Investor Sentiment and Antitrust Law as Determinants of Corporate Ownership Structure: The Great Merger Wave of 1897 to 1903 *

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Abstract

A great merger wave occurring in the United States between 1897 and 1903 was the single most important event in a process that yielded the pattern of managerial control and dispersed share ownership which currently distinguishes America's corporate economy from arrangements in most other countries. This paper examines the turn-of-the-century consolidation movement in order to offer lessons on how patterns of ownership and control become configured. The United States constitutes the central reference point for analysis but the paper also considers events occurring in Germany.

One theme the paper develops is that mergers matter with respect to the evolution of systems of ownership and control. Events occurring in the U.S. and Germany indicate that different patterns of acquisition activity in the two countries had important consequences for the evolution of business forms that persist to the present day. A second topic the paper deals with is the process by which a country's investors become sufficiently comfortable owning publicly traded shares to permit a transition from concentrated to dispersed share ownership. The merger wave of 1897 to 1903 illustrates that surges in demand for shares founded upon optimistic investor sentiment is a potentially important variable. A third theme the paper emphasizes is antitrust law's significance. The experience in the U.S. and Germany suggests that the legal status of anti-competitive alliances is a potentially important determinant of corporate ownership structures.

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I. INTRODUCTION

Over the past few years, there has been much academic debate about what constitutes the crucial "bedrock" that underpins a U.S.-style economy where widely-held public companies dominate. Various key contributors to the discourse have carried out historically-oriented studies to advance the arguments they have made.[1] A potentially pivotal chapter has, however, been ignored. A great merger wave occurring in the United States between 1897 and 1903 arguably was the single most important event in a process that yielded the pattern of managerial control and dispersed share ownership which now distinguishes the corporate economy in the U.S. from arrangements in most other countries. Despite this, the turn-of-the-century consolidation movement has received only passing mentions in the contemporary literature on international corporate governance. This paper retrieves the merger wave of 1897 to 1903 from its relative obscurity in order to offer lessons about how patterns of ownership and control become configured within countries.

One proposition the paper advances is that merger activity matters with respect to the evolution of systems of ownership and control. Throughout the 20th century, there were a series of great merger waves, one at the beginning, one at the end and

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[1] See, for example, Mark J. Roe, Strong Managers, Weak Owners: The Political Roots of American Corporate Finance (1994); Raghurham Rajan and Luigi Zingales, The Great Reversals: The Politics of Financial Development in the 20th Century (Discussion Paper No. 2783, Center for Economic Policy Research 2001); John C. Coffee, The Rise of Dispersed Ownership: The Roles of Law and State in the Separation of Ownership and Control, 111 Yale L.J. 1 (2001).

others occurring during the 1920s, 1960s and 1980s. Until the most recent burst, which affected a wide range of industrialized countries, acquisition activity was confined primarily to the two countries where diffuse share ownership is the norm for large business enterprises, namely the United States and the United Kingdom.[2] This correlation does not demonstrate any sort of causation. Events relating to America's merger wave of 1897 to 1903 suggest, however, that acquisition activity constituted a catalyst for diffuse ownership in the corporate sector.

If mergers occurring in the United States at the turn of the twentieth century were an agent for change, discerning the factors which influenced the pace of acquisition activity should offer clues as to how dispersed share ownership becomes the norm in large business enterprises. The paper identifies two variables as being pivotal. One was investor sentiment. Essentially, a surge in demand for corporate equity founded upon optimistic assumptions concerning the future prospects of newly amalgamated companies provided a platform for the acquisition activity which took place in the U.S. In the contemporary discourse concerning cross-border corporate governance, little has been said about the role which rapid fluctuations in investor confidence can play in shaping corporate ownership structures. Instead, with respect

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[2] On merger activity, see Klaus Gugler *et al.*, The Effects of Mergers: An International Comparison, unpublished working paper 1 (2002); see also Bernard S. Black, The First International Merger Wave (and the Fifth and Last U.S. Merger Wave) 54 U. Mia. L. Rev. 799, 799-806 (2000). On the U.S. and U.K., see John Armour *et al.*, Corporate Ownership Structure and the Evolution of Bankruptcy Law: Lessons from the UK, part V (forthcoming Vanderbilt L. Rev. 2003).

to investor sentiment, the dominant theme in the literature has been that the "law matters", in the sense that diffusion will only occur when strong corporate law deprives corporate insiders of key private benefits of control and concomitantly gives outside investors sufficient confidence to purchase corporate equity. The U.S. experience with mergers suggests that a re-evaluation of the relationship between investor confidence and ownership structure is in order.

Antitrust law is the second variable which the paper emphasizes. As the 19th century drew to a close, there was in the United States a legal bias against cartel-type arrangements that may have had important consequences for the evolution of business forms that persist to the present day. With respect to the contemporary discourse on corporate governance arrangements, the contention that antitrust law is a major determinant of ownership structure is novel. Aspects of the legal system which have attracted attention in the relevant literature include not only corporate law but also the quality of legal institutions, the regulation of investment intermediaries, and bankruptcy law.[3] Antitrust law, in contrast, has been largely ignored. An analysis of America's turn-of-the-century consolidation movement suggests this neglect is inappropriate.

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[3] For an overview of the literature on the quality of legal institutions, see Stephen J. Choi, Law, Finance and Path Dependence: Developing Strong Securities Markets, 80 Tex. L. Rev. 1657, 1696-1702 (2002). On the regulation of investment intermediaries, see, for example, Roe, Strong, *supra* note xx. On bankruptcy law, see, for instance, Armour *et al.*, Corporate, *supra* note xx.

Events occurring in the United States constitute the central reference point for analysis in this paper. Nevertheless, since the intention is to offer insights concerning international corporate governance, there is also an explicit comparative dimension. This will be provided via an analysis of events occurring in Germany, the one European economy that was proving itself capable of dealing with America's growing strength as the 19th century drew to a close. Germany did not experience a consolidation movement akin to that occurring across the Atlantic and an analysis of the reasons for this disparity lends support to the proposition that, via merger activity, spontaneous surges in demand for corporate equity and the regulation of anti-competitive behaviour (or lack thereof) can be key determinants of patterns of ownership and control.

II. THE UNITED STATES

A. The Setting for the Merger Wave

As the 19th century was drawing to a close, family control of industrial enterprises was the norm in the United States and there were only very rare examples of companies with widely dispersed shareholdings and well-developed managerial hierarchies.[4] Moreover, manufacturers of the time preferred, if possible, to retain a

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[4] Thomas R. Navin and Marian V. Sears, The Rise of a Market for Industrial Securities, 1887-1902, 29 Business History Rev. 105, 106-12 (1955); Walter Werner, Corporation Law in Search of its Future 81 Columbia L. Rev. 1611, 1636-40 (1981).

separate and distinct identity.[5] This bias is consistent with what is referred to in the contemporary literature on governance arrangements as the "controller's roadblock", which is attributed to a blockholder's ability to extract "rent" by diverting a disproportionate share of the returns generated by a business.[6]

Product market competition can, however, limit private benefits of control by reducing profits available for "skimming".[7] This likely was a potent dynamic as the 19th century drew to a close since many manufacturers were suffering from unprecedented competitive pressures.[8] One cause was improvements in transportation which served to transform markets from local to national and thereby exposed industrialists who had enjoyed regional oligopolies to competing commodities from distant factories. Also important were technological advancements that created new

[5] Wallace E. Belcher, Industrial Pooling Agreements, 19 Q.J. Econ. 111, 121 (1904).

[6] Lucian A. Bebchuk and Mark J. Roe, A Theory of Path Dependence in Corporate Ownership and Governance, 52 Stanford L. Rev. 127, 143-46 (1999).

[7] Alexander Dyck and Luigi Zingales, Private Benefits of Control: An International Comparison 3-4 (Working Paper No. 535, Center for Research in Security Prices 2001).

[8] Charles S. Tippetts and Shaw Livermore, Business Organization and Public Control 364-67 (2d ed. 1941); Hans B. Thorelli, The Federal Antitrust Policy: Origination of an American Tradition 66-68 (1954); Richard F. Bensel, The Political Economy of American Industrialization, 1877-1900 314-15, 320 (2000).

opportunities for firms to engage in high-volume manufacturing. The soaring output which ensued drove down prices, placing manufacturers under intense pressure to limit output. In various heavily capitalized industries, however, this was difficult for companies to orchestrate because of high fixed costs. Overall, then, the returns generated by the business enterprises affected by intense competitive pressures would have been poor and the private benefits of control meagre.

Producers discouraged by the seemingly relentless forces of competition attempted to seek refuge by entering into alliances designed to control price and production.[9] Often, the devices used for restraining competition did stabilize market conditions temporarily. Manufacturers, though, were continually tempted to seek advantage by undercutting established prices and by exceeding output quotas.[10] Retaliation was problematic because at this time U.S. courts typically applied common law principles that precluded enforcement of combinations in restraint of trade.[11]

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9 Tippetts and Livermore, *supra* note xx, at 367; Alfred D. Chandler, The Visible Hand: The Managerial Revolution in American Business 316-17 (1977).

10 Tippetts and Livermore, *supra* note xx, at 338-39, 344, 367; Tony Freyer, Regulating Big Business: Antitrust in Great Britain and America 1880-1990 23 (1992).

11 Thorelli, *supra* note xx, at 266-67; William R. Cornish, Legal Control Over Cartels and Monopolization 1880-1914: A Comparison in Law and the Formation of

For industrialists who were in despair as a result of "cutthroat" competition, economic hardship served to displace, at least to some degree, the bias in favor of independence and fostered a willingness to contemplate selling out.[12] With manufacturers being keen to "get in out of the rain"[13] attention shifted from anti-competitive alliances to a different method for imposing discipline on market forces, namely merging under a single corporate roof. One way a horizontal consolidation could be structured was a complete "fusion" where the assets of former competitors were brought under the direct ownership of a pure operating company. This sort of transaction was facilitated during the late 19th century by the displacement of a common law rule requiring unanimous shareholder consent for the sale of corporate assets.[14] Another possibility was the holding company, which would acquire the shares of each of the constituent companies and use this leverage to exercise tight

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the Big Enterprises in the 19th and Early 20th Centuries 280, 284-85, 288 (Norbert Horn and Jurgen Kocka eds. 1979).

12 Lewis H. Haney, Business Organization and Combination 137-38 (1921); Glenn Porter, The Rise of Big Business 1860-1920 80 (2d ed. 1992); Myron W. Watkins, Industrial Combinations and Public Policy: A Study of Combination, Competition and the Common Welfare 26 (1927).

13 Tippetts and Livermore, *supra* note xx, at 367.

14 On this process, see Morton Horwitz, The Transformation of the American Law 1870-1960 87-89 (1992); Herbert Hovenkamp, Enterprise and American Law 1836-1937 252-53 (1991).

control over price and production. A handful of state legislatures, led by New Jersey in 1889, paved the way for the use of this organizational form by modifying their respective general incorporation laws to permit a corporation to own stock in other enterprises.[15]

The fact that the turn-of-the-century merger wave was at least partially a product of "cutthroat" competition yielded the key distinguishing feature of this consolidation movement: the mergers typically involved the simultaneous amalgamation of many competitors in a single industry. According to figures compiled by economic historian Naomi Lamoreaux, more than 1,800 firms disappeared and well over half of the resulting consolidations absorbed over 40 per cent of their respective industries.[16] This pattern turned out to be unique, since during subsequent waves of merger activity in the U.S. the transactions focused around the acquisition of a single enterprise by a competitor or by a firm engaged in an unrelated line of business. To illustrate, while 75 per cent of the firms that disappeared as a result of corporate amalgamations at the turn-of-the-century joined a consolidation

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[15] Hovenkamp, Enterprise, *supra* note xx, at 257-58; James C. Bonbright and Gardiner C. Means, The Holding Company: Its Public Significance and its Regulation 55-57, 64-65 (1932); William G. Roy, Socializing Capital: The Rise of the Large Industrial Corporation in America 151-54 (1997).

[16] Naomi R. Lamoreaux, The Great Merger Movement in American Business, 1895-1904 2-4 (1985).

involving five or more enterprises, when merger activity began to pick up again (1915-20), this figure fell to 14 per cent.[17]

A massive horizontal consolidation was not, in and of itself, a viable business strategy. After a shakedown period that covered the first two decades of the 20th century, the successes became dominant players in the U.S. economy whereas ill-conceived or poorly executed mergers unravelled.[18] With companies that failed, a common affliction was that they were burdened by antiquated plants imprudently acquired in a bid to boost market share and thus were vulnerable to new entrants to the industry.[19] In contrast, a company that was a product of horizontal consolidation was well-positioned to succeed if it was in a technologically advanced sector where genuine economies of scale could be sustained and market power could be entrenched by vertical integration forward into marketing and backward into purchasing.[20]

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[17] Lamoreaux, *ibid.*, 1; see also Ralph L. Nelson, Merger Movements in American Industry 1895-1956 55-64 (1959).

[18] Porter, Rise, *supra* note xx, at 83-84; Tippetts and Livermore, *supra* note xx, at 474-75; George W. Stocking, Comment, Business Concentration and Price Policy 191, 200 (NBER Report 1955).

[19] Lamoreaux, Great, *supra* note xx, at 191-92; Arthur S. Dewing, Corporate Promotions and Reorganizations 562-65 (1914).

[20] Chandler, Visible, *supra* note xx, at 315, 345; Porter, Rise, *supra* note xx, at 86-88; Thomas K. McCraw, Rethinking the Trust Question in Regulation in Perspective 1, 17-18 (Thomas K. McCraw ed. 1981).

B. The Merger Wave's Contribution to the Emergence of U.S.-Style Capitalism

The United States experienced a "corporate revolution" between 1880 and 1930.[21] While family-oriented companies were the norm at the beginning of this period, by the end leading firms in a wide range of industries had diffuse share ownership and stockholders who tended to lack a sufficient financial incentive to participate directly in corporate affairs. Indeed, by 1932 Adolf Berle and Gardiner Means could proclaim in *The Modern Corporation & Private Property* that "a separation of ownership and control" had emerged in America's larger public companies.[22] America's corporate economy continues to be organized on this sort of "outsider/arm's-length" basis today.[23]

The merger movement which took place between 1897 and 1903 was perhaps the single most important single episode in the formative era of American managerial

[21] Roy, *supra* note ??, 3, 16-18; Werner, Corporation, *supra* note ??, 1641-42; Mary O'Sullivan, Contests for Corporate Control: Corporate Governance and Economic Performance in the United States and Germany 75-77 (2000).

[22] Adolf A. Berle and Gardiner C. Means, The Modern Corporation & Private Property 5 (1932).

[23] Brian R. Cheffins, Current Trends in Corporate Governance: Going From London to Milan via Toronto, 10 Duke J. Comp. & Int'l L. 5, 12-13 (1999).

capitalism.[24] Essentially, by reconfiguring ownership structures, the flurry of consolidation activity hastened or stimulated a shift towards contemporary managerial arrangements.[25] When an industry-wide amalgamation occurred, the family-oriented governance pattern that would have been the norm was fundamentally disrupted as formerly autonomous proprietors retired or became subject to controls necessary to maximize the value of the entire enterprise.[26] Collectively, then, controller roadblocks were displaced in a massive way in key sectors of the American economy during the merger wave of 1897 to 1903.

Despite the changes wrought by the flurry of consolidation activity, the widely held and managerially-oriented “Berle and Means corporation” did not predominate immediately. The fact that the more important 1897-1903 consolidations were typically listed on the New York Stock Exchange (NYSE) or another stock market meant that the merger wave ensured that corporate equity was a more fungible asset

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24 Roy, *supra* note xx, at 254; Thorelli, *supra*, note ??, 306; Alfred D. Chandler, Scale and Scope: The Dynamics of Industrial Capitalism 79 (1990).

25 Chandler, Scale, *supra* note xx, at 75-78; George Bittlingmayer, Antitrust and Business Activity: The First Quarter Century, 70 Bus. Hist. Rev. 363, 367-68 (1996); H.A. Marquand, The Dynamics of Industrial Combination 40-45 (1931).

26 George Bittlingmayer, Did Antitrust Policy Cause the Great Merger Wave?, 28 J. L. Econ. 77, 104-7 (1985).

class than had been the case previously.[27] Still, the dispersed ownership structure that prevails in today's large American companies was not yet the norm. Instead, "core" investors were in place that were potentially in a position to dictate how the newly consolidated companies would be run.

One key constituency which remained when a turn-of-the-century merger had been concluded was composed of the owners of the formerly autonomous firms encompassed within the consolidation. This was because of the merger package typically offered to incumbents with an industry. The proprietors rarely received payment in cash.[28] Instead, the consideration typically constituted a package of common and preferred stock in the newly merged company.

Aside from former industry incumbents, the configuration of influence depended on the structure of a particular merger. In industries where manufacturers were too numerous or too intensely suspicious of each other to organize themselves, a professional "promoter" would take on the leadership role. Individuals acting in this new capacity – "promotions" were previously unknown to the vernacular of American finance[29] -- would act as the impartial arbiter formulating the terms of the deal and

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[27] Roy, Socializing, *supra* note xx, at 248; for statistics on merged companies with listed securities, see Nelson, *supra* note xx, at 92-93, 99.

[28] On why payment in cash was not the norm, see Navin and Sears, *supra* note xx, at 132; Eliot Jones, The Trust Problem in the United States 283-84 (1924).

[29] Alexander D. Noyes, The Market Place: Reminiscences of a Financial Editor 179 (1938).

would organize the financing.[30] Promoters of a successful merger would typically retain a large block of shares in the new company as consideration for their services and would secure a position on the board of directors as recognition of their stake.[31]

In certain industries, the services of a promoter were unnecessary since a viable horizontal consolidation could be organized with the participation of a relatively small number of firms. Under such circumstances, the owners of the enterprises would co-ordinate the transaction themselves, with the standard pattern being that leaders would emerge within this group.[32] These "first movers" would dictate how the merger would be structured, would own a substantial portion of the equity in the new corporation and would become the core of the new management team.

Investment banks that had provided significant financial backing constituted one additional constituency which could play a pivotal role in a corporation emerging from a horizontal consolidation. Leading houses such as J.P. Morgan & Co. sometimes promoted mergers themselves but more often they would confine

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[30] Lamoreaux, Great, *supra* note xx, at 115; Thorelli, *supra* note xx, at 279.

[31] Marquand, *supra* note xx, 75; Haney, Business, *supra* note xx, at 296-97.

[32] Lamoreaux, Great, *supra* note xx, at 114-15; Chandler, Scale, *supra* note xx, at 247; Chandler, Visible, *supra* note xx, 415-16.

themselves to underwriting.[33] Their objective in the latter instance was to place the equity with a clientele of wealthy private investors and institutional buyers such as trust companies and insurance companies.[34]

Top-ranking investment banks were intent upon maintaining a reputation for delivering value and correspondingly would frequently make their co-operation in a merger transaction contingent upon having a continuing influence over the ventures they were being asked to assist.[35] For instance, there might be a demand for directorships, with the idea being that representation on the board would allow an investment bank to assess how things were being run and to replace quickly managers whose performance was unsatisfactory. The upshot was that the merger wave of 1897 to 1903 fitted comfortably into what was the heyday of "financial capitalism" in the

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[33] Thorelli, *supra* note xx, at 283; Jeremiah W. Jenks and Walter E. Clark, The Trust Problem 195-96 (5th ed. 1929).

[34] On who underwriters would sell shares to, see Haney, Business, *supra* note xx, at 302-7; Paul G. Mahoney, The Political Economy of the Securities Act of 1933, 30 J. Legal St. 1, 5 (2001); Gene Smiley, The Expansion of the New York Securities Market at the Turn of the Century, 55(1) Business History Rev. 75, 79-83 (1981).

[35] Thorelli, *supra* note xx, at 283; J. Bradford De Long, Did J.P. Morgan's Men Add Value: An Economist's Perspective on Financial Capitalism, in Inside the Business Enterprise: Historical Perspectives on the Use of Information 205, 205, 216 (Peter Temin ed. 1991).

United States, represented by a uniquely strong association between finance and industry.[36]

While the large enterprises that were formed as a result of the 1897-1903 merger wave had "core" investors that could exercise considerable influence over corporate policy, this often was a transitional phase. For proprietors of firms disappearing in a merger, unwinding their holdings was typically a logical step since they often accepted the deal on the premise that exit was an option.[37] The influence of promoters also often had a transitory aspect since there was a tendency for them to disengage from the venture soon after launch.[38]

With those manufacturers who acted as leaders in a merger transaction, they tended to cede authority over time to senior executives with little or no stock ownership.[39] Investment bankers also became increasingly content to defer to managerial judgment and their leverage dwindled as they failed to press for a continuing role on corporate boards.[40] To cap matters, during the 1920s, larger

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36 De Long, *supra* note xx, at 205; George David Smith and Davis Dyer, The Rise and Transformation of the American Corporation, in The American Corporation Today 28, 44 (Carl Kaysen ed. 1996).

37 For more detail on this, see *infra* note xx and accompanying text.

38 Thorelli, *supra* note xx, at 279; Tippetts and Livermore, *supra* note xx, at 379.

39 Chandler, Scale, *supra* note xx, at 80; Marquand, *supra* note xx, at 146, 149.

40 Chandler, Scale, *supra* note xx, at 81-82; Marquand, *supra* note xx, at 139-41.

enterprises increasingly carried out stock offerings to finance the opening of new facilities, the restructuring of existing operations and growth through acquisition. The diffusion in share ownership which ensued accelerated the decline in influence of those who were owners of large blocks of equity in America's bigger companies.[41]

C. Antitrust Law and the Merger Wave

Given that the merger wave of 1897-1903 was the single most important event in the formative era of American managerial capitalism, ascertaining its causes should offer clues that help to explain why the system of ownership and control in the U.S. differs from arrangements in most other countries. Antitrust law is one variable that merits consideration, with the argument in favour of its contribution running as follows. Industrialists in the U.S. were facing unprecedented competitive pressures as the 19th century drew to a close. The creation of successful anti-competitive alliances potentially could have offered relief and ensured that significant private benefits of control would remain available for proprietors. The bias manufacturers had in favour of remaining independent would thus remain fully in play. However, alliances designed to control price and production were, as John D. Rockefeller said, "ropes of sand" since U.S. courts typically applied common law principles that precluded enforcement of combinations in restraint of trade.[42]

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[41] Chandler, Scale, *supra* note xx, at 49, 80; Smith and Dyer, *supra* note xx, at 44; Margaret G. Myers, A Financial History of the United States 297-98 (1970).

[42] Freyer, Regulating Big, *supra* note xx, 23-4; Thorelli, *supra* note xx, 267-8.

Judicial interpretation of the Sherman Antitrust Act, enacted in 1890,[43] was another integral part of the equation. In an 1895 decision, the U.S. Supreme Court ruled that the activities of a New Jersey holding company owning shares in Pennsylvania corporations were beyond the reach of the Sherman Act since interstate commerce was unaffected.[44] Shortly thereafter, the Supreme Court held that alliances between independent business firms formed to fix prices or allocate markets violated the Act.[45] As a result of these various cases, contemporaries assumed that anti-competitive conduct occurring purely through the medium of a single corporate entity would fall outside federal jurisdiction and corporate lawyers were correspondingly advising clients to abandon cartel-like arrangements in favour of amalgamation.[46] Coincident with this, the merger wave of 1897 to 1903 was in full swing, with consolidations occurring via holding companies or pure operating companies in a wide range of key industries.

By virtue of a 1904 decision where the U.S. Supreme Court ordered the dissolution of a holding company involving railroads, it became evident that anti-

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[43] 26 Stat. 209 (1890); current version at 15 U.S.C. § 1.

[44] United States v. E.C. Knight, 156 U.S. 1 (1895).

[45] United States v. Trans-Missouri Freight Ass'n, 166 U.S. 290 (1896); United States v. Joint Traffic Ass'n 171 U.S. 505 (1898).

[46] Bittlingmayer, Did Antitrust, *supra* note ??, 87-89; Freyer, Regulating, *supra* note xx, at 91, 101-2, 136-37, 155-56; Neil Fligstein, The Transformation of Corporate Control 69-73 (1990).

competitive conduct channelled through a single corporation could be challenged under the Sherman Act.[47] This decision signalled that mergers did not offer the full set of legal advantages which had been hypothesized and thus may have helped to end the flurry of corporate amalgamation. A crisis in confidence caused by the disappointing performance of many of the new horizontal consolidations perhaps had a greater impact.[48] Regardless, a plausible inference to draw is that the Sherman Act, as interpreted by the Supreme Court at the end of the 19th century and the beginning of the 20th century, hastened legal consolidation by providing pressure for independent business enterprises to amalgamate into a single, legally defined enterprise.

While there is historical evidence which suggests that antitrust law influenced the evolution of managerial capitalism in the United States, due account should be taken of possible qualifications to this proposition. To illustrate, it cannot be taken for granted that judicial interpretation of the Sherman Act was a pervasive consideration among manufacturers seeking to mute competitive pressures. During the 1890s, federal officials typically were indifferent or hostile to the Sherman Act and launched few proceedings. The lack of determined enforcement might well have meant that for

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47 Northern Secs. Co. v. United States, 193 U.S. 197 (1904); see also Jones, Trust, *supra* note xx, at 44, 403; Watkins, *supra* note xx, at 36.

48 Shaw Livermore, The Success of Industrial Mergers, 50 Q.J. Econ. 68, 68 (1935); Jesse W. Markham, Survey of the Evidence and Findings of Mergers in National Bureau of Economic Research, Business Concentration and Price Policy 141, 166-67 (1955).

members of an industry contemplating how to discipline market forces, the risk of prosecution would have been insufficient to affect materially decisions reached.[49] Certainly, it was suspected at the time that case law condemning anti-competitive alliances had not greatly diminished their use.[50]

An additional variable that needs to be kept in mind when assessing the contribution antitrust law might have made to the reconfiguration of America's corporate economy is that motives other than a desire to restrain competition may have provided the impetus for the amalgamation activity occurring between 1897 and 1903. The notion that mergers could help those running a new company to maximize useful output per given input was much discussed at the time, so the achievement of improved productive efficiency stands out as a strong candidate.[51] Beneficial strategies which could be implemented as a result of consolidation under a single corporate roof included closing laggard factories, exploiting economies of scale by increasing production in the plants which remained open and streamlining duplicative marketing and distribution structures. To the extent that the promotion of efficiency was in fact the driver for the flurry of consolidation activity that took place, most mergers presumably would have taken place regardless of what antitrust law

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49 Thorelli, *Federal*, *supra* note xx, at 259. See, though, Bittlingmayer, Did, *supra* note xx, 91-92; Cornish, Legal, *supra* note xx, at 294-95.

50 Belcher, *supra* note xx, at 123.

51 McCraw, Rethinking, *supra* note xx, at 7-9; Fligstein, Transformation, *supra* note xx, 73; Tippetts and Livermore, *supra* note xx, at 375-76.

provided. This is because the impetus to amalgamate would have existed regardless of whether antitrust regulation was biased against loose associations designed to restrict competition.

Various companies that were products of the merger wave were pioneers with respect to creating sophisticated managerial hierarchies and coordinating production, marketing and distribution on a national scale.[52] Moreover, those promoting consolidations during the 1897 to 1903 period were keen to stress that a corporate amalgamation would improve productive efficiency within the industry affected.[53] Still, it is doubtful whether exploiting the economies associated with centralized, large-scale production was the primary motive for the turn-of-the-century merger activity. For instance, with respect to declared intentions, there might well have been a desire to downplay the importance of suppressing competition. Specifically, the presence of the Sherman Act on the statute books and the possibility of adverse publicity potentially affected the way those organizing mergers made their case.[54]

The fact that consolidations were organized in many industries with widely varying types of production processes also casts doubt on the efficiency explanation for the merger wave. It seems unlikely that economies of scale were available to be

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[52] Chandler, Visible, *supra* note xx, at 415-16.

[53] Dewing, Corporate, *supra* note xx, at 528-29.

[54] Dewing, Corporate, *supra* note xx, at 524, 527; Edward D. Durand, The Trust Problem 61 (1915).

exploited in each instance.[55] Certainly, this seemed to be the case in practice, since many of the firms formed in the turn-of-the-century merger wave failed to survive until 1919.[56] Admittedly, the extent to which companies utilised the technologies of mass production, centralized administrative functions and developed strong marketing and purchasing capabilities did dictate which horizontal consolidations would ultimately be successful.[57] It does not automatically follow, however, that a drive to achieve substantial economies of scale was a pivotal motive for mergers occurring between 1897 and 1903.

D. The Emergence of a Market for Industrial Securities

Regardless of whether controlling competition or organizing efficient large-scale production was uppermost in the minds of those associated with turn-of-the-century mergers, an additional element must be added to the story. This is the emergence of a market for industrial securities in the United States in the 1890s.

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55 Lamoreaux, Great, *supra* note xx, at 109; Nelson, Merger, *supra* note xx, at 103.

56 Fligstein, Transformation, *supra* note xx, at 73-74. For more background on the rate of success, see Livermore, *supra* note xx.

57 Chandler, Visible, *supra* note xx, at 336, 338-39; Fligstein, Transformation, *supra* note xx, at 108-10.

Innovation on this count was potentially pivotal because new means became available for financing the purchase of incumbent firms within an industry. [58]

Until the late 1880s, industrialists rarely sought to market large blocks of stock to the public and market professionals had little interest in offering trading facilities. Indeed, as late as 1890 there were not even 10 industrial companies, exclusive of mining ventures, that had their prices quoted in the financial press.[59] At this point, however, some family owners were beginning to explore options for liquidating some of their equity and the market for the shares proved sufficiently healthy for this number to grow from thirty in 1893 to close to 200 in 1897. [60] Matters accelerated further as merger transactions were being formulated in the latter half of the 1890s, with demand for shares in the newly consolidated companies being sufficiently robust to constitute a "craze for combination".[61]

The number of listings on the New York Stock Exchange did not increase radically during the merger wave and the number of individuals owning common

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[58] Nelson, Merger, *supra* note xx, at 94-95; Markham, *supra* note xx, at 163, 167; George J. Stigler, Monopoly and Oligopoly by Merger, 40 Amer. Econ. Rev. 23, 28-29 (1950).

[59] Navin and Sears, *supra* note xx, 106-7, 127. See also Chandler, Visible, *supra* note xx, at 331-32.

[60] Navin and Sears, *supra* note xx, at 108, 123-24, 126-27.

[61] Navin and Sears, *supra* note xx, at 129, 133; Durand, *supra* note xx, at 61.

stock numbered perhaps a half million in 1900 compared with ten million in 1930.[62] Still, the market for industrial securities was clearly evolving in important ways. For instance, acquisition activity ensured that the number of companies with a capitalization of $10 million grew from a tiny handful at the beginning of the 1890s to nearly 100 at the turn-of-the-century.[63] Moreover, while a "million-share day" was rare as late as 1899, on occasions during 1901 daily stock transactions on the NYSE peaked at more than 3 million.[64]

To understand why the rise of the market for industrial securities mattered in the context of mergers, it is necessary to consider the position of incumbents within the industries affected. A fairly standard "package deal" for these industrialists was that they would agree to a merger in return for preferred stock representing the cash value of the business and a bonus consisting of an equivalent amount of common stock.[65] Such terms might seem incongruous, given the battering which market forces were allegedly administering. It needs to be borne in mind, however, that instigators of a merger needed to err on the side of generosity to ensure that industry-wide participation was sufficiently broadly based to give the newly amalgamated company

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62 Nelson, Merger, *supra* note xx at 90; Jonathan B. Baskin and Paul J. Miranti, A History of Corporate Finance 177, 190 (1997).

63 Navin and Sears, *supra* note xx, at 134.

64 Noyes, Market Place, *supra* note xx, at 194.

65 Jones, Trust, *supra* note xx, at 284. See also Haney, *supra* note ??, 285; Jenks and Clark, *supra* note xx, 186, 194.

meaningful market power.[66] Also, an important catch was that the consideration incumbents in an industry would receive would not be cash but stock in the new corporation. Potentially, then, the recipients were in a position where they would have "all their eggs in one basket" and would, in effect, be making a heavy bet on the horizontal consolidation's earning power.[67] The emergence of a robust market for industrial securities potentially solved, however, this dilemma since manufacturers could unwind their stock in the merged company through sales to the public.

The dynamics were similar for merger promoters. To the extent that these instigators of horizontal consolidations needed cash to pay industry incumbents, issuing shares to the public constituted a potential source of finance.[68] Moreover, while promoters retained a block of shares in the newly merged company as compensation for their services, they typically did not intend to be affiliated with the

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66 Thorelli, *supra* note xx, at 280-81; Robert Liefmann, Cartels, Concerns and Trust 306 (1932).

67 Roy, Socializing, *supra* note xx, at 249-50; Porter, Rise, *supra* note xx, at 82-83; Marquand, *supra* note xx, at 78.

68 Navin and Sears, *supra* note xx, at 132-33, 137; Thorelli, *supra* note xx, at 282-83.

corporation over the long haul. Instead, the ultimate intention was to cash out, with the assumption being that the stock market could digest the equity in question.[69]

Admittedly, mergers could occur without support from public investors. Indeed, four out of five consolidations carried out during the 1897-1903 period did not subsequently result in a subsequent listing on the New York Stock Exchange.[70] Still, consolidations lacking an association with the NYSE quite often had securities traded on a minor stock exchange or the unlisted market. Also, with large mergers, the stock market clearly was a pivotal element since four out of five of these transactions yielded a listing on the NYSE. It is fair to say, therefore, an appetite among outside investors for shares in merged companies was a pillar upon which the merger wave of 1897 to 1903 was built.

E. Explaining Investor Sentiment

While a case can be made that a "craze for combination" provided a platform for the surge in amalgamation activity at the turn of the twentieth century, there is still a gap in the story: no explanation has been proffered for the emergence of a robust demand for corporate equity. The issue requires consideration because a sharp reversal of investor sentiment was involved. Throughout most of the 19th century, the market for industrial securities was perceived as being too speculative for all but the

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[69] Jones, Trust, *supra* note xx, at 286-87; Navin and Sears, *supra* note xx, at 129-30; Larry Neal, Trust Companies and Financial Innovation, 1897-1914, 45 Bus. Hist.Rev. 35, 41 (1971).

[70] For data on stock market listings, see Nelson, Merger, *supra* note xx, at 92-93.

most robust investors.[71] This bias in favour of caution was displaced, however, during the merger wave of 1897 to 1903. What accounted for the shift in sentiment?

Corporate law is a variable that merits consideration. This is because of the "law matters" thesis, an influential theory which has been offered to account for contemporary global corporate ownership structures.[72] The essential insight underlying the law matters thesis is that, in an unregulated environment, a public company's "insiders" (controlling shareholders and senior executives) will be well situated to divert to themselves a disproportionate share of the returns generated by the corporation. Potential outside investors, fearing exploitation, will shy away from buying shares, concentrated ownership will persist and the stock market will remain weak. According to the law matters story, events will unfold differently if the legal system regulates quite closely opportunistic conduct by insiders. In this milieu outside investors will become confident about owning tiny holdings in publicly traded companies and controlling shareholders will be content to unwind their holdings since the law will largely preclude them from exploiting their position. The conditions therefore will be well suited for a widely dispersed pattern of share ownership.

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[71] George D. Smith and Richard Sylla, The Transformation of Financial Capitalism: An Essay on the History of American Capital Markets, 2 Fin. Markets, Institutions & Instruments, issue #2, 1, 20 (1993).

[72] For summaries, see Coffee, Rise, *supra* note xx, at 5-6; Diane K. Denis and John J. McConnell, International Corporate Governance 23-29, (unpublished working paper, 2002); Mark J. Roe, Corporate Law's Limits, 31 J. Legal Studies 233, 238-39 (2002).

The foregoing implies that the legal regime in the U.S. should have favoured outside investors against managers and dominant shareholders during the country's "corporate revolution". In fact, however, the legal environment was "uninviting".[73] To illustrate, prior to the enactment of the cornerstones of federal securities law, the Securities Act of 1933 and the Securities Exchange Act of 1934,[74] legal regulation of corporate disclosure was meagre. Also, while the judiciary permitted a minority shareholder who satisfied certain requirements to initiate "derivative" litigation on a corporation's behalf, practically speaking obtaining redress for breaches of duty by miscreant corporate directors was an exercise fraught with difficulty. Moreover, from the 1880s onwards, competition between states seeking to supply laws under which businesses would want to incorporate served to erode various legal constraints ostensibly designed to constrain irresponsible corporate behaviour. Given this state of affairs, the argument was put by some that the United States would benefit from bringing its corporate and securities law up to the standards of those in a country rarely thought of now as an exemplar of investor protection, namely Germany.[75]

Since corporate law seemingly did little to preclude insiders from deriving private benefits of control and to foster confidence among outside investors, the "law

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73 Coffee, Rise, *supra*, note xx, at 29; see more generally Brian R. Cheffins, Law as Bedrock: The Foundations of an Economy Dominated by Widely Held Public Companies, at 11-13 (unpublished, forthcoming Oxf. J. Legal Stud.).

74 15 U.S.C.A. §77; 15 U.S.C.A. §78.

75 I. Maurice Wormser, Frankenstein, Incorporated 153 (1931).

matters" thesis cannot account readily for the surge in investor confidence which contributed to the merger wave of 1897 to 1903. After all, without specific legal protections, outside investors were potentially vulnerable to a disinformation campaign by organizers of a merger and to subsequent mistreatment by corporate insiders.[76] With the uninviting legal environment, what displaced the scepticism towards corporate equity? The short answer is "frenzied speculation" that was "rarely paralleled in the history of speculative manias".[77] Given this pejorative rhetoric, an inference that could be drawn was that the rapidly growing appetite for corporate equity lacked a rational foundation. In fact, there were various objective factors which motivated investors to buy stock in companies resulting from the merger wave.

One consideration was that returns on debt instruments such as commercial paper and railway bonds were declining. This pattern created momentum for investment in different categories of financial assets, such as corporate equity.[78] More generally, as the 1890s drew to a close, the steady expansion of industry and population in the United States fostered a spirit of optimism concerning the future of

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[76] Richard B. DuBoff and Edward S. Herman, The Promotional-Financial Dynamic of Merger Movements: A Historical Perspective 23 J. Econ. Issues 107, 110-12 (1989).

[77] Smiley, *supra* note xx, at 76; Alexander D. Noyes, Forty Years of American Finance 300 (1907).

[78] Smiley, *supra* note xx, at 77, 83-84; George W. Edwards, The Evolution of Financial Capitalism 188 (1938).

the country's business undertakings. The received wisdom by 1901 was that it was a "New Era" in which the United States had

> "reached a pinnacle of prosperity from which nothing could dislodge it. The profits of our incorporated enterprises seemed to have no assignable limit."[79]

Consistent with this sort of euphoria, the available evidence suggests that in the U.S. stock prices nearly doubled between 1896 and 1902.[80]

There were also particular features of mergers which were appealing to investors. Promoters, for instance, emphasized the impact economies of large-scale production would have. The public, fortified by a belief in growing industrial

[79] Noyes, Forty, *supra* note xx, at 294. For further background, see *id.*, at 257-58; Navin and Sears, *supra* note xx, at 129; Marquand, Dynamics, *supra* note xx, at 80. On the "New Era" terminology, see Noyes, Market Place, *supra* note xx, at 176, 197.

[80] See Bryan Taylor, Global Financial Data: Stock Market Indices, 1800-1995, available on the internet at http://xnet.rrc.mb.ca/tltc/Workshop_H&R/Microsoft_Mentors_Program/Stock%20Market%20Indices.htm (indicating that with a base of 100 for the S. & P. 500 as of 1969, the stock price level was 4.22 in 1896 and 8.05 in 1902).

efficiency, seemingly was entranced by the promise of centralized control and thus took this argument very seriously.[81]

An additional key factor was anticipated monopoly profits. Again, those orchestrating horizontal consolidations were somewhat circumspect about emphasizing the impact which the potential suppression of competition would have. Still, they did draw attention to the percentage of the industry that a new consolidation would control. Investors, in turn, no doubt drew inferences about what would happen to competition when most of the productive capacity in a particular industry was under one corporate roof.[82] As one historian of financial markets has said:

> "Optimism engendered by the apparent ease of securing monopoly riches helped to surmount the skepticism over securities that were backed neither by government nor by a regulated transportation system".[83]

The role of law merits a mention in this context. While it would seem that corporate law did little to make investors "comfortable" about owning shares in

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[81] Chandler, *Visible*, *supra* note xx, at 345; Dewing, Corporate, *supra* note xx, at 527-31; Tippetts and Livermore, *supra* note xx, at 375-76.

[82] Dewing, Corporate, *supra* note xx, at 524; Durand, *supra* note xx, at 61; Smiley, *supra* note xx, at 78-79.

[83] Jonathan B. Baskin, The Development of Financial Markets in Britain and the United States, 1600-1914: Overcoming Asymmetric Information, 62 Business History Review 199, 234 (1988).

companies during the merger wave, the configuration of antitrust regulation apparently made an important if indirect contribution. Again, the received wisdom was that, while alliances established by independent firms contravened the Sherman Act, consolidations occurring through the medium of holding companies or pure operating companies were not subject to challenge. This, in turn, allowed promoters to imply that quasi-monopoly profits might be available when a merger encompassed much of the productive capacity in a particular industry. Investors arguably were sufficiently attracted by this prospect to overcome concerns they might have had about the dangers associated with the ownership of corporate equity.

Confidence investors had concerning the economics of mergers was reinforced by the participation of key players.[84] For instance, it was important that the proprietors of firms disappearing as a result of a horizontal consolidation would take stock in the new company rather than demand cash. Admittedly, industry participants would typically have been contemplating exit. Still, to quote one text devoted to the topic of trusts, "the public would have hesitated to buy securities that were unacceptable to the manufacturers, who were acquainted with the industry and its prospects".[85]

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[84] Noyes, Forty, *supra* note xx, at 295 (arguing, though, that investors misinterpreted the signal being offered).

[85] Jones, Trust, *supra* note xx, at 284. See also Navin and Sears, *supra* note xx, at 132-33.

Heavy involvement by financial professionals also provided a reassuring signal. When a dominant investment bank such as J.P. Morgan & Co. was heavily involved in a horizontal consolidation, its reputation for delivering value was at stake. Correspondingly, for a public lacking reliable information about the merger, participation of this type of financial intermediary functioned as a proxy for the soundness of the stock available for sale.[86]

While a label of "frenzied speculation" might overstate what was going on, investor optimism concerning the horizontal consolidations created between 1897 and 1903 was at least partially misplaced. Indeed, by the end of 1902 the share prices of many leading corporate amalgamations had already sustained major declines and the merger wave collapsed in part because of general dissatisfaction with the results achieved.[87] To an extent, however, this pessimism was overdone. Those corporations that subsequently established centralized managerial hierarchies, organized production effectively on a national scale and carried out vertical integration successfully were able to achieve formidable barriers to entry and stake out positions as leading names in American business.[88] Since these highly successful firms were in a position to deliver excellent returns to investors, those owning a portfolio of shares

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[86] Smith and Sylla, *supra* note xx, at 22-23; Thorelli, *supra* note xx, at 283-84.

[87] DuBoff and Herman, *supra* note xx, at 112-13; Livermore, *supra* note xx, at 68-70.

[88] Chandler, Visible, *supra* note xx, at 338-39; see also *supra* note xx and related discussion.

in the companies resulting from the merger wave of 1897 to 1903 likely would have realized a positive risk-adjusted return on their investment.[89]

Despite the immediate dissatisfaction with the results achieved after the "craze for combination", confidence in industrial securities clearly was not impaired on any sort of permanent basis. Admittedly, stock prices did not rise markedly for a decade or more after the turn-of-the-century.[90] On the other hand, the 1920s was a prosperous decade during which rapidly growing numbers of individuals became convinced that they could get rich by investing in the stock market and correspondingly took greater risks in pursuit of higher returns.[91] The crash of 1929 ultimately had a strong sobering effect on investor sentiment. Still, the broadening of the demographic base of investors which occurred was congenial to the unwinding of large share blocks which yielded Berle and Means' separation of ownership and control.

III. GERMANY

A. The "Land of Cartels"

[89] Nelson, *supra* note xx, at 96-99 (describing data from the decade following the mergers); Livermore, *supra* note xx (discussing the earning power of consolidations established during the 1897 to 1903 merger wave).

[90] See Taylor, *supra* note xx (indicating that the stock price level was 8.05 in 1902 and 8.78 in 1922).

[91] Smith and Sylla, Transformation, *supra* note xx, at 28-29; Baskin, Development, *supra* note xx, at 234-35; Mahoney, *supra* note xx, at 8.

Germany, in the decades between its unification in the early 1870s and World War I, emerged as a powerful state and displaced Britain as the primary industrial rival of the United States.[92] According to distinguished business historian Alfred Chandler, Germany's economic success ultimately was derived from the ability of its entrepreneurs and managers to adopt new technologies readily and to build the organizational structures necessary to exploit effectively opportunities created by changing market dynamics.[93] In this regard, the experience was similar to that in the United States.[94] Nevertheless, German industrial enterprises operated in a considerably different environment than their American counterparts. The distinctions, in turn, help to put into helpful perspective the dynamics associated with the U.S. merger wave of 1897 to 1903.

As was the case in the United States, when the 19th century was drawing to a close, German industrialists were facing intense competitive pressures and were keen to stabilize conditions by restricting competition.[95] The response, however, was dissimilar in the two countries. There was awareness in Germany that an amalgamation yielding a managerially centralized corporation could be used to

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[92] Chandler, Scale, *supra* note xx, at 409-11, 428, 496-97; Edwards, Evolution, *supra* note xx, at 64-66.

[93] Chandler, Scale, *supra* note xx, at 428, 595-96.

[94] *Id*. at 12, 500-1.

[95] J. Riesser, The Great German Banks and Their Concentration in Connection with the Economic Development of Germany 168-69 (1911).

rationalize production within an industry.[96] There was, however, nothing akin to America's merger wave of 1897 to 1903, either in terms of its sheer dimensions or in terms of the massive companies it yielded.[97] Corporate acquisitions certainly did occur in Germany during the late 19th century and early 20th century. Such transactions, however, were designed to solidify a particular enterprise's standing within an industry or to foster vertical integration rather than to capture a decisive share of the relevant market.[98]

Though merger was not a preferred strategy, Germany's industrialists did not react passively when confronted with strong competitive pressures. Instead, collusive activity was prevalent and served to foster *de facto* concentration within the industrial economy. The primary agent was the cartel, within which mainly autonomous and independent firms would subject themselves to restrictions concerning production, pricing and marketing.[99] In the 1870s, the tandem forces of industrialization and depression caused beleaguered industrialists to turn toward this method of "co-

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[96] Chandler, Scale, *supra* note xx, at 479-80; Liefmann, *supra* note xx, at 259.

[97] Richard Tilly, Mergers, External Growth, and Finance in the Development of Large-Scale Enterprise in Germany, 1880-1913, 42 J. Econ. Hist. 629, 640-41 (1982).

[98] Chandler, Scale, *supra* note xx, at 467, 501; John F. Wilson, British Business History, 1720-1994 72 (1995); Tilly, Mergers, *supra* note xx, at 633-37, 641-43.

[99] Liefmann, *supra* note xx, at 10-11, 60-62, 278-79; Tilly, Mergers, *supra* note xx, at 641.

operation".[100] In the decades which followed, the crisis atmosphere receded but cartelization arrangements became larger, grew more permanent and acquired greater control over the markets in which they operated.[101] Many sectors of the economy were unaffected and even when cartels were in place defections were by no means unprecedented.[102] Still, Germany was known as the "Land of Cartels" since the movement affected pivotal industries such as coal, chemicals and steel and yielded anti-competitive alliances that were larger, more numerous and more durable than anywhere else in Europe.[103]

As we have seen, in the U.S. the merger wave of 1897 to 1903 helped to prompt a transition to contemporary corporate ownership patterns.[104] The absence of a similar flurry of consolidation activity in Germany also appeared to have enduring

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[100] David G. Gerber, Law and Competition in Twentieth Century Europe 25-26, 70-73 (1998); W.F. Bruck, Social and Economic History of Germany from William II to Hitler 1888-1938: A Comparative Study 93 (1938).

[101] Gerber, Law, *supra* note xx, at 75.

[102] Liefmann, *supra* note xx, at 60-61; Wilson, British, *supra* note xx, at 72; Fritz Voigt, German Experience with Cartels and Their Control During the Pre-War and Post-War Periods, in Competition, Cartels and Their Regulation 169, 171-72 (John P. Miller ed. 1962).

[103] Wilson, British, *supra* note xx, at 72; Gerber, Law, *supra* note xx, at 74.

[104] *Supra* notes xx to xx and related discussion.

consequences. The country currently has an "insider/control-oriented" system of ownership and control, with the involvement of families constituting a hallmark.[105] Events occurring at end of the 19th century and the beginning of the 20th century likely helped to determine this contemporary pattern. In the United States, the turn-of-the-century merger wave began to dislodge "family capitalism" with respect to larger companies, since it displaced controllers' roadblocks on a huge scale and paved the way for further unwinding of large blocks of shares in subsequent decades. In contrast, in Germany control by founders and their offspring remained strong throughout the period up to World War I.[106] Merger activity, or lack thereof, seemingly was an influential variable here. Whereas in the United States controlling shareholders were being cashed out as part of industry-wide rationalizations in various

[105] On the insider/control-oriented label, see Brian R. Cheffins, Does Law Matter? The Separation of Ownership and Control in the United Kingdom, 30 J. Legal St. 459, 461-62 (2001). On the family aspect, see Wilson, British, *supra* note xx, at 71.

[106] Chandler, Visible, *supra* note xx, at 495, 500-1; Gregory Jackson, The Origins of Nonliberal Corporate Governance in Germany and Japan, in The Origins of Nonliberal Capitalism: Germany and Japan in Comparison 121, 132 (Wolfgang Streek and Kozo Yamamura eds. 2001); Roy Church, The Family Firm in Industrial Capitalism: International Perspectives on Hypotheses and History, 35(4) Bus. History 17, 29 (1993).

sectors of the economy, in Germany cartelization softened and stabilized the industrialization process by protecting the vested interests of participating firms.[107]

B. Efficiency Considerations

Why did Germany fail to experience a merger wave akin to that which occurred in the U.S.? One possibility is that economies of scale were more important in the United States than they were in Germany. If promotion of efficiency was the catalyst for the flurry of consolidation activity that took place in the United States and there was little scope for corporate amalgamations to deliver the same results in Germany, the different merger patterns in the two countries would be largely explained. A potential driver in this instance would be that the optimum scale of industrial enterprise in the United States was greater than it was in Germany, given the expanse of America's domestic market.[108]

There is reason to doubt, however, whether, efficiency considerations provide a satisfactory explanation for Germany's failure to experience a U.S.-style merger wave. Again, while successful exploitation of economies of scale typically was a key ingredient of a successful merger in the United States, efficiency considerations apparently were not the primary catalyst for horizontal consolidation.[109] Moreover,

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107 McCraw, Rethinking, *supra* note xx, at 5; Chandler, Visible, *supra* note xx, at 395, 424, 500-1; Jackson, Origins, *supra* note xx, at 134.

108 Sklar, Corporate Reconstruction, *supra* note xx, at 165.

109 *Supra* note xx and accompanying text.

statistical measures imply that German companies operated in markets large enough to support firms operating at output levels similar to those of large U.S. enterprises. For instance, the population of the two countries was roughly equivalent, with there being 76 million people in the United States in 1900 and 56 million in Germany.[110] Moreover, since data on the ratio of trade levels to Gross Domestic Product suggest that Germany's economy was more export-oriented than America's at the turn-of-the-century, German businesses presumably could exploit foreign demand more readily than their American counterparts.[111]

C. The Legal Setting for Anti-Competitive Alliances

Assuming that efficiency considerations in fact do not explain why the U.S. experienced a merger wave while Germany did not, then differences in the regulation of anti-competitive behaviour likely provide at least part of the answer. Germany lacked a specific statutory measure like the Sherman Act which prohibited anti-competitive practices. Also, there was no German equivalent to the common law rule

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[110] S.N. Broadberry, The Productivity Race: British Manufacturing in International Perspective, 1850-1990 91 (1997).

[111] Broadberry, Productivity, *supra* note xx, at 142, 144; see also Bruck, Social, *supra* note xx, 73-75 (describing Germany's system of "export industrialism"). See, though, Gary Herrigel, Industrial Constructions: The Sources of German Industrial Power 5 (1996) (arguing that the consumer markets German companies served were too fragmented to permit producers to achieve production economies available in the U.S.)

which precluded parties from enforcing contracts constituting combinations in restraint of trade. Instead, by virtue of a ruling made by the country's highest court in 1897, cartel arrangements and other alliances between competitors were, in principle, valid and enforceable.[112] The bias in favour of horizontal consolidations that existed in the U.S. correspondingly was completely absent, and various observers have relied on this pattern to account for the absence of an American-style merger wave in Germany.[113]

The hospitable legal environment for collusive arrangements can certainly be drawn upon to offer a plausible account of developments occurring in Germany. Recall that in the United States manufacturers faced intense competitive pressures which served to erode the private benefits of control and fostered a willingness to sell out. Collusive alliances between independent firms constituted a potential defensive strategy, but the Sherman Act and common law rules governing combinations in restraint of trade undermined considerably the viability of this approach. The situation was different in Germany. As in the United States, manufacturing firms sought relief from product market competition by using anti-competitive alliances control prices, to regulate output and to allocate markets. Since such arrangements were legally enforceable, however, their potency was considerably greater. The muting of competitive pressures which ensued offered manufacturers steadier

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112 Cornish, Legal, *supra* note 299-300; Gerber, Law, *supra* note xx, at 89-95.

113 See, for example, Chandler, Scale, *supra* note xx, at 395, 398, 423-24, 427, 496, 501; Thorelli, *supra* note xx, at 266; Porter, Rise, *supra* note xx, at 76-78.

utilization of productive capacity and a more stable profit flow, and thereby reduced the incentive to exit via merger.

D. Market Dynamics Affecting the Status of Control Blocks

Though Germany's hospitable legal environment for collusive arrangements can be cited to account for the absence of a U.S.-style merger wave, it is imprudent to leave matters at this. Instead, other variables merit consideration. For instance, attitudes toward control perhaps had an impact. Allegedly, as compared with their counterparts in the U.S., industrialists in Germany were more reluctant to relinquish their independence and lose the identity of the firms they had founded. This was because they tended to have deeply-rooted historical ties to the firms providing their income and believed that having a family business provided the basis for their social status.[114]

To the extent that a family-oriented bias was in play, persuading proprietors of German firms to participate in mergers would have been more difficult than it was in the United States. Moreover, with the merger activity that did take place, participants would have been less likely to accept a U.S.-style amalgamation characterized by administrative centralization and rationalization of facilities. Still, it cannot be taken

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[114] Chandler, Visible, *supra* note xx, at 501; Alfred D. Chandler and Herman Daems, Administrative Coordination, Allocation and Monitoring: Concepts and Comparisons, in Horn and Kocka, Law, *supra* note xx, at 28, 48; Martin J. Sklar, The Corporate Reconstruction of American Capitalism, 1890-1916: The Market, the Law, and Politics 164-65 (1988).

for granted that the attitudes of German manufacturers were radically different than those of their American counterparts. With sufficiently generous terms on the table, objections concerning the surrender of all independence presumably would have been overshadowed.[115]

The cue companies received from financial intermediaries was another factor which might have been relevant. The received wisdom is that, in the years before World War I, Germany's largest deposit-taking banks were powerful financiers that wielded exceptional sway over the country's corporate economy. Banks, it is said, were well-situated to sway matters in their favour because they had influential representation on the supervisory component of the two-tier boards which larger German companies used and because they had considerable scope to exercise proxy votes at shareholder meetings.[116] This matters in the present context because promoting cartelization allegedly was a priority for German bankers. Allegedly, they were favourably disposed towards collusive agreements between competitors within the same industry because the restraints imposed on market forces had a stabilizing influence on business conditions and thereby reduced the risk of default by

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115 Hermann Levy, Monopolies, Cartels and Trusts in British Industry 279 (1927) (making the same point about British industrialists, whose bias in favour of independence allegedly deterred mergers in the U.K.).

116 See Chandler, Emergence, *supra* note xx, at 499-500; Bruck, *supra* note xx, at 80-82; Hans Pohl, On the History of Organisation and Management in Large German Enterprises Since the Nineteenth Century, in German Yearbook on Business History 91, 110-11 (Wolfram Engels and Hans Pohl eds. 1982).

borrowers.[117] To the extent there was a bias of this sort among German bankers, it could have displaced momentum that otherwise might have developed in favour of mergers.

This bank-oriented explanation for the absence of a U.S.-style merger wave in Germany is not wholly convincing. For instance, the traditional view that banks were dominant players may well overstate the grip they had on industry. Strong family owners resisted encroachment on their entrepreneurial prerogatives, leading industrial companies relied heavily on internally generated revenue as the source for finance and a large corporate borrower rarely had exclusive relations with a single bank.[118] Correspondingly, the influence which German banks had was compromised in key respects.

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[117] Riesser, *supra* note xx, at 718-20, 725-26; Alexander Gerschenkron, Economic Backwardness in Historical Perspective, in Economic Backwardness in Historical Perspective 5, 15-16 (Alexander Gerschenkron ed. 1962); Ulrich Wengenroth, Germany: Competition Abroad – Cooperation at Home, 1870-1990, in Big Business and the Wealth of Nations 139, 142 (Alfred D. Chandler *et al.* eds. 1997).

[118] Jackson, Origins, *supra* note xx, at 133; Caroline Fohlin, Universal Banking in Pre-World War I Germany: Model or Myth, 36 Explorations in Econ. History 305, 314 (1999); Jeremy Edwards and Sheilagh Ogilvie, Universal Banks and German Industrialization: A Reappraisal, 49 Econ. Hist. Rev. 427, 437-41 (1996).

Also, to the extent that German banking institutions exercised leverage, it is open to question whether this would have yielded a bias against horizontal consolidation. A handful of Germany's largest deposit-taking banks dominated securities underwriting in the country,[119] which means that they could have charged substantial fees if they had organized the financing for merger transactions. Given this, there presumably would have only been a bias against mergers if concerns about protecting depositors caused German bankers to forsake high-risk transactions offering potentially lucrative returns.[120]

E. German Capital Markets

The strength of the German market for industrial securities is an additional variable that requires consideration when seeking to ascertain why Germany did not experience a U.S.-style merger wave. In contemporary times Germany has typically had considerably fewer publicly quoted companies per one million people than the U.S. and had a much lower stock market capitalization/Gross Domestic Product

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119 Charles W. Calomiris and Daniel M.G. Raff, The Evolution of Market Structure, Information and Spreads in American Investment Banking, in Anglo-American Financial Systems: Institutions and Markets in the Twentieth Century 103, 110 (Michael D. Bordo and Richard Sylla eds. 1995); D. Warriner, Combines and Rationalisation in Germany: 1924-1928 114 (1931).

120 On the possibility of this sort of bias, see Fohlin, Universal, *supra* note xx, at 321.

ratio.[121] Again, an intense demand for shares in newly amalgamated companies provided a boost for horizontal consolidations in the United States. If the German stock market was "underdeveloped" relative to America's in the same manner as currently, this would account at least partially for the difference in merger activity.

It is fair to say that the strong surge of optimism concerning industrial companies which was evident in the United States was not matched in Germany and that the degree of public participation in the stock market which was pivotal Stateside also seemed to be lacking.[122] Still, when seeking to account for differences in merger activity, there is reason to pause before assigning capital markets a decisive role. Even if there was no "boom" equivalent to America's, stock prices were generally rising in Germany at the end of the 19th century and the beginning of the 20th century.[123] Moreover, there is empirical evidence which suggests that, during the

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121 On Germany's contemporary position, see Rafael La Porta *et al.*, Legal Determinants of External Finance, 52 J. Fin. 1131, 1137-38 (1997); Christopher van der Elst, The Equity Markets, Ownership Structures and Control: Towards an International Harmonisation?, 5-13 (Working Paper 2000-04, University of Gent Financial Law Institute 2000).

122 Noyes, Forty, *supra* note xx, at 327; Joseph A. Schumpeter, Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process 437 (vol. 1, 1939).

123 See Taylor, *supra* note xx, indicating that the stock price level in Germany was 32.6 in 1895 and 37.7 in 1905.

early stages of the 20th century, the use of common stock as a financial vehicle was more prominent in Germany than it was in ostensibly market-oriented Britain.[124] Similarly, as of 1913, Germany had more publicly quoted companies per one million people than the U.S. and had a higher stock market capitalization/Gross Domestic Product ratio.[125] The upshot is that, while the sort of turn-of-the century euphoria that gripped the United States was not present in Germany, care should be exercised before relying on the strength of the market for industrial securities to explain differing levels of merger activity.

F. Investor Protection

To conclude the analysis of the German situation, the "law matters" thesis should be taken into account. Again, events occurring in the United States during the latter part of the 19th century and the early part of the 20th century are inconsistent with the thesis since the legal environment was "uninviting" during a pivotal transition towards the separation of ownership and control. There is also a significant

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124 Richard Tilly, An Overview on the Role of the Large German Banks up to 1914, in Finance and Financiers in European History, 1880-1960 93, 104 (Youssef Cassis ed. 1992); Richard Tilly, Public Policy, Capital Markets and the Supply of Industrial Finance in Nineteenth-Century Germany, in The State, the Financial System and Economic Modernization 134, 142 (Richard Sylla, Richard Tilly and Gabriel Tortella eds. 1999).

125 Rajan and Zingales, Great, *supra* note xx, Tables 3, 5.

"disconnect" between the law matters story and events occurring in Germany, though the angle is somewhat different.

A striking feature of the legal milieu within which German companies operated was the degree of protection afforded to shareholders. Germany carried out a round of corporate law reform culminating in 1884 and perhaps the most important feature of this effort was to strengthen suppliers of capital relative to those acting in an executive capacity.[126] To illustrate, the legislation bolstered the supervisory board at the expense of those running a company on a day-to-day basis and imposed severe penalties on managers who failed to disclose information concerning their private business activities. Moreover, in 1896, as part of a wide-ranging reform program affecting German security exchanges, provisions were introduced to protect the public better against unsound corporate securities. Most notably, companies seeking to have shares listed for trading were compelled to prepare a highly detailed prospectus that would be scrutinized by a listing board and for which the promoters and underwriters would be held liable if misleading or false information was disseminated.[127]

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[126] Tilly, Public, *supra* note xx, at 139, 152-53.

[127] Henry C. Emery, The Results of the German Exchange Act, 13 Political Sci. Q. 286, 312-13 (1898); Ernst Loeb, The German Exchange Act of 1896, 11 Q.J. Econ. 388, 402-5 (1897). The legislation also stipulated that companies could not have their securities listed for trading unless they had been in business for a year or more: Emery, Results, *supra* note xx, at 314; Loeb, *op. cit.*, at 406.

The investor protection reforms Germany enacted in 1884 and 1896 were of the character that would be anticipated where regulators were seeking to strengthen securities markets by constraining misconduct by corporate insiders. Given the precepts of the law matters thesis, it might have been expected that a reconfiguration of ownership structures would have ensued. Instead, however, family-dominated companies prevailed in the German corporate economy throughout the period leading up to World War I. How can this be explained?

One possibility is that aspects of the 1896 law which were not specifically addressed to public companies but which were intended to curb private speculation "effectively stunted the development of (Germany's) then-growing securities markets".[128] A by-product of such a trend would have been to stop any shift to dispersed ownership in its tracks. Still, new issues of industrial securities were in fact much more common in the decade following 1896 than they were before.[129] It follows that the reforms carried out that year did not have the debilitating impact which has been hypothesized.

Observations made by Joseph Schumpeter in his influential 1939 book on business cycles may offer a more helpful clue as to why traditional ownership structures persisted in Germany despite the regulation of insider misconduct.[130] He

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[128] Coffee, Rise, *supra* note xx, at 56.

[129] Noyes, Forty, *supra* note xx, at 323-24; Tilly, Public, *supra* note xx, at 142; Riesser, *supra* note xx, at 117-19.

[130] Schumpeter, *supra* note xx, at 436-37.

conceded that while the legislation passed in 1896 did not attain all of its objects, it nevertheless conveyed a highly significant official expression of moral disapproval of gambling. He argues that this signal may have restrained, at the end of the 19th century and the beginning of the 20th century, the sort of investor exuberance which characterized American securities markets. To the extent this is true, and to the extent that market sentiment is a catalyst for reconfiguring corporate ownership structures, the strong package of investor protections on offer in Germany would have had an effect that was precisely the opposite of what the law matters theory would predict: preserving the country's family-oriented brand of capitalism.

IV. CONCLUSION

The foregoing examination of the U.S. merger wave of 1897 to 1903 offers three key lessons. First, with respect to corporate ownership structures, the groundswell of horizontal consolidation activity mattered. In the United States, in dozens of instances the merger transactions which took place unwound control blocks and yielded corporate structures that were amenable to a transition towards the diffuse ownership pattern that is a hallmark of the American version of capitalism.

Arguably, in the U.S., the shift to a corporate economy dominated by the Berle-Means corporation was inevitable in any event.[131] Developments in Germany, however, suggest otherwise. Its leading companies were in the process of developing sophisticated managerial hierarchies at the time of America's merger wave and these efforts contributed to the great economic success the country was enjoying. Still,

131 Bensel, Political, *supra* note xx, at 320.

Germany's system of ownership and control was insider/control-oriented at the time and remains so today. It follows that, with respect to the United States, diffuse share ownership was not destined to become the norm in large companies regardless of events such as the horizontal consolidation movement which commenced at the close of the 19th century.

Second, fluctuations in market sentiment can constitute a determinant of ownership structures. As a result of the merger wave of 1897 to 1903, control blocks were unwound at a frantic pace in the United States. No comparable trend was evident in Germany. The quality of corporate law does not account for the divergence since during the relevant period shareholders in German companies had more extensive legal protection than their American counterparts. In contrast, differences in market sentiment may well have had a critical impact. Essentially, while the industrial securities "craze" which commenced in the U.S. in the final years of the 19th century created a potentially crucial exit option for merger promoters and for proprietors of companies disappearing as a result of horizontal consolidations, no equivalent momentum was present in Germany. Certain advocates of the law matters thesis have acknowledged that an accumulation of favourable sentiment can play a role in stimulating investment when potential shareholders are in an otherwise sceptical frame of mind but argue that law and its enforcement is the truly pivotal variable.[132] Events occurring at the conclusion of the 19th century and the opening of

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[132] Rafael La Porta *et al.*, Investor Protection and Corporate Governance 58 J. Fin. Econ. 3, 4, 19 (2000).

the 20^{th} century suggest that, at least in historical terms, it may be appropriate to reverse the order of importance.

Third, with respect to the legal system's contribution to the configuration of share ownership patterns, more attention should be devoted to understanding the role of antitrust law. As the 19^{th} century drew to a close, manufacturers in both the U.S. and Germany were facing competitive pressures which would have reduced the private benefits of control. For producers in an industry suffering from "cutthroat" competition, establishing an anti-competitive alliance and merging under a single corporate roof both constituted strategies available to discipline market forces. In the United States, the horizontal consolidation option was considerably more popular than it was in Germany. Differences in the regulation of anti-competitive behaviour help to explain why. Industrialists in the U.S. took the merger alternative seriously because the law was strongly biased against loose anti-competitive alliances. In Germany, in contrast, the legal regime was highly tolerant of such arrangements and a reasonable inference to draw is that this muted whatever momentum there might have been in favour of horizontal consolidation. Antitrust and corporate law may typically not have much to say to each other.[133] Still, with respect to the evolution of patterns of ownership and control, the situation may well be different.

Assuming that investor sentiment and antitrust law can, through the medium of merger activity, be determinants of corporate ownership structure, it becomes tempting to speculate on the relative importance of the two variables. The discussion

133 Edward B. Rock, Corporate Law Through an Antitrust Lens, 92 Columbia L. Rev. 497, 498 (1992).

offered here does not, however, provide a firm foundation for conjectures of this type. A possible test can, however, be suggested: examine developments in the United Kingdom. In Britain, like the United States, a separation of ownership and control the is the norm in large business enterprises and recent historical research suggests that mergers helped to determine the structure of corporate ownership in British companies.[134] An analysis of what occurred in the U.K. correspondingly could offer a way to test the relative importance of antitrust law and investor sentiment as determinants of ownership structure.

What does the foregoing mean in a contemporary context? There has recently been much speculation that in continental Europe and elsewhere market forces are destabilizing traditional business structures and causing some form of convergence towards U.S.-style capitalism. The analysis offered in this paper provides the foundation for at least two lines of speculation concerning this trend. One concerns antitrust law. Until a few years ago, regulation of cartel behaviour was much tighter in the United States than it was elsewhere. The situation is changing, however, as enforcement is now becoming more rigorous in other industrialized countries.[135] If this trend becomes well-entrenched, a possible effect might be to erode the private benefits of control which blockholders currently retain via collusive alliances. To the extent this is correct, there should be an acceleration of whatever unravelling of corporate ownership structures might be taking place.

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[134] Julian Franks, Colin Mayer and Stefano Rossi, The Origination and Evolution of Ownership and Control of the Corporation (unpublished working paper, 2002).

[135] Fixing for a Fight, Economist, April 20, 2002, 71.

The other point relates to investor sentiment. Recent speculation concerning evolving ownership structures coincided with the emergence of a "thriving global equity culture" supported by "one of the most impassioned global equity rallies in memory".[136] By 2002, however, "the worst bear market in Europe since the Great Depression" was "stopping the clock – and threatening to turn it back".[137] In the face of this trend, market regulators were imposing ever tougher standards on publicly quoted companies,[138] a strategy which the law matters thesis implies should deliver strong securities markets and increasingly diffuse ownership structures. The experience with merger wave of 1897 to 1903 suggests that market sentiment is a more powerful agent for change than legal reform, which in turn implies that any sort of transition to U.S.-style capitalism will be postponed until the return of some of the euphoria of the recent past. This would be consistent with what is arguably an intrinsic feature of capitalism, this being evolution in fits and starts supported by lurching cycles of sentiment.[139]

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[136] Craig Karmin, The Global Shareholder, Wall Street Journal, May 8, 2000, at R4.

[137] Christopher Rhoads, Europe's Tender Equity Culture, Wall Street Journal, September 18, 2002, at A17.

[138] See Bertrand Benoit and Alex Skorecki, 'The Market Has Been Burnt Badly…Retail Investing Has Been Wiped Out for a Whole Generation', Financial Times (U.S. edition), September 27, 2002, 11.

[139] Thumped, Economist, July 13, 2002, 13.