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CORPORATE DEMOCRACY

Stockholder Voting Rights in Nineteenth-Century American and Prussian Railroad Corporations

COLLEEN A. DUNLAVY

INTRODUCTION

Historians attentive to “power” in a nineteenth or early twentieth century business setting usually mean either the internal balance of power between labor and management or the external balance of power between business and government. But “power” also characterized relations *among* the owners of a business that was organized as anything other than a simple proprietorship. In a partnership, for example, two or more businessmen (or, more rarely, businesswomen) participated in the making of critical business decisions; in a joint-stock company or corporation, the number of potential participants totaled many more. Yet, for all the attention that historians have given to the content of corporate strategies, particularly since Alfred D. Chandler’s *Strategy and Structure* and his subsequent works,¹ we know very little about the form of strategic decision-making and how it may have changed over the years. To be sure, most scholars take an increasing separation of management and ownership for granted, especially after firms turned in greater numbers to the stock market for capital in the late nineteenth century, but very few historians have asked of the modern business enterprise, “who actually governed?”² As a result, we have had only glimpses inside the “black box” of the boardroom and have hardly begun to think about the impact of power relations on corporate strategy.

This chapter sketches out some preliminary thoughts about power in the boardroom from a comparative perspective. How did the distribution of power among capitalists within firms differ in the United States and Prusso-Germany during the nineteenth century, it asks, and what consequences might any such differences have had for the choice of corporate

strategies, especially those intended to deal with interfirm competition around the turn of the century? These are questions of the power of capital to have its way and as such they invite a political analysis of incorporation and consolidation. This essay begins to construct such an analysis by conceiving of the firm as a *polity* with a distinctive *constitutional structure* and by thinking of its investors as the firm's citizens, who may or may not enjoy *suffrage*.

The United States and Germany (or, earlier, Prussia) make interesting cases for comparison in the nineteenth and early twentieth centuries, because in important respects economic concentration in the two countries followed a strikingly similar dynamic. In his massive comparative study of industrial capitalism in three countries, Alfred D. Chandler writes,

In Germany as in the United States, but much more than in Britain, entrepreneurs did make the investment in production facilities and personnel large enough to exploit economies of scale and scope, did build the product-specific international marketing and distribution facilities, and did recruit the essential managerial hierarchies.³

In both the United States and Germany, they were willing to share power with salaried managers, became first-movers in the new, capital-intensive industries, expanded abroad, and diversified into related industries. In both, he concludes, "the technologically advanced, capital-intensive industries of the Second Industrial Revolution came to be managed through a system of managerial capitalism and so were driven by the same dynamics of growth."⁴ So thoroughly had the two economies been transformed by the eve of the Great War that a German author wondered which was *Das Land der Monopole: Amerika oder Deutschland?*⁵ On methodological grounds, this set of essential similarities makes for a "cleaner" comparison, for it eliminates a variety of factors, such as the pace or nature of industrial growth, that might have shaped strategies of corporate growth in each country.

In both countries, moreover, the story of economic concentration begins with the railroads, because they were the first enterprises to make widespread use of the joint-stock form of corporate organization and they were the first to introduce broad segments of the public to the stock market. To raise large sums of capital, which reached millions of dollars per enterprise, railroad promoters in both countries turned mainly to private bankers (in Prussia) or merchant-capitalists (in the United States), who were often to be found among the ranks of their own stockholders. The companies relied on these private capitalists to help them in placing railroad stocks and bonds, which in both countries were the first industrial

securities to be offered publicly in large volume. Indeed, they were virtually the only ones until the last decades of the nineteenth century: In Germany, other industrial securities did not appear on stock exchanges in any number until the 1870s; in the United States, it was only in the 1890s that manufacturers turned to the stock exchange for outside funds.⁶ This is one reason why Chandler terms the railroads the "first big business" in the United States, a designation that applies equally well in Prusso-Germany.⁷

Since the relevant literature is so thin,⁸ this essay introduces the issues via an extended critique of Alfred D. Chandler's account of rather puzzling developments in the steel and electrical manufacturing industries in the United States and Germany at the turn of the century. In doing so, this section argues that our understanding of the divergence that produced consolidated enterprises in the United States and cartels in Germany is shaky at best and that attention to power in the corporation—particularly to the underlying capacity of investors to engage in consolidation, which has thus far gone unquestioned—offers a new way of understanding that divergence. The second section then turns to the development earlier in the century of the corporate form in the railroad business; it explores changes in stockholder voting rights in American and Prussian railroad corporations through the middle decades of the nineteenth century. The concluding sections offer a brief survey of changes in the constitutional structure of the corporation as well as a few speculative remarks about the impact of distinctive forms of power relations on corporate strategizing. Although we seldom think about corporations as polities—hence, in terms of suffrage and constitutions—it certainly makes sense to do so, as nineteenth-century American and European observers would have agreed, since corporate charters and company by-laws quite explicitly spelled out and regularized power relations among the owners of a corporation.

The basic (though necessarily preliminary) argument developed here is that a process of divergence from a common, relatively democratic starting point marked the evolution of power in American and Prussia railroad corporations during the middle decades of the nineteenth century. Indeed, viewed in explicitly political terms, the contrasting ways in which corporate governance evolved in these two countries present a paradox. Inside American railroad corporations, the political environment had become discernibly *less* democratic by about 1860, even though the American polity during these years qualified as *more* democratic than the Prussian; meanwhile, inside Prussian railroad corporations, the political environment retained more of its democratic character through much of the century, even though the Prussian polity, with its three-class system of suffrage based on wealth, remained demonstrably less democratic than

its American counterpart. My suspicion—and here it can be no more than that—is that this divergence carried forward into the later decades of the nineteenth century, making consolidation comparatively easier to carry out in the United States and thus setting the stage for the “great merger movement” at the turn of the century.⁹ In Prusso-Germany, industrialists more often resorted to cooperation—not, this line of thinking suggests, out of choice, but on precisely opposite grounds: Because the political environment within the corporation made consolidation much more difficult to achieve and in that sense left them much less choice than commonly recognized.

CORPORATE DEMOCRACY: THE ISSUES

To introduce the issues that this chapter considers, it is helpful to begin with an extended look at turn-of-the-century developments in the United States and Germany, for even though economic concentration proceeded apace in the two countries during the nineteenth century, it took quite different forms at the end of the century. Through the 1870s and 1880s, American and German firms alike experimented with cooperation in cartels as well as with consolidation through mergers and acquisitions. On the whole, however—at least, as conventional understanding would have it—German businesses seemed better able to create and sustain cartels, while American firms showed a greater propensity to consolidate their enterprises into single firms. In broad outlines, this pattern of difference marked nineteenth-century railroad development as well: A German railroad association formed relatively quickly in the 1840s and retained its vitality through much of the century, but American railroad men, who first sought to organize in the late 1840s and early 1850s, did not prove successful in those efforts until they founded the American Railway Association in the 1880s.¹⁰ This is the essential difference in associational behavior that Chandler sought to capture in his names for the type of managerial capitalism that characterized each country: In the United States, *competitive managerial capitalism*; in Germany, *cooperative managerial capitalism*.¹¹

The steel industry ultimately came to epitomize this divergence just after the turn of the century, but through the 1880s the structure of the American and German steel industries was not markedly different.¹² Initially, since markets for iron and steel products were relatively large and varied, as Chandler explains, “many more companies competed for market share” in this industry than in, say, electrical manufacturing. No single “first mover” equivalent to Andrew Carnegie emerged in the German context, and because their domestic market was smaller, Chandler argues,

more German producers made secondary or fabricated products (wire, plates, rods, and so on) as well as primary products (ingots, bars, rails, etc.). But, otherwise, “the growth of the German steel industry closely paralleled that of the United States,” the initial surge in output coming in both countries in the 1880s.¹³

As the turn of the century approached, the American steel industry looked somewhat more concentrated than the German, while the German steel industry showed a greater degree of vertical integration, but neither difference was excessive. In the production of primary steel in the United States, Carnegie Steel and Federal Steel (reorganized by J. P. Morgan) dominated the field, together accounting for about a third of the country’s production, while the manufacture of secondary products was much less concentrated. In Germany, the Krupp and Thyssen steel concerns stood out as the largest in a field of some thirty producers, although the capacity of each accounted for only about 10 percent of the total.¹⁴ Since primary steel producers in Germany also tended to manufacture secondary products, that branch of the industry showed correspondingly greater concentration than in the United States, but, overall, the degree of concentration in the American and German steel industries did not differ radically.

The classic pattern of divergence set in just after the turn of the century. As Chandler tells the story, it began in the United States when the secondary producers—steel fabricators—began industry-wide consolidations in the 1890s. As part of that effort, they began to integrate backwards to produce their own supply of primary products. Andrew Carnegie’s first impulse was to compete openly and directly by moving into fabrication himself. But the financier J. Pierpont Morgan, concerned about the potential damage to concerns whose securities he handled, very much preferred a strategy of consolidation. At his insistence and under his guidance, Carnegie and Federal Steel joined the secondary producers in the merger that created the United States Steel Corporation in 1901. United States Steel “was by far the world’s largest industrial corporation,” Chandler writes, the product ultimately of “a merger of many nationwide mergers in many major lines of steel products.”¹⁵ A few years later, after the 1901 economic downturn known in Germany simply as “The Crisis,” German steel producers completed the divergence by agreeing to cooperate in a multi-product cartel called the Steel Works Federation (*Stahlwerksverband*), while retaining their identity as individual firms. Formed in 1904, the *Stahlwerksverband* encompassed twenty-seven vertically-integrated firms that together controlled three-quarters of the industry’s output.¹⁶ Thus by the early twentieth century, American steel industrialists had taken consolidation to an extreme, while their German counterparts had gone just as far in the direction of cooperation.

Yet, in contrast to this classic pattern of divergence, the two countries ended up during the same years with virtually indistinguishable structures in electrical manufacturing.¹⁷ Following a period of rapid expansion in the 1880s, consolidation in electrical manufacturing proceeded rapidly in both countries, as “first movers” constructed large-scale production facilities, built managerial hierarchies, and developed extensive sales and service facilities. In the United States, two mergers came in quick succession: One in 1889, which produced Edison General Electric; followed by a second in 1892, which consolidated Edison General Electric and Thomson-Houston into the General Electric Company (GE). Together, GE and George Westinghouse’s proprietary company composed a duopoly that dominated the industry for years. A decade later in Germany, in the aftermath of “The Crisis” of 1901, another series of mergers produced another duopoly, this one composed of the *Allgemeine Elektrizitäts-Gesellschaft* (AEG or General Electric Company) and Siemens. “Of all the great German industries,” Chandler concludes, “the electrical equipment industry was most similar, in its evolution, to its American counterpart.”¹⁸ In this industry, unlike in steel, in other words, changes in industrial structure moved along *similar*, not contrasting, lines.

How does Chandler understand these national differences in the structure of the two industries? In his view, the divergence in the American and German steel industries set the dominant pattern for the two countries: In general, he observes, “industrial leaders in the United States continued to compete functionally and strategically for market share, while in Germany they often preferred to negotiate with one another to maintain market share at home and in some cases abroad.” This “basic difference” reflected, in turn, the distinctive stance of each country’s law toward combinations, for German law permitted many more kinds of interfirm cooperation than American anti-trust law did. In 1890 and 1897 the German courts declared cartels to be reconcilable with freedom of trade and their agreements to be legally binding. The latter decision explicitly regarded cartels as serving the public interest and therefore entitled to legal protection. Following the 1897 decision, German law on combinations in restraint of trade effectively followed what became known in the United States as the “rule of reason.” As an American writer explained in 1912,

The German law . . . puts a cartel contract on the same basis as any other contract. The good cartels are allowed to pursue the even tenor of their way; the bad cartels are subject to various penalties and disabilities provided for all persons and associations under the criminal and civil law.¹⁹

Meanwhile, in precisely the same years came two major developments in the United States. In 1890, the United States Congress passed the Sher-

man Antitrust Act, which, in Senator John Sherman’s words, was intended to codify common-law strictures not against all combinations but only against those that imposed unreasonable restraints on trade. Then in 1897, historian Martin J. Sklar maintains, the Supreme Court abandoned the rule of reason in favor of an absolute ban on combinations, a view that held sway until 1911.²⁰ This foreclosed the strategy of cartellization for American firms. German firms, meanwhile, continued to have more options open to them, Chandler concludes. Consequently they “had less incentive than those in the United States to attempt to control markets through mergers and acquisitions.” As a consequence, German industries tended to remain less concentrated than their American counterparts, and German firms therefore remained more plentiful and developed more elaborate methods of cooperation.²¹

But notice that the problematical element in this account is the ability to cooperate, not to consolidate. On the contrary, the ability to consolidate is simply taken for granted. Differences in legal context, moreover, could not logically account for the similarity in strategic choices evident in electrical manufacturing. The key must lie elsewhere.

Chandler’s own evidence points in a different direction where electrical manufacturing is concerned—towards the high levels of capital intensity in the industry in the late nineteenth century, which, as he emphasizes, created compelling economic incentives for plant owners and managers to maintain high production levels or to increase throughput. Absent perfect markets, “running full,” in the terminology of the day, placed a premium on control of adequate supplies of all the factors of production (including labor) as well as on control of adequate outlets for one’s products. Once a certain level of capital intensity had been attained, in other words, the incentives for consolidation and vertical integration (to eliminate competition for raw materials as well as markets) became paramount.²² Interestingly, even German steel industrialists, their cooperative activities notwithstanding, understood that this imperative applied to their industry as well by the turn of the century.²³

Considered in this light, the American and German processes of concentration at the turn of the century suddenly raise a quite different interpretive problem. The striking parallels in electrical manufacturing no longer seem so surprising: Given the legal context in which they operated, German industrialists may well have had other options, as Chandler and others argue, but the logic of capital intensity encouraged them, like their American counterparts in this dynamic, capital-intensive industry, to adopt the strategy that would yield both the requisite capital and the greatest control: consolidation.²⁴ And, from this standpoint, it is now the behavior of German steel industrialists that seems the most perplexing.

Given the recognized capital intensity of that industry, why did German steel producers not feel the same imperative to control—hence, to consolidate—that shaped the strategic choices of their own counterparts in electrical manufacturing at home as well as in both the electrical manufacturing and steel industries on the other side of the Atlantic?

Here Chandler's own evidence is again suggestive. On the eve of the steel producers' formal agreement to cooperate, he notes, they disagreed among themselves about the proper strategy to pursue. In the discussions leading up to formation of the Steel Works Federation, Chandler acknowledges, "some of their number were calling for merger"—the American solution. The proponents of outright merger or horizontal consolidation included August Thyssen, head of what was initially the largest firm to enter the *Stahlwerksverband*. In Chandler's words, "Only through merger, Thyssen . . . argued, could the industry be rationalized in the American manner."²⁵ Although he was ultimately overruled and joined his colleagues in pursuing a strategy of cooperation, the point is that Thyssen voiced a strong preference that, as Chandler himself suggests, sounded more American than German.

In practice, it seems reasonable to think, industrialists' preferences frequently diverged. A difference of views was certainly commonplace among American industrialists during these years.²⁶ Indeed, key figures in the GE merger, according to W. Bernard Carlson, held widely differing views of competition: Charles Coffin, head of Thomson-Houston, and Boston financier Henry L. Higginson favored consolidation and viewed competition as "wasteful of their organizational capability," while George Westinghouse and Thomas Edison "fought to the bitter end to maintain competition."²⁷ Also, in the American steel industry, Andrew Carnegie and J. P. Morgan, just like different factions of German steel producers, held opposing views, the former preferring to compete outright and the latter successfully pursuing industry-consolidation.

In other words, the critical question seems to center not on strategic choice as such, but on power: When industrialists disagreed among themselves, *whose views prevailed?* If we can assume that industrialists' views of appropriate strategies for dealing with competition were divided along roughly similar lines in the two countries, and yet, in practice, American industrialists favored consolidation, while their German counterparts opted for cooperation, this would suggest that those who favored consolidation somehow wielded greater power in the American than in the German context, that they—unlike Thyssen in Germany—were better positioned to overrule the opposition. These are the basic considerations that motivate this exploration of power in the nineteenth century politics that we know as railroad corporations.

STOCKHOLDER VOTING RIGHTS

A Common Democratic Practice

Limitations on the power of capital within the corporation—strange as it may seem today—were once rather commonplace. "Early charters," as legal historian Lawrence M. Friedman explains of American practice, "did not necessarily adhere to the principle that one share of stock was entitled to only one vote."²⁸ Indeed, the federally-chartered Bank of North America's adoption of the modern-day practice of granting shareholders votes in proportion to their shares sparked enormous controversy in the 1780s. The bank's critics, as historian Pauline Maier writes, preferred "that all shareholders have equal votes and be allowed to vote only in person, not by proxy."²⁹

In the American context, restrictions on capitalist suffrage within the corporation reflected two considerations. First of all, British tradition, as Maier explains, had viewed the stockholder not as the owner of shares but as a "member" of the corporation. The model was the English trading company: "Voting in early English profit-seeking corporations such as the East India company," she writes, "allowed all shareholders single votes since 'the units of which the corporation was composed were still considered to be the members, as is the case in municipal corporations and guilds,' not shares."³⁰ The flavor of this conception comes through in the language used in early railroad charters. Massachusetts legislation of 1827, for example, termed the stockholder "a member of the corporation." A railroad charter issued by the Rhode Island legislature in 1836 likewise regarded "each proprietor or owner of one share . . . a member of the corporation" (although it then gave each member "as many votes as he has shares," up to a maximum of "one-fourth part of the whole number").³¹ This practice—of safeguarding individual stockholders as members of a corporation—carried forward into the 1830s, as we will see.

The second consideration, alluded to in Maier's comments, was what Lawrence M. Friedman has described as a "typical, American fear . . . of unbridled power, as possessed by large landholders and dynastic wealth, as well as by government."³² As stockholder voting rights evolved in Britain, the practice emerged in the eighteenth century of giving the largest stockholders additional votes, although only up to some maximum. This practice, too, was put to use in the United States in the late eighteenth century, where it served democratic ends. Critics of the aristocratic, one-vote-per-share rule, Maier argues, sought to limit the power of capital in order to secure a greater degree of democracy:

By allowing small shareholders at least one vote and capping those of large shareholders, charters might not only limit "aristocratic" power but

build into the very structure of corporations a check on their "vast influence and magnitude, a democratic counterpoise" to corporate power such as other societies found, as William Findley observed in Pennsylvania legislative debates of 1785, in kings, nobles, and great landed families.³³

Together, the tradition of the stockholder as corporate "member" and the revolutionary fear of concentrated power helped to ensure that limitations on the power of large stockholders persisted into the nineteenth century. In both countries, provisions governing stockholder voting rights were usually found in the charters of individual railroad companies. Some examples will suggest in more concrete terms how safeguards such as graduated voting rights were intended to operate in the United States and Prussia.

In the United States, graduated voting rights made their appearance in railroad history with the first railroad charters to be granted by the state governments. As we will see, such schemes disappeared fairly quickly, but for a time they were widely used—indeed, they were the rule rather than the exception. As an authority on American railroad charters wrote at the turn of this century, "in the North and South Atlantic States the graded system of voting, by which the number of votes of the individual stockholder decreases as his holdings increase, [was] common."³⁴ The railroad charters issued by the state of Massachusetts in the year 1829 offer a good indication of the diversity of early practice and of the extent to which early business charters deviated from the one-share, one-vote principle that prevailed later. The Massachusetts legislature granted four railroad charters that year. One contained no explicit provision regarding voting rights. The second specified one vote for the first share, then one vote for every two additional shares, up to a maximum of ten votes; the member who held more than nineteen shares, in other words, did not gain additional voting power. The third charter prescribed a slightly more extensive gradation: One vote for the first share; one vote for every two additional shares up to ten; one vote for every four additional shares over ten, up to a maximum of thirty votes. The fourth charter, finally, spelled out a simpler system that became common for a brief time in the United States: One vote per share up to a maximum of one-quarter of the total votes.³⁵

Massachusetts was not alone, however, in its interest in graduated voting scales. The state of Virginia passed legislation in 1837 that, among other things, required all railroad corporations to grant each stockholder one vote for each share up to ten and then "one vote for every ten shares above ten."³⁶ As noted, however, such provisions were usually found in the charters of individual railroads. One of the most detailed was that of

the South Carolina Railroad, the first long-distance railroad in operation in the United States. An early amendment to its charter spelled out a graduated scale with eleven steps (see Figure 2.1). It began with one vote for one or two shares, then increased one vote at a time up to ten votes for thirty-four to forty shares; thereafter, the stockholder received one additional vote over every ten additional shares.³⁷

But, lest one think that respect for the proprietor as corporate member or fear of concentrated economic power were exclusively American (or perhaps Anglo-American) phenomena, it must be emphasized that graduated voting scales also appeared in the charters of early Prussian railroads.³⁸ David Hansemann was one of the first to comment on methods of voting in railroad corporations in an 1837 book on relations between the railroads and the Prussian state. Making quite explicit his

Number of votes at election.

Sec. 6. And be it further enacted by the authority aforesaid, That in the said election for president and directors, the votes shall be taken by the following scale: The owner of one or two shares shall be entitled to one vote; the owner of not less than three shares nor more than four shares, shall be entitled to two votes; the owner of not less than five nor more than six shares, shall be entitled to three votes; the owner of not less than seven nor more than eight shares, to four votes; the owner of not less than nine nor more than eleven shares, to five votes; the owner of not less than twelve nor more than fifteen shares, to six votes; the owner of not less than sixteen nor more than twenty shares, to seven votes; the owner of not less than twenty-one nor more than twenty-six shares, to eight votes; the owner of not less than twenty-seven shares nor more than thirty-three shares, to nine votes; the owner of not less than thirty-four shares nor more than forty shares, to ten votes; and the owner of every ten shares above forty, shall be entitled therefor to one vote. Any person being a

FIGURE 2.1 Voting Rights in the South Carolina Canal and Railroad Company's Charter, 1828

Source: "An Act to Amend An Act Entitled 'An Act to Authorize the Formation of a Company for Constructing Rail Roads or Canals, From the City of Charleston, to the Towns of Columbia, Camden and Hamburg,'" 30 January 1828. In *The Charter and Other Acts of the Legislature, in Relation to the South-Carolina Rail Road Company, . . .* (Charleston: Steam Power-Press of Walker and James, 1851), 67.

conception of the corporation as a polity, he likened the two extremes, one vote for every shareholder and one vote for every share, to a contrast between democracy and aristocracy. Hansemann himself favored a compromise that included a threshold, below which a shareholder would have no votes; a ceiling, beyond which a shareholder would gain no additional votes; and between the two a graduated scale.³⁹ He included in an appendix to the book the statutes of the Rhenish Railroad, approved in 1835, and those of the Prussian-Rhenish Railroad from 1836. Both followed very closely the scheme that he favored. The Prussian-Rhenish Railroad (see Figure 2.2) set the threshold for suffrage at 3 shares; the Rhenish Railroad put it at 4 shares. Both also set a maximum number of votes that any stockholder could cast: The Prussian-Rhenish Railroad put it at forty votes for one thousand or more shares, while the Rhenish Railroad granted representation only up to 100 shares, for which the stockholder was entitled to five votes. The Prussian-Rhenish Railroad's

Art. 32. Die Eigenthümer von weniger als drei Aktien sind nicht stimmberechtigt. Das Stimmrecht wird in folgendem Verhältniß ausgeübt: (R. §. 12.)

Für 3 Aktien und weniger als 6 Aktien 1 Stimme.	
6	2
10	3
15	4
20	5
25	6
35	8
50	10
100	15
150	18
375	25
500	30
750	35
1000	40

FIGURE 2.2 Voting Rights in the Prussian-Rhenish Railroad Company's Charter, 1836
 Source: "Statuten der Preußisch-Rheinischen-Eisenbahn-Gesellschaft," 5 April 1836 in David Hansemann, *Die Eisenbahnen und deren Aktionäre in ihrem Verhältniß zum Staat* (Leipzig and Halle: Renger'sche Verlagsbuchhandlung, 1837), 141-142.

§. 20. Nach Genehmigung des Statuts haben bei General-Versammlungen die Eigenthümer von einer bis vier Aktien, eine Stimme, von fünf bis neun, zwei Stimmen, von zehn bis neunzehn, drei Stimmen, von zwanzig bis neun und vierzig, vier Stimmen, von fünfzig bis neun und neunzig, fünf Stimmen, von hundert und mehrerer, sechs Stimmen.

FIGURE 2.3 Voting Rights in the Rhine-Weser Railroad Company's Charter, 1837
 Source: "Statut der Rhein-Weser Eisenbahn-Aktien-Gesellschaft," *Amtsblatt der Kgl. Regierung zu Minden*, Minden, 15 September 1837, in Walter Steitz, *Die Entstehung der Köln-Mindener Eisenbahngesellschaft: Ein Beitrag zur Frühgeschichte der deutschen Eisenbahnen und des preussischen Aktienwesens*, Schriften zur Rheinisch-Westfälischen Wirtschaftsgeschichte, Band 27 (Cologne: Rheinisch-Westfälischen Wirtschaftsarchiv zu Köln, 1974), 294.

charter specified fourteen gradations between the two extremes; the Rhenish Railroad's statute called for four.⁴⁰

An intermediate form of the graduated scale in Prussia occurred in the charter of the Rhine-Weser Railroad (see Figure 2.3), a forerunner of the Cologne-Minden Railroad. Unlike Hansemann's preferred charters, this one did not establish a minimum threshold for attaining the right to vote; possession of one to four shares earned the stockholder one vote. As in the charters discussed above, however, the Rhine-Weser Railroad's charter did not allow any stockholder representation for more than one hundred shares.

Whether limitations on the power of capital in German corporations had their origins in Britain practice, as they did in the United States, or perhaps in Dutch or French practice, remains to be explored,⁴¹ but a German legal expert offered some fascinating observations on the practice in the early 1840s. "Votes [in a joint-stock corporation] are counted not according to heads but according to shares," began Dr. Meno Pöhls's discussion of voting rights in an 1842 legal handbook, as if he were oblivious to current practice; "in an association of capitalists, in which the personages [of the stockholders] necessarily lie outside, the total capital specified in the charter (the total of the shares) is actually more the *socius* than the proprietor of the share. Whoever possesses more shares, therefore, is so many times *socius* as the total number of his shares." For this reason, he continued, one share gets one vote and "every member has as many votes as he possesses shares."⁴²

But this, it turned out, was mere theory, for Pöhls noted that actual practice differed substantially. In particular, he noted that individual

companies set a limit on the total number of votes that individual stockholders could cast. This was meant in part, he explained, to head off the disadvantages that would accrue if too great a number of votes accumulated in the hands of an individual and “especially to secure for every single share the possibility of participating in the [stockholders’] deliberations.”⁴³ A cap on maximum votes, in other words, would both head off the dangers inherent in the accumulation of power and help to ensure a measure of representation for all stockholders.⁴⁴

Overall, the preliminary evidence in the railroad industry suggests that roughly similar levels of democratic practice prevailed in the early American and Prussian corporations, although the emphases differed somewhat. In Prussia, graduated voting scales such as these seem to have been in wider use. Of the eleven earliest and largest railroads, for example, eight used graduated voting scales similar to those that David Hanse-mann showcased in the appendix to his book. But this did not necessarily constitute unambiguous evidence of a higher regard for the rights of the individual in Prussia, since nine of the eleven railroads required that stockholders possess a minimum number of shares (between three and ten) before they were entitled to vote at all.⁴⁵ According to Pöhls, writing in 1842, this practice was developed by the larger companies in response to the “inconvenience” (*Unbequemlichkeit*) in voting occasioned by the division of their capital into many small shares; as he noted, however, this left the smallest stockholders without any representation in company affairs.⁴⁶ No charter in the United States, to my knowledge, failed to give the smallest stockholder at least one vote, so in this sense the democratic ethos implicit in American practice, despite the smaller incidence of graduated voting scales, could be regarded as roughly comparable to the Prussian.

Divergence Sets In

Yet, despite an initial similarity in the democratic thrust of corporate voting rights, however much the details varied, railroad legislation in the United States and Prussia began to diverge within a decade or two, for American practice shifted closer to the one-share, one-vote rule in the 1830s and 1840s, while Prussian practice remained uniformly with the graduated scale. In a general revision of Massachusetts statutes in 1835, for example, the diversity evident in 1829 was considerably reduced. The portions of the Revised Statutes (Chap. 39, § 45–86) that related explicitly to railroad companies dispensed with graduated voting scales altogether and simply gave each member of the corporation one vote for each share, but it retained a cap on the overall voting power of individuals:

“(E)ach member,” the legislation read, “shall not be entitled to any vote for any shares beyond one tenth part of the whole number of shares of the stock of such corporation.” This stricture applied to all railroads that might be chartered thereafter as well as to all those whose charters did not specify something different. Through at least 1850 (the endpoint of a compendium of New England railroad laws that was published in 1851), this provision remained in force and no Massachusetts railroad charter again contained explicit provision regarding voting rights.⁴⁷

The State of New Hampshire’s Revised Statutes of the early 1840s, meanwhile, initially required a slightly more complicated scheme of all corporations, then moved to a simple cap on total votes. Simultaneously banning the use of proxies, the initial legislation declared,

(E)ach member . . . may give one vote for every share of which he is the bona fide and absolute owner, not exceeding ten, and one vote for every two shares of which he is such owner, over ten and not exceeding twenty, and no more.⁴⁸

In 1846 the legislature eased these restrictions considerably, though it still did not move all the way to a one-share, one-vote form of suffrage. The changes came in amendments to the laws of corporations that applied to all for-profit corporations, including all previously chartered corporations “whose charters are subject by law to alteration, amendment, or repeal,” which would have meant the vast majority of, if not all, existing corporations. This legislation now permitted the use of proxies, but it still limited total voting power as follows: “(N)o one shall be entitled to vote in any case for any shares beyond one eighth of the whole number of shares into which the capital stock may be divided.”⁴⁹

By mid-century, however, graduated voting schemes—even a simple cap on total votes—seem generally to have fallen out of favor in the United States, except possibly in Massachusetts. The first railroad charter that the State of Connecticut issued (in 1832) restricted an individual’s voting power to one-tenth of the total, and subsequent charters sometimes contained this provision, sometimes did not. But the last charter with this kind of cap was granted in 1841; thereafter, one vote per share became the rule.⁵⁰ When the New York legislature passed a general railroad law in 1850, moreover, it explicitly endorsed one-share, one-vote suffrage for the election of directors.⁵¹ Two years later, a railroad company chartered in Georgia repealed a graduated voting scale by amending its charter. The suffrage provision in its original charter had given “one share, one vote; two shares and not exceeding five shares, two votes; every ten shares above five, one vote.” The first section of a charter amendment passed in 1852 read: “(E)ach stockholder shall be entitled to

one vote for each and every share he, she or they may hold." A change in the company's by-laws the same year affirmed what David Hansemann fifteen years earlier had termed the aristocratic system of voting: "Each stockholder may at every meeting give as many votes or ballots as he owns shares."⁵²

By the turn of the century, graduated voting scales had disappeared entirely. An American authority on railroad legislation, writing in 1903, noted that such scales had been common in early railroad charters granted in the Atlantic seaboard states, but made clear that they were a thing of the past.⁵³ Five years later, another writer, author of *A Manual of Corporate Organization*, advised his readers: "The usual rule in regard to voting is that each stockholder of a corporation is entitled to one vote for each share of stock standing in his name on the books of the corporation."⁵⁴

In Prussia, in contrast, graduated voting scales clearly remained the norm through the 1850s. In "a handbook for businesspeople, private individuals, capitalists and speculators," Dr. Julius Michaelis reported in minute detail on all German railroads in operation ca. 1853. A survey of his information for eleven of the earliest and largest Prussian railroads reveals that eight still used a graduated scale at mid-century and that one other retained a cap on total voting power; only two of the railroads used something close to a one-share, one-vote rule. The graduated scales varied considerably in their details but followed the general pattern outlined earlier.⁵⁵

A few years later, an expert in German railroad law, Julius Herrmann Beschorner, confirmed that the practice persisted. His opening words in a discussion of voting rights in an 1858 legal handbook were practically identical to Pöhls' in 1842: "The votes are counted not according to heads"—*nach Köpfen* was the phrase that both used—"but according to shares." Then he repeated the same argument—that the basic units [*Einheiten*] of an association were capital, not individuals, that the share was the *socius*, and so on. Therefore, he concluded, each share warranted a vote "and every member [*Mitglied*] must have as many votes as he or she possess shares." Then, like Pöhls sixteen years earlier, he left theory behind and turned to practice: "Nevertheless, on the grounds of expediency and fairness, a thoroughgoing enforcement of this principle in the charters had to be forsaken." In particular, he cited the problems that had arisen when a single stockholder accumulated a large number of votes. "Also," he observed, "the interest of the proprietor of many shares often collides with that of the proprietor of one or only a few." For this reason, railroad companies used graduated voting scales, and he offered the reader an example of a ten-step scale that "many joint-stock corporations" used (see Figure 2.4). Beschorner also noted that a number of cor-

Man findet bei vielen Actiengesellschaften z. B. folgende Scala:

1 Actie	gibt	1 Stimme,	
2—5 Actien	geben	2 Stimmen,	
6—10	"	"	3 "
11—20	"	"	4 "
21—50	"	"	5 "
51—75	"	"	6 "
76—100	"	"	7 "
101—150	"	"	8 "
151—200	"	"	9 "
201 und mehr Actien	geben	10 Stimmen,	

FIGURE 2.4 Graduated Voting Scale Used By German Corporations in the Late 1850's

Source: Julius Herrmann Beschorner, *Das Deutsche Eisenbahnrecht mit besonderer Berücksichtigung des Actien- und Expropriationsrechtes* (Erlangen: Verlag von Ferdinand Enke, 1858), 77.

porations retained a threshold, below which a stockholder did not have the right to vote.⁵⁶ Unlike in the United States, where graduated voting scales had largely disappeared by the late 1850s, little seemed to have changed in Prussia, or in the German states more broadly, by then.

And, later in the century, when the *Reichstag* passed an extensive revision of German corporation law, the result—in formal terms, at least—was to democratize the internal environment of the German corporation a bit further. In the new legislation, passed in 1884, the threshold to attain the right to vote fell away: "Every share affords the right to vote," read *Artikel 190*, which applied to *Aktiengesellschaften* as well as to *Kommanditgesellschaften auf Aktien*.⁵⁷ At the same time, the law endorsed the one-vote, one-share rule in principle, as earlier commentators had, but it preserved the option for incorporators to choose to limit suffrage in various ways: "In the event that a shareholder [literally, *Kommanditist*] owns several shares, the corporation statutes [*Gesellschaftsvertrag*] can limit the exercise of his voting right by setting a maximum amount or in gradations [*Abstufungen*] or by type of share." As a legal commentator pointed out, this meant that a corporation, if it wanted, could even allow only one vote per stockholder (e.g., one vote for the first share and no additional votes for additional shares).⁵⁸

In the United States, meanwhile, voting rights evolved further in the "aristocratic" direction—"plutocratic" would be the better designation—in the last decades of the nineteenth century. Corporations began to

divide their shares into classes of stocks—preferred and common stock, for example—and not all classes carried voting rights. After the turn of the century, Robert Liefmann, a recognized German authority on cartels and trusts, noted the emergence of this practice in the United States and pondered its implications: “by possessing half of [only] the voting shares,” he observed, “one controls the entire enterprise.” Concerned as he was to understand why so many mergers had taken place in the United States around the turn of the century, the contrary movement in Germany that ensured the right of every stockholder to vote had, he thought, made the mass of small stockholders relatively more powerful and made takeovers more difficult.⁵⁹

During the same years, changes in American law, according to Thomas Conyngton, author of a 1905 edition of a handbook on incorporation, enhanced the rights of minority stockholders in other ways that made it easier for a minority to gain control.⁶⁰ By the late nineteenth century, nine state constitutions explicitly gave railroad stockholders the right to engage in what was known as *cumulative voting*, which meant that they could “cumulate [their] shares, and give one candidate as many votes as the number of directors multiplied by the number of shares of stock shall equal.”⁶¹ As Conyngton explained, “the cumulative system of voting . . . is designed to secure minority representation on the board.” This might make it easier for the minority interest to control a corporation, as Liefmann thought, but the overall effect as not necessarily to protect the *small* stockholder, as Conyngton implied a few years later in his 1908 manual on incorporation.⁶²

As the twentieth century opened, the practical effect, paradoxically, was that Americans enjoyed a lesser degree of what William N. Parker has termed “shareholder democracy” in the corporate world.⁶³ By 1918, when Liefmann wrote, the constraints on suffrage inside the American corporation had facilitated a concentration of wealth that astounded him. Thinking specifically of the extensive wealth controlled by the J. P. Morgan *Konzern*, Liefmann wondered “how Americans, in those circumstances, can speak of their country as a true democracy.” Corporate practice in Germany was, in Liefmann’s words, a good deal “more democratic,” and this, in his view, made it much harder to carry out mergers and consolidations.⁶⁴

CONSTITUTIONAL STRUCTURE

This basic difference in the democratic thrust of corporation policy extended beyond the issue of voting rights and procedures into the very structure of the corporation itself, as a brief review of the secondary

literature indicates.⁶⁵ In the United States, the corporate structure specified in the earliest railroad charters consisted of two overlapping bodies: The mass of stockholders and, elected from their midst, the board of directors; this basic structure remained in place throughout the nineteenth century. In Prussia and later in Germany, in contrast, the vast majority of the earliest railroad corporations had two levels of management above the stockholders.⁶⁶ As in the American corporation, the *Vorstand* or board of directors stood at the top of the organization; at the bottom were the mass of stockholders, their powers institutionalized in the *Generalversammlung* or general assembly. Unlike in American corporations, however, another body—the *Aufsichtsrat* or supervisory board—resided between the two. Its members were elected from among the mass of stockholders, and the members of the supervisory board, in turn, selected the board of directors. The lines of power in the Prussian corporation thus flowed upwards from the general assembly, which had authority over the supervisory board, which in turn had authority over the board of directors.

The law’s view of sovereignty in the corporation also differed radically in the United States and Germany by the end of the century. Initially, practice does not appear to have differed significantly. “Bottom-up” sovereignty characterized the German corporation, for German law traditionally regarded sovereignty to reside in the general assembly, rather than in the supervisory board or the board of directors. Similarly, in the United States “(i)n the early decades of the nineteenth century,” writes Scott R. Bowman, “American jurists lodged effective control of corporate enterprise in the shareholders, who as owners were deemed to be ultimately responsible for its conduct.”⁶⁷

But by mid-century American courts had begun to sanction an expansion of the board of directors’ implied powers,⁶⁸ and by the end of the century American law clearly lodged sovereignty at the top of the corporation, in the hands of the board of directors. The rather innocent-sounding vehicle in accomplishing this change was the process of writing by-laws to govern the internal organization of the corporation. As Thomas Conyngton observed in his 1908 manual on incorporation,

the right to make by-laws was formerly a prerogative of the stockholders alone, and these by-laws usually imposed certain proper restraints and limitations upon the directors. Now, in New Jersey and a few other states, it is possible and not uncommon by charter provision to give the directors absolute power to repeal by-laws passed by the stockholders, and to substitute, if they so desire, by-laws of their own of exactly opposite effect. This is perhaps the most dangerous of all the innovations

upon the old rules, as it virtually releases the directors from all necessity for compliance with the wishes of the stockholders and leaves in their hands the unrestrained management of the affairs of the corporation.⁶⁹

While the mass of the stockholders were steadily losing ground in the United States, their position was being beefed up in Germany. There the legislation passed by the *Reichstag* in 1884 strengthened the authority of the general assembly, which the law regarded as the body that expressed the "highest will" of the corporation (*als oberstes Willensorgan der Aktiengesellschaft*). Accordingly, selection of the supervisory board, decisions regarding changes in corporate statutes, changes in capitalization, and so on all required the approval of the general assembly in Germany.

Thus, in terms of both corporate suffrage and constitutional structure, American and German corporations ended the century on very different terms. The American corporation entered the twentieth century in a decidedly less democratic mode than it had begun the nineteenth century. German corporations, in contrast, preserved more of the markers of democracy throughout the century.

THE IMPORT OF POWER

How might an understanding of the divergence in democratic practice within the corporation help us to understand the evolution of corporate strategies? The foregoing discussion does not provide a firm basis, of course, on which to draw sound conclusions about the consequences of different political environments within the corporation. But, by way of closing, it is worth noting just where power relations among stockholders would have intersected with the process of corporate strategizing, a discussion that brings us full circle to the issues raised earlier about associational behavior in the electrical manufacturing and steel industries.

Both the United States and Germany were at the forefront of late-nineteenth-century efforts to develop new strategies of growth, and the two novel strategies that came to dominate in this era were horizontal integration, carried out by merging with companies in the same line of business, and vertical integration, which entailed the creation or acquisition of business capability in marketing or raw-material production. Of the two, vertical integration seems less likely to have prompted conflict over the power of stockholders in Prussia or Germany than in the United States, for it was more available as an option from the outset, especially in Prusso-Germany. In both countries, corporate charters routinely specified the corporation's lawful activities, but Prussian and German charters, anchored in Roman law, did so in much broader terms than

American charters, whose formulation was guided along narrower lines by Anglo-Saxon law. Consequently, vertical integration, which necessarily brought the company into new areas of operation, was more likely to require a change in the corporate charter in the United States, especially if the new lines of business not merely supported the corporation's main line of business but offered their services to the public. In that case, the corporation clearly risked having its business activities declared *ultra vires* or "beyond the powers" granted by the charter and therefore legally unenforceable. As Maier writes,

Widespread use of the *ultra vires* doctrine in nineteenth-century corporate law resembled the establishment of judicial review in constitutional law, and for good reason: Charters and constitutions were understood essentially as the same.⁷⁰

Yet, by the turn of the century, the *ultra vires* doctrine was apparently moot: "Owing to the broad powers that are now usually granted," Conyngton reported in his 1908 incorporation manual, "the doctrine of *ultra vires* has much less importance than formerly."⁷¹ On this score, American and German corporations opened the twentieth century on roughly comparable terms.

Horizontal integration, however, would have raised the issue of the stockholders' power in similar fashion in both countries right from the start, and here the divergence in democratic practice, evident in the evolution of corporate suffrage and constitutional structures, would more likely have mattered. In practice, stockholders in both the United States and Prussia or Germany almost always had to secure a change in a corporate charter to pursue horizontal integration, since the charter almost always specified a maximum capitalization or required stockholder assent to dissolve the company. Thus, regardless of whether a given company was absorbed in a merger or re-emerged as the parent company in a consolidation, such transformations usually required a change in a corporate charter.

In this circumstance, then, the divergence in democratic practice that began when railroads dominated corporate activity in the United States and Prusso-Germany could well have made it easier for a small body of stockholders to gain control in an American corporation at the turn of the century and relatively more difficult in its Prussian and later German counterpart. As suggested earlier, the conventional understanding of the conditions that gave rise to cartels in Germany and to consolidated enterprise in the United States now seems quite inadequate. Closer attention to the distribution of power among stockholders—and therefore to the underlying capacity to consolidate—offers a potentially fruit-

ful way of understanding the divergence anew. If German industrialists seemed to favor cooperation more than their American counterparts did, in other words, this could well have been because they, unlike their American colleagues, simply had less power to override the preferences of colleagues who thought differently.⁷² If cartel policy did indeed give German industrialists greater latitude to choose among corporate strategies, it is nonetheless possible, viewed from the standpoint of power relations within the corporation, that German industrialists who preferred consolidation also found themselves—in practice—with much less latitude for choice.

Notes

1. Alfred D. Chandler, Jr., *Strategy and Structure: Chapters in the History of the American Industrial Enterprise* (Cambridge: Harvard University Press, 1962); idem, *The Visible Hand: The Managerial Revolution in American Business* (Cambridge: Harvard University Press, Belknap Press, 1977); idem, *Scale and Scope: The Dynamics of Industrial Capitalism* (Cambridge: Harvard University Press, Belknap Press, 1990).
2. The allusion here is to a classic work in political science: Robert Dahl, *Who Governs? Democracy and Power in an American City* (New Haven: Yale University Press, 1961). Municipalities represented another class of early corporations. The classic American study on the separation of ownership and management was Adolf A. Berle and Gardiner C. Means, *The Modern Corporation and Private Property* (New York: William S. Hein, 1932).
3. Chandler, *Scale and Scope*, 393.
4. Ibid., 393f.
5. J. Singer, *Das Land der Monopole: Amerika oder Deutschland?* (Berlin: Franz Siemenroth, 1913).
6. Colleen A. Dunlavy, *Politics and Industrialization: Early Railroads in the United States and Prussia* (Princeton, New Jersey: Princeton University Press, 1994), 34f.
7. Alfred D. Chandler, Jr., comp. and ed., *The Railroads: The Nation's First Big Business, Sources and Readings* (New York: Harcourt, Brace & World, Inc., 1965); Jürgen Kocka, "Eisenbahnverwaltung in der Industriellen Revolution: Deutsch-Amerikanische Vergleiche," in *Historia Socialis et Oeconomica: Festschrift für Wolfgang Zorn zum 65. Geburtstag*, ed. Hermann Kellenbenz and Hans Pohl (Stuttgart: Franz Steiner Verlag Wiesbaden GmbH, 1987), 259–77.
8. For example, Ronald E. Seavoy, *The Origins of the American Business Corporation, 1784–1855* (Westport, Conn., and London: Greenwood Press, 1982), pays no attention to voting rights or to the constitutional structure of the corporation. Although it seems to have stimulated little follow-up research, the pioneering work on these topics was Norbert Horn and Jürgen Kocka, eds., *Recht und Entwicklung der Großunternehmen* (Göttingen: Vandenhoeck and Ruprecht, 1979).
9. Naomi Lamoreaux, *The Great Merger Movement in American Business, 1895–1904* (Cambridge: Cambridge University Press, 1985).
10. Dunlavy, *Politics and Industrialization*, 145–201, 245–53.
11. Chandler, *Scale and Scope*, 11f. This dichotomy—competitive versus cooperative—is rather misleading, however, since one can distinguish among three strategic responses to competition: outright, head-to-head competition; cooperation with competitors; and consolidation via merger or acquisition. The latter two, which characterized Germany and the United States, respectively, were alternative ways of seeking to eliminate competition: Consolidation sought to do away with competitors by absorbing them; cooperation sought to dampen competition through mutual agreements to divide profits, production, or territory. Thus the essential behavioral difference between American and German industrialists might better be summed up as a difference between *consolidative managerial capitalism* and *cooperative managerial capitalism*.
12. Except where noted otherwise, the following paragraphs are based on Chandler, *Scale and Scope*, 127–39, 488–96. The need to draw elements of Chandler's research into closer comparison arises because the book is structured as a series of parallel national stories. Thus, the analysis offered here also underlines the methodological point that a fully integrated comparative history may bring to light important facets of a comparison that remain hidden from view—even from the author's view—when national case studies are recounted in parallel fashion.
13. Quotations from Chandler, *Scale and Scope*, 489.
14. These inferences are based on information regarding the quotas assigned to individual firms in the Steel Works Federation, which is discussed further below. See Francis Walker, "The German Steel Syndicate," *Quarterly Journal of Economics* 20 (1906): 372f. According to Walker, the quota of Thyssen's company (*Gewerkschaft Deutscher Kaiser* or GDK) was initially the largest (704 000 tons of 8 012 000 total), while that of the Krupp company, an unwilling entrant into the association, began at 456 000 tons and was slated to rise to 706 000 in 1907. For valuable background, see Wilfried Feldenkirchen, *Die Eisen- und Stahlindustrie des Ruhrgebiets 1879–1914: Wachstum, Finanzierung und Struktur ihrer Großunternehmen* (Wiesbaden: Franz Steiner Verlag, 1982). He gives participation rates (in percentage of the Federation's total production) for selected firms in 1904, 1907, and 1911; see tables 28–30.
15. Quotation from Chandler, *Scale and Scope*, 132.
16. In addition to Chandler, *Scale and Scope*, see Rainer Fremdling, "The German Iron and Steel Industry in the 19th Century," in *Changing Patterns of International Rivalry: Some Lessons from the Steel Industry*, ed. Etsuo Abe and Yoshitaka Suzuki (Tokyo: University of Tokyo Press, Committee for the International Conference on Business History, 1991), 125, 132; and Feldenkirchen, *Stahlindustrie*, 120ff. On forerunners to the Steel Works

- Federation, see Feldenkirchen, *Stahlindustrie*, 110–20; and Ulrich Wengenroth, *Enterprise and Technology: The German and British Steel Industries, 1865–1895* (Cambridge: Cambridge University Press, 1994), 120–28, 140–45, 187ff.
17. Except as otherwise noted, this section is based on Chandler, *Scale and Scope*, 212–221, 228, 402, 463–72, 548f. Cf. n. 12.
 18. Quotation from Chandler, *Scale and Scope*, 548.
 19. Chandler, *Scale and Scope*, 12; Hans Jaeger, *Geschichte der Wirtschaftsordnung in Deutschland* (Frankfurt am Main: Suhrkamp, 1988), 112; Francis Walker, “The Law Concerning Monopolistic Combinations in Continental Europe,” in *Trusts in Foreign Countries: Laws and References . . .*, comp. Fred A. Johnson (Washington: Government Printing Office, 1912), 80.
 20. Martin J. Sklar, *The Corporate Reconstruction of American Capitalism, 1890–1916: The Market, the Law, and Politics* (New York: Cambridge University Press, 1988). See also Scott R. Bowman, *The Modern Corporation and American Political Thought: Law, Power, and Ideology* (University Park, Penn.: Pennsylvania State University Press, 1996), 63f. For a dissenting view, see P. C. Carstensen, “Dubious Dichotomies and Blurred Vistas: The Corporate Reconstruction of American Capitalism,” *Reviews in American History* 17 (1989): 407f., who argues that Sklar “imposes a wholly unjustified level of consistency and certainty on pre-1897 cases and legislative history.” He also maintains that the courts did not consistently uphold an absolute ban on combinations between 1897 and 1911.
 21. Chandler, *Scale and Scope*, 501.
 22. On these general points, see, in addition to Chandler, *Scale and Scope*, Lamoreaux, *Merger Movement*, 14–86; Melvin Dubofsky, “Technological Change and American Worker Movements, 1870–1970,” in *Technology, the Economy, and Society: The American Experience*, ed. Joel Colton and Stuart Bruchey (New York: Columbia University Press, 1987); William Lazonick, “Technological Change and the Control of Work: The Development of Capital-Labour Relations in US Mass Production Industries,” in *Managerial Strategies and Industrial Relations: An Historical and Comparative Study*, ed. Craig R. Littler and Howard F. Gospel (London: Heineman, 1983), 111–36; and, for an overview, Glenn Porter, *The Rise of Big Business, 1860–1920*, 2d ed. (Arlington Heights, IL: Harlan Davidson, 1992), 1–28.
 23. Walker, “German Steel Syndicate,” 386; Fremdling, “German Iron,” 131.
 24. The two processes of consolidation in electrical manufacturing, it should be noted, resembled each other even more than Chandler’s account suggests. The German mergers took place, he notes, because the consolidating firms needed capital during the economic downturn; the merger that produced the American GE, in contrast, he attributes to the need to control patents as well as a desire to merge complementary product lines. But more recent research by Carlson rules out these factors on the American side and instead reveals motivations very much like those behind the German mergers: On the one hand, a “desire to eliminate competition” via consolidation and, on the other, “the problem of raising sufficient capital for a capital-intensive industry.”

- W. Bernard Carlson, “Competition and Consolidation in the Electrical Manufacturing Industry, 1889–1892,” in *Technological Competitiveness: Contemporary and Historical Perspectives on the Electrical, Electronics, and Computer Industries*, ed. William Aspray (New York: Institute of Electrical and Electronic Engineers, Inc., 1993), 301f.
25. Chandler, *Scale and Scope*, 493. For details on the formation of the cartel, the initial quotas, and its early results, see Walker, “German Steel Syndicate,” 353–98.
 26. Colleen A. Dunlavy, “How Did American Business Get So Big?” *Audacity, The Magazine of Business Enterprise* (Spring 1994): 41–49; Gerald Berk, *Alternative Tracks* (Baltimore: Johns Hopkins University Press, 1994).
 27. Carlson, “Competition and Consolidation,” 288.
 28. Lawrence M. Friedman, *A History of American Law* (New York: Simon & Schuster, Inc., 1973), 168. Friedman gives examples of voting schemes that included the graduated scales and caps discussed below.
 29. P. Maier, “The Revolutionary Origins of the American Corporation,” *William and Mary Quarterly*, 3d ser., no. 50 (1993): 77.
 30. *Ibid.*, 77, n.74.
 31. W. P. Gregg and Benjamin Pond, comp., *The Railroad Laws and Charters of the United States . . .*, vol. II, *Containing the Railroad Laws and Charters of Massachusetts, Rhode Island, and Connecticut* (Boston: Charles C. Little and James Brown, 1851), 609; *An Act to Incorporate the New-York, Providence, and Boston Rail Road Company, Passed at the June Session, 1832* (Providence: B. Cranston & Co., 1836), 10.
 32. Friedman, *History of American Law*, 171.
 33. Maier, “Revolutionary,” 77.
 34. Balthasar Henry Meyer, *Railway Legislation in the United States* (New York: The Macmillan Company, 1903), 76f.
 35. Gregg and Pond, *Railroad Laws*, 2:30.
 36. *Charter for the Richmond and Ohio Railroad Company* (n.p., [1847]), 19.
 37. Examples from two other states—Rhode Island and Georgia—may be found in *Act to Incorporate*, 10; and *Charter of the Brunswick and Florida Railroad Company, with the Amendments Thereto* (n.p., 1835), 17.
 38. Both the Prussian national railroad law of 1838 and Prussian legislation governing joint-stock corporations were silent on voting rights and thus left their determination to individual charters; “Gesetz über die Eisenbahn-Unternehmungen, vom 3. November 1838,” *Gesetz-Sammlung für die Königlichen Preussischen Staaten*, no. 35, reprinted (among other places) in Wolfgang Klee, *Preussische Eisenbahngeschichte* (Stuttgart: Verlag W. Kohlhammer, 1982), App.; “Gesetz über die Aktien-Gesellschaften,” 9 November 1843, reprinted in Friedrich Wilhelm Freiherr von Reden, *Die Eisenbahnen Deutschlands*, 1. Abt., 2. Abschnitt: *Statistisch-geschichtliche Darstellung ihrer Entstehung, ihres Verhältnisses zu der Staatsgewalt, so wie ihrer Verwaltungs- und Betriebs-Einrichtungen* (Berlin: Ernst Siegfried Mittler, 1844), 295.
 39. David Hansemann, *Die Eisenbahnen und deren Aktionäre in ihrem Verhält-*

- niß zum Staat (Leipzig and Halle: Renger'sche Verlagsbuchhandlung, 1837), 116.
40. Ibid., 141f., 157f.
 41. For brief comments on the Dutch and French background of the German corporation, see Karl Lehmann, *Das Recht der Aktiengesellschaften*, vol. I (Berlin: Carl Heymanns Verlag, 1898), 62f.
 42. Meno Pöhls, *Das Recht der Actiengesellschaften mit besonderer Rücksicht auf Eisenbahngesellschaften* (Hamburg: Hoffmann and Campe, 1842), 198.
 43. Ibid., 198ff. According to Pöhls, Württemberg and Hungary had adopted legislation to this effect; *ibid.*, 200, n. 4, 200, n. 5.
 44. For further qualifications in practice, however, see n. 46 below and the accompanying text.
 45. Julius Michaelis, *Deutschlands Eisenbahnen: Ein Handbuch für Geschäftslente, Privatpersonen, Capitalisten und Speculanten, enthaltend Geschichte und Beschreibung der Eisenbahnen, deren Verfassung, Anlagecapital, Frequenz, Einnahme, Rentabilität und Reservefonds. . . .* (Leipzig, C. F. Amelang's Verlag, 1854), 30, 34, 39, 49, 76, 87, 141, 189, 220, 241, 252. The summary pertains to the Berg-Mark, Berlin-Anhalt, Berlin-Hamburg, Berlin-Stettin, Cologne-Minden, Düsseldorf-Elberfeld, Magdeburg-Leipzig, Upper Silesian, Rhenish, Stargard-Posener, and Thuringian railroads. Although this book reported on conditions ca. 1853, the author was careful to note changes since the companies were first incorporated.
 46. Pöhls, *Das Recht der Actiengesellschaften*, 198f.
 47. Gregg and Pond, *Railroad Laws*, 2:624. Chapter 44 of the Massachusetts Revised Statutes substantially increased the autonomy of "[a]ll corporations . . . where no other provision is specially made." They could determine themselves (via their by-laws) the basic elements of internal governance: How meetings were to be called and conducted, the definition of a quorum, "the number of shares that shall entitle the members to one or more votes; the mode of voting by proxy;" and so on; *ibid.*, 633. The more stringent provisions of the Revised Statutes that pertained specifically to railroads, however, would have taken precedence.
 48. W. P. Gregg and Benjamin Pond, comps., *The Railroad Laws and Charters of the United States . . .*, vol. I, *Containing the Railroad Laws and Charters of Maine, New Hampshire, and Vermont* (Boston: Charles C. Little and James Brown, 1851), 641 (Revised Statutes, Chap. 146, § 20).
 49. Gregg and Pond, *Railroad Laws*, 2:652, 654 (N. H. Laws of 1846, Chap. 321, § 2, § 5). Subsequent legislation passed in 1849 limited the use of proxies by any individual to no more than one-fiftieth of the total number of shares; *ibid.*, 661 (Laws of 1849, Chap. 860).
 50. See Gregg and Pond, *Railroad Laws*, vol. II.
 51. *Laws of the State of New York, Passed at the Seventy-Third Session of the Legislature. . . .* (Albany: Little & Company, 1850), Ch. 140, § 5.
 52. *Charter of the Brunswick*, 3, 17.
 53. Meyer, *Railway Legislation*, 104.

54. Thomas Conyngton, *A Manual of Corporate Organization Containing Information, Directions and Suggestions Relating to the Incorporation of Enterprises*, 2d ed. (New York: The Ronald Press, 1908), 153.
55. See note 45. The Berg-Mark, Berlin-Hamburg, and Berlin-Anhalt railroads, none of which used a graduated scale, granted one vote to multiples of three, five, and ten shares, respectively. The Berlin-Anhalt, whose shares at 200 Thlr. were also twice as large as the norm in Prussia, set a maximum number of votes at 30; the other two did not impose a maximum.
56. Julius Herrmann Beschorner, *Das Deutsche Eisenbahnrecht mit besonderer Berücksichtigung des Actien- und Expropriationsrechtes* (Erlangen: Verlag von Ferdinand Enke, 1858), 76.
57. Viktor Ring, *Das Reichsgesetz betreffend die Kommanditgesellschaften auf Aktien und die Aktiengesellschaften. Vom 18. Juli 1884*, 2d ed. (Berlin: Carl Heymanns Verlag, 1893), 93, 450f. The commentator noted that this represented a real change and that it meant, among other things, that statute provisions that allowed certain, otherwise-capable shareholders (*verfügungsfähige Personen*) to cast votes only by means of a proxy would no longer be permissible; *ibid.*, 450. This elliptical statement would seem to refer to women stockholders, who were traditionally not allowed to attend the stockholders' meetings.
58. *Ibid.*, 450f.
59. Robert Liefmann, *Kartelle und Trusts und die Weiterbildung der Volkswirtschaftlichen Organisation* (Stuttgart: Verlag von Ernst Heinrich Moritz, 1918), 168ff; Norbert Horn, "Aktienrechtliche Unternehmungsorganisation in der Hochindustrialisierung (1860–1920)," in *Recht und Entwicklung der Großunternehmen . . .*, ed. Norbert Horn and Jürgen Kocka (Göttingen: Vandenhoeck and Ruprecht, 1979), 159. The difference was one of degree, not kind, for the German legislation (*Novelle*) did allow special kinds of stock to have enlarged voting rights, but it still meant that one had to contend with more stockholders. In this context, the power of the proxy would have been even more significant than in the United States.
60. Thomas Conyngton, *The Modern Corporation, Its Mechanism, Methods, Formation and Management: A Practical Work on the Corporate Form as Used for Private Enterprises*, 2nd. ed. (New York: The Ronald Press, 1905) pp. 86–96.
61. Meyer, *Railway Legislation*, 104.
62. Conyngton, *Manual*, 250.
63. W. N. Parker, "The Scale and Scope of Alfred D. Chandler, Jr.," *Journal of Economic History* 51 (December 1991): 961n.
64. Liefmann, *Kartelle*, 173, 197.
65. Except as noted, this summary is based on Horn, "Aktienrechtliche Unternehmungsorganisation," 123–89.
66. Michaelis, *Deutschlands Eisenbahnen*, gives details on the internal structure of all German railroads ca. 1853. For general discussions see Pöhls, *Das Recht der Actiengesellschaften*, 179–210; and Beschorner, *Deutsche Eisenbahnrecht*.

67. Bowman, *Modern Corporation*, 51.
68. *Ibid.*, 52.
69. Conyngton, *Manual*, 251.
70. Maier, "Revolutionary Origins," 79. On *ultra vires* see Friedman, *History of American Law*, 452ff.
71. Conyngton, *Manual*, 113.
72. Left out of consideration in this preliminary sketch, it should be noted, is the use of proxies, but this practice seems to have been fairly widely accepted in both countries from the outset.