporate assets, the data for corporate ownership exhibit a similarly dramatic increase in the early twentieth century. The average number of shareholders increases from less than 200 in the 1820s, to around 600 in the 1870s, more than 5,000 in 1900, and around 39,000 in the sample of the 200 largest companies in *The Modern Corporation*. (The figure presents these data in logarithmic scale.) The number of shareholders in nineteenth century corporations was orders of magnitude smaller than in twentieth century corporations, and Berle and Means were correct in their claim that the numbers of shareholders among the largest enterprises had grown to historically unprecedented levels.
Figure 4:  
**Total Shareholders, Public Corporations (Log Scale)**  
This figure presents the changes in the average total number of shareholders among public companies in the United States. The average number of shareholders is presented in log scale. For sources and methods, see the Appendix.

But it may not be the case that ownership is separated from control when the number of shareholders is large. A large number of shareholders necessarily implies that a substantial fraction will hold a small stake in the business, which would likely contribute to passivity among the owners. But it does not necessarily follow that the shareholders as a group have collectively surrendered control of the enterprise when their numbers are large. A single owner holding a large block or majority of the stock could have been present among the other owners.

An alternative indication of the structure of ownership is the level of ownership held by management. As with the total number of owners, this figure does not clearly indicate the degree of separation of ownership from control. But it does provide an indication of the extent to which ownership and management are separated, which is related to the separation of ownership from control. Managerial ownership data are not presented for most of the 200 corporations in *The Modern Corporation*. But they are available from 1935, and also for 1995, from data reported to the Securities and Exchange Commission.
This figure presents the level of managerial ownership, computed as the percentage of the common stock held in the names of the officers and directors, over time. For sources and methods, see the Appendix.

They are also available for the same samples of companies presented above, and also for the Bank of New York in 1790.

The data are presented in Figure 5. In contrast to all the previous figures, these data exhibit no significant changes over time. Whereas the analysis of Berle and Means generally implies that there should be a downward trend, particularly in the twentieth century, no such trend is present. The corporations of the 1930s were substantially larger than their predecessors, and had far greater numbers of shareholders. Yet in terms of the fraction of their shares owned by management, they looked virtually identical to the public companies of the 1870s, or for that matter, to those of the 1790s. The data in the figure may suggest that the proportion of the shares held by the management in large public companies is less a function of corporate scale than other factors, which may not have changed so much over time.

Finally, I turn to the concentration of ownership itself. The two historical contexts for which complete ownership lists are available for a substantial number of public companies are the 1825-26
Table 1:  
Control of American Public Companies Over Time

| NYS&EB Listed Companies, 1826 | 52 | 75 |
| Boston Stock Exch Mfg & Utility Companies, 1872 | 80 | 98 |
| Berle and Means 200 Largest, 1930 | 59 | 63 |

This table presents the degree to which public companies in 1826 and 1872, and the Berle and Means sample of 200 companies from 1930, were widely held. Widely held is defined as lacking a substantial owner, where substantial is defined in two ways. Column (1) presents the percentage of the firms in each sample that did not have a 10 percent owner. Column (2) presents the percentage that did not have a 20 percent owner. For information on the sources and methods used in constructing the table, see the Appendix.

NYS&EB corporations, and the 1872 Boston Stock Exchange Corporations. From the complete ownership lists for these companies, I recorded the size of the largest block of stock held by any individual or institution. In Table 12 of *The Modern Corporation*, Berle and Means report the size of the largest block of shares held in many of their 200 companies. For some of them, however, they do not have ownership data, but instead indicate that the company was controlled by a legal device, was presumably under management or minority control, or was in other special circumstances, typically receivership. For companies in each of these categories, I assume that they had no significant owner. This should bias the data in favor of the argument of Berle and Means, showing a greater degree of ownership dispersion.

Table 1 presents comparisons of the degree to which the 1826, 1872, and Berle and Means companies (the 200 largest in 1930) were widely held. Following a categorization fairly standard in the corporate finance literature, I characterize a company as widely held if it does not have a significant owner. Two thresholds for a significant owner are used: an owner holding 10 percent, and 20 percent. The numbers in the table indicate the percentage of sample companies that are widely held in sense that they did not have a 10 percent owner (column (1)) or a 20 percent owner (column (2)).

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The data in the table completely reject the notion that the 200 companies analyzed by Berle and Means were more widely held, or had less concentrated ownership, than public companies from earlier eras. Quite surprisingly, ownership was substantially more concentrated among the Berle and Means firms than it was among 1872 Boston Stock Exchange firms. And the ownership of the their 200 firms was roughly comparable (if somewhat more concentrated when a 20 percent cutoff is used) to that of the public companies of 1825-26. At least within the available samples of public companies presented here, there is no evidence at all that ownership separated from control in the twentieth century – this was already the case among nineteenth century public companies, including those of the 1820s. Even though twentieth century firms were much larger in scale and had far greater numbers of shareholders, their ownership was relatively concentrated, and in fact more concentrated than that of many nineteenth century public firms.

This insight is consistent with the observation made by other scholars that the data presented in *The Modern Corporation* does not provide clear support for the notion that ownership was separated from control to a significant degree in 1930.26 Only 44 percent of the 200 firms in Table 13 of the book were characterized as under management control, for example. If we acknowledge that the ownership of the Berle and Means firms was in fact relatively concentrated, then the insight that it was no less concentrated than that of historical firms becomes somewhat less surprising.

The notion that ownership was separated from control among nineteenth century public companies is supported by other elements of the history of America’s securities markets as well. There have been many episodes in which the “divergence of interest” between controlling insiders and the outside securities holders of prominent public companies led to acute problems their governance. For example, a frustrated investor in some of the manufacturing firms traded on the Boston Stock Exchange in the 1860s published a pamphlet, entitled “Some of the Usages and Abuses in our Manufacturing Companies,” in which he argued that the firms’ many small shareholders had become entirely passive and had not adequately monitored

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26 See, e.g., Brian Cheffins and Steven Bank, *Is Berle and Means Really a Myth*, 83 BUSINESS HISTORY REVIEW 453 (2009) (argues “the evidence on the separation of ownership from control was, though, not clear-cut”); and Kenneth Lipartito and Yumiko Morii, *Rethinking the Separation of Ownership from Management in American History*, 22 SEATTLE UNIVERSITY L.R. 1038 (arguing that “more recent work tends to show that separation of ownership from control was neither as rapid nor as thorough as conventional readings of Berle and Means text assume”).
management or participated in the governance of those firms.\textsuperscript{27} As a result, the directors, who themselves held only small ownership stakes in their enterprises, engaged in a variety of transactions that benefitted themselves at the expense of the other securities holders, including self-dealing with their own mercantile partnerships for the purchase of raw material inputs or finished outputs; hiring their relatives for managerial positions; and paying themselves salaries that were excessive as well. The author of the pamphlet also argued that the directors sometimes entrenched themselves in their positions by soliciting proxy votes from shareholders through duplicitous means.

Evidence of similar governance problems can be found among nineteenth century railroads, and among the 1820s corporations whose shares were traded on the New York Stock & Exchange Board.\textsuperscript{28} Although one must be cautious about generalizing from these episodes—it is unclear whether they reflected problems typical among early public companies, or if they were unusual—they do suggest that problems related to the separation of ownership from control were at least present throughout much of the history of America’s public companies.

IV. DISCUSSION: HISTORY AND THE BERLE AND MEANS CORPORATION

Some of the data presented in this paper have confirmed major elements of the argument of \textit{The Modern Corporation}. The claim that quasi-public corporations became much larger over time, and had greater numbers of shareholders, has been shown to be completely correct. The 200 corporations in the sample of Berle and Means were radically different from early or mid-nineteenth century firms in both respects, and although they did not actually displace small enterprises in the way that Berle and Means described, they almost certainly did attain a degree of economic and political power that was historically unprecedented.

Yet it does not follow that the ownership of the large corporations of the early twentieth century was separated from control to a degree that was historically unprecedented. Even though the total number of

\textsuperscript{27} Ayer, \textit{supra} note 8.

shareholders among early nineteenth century firms was typically in the low hundreds, rather than in the hundreds of thousands, there were often no owners of substantial blocks of their stock. And twentieth century companies with more than a hundred thousand shareholders sometimes had substantial blockholders. All else equal, with greater scale one would certainly expect to find greater diffusion of ownership. Yet the scale of an enterprise is not the only determinant of the structure of ownership, and the data presented in this paper has shown that the ownership structure of the relatively small public companies from the nineteenth century was relatively similar to that of the corporate giants chronicled in The Modern Corporation.

The American business corporation has undergone a long and complex process of evolution; the public companies of the 1930s were quite different than those of the 1870s, or 1850s, or 1820s in many important respects. In spite of those differences, the ownership structures of public companies from all of those eras were relatively similar. Although the entrepreneurs who founded those enterprises and the shareholders who invested in them operated in different legal, technological and institutional contexts, problems related to the separation of ownership from control, and conflicts of interest between controlling insiders and outside securities holders were always present. There was likely never a period in which ownership and control were unified, with major corporations either run by owner-managers, or by a small handful of owners who delegated management to agents and carefully monitored their performance. Berle and Means write that the “surrender of control over their wealth by investors” in their era “has effectively broken the old property relationships.”29 The property relationships between investors and public companies never lived up to the ideal of their characterization of the early history. The problems related to the separation of ownership from control identified by Berle and Means are likely inseparable from the institution of the public company.

29 BERLE & MEANS, supra note 1, at 4.
V. CONCLUSION: THE NEW CONCEPT OF THE CORPORATION

The analysis of *The Modern Corporation* culminates in the argument that the changing role of the corporation in society required the development of a new conception of the corporation. It was no longer merely a legal entity created to facilitate the conduct of business, but it had become one of the most formidable institutions in society. Its profits were no longer the product of individual initiative, and its owners no longer took responsibility for it or participated in its management. Ownership was separated from control. And the control of these institutions that held so much influence over everyone’s wellbeing was held by individuals who were apparently accountable to no one.

Although it was written mostly in the 1920s, *The Modern Corporation* was published during the depths of the Great Depression. The economic cataclysm of the Great Depression presented fundamental challenges to policy makers, and the book’s analysis of what it describes as recent developments in the organization of the economy may have been perceived as holding insights relevant to the design of a policy response. In this way, the book’s characterization of the corporate system as something fundamentally new and specific to the 1930s likely added to its impact.

Yet the analysis of this paper has shown that some elements of the book’s description of the corporations of the 1930s were also true of the public companies of earlier eras. Ownership has likely always been separated from control, and the shareholders of corporations in the 1820s and the 1870s would have found some of the argument of *The Modern Corporation* familiar. The new concept of the corporation that Berle and Means urged scholars to develop, if it ever emerges, should be applied to historical corporations, as well as those of their era, and the corporations of today as well.
Appendix

Figure 1: Corporations per Million Persons

This figure presents total business corporations at various points in time, scaled by total population. Population figures were linearly interpolated from the decennial federal census. No comprehensive data exists for total corporations in the United States for years prior to the Revenue Act of 1916, which created the modern income tax system. Instead, total corporations were collected for New York and Massachusetts, which collected detailed records of operating corporations pursuant to their states’ capital taxes. It should be noted that both Massachusetts and New York were states in which unusually large numbers of corporations were created, particularly in the early to mid-19th century. The figure may therefore understate the degree of change that occurred in the years following 1900.

The sources were as follows. For New York State: For 1826: collected from the records of New York’s comptroller relating to New York State’s 1823 capital tax on corporations, New York State Archives, Albany NY. Ledgers of existing corporations were found in Record Group A1301 and A1204. For 1868: New York Senate, Document 91, April 10 1868. Report of the Comptroller, Giving the Name of All Stock Corporations Doing Business in this State, Under General or Special Laws, etc.

For Massachusetts: Total corporations in the state was collected at five-year intervals over the years 1870-1910 from Report of the Tax Commissioner of the Commonwealth of Massachusetts. That publication includes a count of the total number of corporations operating in the state for those years only. The totals do not include national banks, which had federal charters, but do include corporations of other states operating in Massachusetts. The number of national banks was therefore obtained from the Annual Reports of the Comptroller of the Currency, and added to the total.


The text states that the rate of use of the corporation in New York in the early twentieth century was similar to that of the United States. Data for total business corporations in New York in 1911 was obtained from the 1909 federal corporate excise tax, published in the Annual Report of the Commissioner of Internal Revenue, indicate that there were nearly 33,000 corporate tax returns filed in New York in that year, implying 3,600 corporations per million persons in that state, relative to 2,900 for the nation as a whole.

Figure 2: Scale of the Largest Existing Corporation in the United States: Total Assets/GDP Per Capita, in Millions

This table presents a measure of changes in the scale of the largest business corporations existing in the United States at different points in time. The measure of their scale is total assets / GDP per person. One way to interpret this ratio is this: how many peoples’ incomes would be required to purchase all of the assets of the corporations, assuming their incomes were the average for the country as a whole.
Another good measure this scale would be the fraction of all business assets accounted for by the largest corporation’s assets, but no reliable or consistent data for total business assets have been compiled for the 19th century.

The dates and corporations chosen represent points in time at which the largest existing corporation in the United States can be ascertained with a reasonable degree of confidence. The period between the closure of the Second Bank of the United States (or its successor, the Bank of the United States of Pennsylvania), and the publication of Volume 1 of Poor’s Manual of Railroads (1868) presents the greatest challenge for the historian seeking to identify the largest corporation in existence. The one data point selected for this interval (the B&O for 1855) is the most uncertain; there may well have been other corporations of greater scale during that period.

The corporations, total assets, and levels of GDP per capita utilized in the table are as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Corporation</th>
<th>Total Assets</th>
<th>GDP per Capita</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1801</td>
<td>Bank of the United States</td>
<td>24,040,000</td>
<td>98</td>
<td>245,306</td>
</tr>
<tr>
<td>1831</td>
<td>Second Bank of the United States</td>
<td>112,775,805</td>
<td>86</td>
<td>1,311,347</td>
</tr>
<tr>
<td>1855</td>
<td>Baltimore &amp; Ohio Railroad</td>
<td>24,881,415</td>
<td>146</td>
<td>170,421</td>
</tr>
<tr>
<td>1872</td>
<td>Pennsylvania Railroad</td>
<td>90,072,069</td>
<td>222</td>
<td>405,730</td>
</tr>
<tr>
<td>1888</td>
<td>Union Pacific Railroad</td>
<td>240,747,888</td>
<td>225</td>
<td>1,069,991</td>
</tr>
<tr>
<td>1902</td>
<td>U.S. Steel</td>
<td>1,546,544,234</td>
<td>280</td>
<td>5,523,372</td>
</tr>
<tr>
<td>1932</td>
<td>AT&amp;T</td>
<td>4,228,400,000</td>
<td>471</td>
<td>8,977,495</td>
</tr>
</tbody>
</table>


![Figure 3: Scale of Publicly Traded Corporations in the United States: Total Assets/GDP per Capita, in Millions](image)

There are four data points presented in the figure. The last one is for 1932, and it is the average value of total assets for the 200 largest corporations in 1932, as reported in Table 12 of The Modern Corporation. The average value of those corporations’ total assets was about $410 million, making the ratio of that value to GDP per capita equal to about 871,000.

The next to last is for 1902, and it is total assets (where available) for all NYSE-listed corporations. There are no easily accessible comprehensive lists of NYSE-listed securities from that era. The listed companies are instead obtained from the stock price tables in the New York Times. There were 195 NYSE-listed companies at the time. For 146 of those, total assets could be found in Moody’s Manual of Corporation
Securities. The average value of those 146 companies was $90.2 million, which was approximately 322,000 times income per person at that time.

The third data point from the left was for 1872. This is for companies traded on the Boston Stock Exchange in that year. There were 130 such companies; total assets could be found for 97 of them. The sources were: Report of the Tax Commissioner of the Commonwealth of Massachusetts, for the manufacturing companies and utilities chartered by Massachusetts; Annual Report of the Board of Railroad Commissioners of Massachusetts, for railroads holding Massachusetts charters; and Poor’s Manual of Railroads, for railroads chartered by other states. Total assets averaged $3.3 million, which was about 15,000 times income per person in 1872.

The fourth data point is for 1825-26. There were about 68 New York corporations whose shares were traded on the NYS&EB during those years, as indicated in the data of Sylla, Wilson and Wright (2005). These corporations consisted principally of insurance companies and commercial banks. Paid-in capital for these firms was obtained from the records of the New York State comptroller (record group A1301, New York State Archives, Albany NY). To convert paid-in capital to assets, the relationship between the two was obtained from balance sheets for banks and insurance companies from later in the 1820s and from the 1830s. For commercial banks, the ratio of assets to paid-in capital was about 3, and for insurance companies, it was 1.2. Inflating the capital numbers using these factors produced an average value of total assets of about $1.1 million, which was about 13,000 times income per person.


FIGURE 4: TOTAL SHAREHOLDERS, QUASI-PUBLIC CORPORATIONS

For 1791: this is for the Bank of New York, which had 193 shareholders. The shareholder list is published Alan Nevins History of the Bank of New York and Trust Company, 1784 to 1934 (1934).

For 1825-26: Stockholder lists were found for 47 of the NYS&EB companies within the New York State Archives. The lists of stockholders submitted by the corporations pursuant to the state’s 1823-27 tax law were found in various different record groups associated with the comptroller’s office, including A0833, A0829, and A0847. New York State Archives, Albany NY. The average total number of shareholders was 139.

For 1872: Complete stockholder lists were found for 81 of the companies listed on the Boston Stock Exchange, as part of the certificates of condition required to be filed annually with the state by several classes of business corporations. Microfilm copies of these certificates were found in the Massachusetts State Archives. Massachusetts railroads submitted a different report to the state’s board of railroad commissioners, which did not include a full shareholder list, but did report the total number of shareholders. This was found for 16 Massachusetts railroads listed on the Boston Stock Exchange. For all these firms together, the average total number of shareholders was 587.

For 1900: The total number of shareholders for 68 NYSE-listed corporations for 1900 (or a year very close to 1900) is reported in H. T. Warshow, The Distribution of Corporate Ownership in the United States, 39 Quarterly Journal of Economics (1924). The average value is 5,034.

For 1930: The total number of shareholders of the Berle and Means sample of the 200 largest corporation is taken from their Table 12.
FIGURE 5: MANAGERIAL OWNERSHIP, IN PERCENT: LARGE PUBLIC COMPANIES

For 1791 and for 1825-26: Lists of directors were obtained from contemporary sources. These were found for the Bank of New York in 1791, and for 38 of the NYS&EB companies from 1826-26. (See the description of Figure 4 above for sources). The values for those years were 11.4 percent for 1791, and 21.7 percent for 1826.

For 1872: The names of the directors of the 81 Boston Stock Exchange Corporations that had submitted certificates of condition were obtained from those certificates and compared to the stockholder lists. The average value of managerial ownership was 6.8 percent. (See the description of Figure 4 above for sources).

For 1935, and 1995: these data are for all NYSE-listed corporations, as reported in Clifford G. Holderness, Randall S. Kroszner, and Dennis P. Sheehan, Were the Good Old Days That Good? Changes in Managerial Stock Ownership Since the Great Depression 54 JOURNAL OF FINANCE (1999).

TABLE 1: CONTROL OF AMERICAN PUBLIC COMPANIES OVER TIME

For the 1825-26 companies, and the 1872 companies, the stockholder lists as described in the note on Figure 4 above were searched for the largest shareholding, and coded accordingly. The Berle and Means companies were coded as having a 20 percent owner if they were indicated as being private or if the largest holding reported in Table 12 was 20 percent or greater.

The one category of firms for which I deviate from the categorization of Berle and Means is for companies that had significant owners that were themselves widely held. Berle and Means argue that when a blockholder was itself widely held, there are no ultimate significant owners of the firm. I argue instead that a significant owner, even if itself widely held, would have a strong incentive to exercise control.