The Legitimate Rights of Public Shareholders

Lawrence E. Mitchell

Follow this and additional works at: https://scholarlycommons.law.wlu.edu/wlulr

Part of the Securities Law Commons

Recommended Citation
The Legitimate Rights of Public Shareholders

Lawrence E. Mitchell*

Abstract

In recent years there has been significant ongoing academic debate over the expansion of public shareholders' participation rights in corporate governance. The debate has accompanied a dramatic increase in institutional shareholder and hedge fund activism attempting to influence the conduct of corporate affairs.

The legitimacy of shareholder participation rights depends upon the actual role public shareholders play in contributing to the corporation's function of providing goods and services and, ultimately, to economic growth and social welfare. Few in the debate have stopped to examine this question. This Article presents original empirical evidence that demonstrates that public shareholders do not, on net, contribute capital to finance industrial production, and in fact are net consumers of corporate equity. Moreover, their investment incentives significantly distort the behavior of corporate managers who place strong emphasis on stock price at the expense of long-term business health, a fact that has played some role in the current global financial debacle. The logical conclusion is that public shareholders' rights should, ideally, be eliminated, and certainly not expanded or enhanced.

Table of Contents

I. Introduction ................................................................. 1636

II. Financiers Who Do Not Finance: The Empirical Evidence .................................................. 1646

* Theodore Rinehart Professor of Law, The George Washington University. My thanks go to Don Braman, Bill Bratton, Larry Cunningham, Lisa Fairfax, Theresa Gabaldon, Martin Lipton, David Millon, Dalia Mitchell, Tom Morgan, Brian Stewart, Leo Strine, and Art Wilmarth, with special thanks to Bill Bratton for Figure 11. I am also grateful for the comments of participants in a business law colloquium at Fordham Law School, especially Caroline Gentile and Steve Thel, and to Jim Fanto and participants at a Brooklyn Law School conference on private equity. Sabin Ahmed, Artur Kolasa, Jason Gaurav Dalal, and Adele Maloney provided excellent research help.

1635
I. Introduction

For a decade or more before the American economy lay in its current shambles, our system of corporate governance had come under serious attack. Shareholders and their advocates had arisen from their slumber and had begun to demand the right to participate in corporate decisionmaking.¹ For over a decade, and accelerating during the pre-panic years, activist shareholders, typically institutional investors and hedge funds, asserted their power to insist that the corporations in which they invested take the specific actions they desired.² These institutional initiatives have included proposals to allow shareholders to advise boards on executive compensation, to require that

¹ See Dalia Tsuk Mitchell, Shareholders as Proxies: The Contours of Shareholder Democracy, 63 WASH. & LEE L. REV. 1503, 1506 (2006) (arguing that attempts at shareholder activism have periodically occurred throughout modern corporate history, but until recently, none met with any meaningful success).

² See Anat R. Admati, Paul Pfleiderer & Josef Zechner, Large Shareholder Activism, Risk Sharing, and Financial Market Equilibrium, 102 J. POL. ECON. 1097, 1098 (1994) ("Large shareholders, and particularly institutional investors, have become increasingly active in recent years."); Thomas H. Noe, Investor Activism and Financial Market Structure, 15 REV. FIN. STUD. 289, 289–90 (2002) (stating that the common paradigm for shareholder activism is active monitoring by numerous moderate-size blockholder institutions that pursue activist policies); Sunil Wahal, Pension Fund Activism and Firm Performance, 31 J. FIN. & QUANTITATIVE ANALYSIS 1, 8–10 (1996) (discussing how activist shareholders insisted that firms take various actions over a seven year period).
directors be elected by majority vote of the shareholders (in contrast to the plurality rule that traditionally dominates), to remove takeover defenses like poison pills and staggered boards, to insist upon proxy access, and to eliminate broker voting. 3 Activist hedge funds have been even more aggressive, often successfully demanding that corporations either sell themselves or divest themselves of portions of their businesses, that chief executives resign or be dismissed, and that corporations undertake major restructurings to "return value" to shareholders while piling on corporate debt. 4

Their efforts have been aided by the work of prominent, and increasingly activist, scholars, led forcefully by Lucian Bebchuk, who have mounted an aggressive campaign to enhance shareholder voting rights. 5 While their efforts have been controversial, 6 they have garnered significant attention and have


created synergy with the actions of shareholders, acting principally through shareholder advisory services, and with activist institutional investors, to put substantial pressure on businesses and lawmakers to expand shareholder rights.\(^7\)

The objective of the so-called reformers, and much of the defense, is centered on the question of which mode of corporate governance—a director primacy model or a shareholder-centric model—holds the greatest promise for enhancing firm value.\(^8\) While the meaning of the phrase "firm value" typically is left ambiguous, the underlying assumption in much of the debate appears to be that firm value equates to share price.\(^9\) A secondary objective, which I do not address because I believe that it serves principally as a rhetorical device and tends not to be taken very seriously, at least in the corporate and economics literature, is that the corporation is somehow a democratic institution and shareholders are its citizens.\(^10\)

---


9. One exception is Lynn Stout, who notes that academics may work on the assumption of this equivalence. Stout, *supra* note 6, at 801. It is a point I have also made elsewhere. LAWRENCE E. MITCHELL, *CORPORATE IRRESPONSIBILITY: AMERICA’S NEWEST EXPORT* 4 (2001) [hereinafter MITCHELL, CORPORATE IRRESPONSIBILITY] (exploring the pathologies of the stockholder primacy norm). It strikes me that the same equation typically is made by those who advocate a director primacy model as those who advocate a shareholder primacy model. This equation is not, of course, universally accepted. For one of the seminal statements of the fundamental value perspective, see BENJAMIN GRAHAM & DAVID L. DODD, *SECURITY ANALYSIS* 47–50 (1934) (stating that share price does not automatically equate to firm value, but the two may converge at certain times).

It is striking that the debate offers no empirical evidence beyond the obvious fact that, as a historical matter, shareholders have exercised little participatory power in American corporate policy. While Bebchuk, in particular, cites a few articles that might suggest that shareholder participation has a positive effect on "firm value," those few studies have been sufficiently debunked by Lynn Stout to obviate the need for me to repeat the analysis. See Stout, *supra* note 6, at 800.

Interestingly, Bebchuk himself has contributed to the development of an economic model that predicts potentially negative effects from short-term market pressures, and this at a time when, as I shall discuss, the stock market was considerably less volatile than it subsequently became. See Lucian A. Bebchuk & Lars A. Stole, *Do Short-Term Objectives Lead to Under- or Over-investment in Long-Term Projects?*, 48 J. FIN. 719, 720 (1993) (arguing that imperfect information will cause underinvestment or overinvestment). This Introduction refers to a much larger and more complete body of literature that has yet to find any positive effect of shareholder governance, or even corporate governance, on "firm value," however measured.

10. *See* Tsuk Mitchell, *supra* note 1, at 1505 (analyzing American corporate democracy as
Lost in the debate are three essential questions that necessarily drive it toward an appropriate resolution. Why do we have public corporations? What is it that shareholders contribute to them? How does this affect our view of shareholders' legitimate rights? My answers are simple. First, the principal purpose of corporations, public as well as private, is to make things and sell things, to provide services to customers, and in the process, to employ people, all to the ends of wealth creation, economic growth, and social welfare. Second, public shareholders contribute little or nothing to this process, not even, as the empirical evidence I present demonstrates, their capital. (It is worth noting that evidence that any of the processes of corporate governance has a meaningful effect on economic growth is almost nonexistent.) The conclusion is that enhanced share price is at best a byproduct of corporate activity that, as I will argue, has distorted the productive incentives of corporate management to the potential long-term harm of American industry.

Therefore, public shareholders ought to have no rights beyond those of largely a rhetorical device).

11. See LAWRENCE E. MITCHELL, THE SPECULATION ECONOMY: HOW FINANCE TRIUMPHED OVER INDUSTRY 8–9 (2007) [hereinafter MITCHELL, THE SPECULATION ECONOMY] (arguing that the modern public corporation was formed in large part because of trust promoters' incentives); Lawrence E. Mitchell, Vulnerability and Efficiency (Of What?), 2 BERKELEY BUS. L.J. 153, 158 (2005) (arguing that good corporate law should facilitate the efficient production of goods and services); see also Lipton & Rowe, supra note 7, at 66–67 (arguing that a key mission of the corporation is wealth maximization); Strine, supra note 7, at 3 (arguing that management and labor view the corporation as more than a nexus of contracts).

12. *Infra* Part II.


receiving information about the corporations in which they invest and selling their shares.\textsuperscript{15} The director primacy model ought to remain our paradigm of corporate governance.\textsuperscript{16}

The Article proceeds as follows. Part II presents my empirical research demonstrating that public equity has had virtually no significant role in financing American industry, and indeed, that the demands of public shareholders, manifested by the behavior of shareholder activists and the market, have resulted in an industrial base heavily overburdened by debt. To be more precise, while extensive evidence documents large numbers of common stock public offerings,\textsuperscript{17} on balance American public shareholders have been net consumers, rather than net providers, of corporate equity.\textsuperscript{18} The real "owners" of the risk capital of American business are creditors, not shareholders, yet shareholders have the only legal rights of control.\textsuperscript{19} While it

\textsuperscript{15} It may be that there is no practical alternative to shareholder election of directors. I take this up in Part IV.

\textsuperscript{16} I am, for the purposes of this Article, indifferent as to which model of director primacy should be privileged, the Bainbridge model or the Blair and Stout model. See Bainbridge, supra note 6, at 1744–51 (arguing that limited voting rights for shareholders is corporate law's majoritarian default); Margaret M. Blair & Lynn A. Stout, A Team Production Theory of Corporate Law, 85 VA. L. REV. 247, 257–76 (1999) (explaining team production analysis). It should be clear from my earlier work discussing the board’s mediating function that I favor the latter. Lawrence E. Mitchell, A Critical Look at Corporate Governance, 45 VA. L. REV. 1263, 1273–83 (1992).


\textsuperscript{18} See Eugene F. Fama & Kenneth R. French, Financing Decisions: Who Issues Stock?, 76 J. FIN. ECON. 549, 579 (2005) (demonstrating that equity offerings are far more frequent and regular than had been supposed). While Fama and French’s findings are interesting, they are not necessarily inconsistent with my data. In the first place, they include within their study substantial amounts of privately issued equity, including stock issued in private placements and for employee stock options and, indeed, attribute to the latter a substantial proportion of new equity issuances. Id. at 574. The other large block of equity issued is in the context of mergers, in which the stock of the merging corporation disappears, so that the net effect on outstanding public equity probably is relatively minimal. Id. at 574–75. In addition, much of the work that supports their conclusions relates to the ratio of equity to debt. Id. at 557–58. But they use Compustat and Center for Research in Security Prices (CRSP) data, neither of which accounts fully for off-balance sheet financing which, as I will show in Part II, infra, comprises the bulk of recent debt financing. Id. at 556, 558, 561, 564, 576, 581. Compustat does provide off-balance sheet rental payments for the first five years of operating leases on a company-by-company basis. Fama and French do not appear to have relied on this data, and if they had, it would nevertheless dramatically understate off-balance sheet financing. CRSP does include capitalized lease obligations but it is not clear how this affects their data. See id. at 581 (explaining the composition of the data used in the paper).

is possible these rights could serve industrial development in a positive way, it seems economically backward to allow those with the least real capital at risk to have power over those with the most.  


I want to be careful to point out that in this Article I am only examining the question of the rights of public stockholders through the lens of their role in financing productivity. The role of the stock market, as an institution, in stimulating economic growth is a much larger and more complex question that I hope to address in a later paper as part of a larger project of which this Article is a part. A substantial literature exists, drawing at least back to Joseph Schumpeter's 1911 work, The Theory of Economic Development, arguing that a nation's economic growth is highly correlated with its development of sophisticated financial markets, a question of particular interest to development economists. JOSEPH SCHUMPETER, THE THEORY OF ECONOMIC DEVELOPMENT (Redvers Opie trans., Harvard University Press 1934) (1911). Levine provides an excellent survey and analysis of this literature. See Levine, Finance and Growth, supra note 13, at 865–70 (explaining various studies and theories concerning the causal connection between economic growth and aspects of financial markets); Ross Levine, Financial Development and Economic Growth: Views and Agenda, 35 J. ECON. LITERATURE 688, 688–92 (1997) [hereinafter Levine, Views and Agenda] (arguing that financial systems are a fundamental feature of the process for economic development). For a sample of additional literature on the subject, see Peter L. Rousseau, Share Liquidity and Industrial Growth in an Emerging Market: The Case of New England, 1854–1897, (Nat'l Bureau of Econ. Res. Working Paper No. H0117, 1999) [hereinafter Rousseau, Share Liquidity], available at http://www.nber.org/papers/h0117.pdf (arguing that share liquidity was a key factor in the rise of the United States as a classic case of finance-led industrialization using price indices and returns for equities); Peter L. Rousseau & Richard Sylla, Emerging Financial Markets and Early U.S. Industrial Growth, (Nat'l Bureau of Econ. Res. Working Paper No. W7448, 1999), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=191548. Gerard Caprio, Jr. and Asli Demirguc-Kunt, in The Role of Long-Term Finance: Theory and Evidence, 13 WORLD BANK RES. OBSERVER 171 (1998), note that "the effect of stock market development on firms' financing decisions is theoretically inconclusive," and little empirical evidence exists. Id. at 185; see also Asli Demirguc-Kunt & Ross Levine, Stock Market Development and Financial Intermediaries: Stylized Facts, 10 WORLD BANK ECON. REV. 291, 293–94 (1996) (discussing connections between attributes of stock markets and economic growth); Raghuram G. Rajan & Luigi Zingales, Financial Dependence and Growth, 88 AM. ECON. REV. 559, 568–69 (1998) (arguing that industrial sectors that are relatively more in need of finance develop disproportionately faster in countries with more developed financial markets according to a large sample of countries over the 1980s); Peter Haas & Gerhard Fink, The Finance-Growth-Nexus Revisited: New Evidence and the Need for Broadening the Approach 22 (Europainstitut: Univ. of Econ. & Bus. Admin. Vienna, EI Working Paper No. 73, 2006), available at http://www.wu.ac.at/europainstitut/forschung/ wp73.pdf. At the same time, more recent scholarship suggests that the data used in these studies provide only "fragile" support for the hypothesis that finance leads growth. James B. Ang, A Survey of Recent Developments in the Literature of Finance and Growth, 22 J. ECON. SURVEYS 536, 543 (2008) (noting critiques of the finance-growth nexus argument); id. at 553 (criticizing empirical studies noting, among other critiques, that country cross-sectional growth regressions tend to assume a positive
Two principal exceptions exist to the conclusion that public equity does not provide corporate investment capital. First, in recent years the financial industry has been a net issuer of corporate equity. Regulatory requirements, and the need for an equity base to permit substantial leveraging, are the apparent reasons for this. The second is the role of private equity in financing risky new business and the incentives to invest that are provided by the possibility of exit through the public market. While these exceptions are important and may suggest a more layered corporate governance regime than we have at present, they are special cases that deserve extended analysis, and so I defer their discussion to another day.

---

21. Infra Figure 9.

22. The proportion of new business financing attributable to venture capital is quite small, although it may be important in terms of the nature of the industries that are its primary consumers. Allen N. Berger & Gregory F. Udell, The Economics of Small Business Finance: The Roles of Private Equity and Debt Markets in the Financial Growth Cycle, 22 J. BANKING & FIN. 613, 619–20 (1998); Paul A. Gompers, Corporations and the Financing of Innovation: The Corporate Venturing Experience, FED. RES. BANK ATLANTA ECON. REV., Fourth Quarter 2002, at 8–13 (showing that venture capital investment appears to be concentrated in discrete regions of the country and discrete business sectors); Paul A. Gompers & Josh Lerner, The Venture Capital Revolution, 15 J. ECON. PERSPECTIVES 145, 157–58 (2001) (showing that in the past there has been a disproportionate amount of funding by venture capitalists in particular regions). Kortrum and Lerner estimate that the ratio of venture capital to research and development (which are close substitutes in innovation) was on average 3% between 1983 and 1992, and venture capital can be attributed to 8% of innovation during that time frame. Samuel Kortrum & Josh Lerner, Assessing the Contribution of Venture Capital to Innovation, 31 RAND J. ECON. 674, 675 (2000). Andrei Shleifer and Robert Vishny note that "[y]oung firms, and firms with intangible assets, may need to be equity financed simply because their assets have little or no liquidation value." Andrei Shleifer & Robert W. Vishny, A Survey of Corporate Governance, 52 J. FIN. 737, 765 (1997); see also Raghuram G. Rajan & Luigi Zingales, Financial Dependence and Growth, 88 AM. ECON. REV. 559, 566–67 (1998) ("It almost goes without saying, but is worth noting, that venture capital is highly concentrated in high technology industries, especially information technology and, to a lesser extent, biotechnology."). Finally, as I will later discuss, infra Part IV, venture capital tends to come in at a stage in small business development where the innovation has substantially been developed, although this observation says little about its utility in stimulating innovation in the first place.

23. I discuss these in Financialism, my book in progress. There appear to be some other
I begin in Part III by accepting, for purposes of discussion, a strong argument in the development literature that holds that the stock market itself can, as an institution, indirectly contribute to economic growth regardless of whether shareholders provide the capital to finance production. I then argue that, in the United States, public shareholders, acting through that market, have increasingly (1) stripped American corporations of capital for productive investment by a shift from investing for dividends to capital gains, and (2) distorted managerial incentives in favor of short-term stock price increases to the detriment of long-term productivity, such that increased shareholder rights would be dangerous to the real economy by aggravating already distorted incentives.

I


Nonetheless, economists largely are in agreement that retained earnings and debt, not equity finance, traditionally have been the primary sources of funds for investment in productive capital. United States Securities and Exchange Commission, Institutional Investor Study Report, Vol. 1, p. 72; Supp. Vol. I, A Report of the National Bureau of Economic Research on Institutional Investors and Corporate Stock—A Background Study 37, 163 (1971) [hereinafter Goldsmith Report]; see also Levine, Views and Agenda, supra note 20, at 720 (showing that retained earnings and debt have historically been the primary sources of funds for investment); Colin Mayer, New Issues in Corporate Finance, 32 EUR. ECON. REV. 1167, 1173–74 (1988) (demonstrating that retentions and debt are the main sources of funds for enterprises across five industrialized countries). Indeed Levine notes as a major weakness of much of the development literature referred to earlier in this Article that "it focuses on equity markets." Levine, Views and Agenda, supra note 20, at 714; see also Caprio & Demirguc-Kunt, supra note 20, at 182 (criticizing Rajan and Zingales for failing to distinguish between equity and credit markets, although noting that active, if not necessarily large, stock markets correlate with faster growth). My central focus in this Article is on the source of funds for productive capital, not such other growth-stimulating benefits that financial markets may provide.

24. The literature, while not yet large, suggests that a developed stock market can introduce significant distortions in fundamental economic behavior. There is a significant and

A more skeptical approach to this view exists, at least for larger firms. See Randall Morck et al., The Stock Market and Investment: Is the Market a Sideshow?, 1990 Brookings Papers Econ. Activity 157, 199 (1990) (arguing that the stock market has little explanatory power); see also Malcolm Baker et al., When Does the Market Matter? Stock Prices and the Investment of Equity-Dependent Firms, 118 Q. J. Econ. 969, 996–97 (2003) (arguing, among other things, that what they define as "equity-dependent firms" find investment constrained when stock prices are low due to nonfundamental causes); Kenneth A. Froot, Andre Perold & Jeremy C. Stein, Shareholder Trading Practices and Corporate Investment Horizons, 5 J. Applied Corp. Fin. 42, 200 (1992) (finding that the net effect on stock volatility from more disclosure is zero for firms). Gilchrist et al. discuss some of the other literature suggesting that the cost of external equity does have a meaningful influence on corporate investment. Gilchrist et al., supra note 23, at 808–10. It is worth noting that much of this literature was published before the bubble decade of the 1990s took place and the substantial increase in stock market volatility and buyback
My method is to critique two common arguments that, on close examination, suggest ways that the actions of public shareholders can damage the real economy. The first, perhaps the dominant argument in favor of shareholder voting, holds that shareholder voting is efficient because shareholders are specialists in risk bearing. I argue that the flaw in this argument is that the only risks in which shareholders are specialists are those that they themselves create. Thus, shareholder voting cannot be efficient, at least as far as improved corporate productivity is concerned, because the interests of shareholders that are derived from these risks are largely irrelevant to corporate production.

This leads logically to the second and, perhaps, more interesting question of the manner in which dramatic changes in styles of investment have created a body of public shareholders whose profit expectations lead them effectively to pressure managers to steal from the corporate present in order to allow them to reap potentially illusory profits from the corporate future. Shareholder pressure creates incentives for managers to spend corporate cash now to create the illusion of future wealth and thus enhance stock prices rather than to invest in the long-term health of the corporation. A growing body of literature from the early 1990s on explores this question, with mixed results, but with most scholars tending to find that the public stock market does have noticeable affects on managerial incentives. This gives rise to the further implication that significant restraints should be put on market behavior through the creation of incentives that favor long-term investing over short-term speculation.

activity during the beginning of the twenty-first century.

25. See MITCHELL, CORPORATE IRRESPONSIBILITY, supra note 9, at 133–34 (arguing that quarterly reporting is hazardous because speculator shareholders constantly seek short-term benefits instead of letting long-term goals mature). The very considerable difference between the expectation of profits from dividends and that from stock price increases, as I will discuss in Part III, seems very much to be the difference between investing and gambling. The difference would be erased in either the case of an efficient stock market, which is by no means any longer an article of faith, or if capital gains reflected only the accumulation of retained earnings. As I will show, the behavior of the stock market over the last fifty years eliminates the latter possibility.

26. See supra note 24 and accompanying text (discussing literature and research dealing with the causal connection between managerial decisions and stock market incentives).

27. History shows that direct attempts to regulate, or even to define, speculation typically fail. MITCHELL, THE SPECULATION ECONOMY, supra note 11, at 188–91. My suggestions are more indirect and are aimed at building financial incentives into market decisionmaking for long-term holding. See MITCHELL, CORPORATE IRRESPONSIBILITY, supra note 9, at 276–78 (summarizing my suggestions for improving long-term corporate management). I will not repeat these suggestions here. Rather, I believe that the limitations on shareholder rights that I advocate will help to relieve short-term pressures from management in a similar, indirect manner.
Part IV concludes with a re-evaluation of the legitimate rights of public shareholders in light of their actual role in the American economy. They are few, indeed. At the very least, in the absence of any evidence that public shareholders serve American industry in a positive way, there is no credible case for the extension of shareholder rights.

II. Financiers Who Do Not Finance: The Empirical Evidence

In order to be legitimate, the rights of public shareholders must be grounded in reality, in some net social or private benefit conferred by public shareholders. The principal justification in the legal and financial economics literature for the existence of public shareholders is that they provide financing for risky enterprise. But it is clear that, on balance, the American public stock

28. Rajan & Zingales, supra note 22, at 559. An additional justification for the market, beyond the scope of this Article, is its role in providing an exit for those who finance risky enterprise. See Levine, Finance and Growth, supra note 13, at 875–76 (explaining literature that argues that systems that allow agents to hold a diversified portfolio on risky projects fosters a reallocation of savings toward high-return ventures with positive repercussions on growth); Levine, Views and Agenda, supra note 20, at 693 (arguing that liquid stock markets reduce liquidity risks and drive transaction costs down, so more investment occurs in illiquid, high-return projects). Further justifications include that the market helps to ameliorate informational asymmetries, assists corporate monitoring, facilitates price discovery, and helps to encourage economic development. Id. at 690–93. Most of the market's identified functions either help to support, or are consequences of, the two principal functions noted in the text. Id. at 691.

The private equity boom, which, in one form or another, gained momentum from the 1980s until the recent market collapse, has raised a number of questions ranging from the efficiency of transactions to, most recently and dominantly, the financial success of private equity funds. See generally Levine, Finance and Growth, supra note 13, at 874 (discussing literature dealing with transactions, markets, and growth). It has also led to questions about the need for, and desirability of, public equity financing in the large, modern corporation, the touchstone being Michael Jensen's now-famous 1989 Harvard Business Review article, The Eclipse of the Public Corporation. See Michael Jensen, The Eclipse of the Public Corporation, HARV. BUS. REV., Sept.–Oct. 1989, at 61 (arguing that the publicly held corporation has outlived its usefulness in many sectors of the economy). Ron Gilson and Charles Whitehead have, over the past several years, been revisiting and revising Jensen's argument. See Ronald J. Gilson & Charles K. Whitehead, Deconstructing Equity: Public Ownership, Agency Costs, and Complete Capital Markets, 108 COLUM. L. REV. 231, 233 (2008) (recalling "Michael Jensen's then premature announcement, of the 'eclipse of the public corporation' by a more efficient organization form"). The implications of this Article suggest that Jensen was more or less on time, just as Thorstein Veblen predicted the growth of a banker-dominated stock market economy in its earliest stages. MITCHELL, THE SPECULATION ECONOMY, supra note 11, at 13–14.

In this Article I disregard as irrelevant to the broader story the historic stock market crash that followed a Congressional bailout of the mortgage-backed securities industry during late September and early October of the Panic of 2008. David M. Herszenhorn & Carl Hulse, Breakthrough Reached in Negotiations on Bailout, N.Y. TIMES, Sept. 27, 2008, at A1 (explaining the crash of 2008 and the ensuing bailout bill). Indeed while the consequences of
The legitimate rights of public shareholders if they do not play a role in financing production?

In Part II.A, I explain the history of public equity financing in America, which is a relatively recent phenomenon. In Part II.B, I present the empirical evidence. That evidence, compiled from raw IRS corporate balance sheet data going back to 1955, Federal Flow of Funds data, compilations of earlier data where raw data were unavailable, and other secondary sources identified where relevant, clearly demonstrates that, on average, external equity has the ongoing financial crisis might ultimately affect my (and others') analysis, I believe it is too early to say anything meaningful about the future effects of the Panic. Consequently, my analysis and data run through early 2007, treating the beginning of the Panic as, at the latest, the summer of 2007.

29. Part of the explanation for the commonly held view that external equity is an important source of funding, comes from the discipline's reliance on financial economics, which "has not emphasized real capital" in contrast to stock market capital. See Robert E. Hall, The Stock Market and Capital Accumulation, 91 AM. ECON. REV. 1185, 1194 (2001) (stating that pure valuation errors create measurement errors in both quantity and price of capital in his framework).

30. These data were obtained as a result of my Freedom of Information Act request. Data from 1961 and 1977 were unavailable, but the effect of this absence is insignificant. I am indebted to Bill Bratton for the observation that balance sheets prepared for tax purposes might show lower retained earnings than balance sheets prepared for Generally Accepted Accounting Principles (GAAP) purposes. While any difference should have no effect on the overall trends, it might affect the absolute numbers. I also note that I have not included depreciation allowances as a contribution to internal cash flow. This omission understates internal financing and I will correct it in future work.

31. These data are drawn largely from records compiled by the United States Internal Revenue Service, the Bureau of Economic Analysis, the United States Bureau of the Census) as compiled in the various Statistical Abstracts of the United States, and the historical abstracts of the United States, primarily as compiled and analyzed in the Historical Statistics of the United States: Millennial Edition.

rarely been an important source of finance for American industry, and that American public shareholders have withdrawn more equity from corporations than they have contributed to their financing. Indeed, external equity financing for American industry only began to grow from the turn of the twentieth century on, and the lion's share of external financing was in various forms of debt. The data show relatively flat or very slightly positive to net negative issuances of capital stock, even during such active trading periods as the 1960s Go-Go years and the internet bubble of the late 1990s. Capital stock is so relatively unimportant as a financing source for the formation of productive industrial capital that recent years have seen corporate stock repurchases outstrip almost all other forms of corporate investment, including, for the three years ending September 30, 2007, investment in capital for the production of goods and services.

33. Economists writing in the 1950s and early 1960s, when good data first became available, widely support the conclusion that the public stock market is relatively unimportant to industrial finance. See Goldsmith Report, supra note 23; Kuznets, supra note 32, at 253 (showing the total, internal, and external financing of large manufacturing corporations from 1900 to 1953); Jules I. Bogen, The Importance of Equity Financing in the American Economy, 5 J. Fin. 170, 173 (1950) (arguing that there was a shift from the main source of equity financing from sale of new stock to retention of earnings); S.P. Dobrovolsky, Economics of Corporate Internal and External Financing, 13 J. Fin. 35, 35 (1958) (stating that American corporations have generally been characterized by a high degree of dependence on retention of funds from revenue stream instead of external financing); John Lintner, The Financing of Corporations, in THE CORPORATION IN MODERN SOCIETY 166, 166-67 (Edward S. Mason ed., 1960); Mayer, supra note 23, at 1173-74; Arnold W. Sametz, Trends in the Volume and Composition of Equity Finance, 19 J. Fin. 450, 450 (1964) (stating that it is well known that since World War II internal equity finance provided a huge portion of the funds, while external equity finance has played a relatively minor role).

34. See infra notes 37-47 and accompanying text (explaining the growth of equity in America and noting the exception of debt issued primarily by railroads, which grew in the late nineteenth century).

35. See infra Figures 7-9 (showing patterns in issuance of stock).

36. See infra Figures 7-9 and accompanying text (displaying formation of productive capital and stock repurchase patterns). It is also important to emphasize the distinction between external equity, raised through the sale of publicly issued securities, and internal forms of equity, including retained earnings, depreciation and depletion allowances, and the use of current expenses to fund the creation of capital assets through, for example, research and development. See Bogen, supra note 33, at 171 (defining different ways owners of equity can provide capital). While there is a superficially appealing argument that these internal forms of equity financing ought to be attributed to public stockholders who, after all, depend upon them for their ultimate return of capital, I shall be at pains to argue that, because equity financing is so minor a portion of corporate finance—indeed Bogen notes it constituted 5% of invested funds in the period 1946-1948—one cannot attribute the creation of those funds to the investment of outside equity so much as to various forms of debt financing. Id. at 172. The implication is that, while the law grants the residual of these funds to shareholders, it does so at the expense of other, far more important, sources of corporate finance.
A. A (Very) Brief History of Equity Financing in America

A significant public equity market, at least for industrial concerns, is just a bit over 100 years old, created at a point where industrialization had reached a stage of reasonable maturity. The railroads were financed largely with government subsidies and debt, and industrial corporations from Standard Oil to the companies that combined to create U.S. Steel were financed with retained earnings and debt. The public equity market simply was not an important factor.

37. Rousseau identifies fifty-one industrial companies listed on the Boston Stock Exchange in 1897. Rousseau, Share Liquidity, supra note 20, at 2-17. This was more or less the peak of that exchange's leadership before becoming overshadowed by the New York Stock Exchange. Id. at 4; see John Moody, The Truth About the Trusts 110 (1904) (noting that the Pullman Palace Car Company was the only industrial company trading on the New York Stock Exchange in the 1880s). Even the largest of these were small companies. See Thomas R. Navin & Marian V. Sears, The Rise of a Market for Industrial Securities, 1877-1902, 29 Bus. Hist. Rev. 105, 110 (1955) (explaining the common unit of organization was small). Navin and Sears further note that in 1890 only ten industrials had their prices quoted in financial journals, rising to thirty by 1893 and 170 by the beginning of the merger wave in 1897. Id. at 110, 127.

38. See Gabriel Kolko, Railroads and Regulation: 1877-1916, at 15 (1965) ("[T]he railroads during the 1870's were the products, in large measure, of the financial efforts of the state and federal governments—about $350 million in state and federal funds, plus many millions of acres in land-grants, were pumped into the canal and railroad system until 1873."); Alfred D. Chandler, Jr., Patterns of American Railroad Finance, 28 Bus. Hist. Rev. 248, 248-49 (1954) (describing railroads' use of bonds); see also Arthur T. Hadley, Railroad Transportation: Its History and Its Laws 51-52, 53-62 (1907) (describing the use of bonds in order to finance new projects). It is interesting to note that Hadley uses "stock" to include debentures and bonds, but it becomes clear from his discussion of railroad accounting (and attendant fraud) that debt was the primary instrument of railroad finance in the nineteenth century. Id. at 52. Ripley describes a detailed and nuanced evolution of railroad financing, noting that prior to the mid-1850s railroads principally capitalized with stock, but that following the Civil War bonds became the principal means of railroad finance. It is well-known that much of the private funding for railroad construction and expansion came from Europe, and "all European capital for railroad purposes came to this country in the form of mortgage loans." William Z. Ripley, Railroads: Finance and Organization 104-10 (1923); see also Alfred D. Chandler, Jr., The Visible Hand: The Managerial Revolution in American Business 91-172 (1977) (describing the formation of the railroad corporations and their financing structures). Cf. Peter Tufano, Business Failure, Judicial Intervention, and Financial Innovation: Restructuring U.S. Railroads in the Nineteenth Century, 71 Bus. Hist. Rev. 1, 6-37 (1997) (describing the judicial innovations that restricted railroads and provided new regulations for securities).

39. See S.P. Dobrovolsky, Economics of Corporate Internal and External Financing, 13 J. Fin. 35, 35 (1958) (stating that American corporations have been characterized by a high degree of dependence on the internal method of financing).

40. See Navin & Sears, supra note 37, at 106 (stating that before 1890, people with excess capital had very little choice in securities and there was no significant market for equity); Mitchell, The Speculation Economy, supra note 11, at 9 (stating that in the nineteenth century most corporations were owned by founders and their families with only a small amount of stock available from railroads).
Thus, American industrialization was accomplished with little significant external equity capital and, in the case of industrial corporations (in contrast to railroads, banks, and insurance companies), such external equity capital that was raised was almost always raised privately.\(^4\) Naomi Lamoreaux notes that equity capital was rarely a source of permanent finance before the 1930s.\(^4\) Railroads financed largely through debt,\(^4\) principally because limited disclosure discouraged outside shareholders and the more transparent integrity of some bond houses allowed lenders to rely upon the reputation of the selling bank for repayment.\(^4\) Significant trading in railroad stock typically signified a battle for control.\(^4\) While banks and utilities did finance with equity, it was typically confined to local holders.\(^4\) Virtually no industrial companies issued public equity and some, like Carnegie Steel, were organized as partnerships.\(^4\)

The merger wave of 1897 to 1903 generally is identified as the period during which the giant modern public corporation was created.\(^4\) While there is little question

---

\(^{41}\) Naomi R. Lamoreaux, *Business Organization*, in *Millennial Statistics*, supra note 32, at 3-477, 3-486 (explaining that most corporations before the 1930s only had a few individuals that held stock except for the railroads, which had people along the routes holding equity); Navin & Sears, supra note 37, at 106 (explaining that corporations before 1930 did not use publicly sold equity to finance ventures); Chandler, supra note 38, at 90–92 (stating that railroads were the only major corporations using public financing prior to the 1930s, but usually the financiers consisted of a small group of individuals).

\(^{42}\) See Lamoreaux, supra note 41, at 3-486 (describing the lack of public equity markets before the 1930s).

\(^{43}\) See Hadley, supra note 38, at 50–62 (discussing the significant role of bonds and other forms of credit in financing the railroads).

\(^{44}\) See Lamoreaux, supra note 41, at 3-486 (describing the problems of asymmetric information).

\(^{45}\) See id. (explaining the merger wave that created large corporations); Mitchell, *The Speculation Economy*, supra note 11, at 11 ("When railroad stock was traded in any great volume, it almost always meant that different factions were clawing for control or speculators were toying with the stock."). Railroad finance also was a significant source of financial fraud that principally affected shareholders. See Ripley, supra note 38, at 35 (discussing the device of the railroad construction company and its use in siphoning railroad capital to controlling shareholders).

\(^{46}\) See Lamoreaux, supra note 41, at 3-486 (stating that most equity holders were either a small group of related investors or those people that lived along the railroad).

\(^{47}\) See Navin & Sears, supra note 37, at 106–10 (describing ownership in the 1880s and stating that Carnegie Steel was a series of partnerships).

\(^{48}\) See Naomi Lamoreaux, *The Great Merger Movement in American Business*, 1895–1904, at 191–94 (1985) (stating that the wave of mergers gave rise to large horizontally integrated corporations until regulation forced an end to the horizontal spread and gave rise to vertically integrated corporations); Mitchell, *The Speculation Economy*, supra note 11, at 11–12 (stating that the merger wave created the large modern corporation by creating stock); Navin & Sears, supra note 37, at 136–37. See generally John Moody, *The Truth About the Trusts* (1904) (offering a sometimes detailed picture of the corporate components and
that this is the time during which large numbers of industrial corporations went public, the function of public equity during this period was not especially related to financing. Although data is most unreliable before the passage of the Sixteenth Amendment and the enactment of the federal income tax in 1913, it seems clear that equity securities during this period were not so much used to raise corporate capital as to provide a currency for corporate acquisitions. Legal changes, most prominently in New Jersey, effectively licensed corporate promoters to print stock for the purpose of assembling competing companies into larger horizontal conglomerates.

While stock offerings in the new combinations did raise some working capital, their primary purpose was to provide liquidity to industrialists and their families and profits to their investment bankers who took substantial portions of their fees in stock. This is not to say that securities offerings during the merger wave failed to fulfill a business purpose. To the extent that corporate combination rationalized business and eliminated destructive competition, common stock provided a cash-free way to ensure business survival and eliminate duplicative costs. The opportunity to use this method was provided by an unusually large cash surplus in the American economy and a paucity of investment opportunities available to the newly emerging middle class. So common stock may have played a useful role in corporate restructuring, but not in financing production, and it is hardly clear from the historical record that it was a role that could not have been played with equal success by debt.

capitalizations of the newly public corporations emerging from the merger wave as well as aggregate data on the combinations).

50. MITCHELL, THE SPECULATION ECONOMY, supra note 11.
51. See id. at 121–23 (explaining the history of mergers that occurred primarily in New Jersey).
52. See Luther Conant, Jr., Industrial Consolidations in the United States, 53 PUBLICATIONS OF THE AM. STAT. ASS'N 1, 2–11 (1901) (providing data on capitalization of various corporations).
53. Rousseau, Share Liquidity, supra note 20, at 5 n.6.
54. See LAMOREAUX, supra note 48, at 187–94 (arguing that although the consolidation of corporations was not inevitable, it was a rational solution to the problems of competition and illiquidity that the corporations faced). The extent to which the combinations formed during the merger wave actually succeeded remains a subject of debate among business historians. It also bears noting that the new combinations did issue equity to raise some working capital during the merger wave. MITCHELL, THE SPECULATION ECONOMY, supra note 11, at ch. 1.
55. See Lamoreaux, supra note 41, at 3-486 (explaining that common stock provided an avenue for investment for American middle class savers after World War II).
56. J.P. Morgan began the practice of using common stock in railroad reorganizations instead of the more common debt in order to eliminate fixed charges from railroad balance sheets. See id. (explaining how Morgan used his reputation for financial probity to build a market for railroads' stocks). Lamoreaux also makes the case that the elimination of high fixed charges in competitive industrial markets with low product differentiation was a principal
The success of the restructuring that did occur also remains a subject of lively debate among business historians. The unavoidable conclusion appears to be that American corporations achieved high productivity without significant funding from public equity. This certainly was the case for most of the nineteenth century, when some of America's largest (and still extant) corporations grew to maturity, and when American industrialization had completed its formative phase. As I will now demonstrate, it continued to be true for most of the financial motivator of the merger wave. See Lamoreaux, supra note 48, at 12 (arguing that the rapid expansion of capital intensive industries followed by depression caused abnormally serious price wars that led to the merger wave). This might suggest that debt financing would not have been a workable alternative to facilitate corporate combination. But the merger wave occurred during a time when dividend payments, although they remained discretionary with boards of directors, were expected by shareholders and only the desperate corporation could afford to pass a dividend. See Mitchell, The Speculation Economy, supra note 11, at 95 (explaining how shareholder power creates harmful incentives). During the first decade of the century (encapsulating the last four years of the merger wave), Cowles Commission/Standard & Poor's ("S&P") Composite stock dividend yields exceeded corporate bond yields by a mean of 30%, although with a standard deviation of 1.2 for stock yields compared with a standard deviation of .52 for bond yields. See Peter L. Rousseau, Stock Dividend Yields: 1802–1999, in Millennial Statistics, supra note 32, tbl.C808-816 (providing the stock yields); Sidney Homer & Richard Sylla, A History of Interest Rates 342 tbl.45 (3d ed. 1996) (providing the bond yields). The median difference was 28%. Id. Investors in the new stock issues clearly anticipated compensatory returns for their risk in the form of dividends. So, while the flexibility to pass dividends might have made common stock appear more attractive to issuers, the financial reality was that it was little different from debt in terms of corporate obligation, and debt financing might have been a workable alternative. In addition, debt's requirement of fixed charges might have prevented the overcapitalization that destabilized financial markets before the creation of the Federal Reserve Board (and for some time after, until it had gained real power) and limited corporate combinations to those more likely to be economically sustainable on the basis of real productivity.

57. Navin & Sears, supra note 37, at 106 (showing the rise of corporations without a significant market for equity); Mitchell, The Speculation Economy, supra note 11, at 9.

58. Thomas McCraw identifies the founding periods of several of America's largest corporations well before the merger wave (although a few, like General Electric, were the product of corporate combination), including Eastman Kodak, Chiquita Brands, Johnson & Johnson, Coca-Cola, Westinghouse Electric, Sears Roebuck, Avon Products, Hershey Foods (the 1880s), General Electric, Knight-Ridder, Ralston Purina, Reebok International, Harris Corp., PepsiCo, and Goodyear (the 1890s). See Thomas K. McCraw, American Capitalism, in Creating Modern Capitalism: How Entrepreneurs, Companies, and Countries Triumphed in Three Industrial Revolutions 303, 321 (Thomas K. McCraw ed., 2000) (listing Fortune 500 companies by founding dates). Of course many extremely large companies predated or were formed parallel to these, including Standard Oil, Carnegie Steel, Armour & Co., Proctor & Gamble, McCormick Reaper and John Deere (which would combine into International Harvester), and American Sugar Refining. Id. McCraw is careful to emphasize that these periods do not necessarily cover the corporations' eras of greatest growth, but it is fair to say that, taken together, they illustrate the very substantial extent to which America had industrialized well before the advent of the public industrial corporation. See id. at 321 ("The decades listed are those of the companies' founding, not necessarily when they became large.").
twentieth century, most reliably (in terms of available data) at least from World War II onward.\textsuperscript{59}

\section*{B. The Empirical Evidence}

The earliest data I present is drawn from work compiled for the Bureau of Economic Analysis by Simon Kuznets through 1956 and extended to 1962 by Arnold Sametz and presented in Table 1.\textsuperscript{60} These data show that, for the first half of the twentieth century, overall external financing (including debt) was less important than internal sources of finance in general, and that its importance declined significantly in the post-World War II years.\textsuperscript{61} Using long-term cycles rather than individual years for a variety of methodological reasons, Kuznets shows that internal sources of finance were as follows through 1956, and Sametz, using different sources, shows this continuing until 1962.

<table>
<thead>
<tr>
<th>Years</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901-1912</td>
<td>0.55</td>
</tr>
<tr>
<td>1913-1922</td>
<td>0.60</td>
</tr>
<tr>
<td>1923-1929</td>
<td>0.55</td>
</tr>
<tr>
<td>1930-1933</td>
<td></td>
</tr>
<tr>
<td>1934-1939</td>
<td>0.98</td>
</tr>
<tr>
<td>1940-1945</td>
<td>0.80</td>
</tr>
<tr>
<td>1946-1949</td>
<td>0.64</td>
</tr>
<tr>
<td>1946-1956</td>
<td>0.61</td>
</tr>
<tr>
<td>1957-1962</td>
<td>0.61</td>
</tr>
</tbody>
</table>

The data original to this paper, presented in a time series running from 1955 through 2006, has been drawn and compiled from raw IRS balance sheet

\textsuperscript{59} See Bogen, \textit{supra} note 33, at 171-76 (showing statistical evidence); Kuznets, \textit{supra} note 32, at 253 (displaying the total, internal, and external financing for large manufacturing corporations); Sametz, \textit{supra} note 33, at 453-59 (providing numerous tables displaying internal and external financing data).

\textsuperscript{60} Kuznets, \textit{supra} note 32, at 245-49 (providing tables giving long-term patterns in sources of corporation financing); Sametz, \textit{supra} note 33, at 453-59 (providing numerous tables displaying internal and external financing data).

\textsuperscript{61} Kuznets, \textit{supra} note 32, at 245-49; Sametz, \textit{supra} note 33, at 453-59.

\textsuperscript{62} Kuznets, \textit{supra} note 32, at 248 tbl.39; Sametz, supra note 33, at 455.
What those data demonstrate is that until the 1970s, American corporations financed their productive activities almost exclusively through retained earnings and various forms of debt. From the late 1970s on, retained earnings began rapidly to disappear, to be replaced almost entirely by debt. Public stock issuances rarely were a factor in industrial production.

Figures 1 through 5 show that the predominance of internal financing begins to decline in the mid-1950s, and rapidly thereafter from the 1980s into the twenty-first century. As I will soon clarify, its diminution has not been balanced by a net increase in external equity, but rather by a dramatic increase in off-balance sheet debt.

Figure 1 is the ratio of retained earnings to external financing. Retained earnings are, effectively, corporate savings, available either for investment in productive activity or, in some circumstances, payments to shareholders. Figure 1 shows a dramatic decline in the proportion of corporate assets attributable to retained earnings, and thus the amount of corporate savings.

63. SOI BULLETIN HISTORICAL TABLES AND APPENDIX, TABLE 13—CORPORATION INCOME TAX RETURNS: BALANCE SHEET, INCOME STATEMENT, AND TAX ITEMS FOR INCOME YEARS, 1990-2005, http://www.irs.gov/taxstats/article/0,,id=175846,00.html [hereinafter SOI BULLETIN HISTORICAL TABLES] (last visited Sept. 1, 2009) (on file with the Washington and Lee Law Review). We drew all other data from various volumes of the Statistics of Income (SOI) Bulletin, issued quarterly, by the Statistics of Income Division of the Internal Revenue Service (IRS), and made available to us at the IRS library pursuant to Freedom of Information Act (FOIA) Request. We have compiled our data from 1938 but do not here present the earlier results due to the fact that the IRS records separate paid-in or capital surplus only from 1955.

64. The ratios of external to internal financing are based on the following equation: External Financing = (Capital Stock) + (Paid in Capital or Capital Surplus) + (Accounts Payable) + (Short-Term Debt) + (Long-Term Debt).

65. Infra Figures 1-5.

66. Infra notes 67-74 and accompanying text. The data contained in these figures are also presented in tabular form in Appendix A.

67. Infra Figure 1.

68. Retained earnings do not, of course, necessarily represent cash, but rather the net value of corporate assets not represented by the capital balance sheet entries shown in Figure 2. Retained earnings can be distributed to shareholders as returns of equity in the form of dividends and stock buybacks.

69. Infra Figure 1.
Figure 1: Ratio of Retained Earnings to External Financing

Figure 2 captures the ratio of capital plus paid-in capital or capital surplus to external financing. This data serves as a proxy for both public and private equity issuances in general. I present a set of equity data based on net issuance values in Figures 7 through 9. These balance sheet items, together with the retained earnings shown in Figure 1, constitute the equity portion of a corporate balance sheet. While the data show a steady rise in capital as a proportion of external financing from 1979 to 2002, the aggregate data presented in this paper suggest that the uptrend is at least in part attributable to an apparent decline of all other forms of financing rather than an actual increase in equity itself.

70. *Infra* Figures 7–9.

71. In other words, if one were to hold capital relatively constant and decrease all other forms of external financing, one would expect to see the ratio of capital to external financing rise simply as a mathematical matter. See *infra* notes 75–78 and accompanying text (concluding that the likely growth in external financing comes in the form of off-balance sheet debt). Fama & French, *supra* note 18, at 574–75. Finally, as I show in Figure 9, financial corporations have been net issuers of equity in recent years and some of the uptrend is undoubtedly attributable to their financing. *Infra* Figure 9. Financial corporations are included in the IRS data.
Figures 3 through 5 capture the ratios of the various components of debt (accounts payable, short-term debt, and long-term debt) to external financing. Accounts payable increase rather significantly, but both short-term and long-term debt show substantial declines after initially rising through the late 1980s (short-term debt) and the early-1970s (long-term debt).

Figure 3: Ratio of Accounts Payable to External Financing
Figure 4: Ratio of Short-Term Debt to External Financing

Figure 5: Ratio of Long-Term Debt to External Financing
Mapped together, the trends appear in Figure 6 as follows:

Figure 6: Ratio of Retained Earnings and Other Debt to External Financing

In place of the Kuznets-Sametz first half century range of retained earnings of 55% to 71% (leaving aside the extraordinary 98% during the period when America was emerging from the Great Depression), we see 37% in 1978, dropping as low as 3% in 2002 (which can partially be explained by the consequences of September 11, 2001), but still well below 20% from 1986 on. Clearly, the importance of retained earnings in relation to overall external financing has evaporated and, as the graphs show, this also appears to be true of the various forms of debt, although accounts payable show some degree of relative stability.72

Perhaps the most striking thing about these data, besides their departure from historical trends, is that they are entirely counterintuitive. For what we see is that, almost precisely when the going-private movement began in the late 1970s, in the form of leveraged transactions in which it has principally continued,73 the relative importance of retained earnings and all forms of debt

72. See supra Figure 6 (illustrating the relationship between retained earnings and external financing).

plummet and equity appears to rise.\textsuperscript{74} In light of the fact that going-private transactions, by definition, remove equity from the public market, and the common understanding that debt financing was the principal means of accomplishing this, we would expect to see exactly the opposite result, even accounting for the dot-com boom of the late 1990s. The diminution in the ratio of retained earnings to external financing by itself is not especially surprising, although the magnitude is, because one characteristic of attractive takeover targets is large amounts of cash with which to pay debt service, and one might conclude that leveraged going-private transactions eat internal equity and continue to eat cash flows that might add to that equity. But the debt numbers are surprising in light of what we know about financing during the period. The surprise is compounded when we recognize also that the mid-1990s to 2007 were a time of historically low interest rates, which would also suggest that debt financing would have become increasingly attractive as a matter of financing productivity.

The probable answer is that some very significant portion of this diminution in debt is accounted for by off-balance sheet financing transactions, although for obvious reasons data on off-balance sheet financing are notoriously difficult to compile.\textsuperscript{75} Although perhaps an extreme case, had

\textsuperscript{74} See SOI BULLETIN HISTORICAL TABLES, supra note 63 (providing the data used in Figure 6 and accompanying text). But see supra notes 49–56 and accompanying text (discussing probable explanations for the apparent increase in equity).


Research and development limited partnerships (RDLPs) may have different effects than other forms of off-balance sheet financing. See, e.g., Thomas M. Carment, Hamid Pourjalali & David Durkee, \textit{A Motivational Study of Off-Balance Sheet Financing: The Case of Research and Development Limited Partnerships}, 37 MID- ATLANTIC J. BUS. 153, 168–69 (2001) ("Off-
Enron reported its off-balance sheet financing as balance sheet debt in 2000, its reported debt would have been $22.1 billion instead of its actual reported balance sheet debt of $10.2 billion. Perhaps more strikingly, one estimate notes that in 2003, $208 billion, or 31% of a total of $668 billion of productive business assets, were acquired by off-balance sheet leasing. It seems reasonable to conclude that off-balance sheet financing arrangements account for a substantial proportion of the apparent diminution in long-term debt, a practice which, intentionally or not, distorts corporate balance sheets and drives stock prices higher.

An examination of Federal Flow of Funds data makes the trend even more puzzling. As shown in Figure 7, from 1945, except for a brief period between 1991 and 1993, and another between 2000 and 2003, net equity issuances by all corporations have been flat or negative, and in fact a significant dip occurred between 1996 and 1998 during the dot-com boom.

balance sheet financing is one device employed to reduce the probability of violating debt covenants. Companies close to their debt covenants may avoid technical default with an RDLP because capital raised by the RDLP is not recorded as a liability. Terry Shevlin, Taxes and Off-Balance-Sheet: Research and Development Limited Partnerships, 62 ACC. REV. 480, 480 (1987) ("Factors favoring use of an LP [limited partnership] include taxes, off-balance-sheet financing and risk-shifting from the R&D firm onto other parties."). But see Thomas W. Bates, Kathleen M. Kahle & Rene M. Stultz, Why Do U.S. Firms Hold So Much More Cash Than They Used To?, 64 J. FIN. 1985, 1985 (2009) (noting a doubling in the average cash to assets ratio of United States industrials between 1980 and 2006 such that the additional cash accumulation on average wipes out the firms' debt obligations resulting in a net no leverage position). They explain the phenomenon as characterizing firms with relatively risky cash flows (including firms with more recent IPOs) and which do not pay dividends. These firms have decreased inventories and capital expenditures, and increased research and development budgets. This is an interesting and plausible explanation for the data reported in the text. One potential flaw in their research is their use of COMPUSTAT data which does not reflect off-balance sheet financing. Although some effects of off-balance sheet financing may be reflected in this data in the form of market value of assets, which they use as one variable, it is unlikely to capture anything close to the magnitude of off-balance sheet financing.


77. See id. at 60 n.154 (citing a report by the Equipment Leasing Association). Corporate obligations under finance leases are, for all relevant purposes, the functional equivalent of debt payments.

78. Miller and Bahnson, supra note 75, who, while calling the practice fraudulent, note that it winds up being more damaging than helpful to the corporation engaging in extensive off-balance sheet financing.

79. See Peter L. Rousseau, Security Issues and Net Change in Outstanding Corporate Securities: 1934–1999, in MILLENNIAL STATISTICS, supra note 32, tbl.Cj817-830 (illustrating slightly positive issuances from 1946–1977 with variance increasing thereafter but trending significantly negatively); infra Figure 7; see also Hall, supra note 29, at 1192 (noting that equity
The puzzle begins to clarify when we separate out nonfinancial corporations from financial corporations. Figure 8 shows an immaterial positive blip here and there but tending around zero to deeply negative, largely following the overall story for all corporations.

figures tend to be overstated). Although without addressing this particular data set, Hall notes that equity figures tend to be overstated, although not grossly, because "[c]orporations frequently barter their equity for the services of employees." *Id.* This occurs as a result of corporate founders retaining significant portions of their equity and because employees often receive stock as a portion of their compensation. *Id.* While founders can almost certainly be said to have put up some portion of the corporation's risk capital, stock compensation to employees, while offering them a participation in profits, in no way can be said to raise external equity for the purpose of financing production. *See* Fama & French, *supra* note 18, at 549-55 (discussing their findings that equity offerings are far more frequent than had been supposed).

During the three-year period that ended on September 30, 2007, nonfinancial corporations included in the S&P 500 increased their long-term debt only 6%, compared with an overall debt increase (including financial corporations) of 76.1%. *See* Rousseau, *supra* note 79, tbl.Cj817-830 (showing slightly positive issuances from 1946-1947 with variance increasing thereafter but trending significantly negatively).

80. *Infra* Figure 8.
Mapping the same data for financial corporations, as shown in Figure 9, completes the explanation. Note that the first major uptrend begins almost precisely at the time of the beginning of the going-private movement, when overall equity issuances were down, and that the most recent and significant up-trend begins in 1997, just a year after the big dip for all corporations started during the dot-com boom.

The implications for the structure of the American economy are significant. The data suggest that America's economy is based increasingly on finance, and that our public financial markets principally are financing
finance. At a minimum, it appears clear that industrial corporations are not obtaining their net financing from publicly issued equity.

A relatively recent explanation for the increasing disappearance of industrial equity is the boom in stock buybacks. The numbers from 1988 through 2008 are presented as Figure 10 and in tabular form in Appendix B. The decrease in net equity issuances by financial corporations beginning in 2004 can be accounted for at least in part by stock buybacks, but this activity began to diminish. Financial corporations accounted for only 13.4% of buybacks in the fourth quarter of 2007 in contrast to 22.3% for the fourth quarter of 2006, most likely reflecting their growing liquidity problems.

Figure 10: S&P 500—Stock Buybacks (Billions of Dollars)

Buybacks, with just a few exceptions, trailed dividends until the fourth quarter of 2004. Then buybacks soared, both absolutely and in relationship to

81. See generally Lawrence E. Mitchell, The Morals of the Marketplace, 20 STAN. L. & POL’Y REV. 171 (2009). In this Article, I further explore the concept that our public financial markets essentially finance themselves. Within limits, such a concept is not necessarily a bad thing and may in fact hold the key to explaining the nexus between stock market development and real economic growth. On the other hand, and as I suggest elsewhere, such an economic structure creates significant distorting effects on the real economy.


84. See id. (comparing buybacks with dividends).
dividends. In the three-year period that ended December 31, 2007, the corporations comprising the S&P 500 spent $1.44 trillion in buybacks, compared to $1.56 trillion on capital expenditures and $721 billion on dividends. And while aggregate data can be misleading, for the three years ending with the third quarter of 2007, 279 of the S&P 500 companies had spent more on buybacks than on capital investment. During this period, 12.5% of the outstanding shares on the market were removed due to buybacks alone, just under a majority of which went into treasury stock with the balance used for M&A and options. While there are legitimate business reasons for corporations to engage in buybacks, the result has been a significant distortion in earnings per share and an artificial increase in stock prices.

Figure 11 breaks out total dividend payouts and share repurchases by S&P 500 corporations, showing their levels relative to one another and to the S&P 500 index since 1998, completing the picture of the substantial degree to which these corporations have been returning wealth to shareholders.

85. *Id.; Silverblatt & Guarino, supra* note 82, at 1.
86. *Silverblatt & Guarino, supra* note 82, at 1.
87. *Id.*
88. *Id.* at 10–11.

For a thorough analysis of both the potentially beneficial and harmful impacts on corporate welfare of stock buyback programs, with particular reference to their effects on corporate governance, see William W. Bratton, *The New Dividend Puzzle*, 93 GEO. L.J. 845 (2005) (analyzing the potentially beneficial and harmful impacts of stock buyback programs on corporate welfare, with particular reference to their effects on corporate governance).
C. Summary Conclusion: Creditors Make, Shareholders Take

The data are clear. Creditors own American business. Public shareholders have made little contribution to the core functions of American industrial corporations, the financing of productive activity. Indeed, as the data from the last quarter of the twentieth century suggest, public shareholders have been net consumers rather than providers of corporate equity capital. The argument for expanded shareholder rights cannot be supported by the idea that shareholders contribute value to American industrial production and thus financial growth. In order to support the legitimate expansion of shareholder rights, its supporters must make a case that public shareholders make some other kind of contribution to the American economy.  

Moreover, the withdrawn equity has been replaced by debt. It is clear that as early as the middle of the twentieth century, the profits of public shareholders piggybacked on the risk capital contributed by debtholders or, to put it differently, that creditors were providing the bulk of the risk capital that

90. There is a growing literature debating the question of whether the stock market as an institution stimulates economic growth. That is a question I will examine in a future paper.
had not been generated from the early investments of entrepreneurs. Now, one could argue that the legal claims of equity and debt have long been settled such that this observation, while interesting, is not problematic. But the overlay of legal form on economic reality shows that those who control the risk capital—the shareholders—do not provide that risk capital. The mismatch permits managers, who are put in place indirectly by the shareholders, to engage in risk-taking with potentially large benefit to the shareholders but with potentially significant adverse consequences to the debtholders. Again, the established existence of legal forms, along with the ability of creditors to self-protect through contract, may not make this a problem of fairness as between the different financial claimants. But it does present a problem of incentives that have potentially significant negative effects on the productive economy.

Managerial incentives can be distorted significantly by the existing regime of shareholder participation rights, and the problem obviously would be exaggerated by an expansion of shareholder rights. But shareholders are seen to be risk-bearers of sorts. Perhaps this would justify a regime of expanded rights, even if those rights posed some macroeconomic risks. It is to this question that I now turn.

III. Equity Without Risk

In this Section, I put aside the data I presented in Part II and the conclusions to be drawn from them—public shareholders have no legitimate corporate participation rights because they make no positive contribution to American industry—to address two additional important points. The first is the argument that shareholders should have corporate participation rights because they take on the risk-bearing function of American industry. My conclusion is that, even assuming my data is wrong, a close look at modern finance theory leads to the conclusion that the only risks public shareholders take are those that they create themselves. This lends no support at all to an argument in favor of expanded shareholder rights, and probably undercuts it.

The second point is to question the frequently asserted equivalence of dividends and capital gains because it is here that the greatest potential damage


92. This standard argument is described in Stephen Bainbridge, Corporation Law and Economics at 10.3(c) (2002).
to the real economy from expanded shareholder rights is demonstrated.\textsuperscript{93} From the perspective of the corporation's long-term business health, the two are rather dramatically different.\textsuperscript{94} But the history of investment in America shows a marked shift from the expectation of dividends to that of capital gains,\textsuperscript{95} which has distorted managerial incentives in a way that encourages managers to harm the long-term health of their corporations' businesses in order to satisfy current shareholder demands. Again, the conclusion to be drawn is that shareholder rights exacerbate the problem and thus should be quite limited.

\textit{A. Shareholders as Risk-Bearers}

The development literature I referred to earlier in this Article gives significant pride of place to the role of financial institutions like the stock market in overcoming information asymmetries and facilitating liquid markets.\textsuperscript{96} The macroeconomic literature connects this function with economic growth by arguing that financial institutions thus overcome barriers to investment, opening the investment markets to large numbers of participants over whom the risk of loss is broadly distributed.\textsuperscript{97} In the absence of the evidence I provided in Part II, the legal literature has justified shareholder participation rights at least in part on this perceived risk of loss.\textsuperscript{98} The argument, in brief, is that because shareholders are the corporation's residual risk bearers, they have the greatest incentives of all corporate stakeholders to monitor corporate management, and it is therefore efficient to assign this role to them through the medium of voting rights.\textsuperscript{99}

Thus, I will turn, in this part, to one of the principal perceived benefits of these market functions, the facilitation of risk sharing among a broad group of investors. For regardless of what I have thus far demonstrated, it is taken

\textsuperscript{93} See \textit{infra} notes 124–25 and accompanying text (discussing the assertion that dividends and capital gains are equal).

\textsuperscript{94} \textit{Infra} note 124 and accompanying text.

\textsuperscript{95} See Bratton, \textit{supra} note 89, at 845 n.3 (discussing the history of the shift in expectation from dividends to capital gains after the First World War).

\textsuperscript{96} See Levine, \textit{Views and Agenda}, \textit{supra} note 20, at 693 ("By facilitating trade, stock markets reduce liquidity risk.").

\textsuperscript{97} See id. at 694 ("The financial system's ability to provide risk diversification sources can affect long run economic growth by altering resource allocation and the saving rates.").

\textsuperscript{98} See Bebchuk, \textit{supra} note 5, at 895 ("Given that it is their money that is on the line, shareholders naturally would have incentives to make the decision that would best serve their interest.").

\textsuperscript{99} See BAINBRIDGE, \textit{supra} note 92, at 469–72 (discussing why shareholders, and only shareholders, should be assigned voting rights).
almost as an article of faith in the finance and corporate literature that shareholders do indeed assume the risk-bearing function of corporate productivity, and this, in a meaningful sense, justifies their participation rights. While I have already demonstrated that public shareholders do not own the risk capital of American industry, it would be idle to deny that in fact they bear some risk; they can and do lose money from investing in poorly performing corporations. Moreover, the argument is sufficiently embedded that it justifies discussion. Therefore I will turn briefly to the microeconomic literature to evaluate precisely what risks are actually born by public shareholders.

Assume that shareholders do, in a meaningful way, take the risk of failure resulting from poor corporate production and innovation, and that they are motivated to do so in part because they have access to information that permits intelligent decisionmaking. This information also facilitates the transfer of shares among investors. The question is how shareholders assume this risk. They do so by purchasing stock, but well before the seminal work of Graham and Dodd, it was widely acknowledged that the purchase of stock in a single public company was a poor investment strategy. That argument has been refined over time into what is generally known as modern finance theory. One aspect of that theory, portfolio theory, first developed by Harry Markowitz in 1952, addressed the question of how an investor should maximize the value of his investment. The answer was to achieve a balance between moderating variance and return on his investment by creating an efficient portfolio, that is, one that either provided the highest return for a given level of variance or the lowest risk for a given return. By so doing, that is to say, by diversifying his investments, each shareholder could achieve the maximum return for a given level of risk. The wisdom of investing in this manner followed as a matter of course.

100. See John R. Boatright, Ethics in Finance 179 (1999) ("In the contractual theory, the arguments for shareholder control turn on the fact that shareholders bear residual risk.").


102. Id. at 77-79.


104. Markowitz, Portfolio Selection, supra note 103, at 89-91.

105. See Mitchell, The Speculation Economy, supra note 11, at 275 ("CAPM allows investors to build the kinds of potentially lower-risk, high-return portfolios described by Markowitz . . . Almost every American who invests in the market through mutual funds or other institutional media has invested on the basis of CAPM.").
But what are the risks involved? The microeconomic literature is careful in categorizing risk, which is refined in the capital asset pricing model. The capital asset pricing model followed relatively quickly on the heels of Markowitz's work. As William Sharpe observed in his famous contribution to the creation of the Capital Asset Pricing Model (CAPM), if stockholders can eliminate the risk of loss from any particular corporation by diversifying, a corporation must only compensate its shareholders—its risk-bearing specialists—for taking nondiversifiable risks. What risks are nondiversifiable? Those that exist in the market itself, like risks of inflation, market bubbles, major political events, the impact of economic cycles, the unavailability of credit, and the like. So far, so good.

But notice the paradox. If the only risk for which corporations must (and therefore will) compensate shareholders is the risk inherent in the market, then the only risks in which shareholders are specialists are market risks. In the absence of a stock market or, to put it differently, in an economy based largely on the provision of external financing by specialized institutions, those institutions would, as they do, demand compensation for the risk of loss inherent in specific corporate investments. While systematic risk would still exist, it would be tempered by significant alpha, that is, corporate-specific returns, and it is likely that much systematic risk would be diminished by eliminating the market. There would, in other words, be no need for the risk specialization services provided by shareholders, which is to assume systematic risk.

Put yet another way, the logic of finance theory seems to lead to the conclusion that the only risks in which shareholders specialize are the risks that they themselves, aggregated in the institution of the market, create, since it is they, and not banks or public debtholders, who are uniquely dependent upon beta for their returns. Consequently, it seems as if the risk-specialization

106. William Sharpe, Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk, 19 J. FIN. 425 (1964). It is commonly said that diversification "eliminates" the risk of holding stock in a particular corporation. This is obviously incorrect. If you own the stock of corporation A in your portfolio and A goes bankrupt, you have lost your investment in A. It is more accurate to say that the impact of that loss on your overall portfolio is balanced by potential gains in the stock of other corporations you own.

107. See Bainbridge, supra note 92, at 117–18 ("Investors can eliminate unsystematic risk by diversifying their portfolio. . . . A well-diversified investor thus need not be concerned with unsystematic risk and therefore will not demand to be compensated for that risk. . . . Ergo investors will demand to be compensated for bearing systematic risk.").

108. See Mitchell, The Speculation Economy, supra note 11, at 274 ("The only nondiversifiable risk was the risk inherent in the market itself and therefore common to all securities.").

109. I do not mean to suggest that systematic risk would be entirely eliminated or that
argument for the presence of public shareholders, and thus the stock market, becomes weaker. The logic of risk-specialization is a consequence of the existence of the market, not a justification for it.\footnote{110}

Now I confess that this reasoning moves a bit too quickly. Despite the claims of portfolio theory, or at least those made on behalf of portfolio theory, stockholders still buy stock in specific companies, and still take the risk of holding stock in specific companies, no matter the facility with which they can diversify in order to minimize that risk. In the absence of a market that allowed such diversification, shareholders would, so the argument continues, refuse to invest in specific companies and would therefore fail to provide the capital necessary to finance industry.

But the logical end of the specialization argument returns us to the premise that stockholders provide financing for industrial production. And that is precisely the question at issue, the answer to which is suggested by the data. For those data demonstrate that stockholders do not importantly provide financing for industrial production, both as an historical and as a contemporary matter. That financing historically has come principally from retained earnings and debt.\footnote{111} While the argument from finance theory is elegant and is logical within its assumptions, the assumptions fall on the facts.

The conclusion remains that stockholders can be seen as specialists in risk bearing only because of the existence of a public market, and the market exists primarily as a historically contingent fact, largely unrelated to the financing of productive enterprise. If this is true, then the market exists for the sake of the financial institutions would not suffer in their investments from systematic risk. What I do mean to suggest is that the return demanded by financial institutions, whose profits would come not from trading but from dividends and interest, would likely be more finely calibrated to the risks inherent in individual corporate investments rather than exogenous factors. A closer correlation between actual corporate performance and returns on investments would likely result. I do think it is fair to note that the same result could be accomplished in the stock market if each market participant (or the overwhelming majority of market participants) invested on the basis of fundamentals and focused more on returns from corporate cash flow than from trading profits.

\footnote{110. As I later discuss, this was historically true during the greatest period of American industrialization before the emergence of the modern stock market. And while the failed conglomerate movement of the 1960s suggests the perils of overdiversified corporations, at least some of the great nineteenth century industrialists did at least vertically integrate their businesses as a protection against volatility in various supply markets. See infra Part III.B (discussing the evolution of the modern stock market during the period of American industrialization).

\footnote{111. Because the data demonstrated a dramatic recent decrease in retained earnings, it is fair to ask whether the historic reliance on internal financing can continue. In light of current economic conditions, I think it is reasonable to suspect that many corporations will begin again to retain earnings to support their stock prices, much as they did in the early part of the twentieth century. Infra Part III.B.}
market, and investment in equities very much resembles the gambling it is often accused of being. Modern finance theory nicely illustrates the gap between the real economy and the finance economy, and raises significant questions about public shareholders' real contribution to economic growth. The argument from risk-bearing proves too much.

B. The Unbearable Lightness of Capital Gains

Our state and federal regulatory models treat public shareholders as investors in American corporations. But I will show that the historical trend demonstrates that the market is more properly described as a speculative arena, and that those who buy and sell stocks have come far less to resemble investors than traders for short-term profit. Stock market volatility has increased dramatically since 1980, during the same period in which a precipitous drop in internal resources was matched with a run-up in borrowed funds. Empirical evidence increasingly points to a managerial focus on short-term stock prices during this period, even at the expense of business development, culminating in the dramatic increase in stock buybacks from 2004 to 2007, a period during which the S&P 500 spent more (in the aggregate, and more as a simple majority of corporations) on stock buybacks than on productive capital, and dramatically more than on research and development.

The historical record demonstrates a significant shift in investment style. Through the 1950s, those who invested in public equity did so primarily for

112. Mitchell, supra note 81.
113. I again defer a question, that is, whether the stock market helps financial institutions to allocate capital more broadly, and especially debt capital. While important to analyzing the appropriate design and regulation of markets, it is beyond the scope of the issue of shareholder rights.
114. Kenneth A. Froot, Andre Perold, and Jeremy C. Stein, in Shareholder Trading Practices and Corporate Investment Horizons, 5 J. APPLIED CORP. FIN. 42, 44–48 (1992), make a careful argument that distinguishes mere turnover from real volatility, and argue that while turnover has significantly increased, volatility has not as a result of increased market capacity. They do, however, note the possibility that informational asymmetries between management and the market might well induce short-term managerial incentives. Id. at 50–56. While their argument is powerful, it is somewhat limited by the fact that it was made in 1992 before the very dramatic turnover increases in the early twenty-first century. It would be interesting to apply their methodology to that period to see if their conclusions hold.
dividends. Indeed the New York Stock Exchange (NYSE) emphasized dividends in its "Own Your Share of American Business" campaign to induce larger numbers of Americans to invest in the stock market, as well as to establish a broader base with which to lobby against double taxation. But matters changed in the 1960s and have continued along the path then set. The desire for dividends gave way to the demand for capital appreciation.

To some extent, this shift was planned and encouraged by the NYSE, suffering from a lack of business in the 1950s. The NYSE clearly contemplated that increasing share ownership would enhance the speculative character of the market (as eventually it did). For example, in its 1955 Annual Report, it noted the low annual turnover of 19%, stating that "[t]his is to be expected, of course, in a cash market of an investment character." Low turnover meant low commissions and low profits for the specialists that controlled the NYSE, and it went on to complain that the Federal Reserve Board, through a lack of understanding of the importance of securities credit, had raised margin requirements twice that year. The annual report describes that the NYSE

devoted increasing effort to research and education in this area. . . . [I]t should be made clear that an excessively high level of initial margin requirements, at a time when there is only a modest amount of credit employed by the securities industry, can be harmful to the nation's entire economy by adversely affecting the liquidity of our marketplace.

While buying stock on margin could in fact be consistent with the desire for dividends, it is significantly more related to investing for capital appreciation. Explosive market development in the succeeding years, with a marked turn to investing for capital gains, demonstrates the success of the NYSE's programs,

116. As recently as the late 1950s, investing for dividends was the dominant style. See, e.g., New York Stock Exchange and Affiliated Companies, Annual Report for 1955 [hereinafter NYSE Annual Report for 1955] (available at the New York Stock Exchange Archives).

117. Id. at 2. But see EDWIN J. PERKINS, FROM WALL STREET TO MAIN STREET: CHARLES MERRILL AND MIDDLE CLASS INVESTORS 145–61 (1999) (chronicling the development of Charles Merrill's new investment strategies). One exception to the drive toward speculation appears to have been Charles Merrill and the firm he founded. Merrill was perhaps the greatest popularizer of post-Depression common stock investment and a creator of the NYSE's monthly investment plan. Merrill appears to have been concerned with ensuring that new investors were careful in assessing the risks they took and prudent in their investments. The biography, apparently the first on Merrill, is a bit hagiographic; but it provides some support for the idea that Merrill popularized common stock investing in a fairly conservative way.


119. Id.

120. Id.
THE LEGITIMATE RIGHTS OF PUBLIC SHAREHOLDERS

Despite the failure of the Fed significantly to reduce (and even sometimes to increase) margin rates.121

This shift to capital gains investing has significant implications for the appropriate role of public shareholders. The famous Miller-Modigliani irrelevance theory, which, although debated, has wide adherence, holds that transactions costs and taxation left aside, investors should be rationally indifferent between receiving dividends and capital gains.122 If the market is efficient—an increasingly dubious proposition123—public stock prices in a broad and efficient market should discount all future cash flows to present value and incorporate them in the stock price.124 Thus, one could receive dividends over the long term by holding onto the stock, or receive them now by selling the stock and receiving future dividends in the form of capital gains, as well as the proportion of the selling price that captures the seller's share of retained earnings. Whether or not the market is speculative in character does not matter, as long as it is efficient.125

But this argument ignores one very important fact. With certain rare exceptions, dividends must be paid out of cash earned currently, or at least cash that is owned by the corporation and therefore certain. Discounted future dividends, even if the market is efficient, are a risky proposition. Because they will only come in the future, they do not exist at the time that a stockholder sells his shares for capital appreciation. And, as a matter of financial reality, they are only as good as the assumptions one makes in applying various valuation models to the corporation’s earnings and cash flows.126 So in one


123. Antawabi & Stout, supra note 3, at 1274–90.


125. See id. at 426–31 (evaluating their theory when the element of uncertainty is introduced).

very real sense, the capital gains seller is shorting future dividends, and the capital gains buyer is gambling that the rather significant assumptions upon which valuation models are built turn out to be correct, or at least that he can find someone else to buy the stock who believes them to be correct. Moreover, as the data show, retained earnings have more or less disappeared from the books of industrial corporations, so the capital gains trader is effectively buying or selling what used to be referred to as "water." While financial theory might establish equivalence, in real economic terms, taking one’s profits in capital gains (taken as discounted future cash flows rather than as accumulated retained earnings) is a very different proposition from receiving a check from a corporation with money in the bank.

The disappearance of retained earnings might well have significant implications for the continuing legitimacy of the Modigliani-Miller theory. Modigliani and Miller published their papers in 1958 and 1961. As the data presented in Part II show, in 1961 retained earnings constituted between 40% (my data) and 61% (Sametz’s data) of corporate balance sheets. In a very real sense at that time, capital gains appear to have been supported by real deferred dividends, held as retained earnings, and while one assumes that market movements also affected stockholder profits, there were balance sheet assets to support stock prices. The situation is dramatically different where, as we see in 2005, retained earnings constitute 11% of corporate balance sheets’ equity. Capital gains are no longer supported by balance sheet assets. Market movements constitute virtually the entire amount of shareholder capital gains. Whatever power the irrelevance theory had at mid-century, the disappearance of retained earnings would seem to cast it in an entirely different, and far less persuasive, light.

The contemporary capital gains situation has historical precedent. During the great merger wave, which took place in the United States between 1897 and 1903, $20 billion of new capitalization entered the American economy in the form of newly created common and preferred stock. Changes in New Jersey law permitted trust promoters to create holding


128. See generally MITCHELL, THE SPECULATION ECONOMY, supra note 11 (examining the stock market trends during the early decades of the twentieth century).

129. Id. at 8–11.
companies, issue as much stock as they liked, and use it to buy up existing industrial enterprises, combining them (typically) into huge horizontally integrated companies. 130 The promoters and sellers then dumped their stock on the market before the new combinations had to show much profit or justify their stock prices, and an eager middle class was ready to buy. 131 Not surprisingly, stock prices collapsed in 1903, leaving much of the newly issued stock well below its issuance price (although quite likely more realistically in line with its value). The consequences for corporate finance were significant. U.S. Steel, for example, spent most of the first thirty years of its existence building its retained earnings in order to support its initial (and rapidly demolished) public stock price. 132

We do not believe in watered stock anymore. Much work in finance theory has been directed to showing how public markets correct mispricing. And in fact, even during the merger wave (which raised issues of overcapitalization that concerned policymakers for decades), many of the new combinations found that they had to adjust either their stock prices or the quantities issued in order to sell their offerings. 133 Nonetheless, the grain of truth that lay in the overcapitalization argument, whether or not it should have been troubling, was that corporations could not in fact be liquidated for their stock prices, that profit was pretty exclusively on the come. The demand for dividends disciplined corporate managers to concentrate on generating real earnings and cash flow out of which to pay them. 134 The shift to capital gains investing removed that discipline. In an environment dominated by the desire for capital gains, profits are provided by the market, not by the profits of production. Thus, CAPM links up with history, and, as I noted earlier, a principal reason that traders make money in the stock market is from the existence of the market itself. The effort shifts from achieving gains from production to using the corporate machinery to manipulate stock price. We may not believe in watered stock anymore, but the evidence of its effects is now painfully clear. Increasing the rights of shareholders will merely exacerbate the problem.

130. Id. at 45–56.
131. See id. at 68 ("The promoters had to be paid as well, and expected to be paid very handsomely. The cheapest way for the combination to pay them was also in stock, which promoters would commonly dump on the market during the initial excitement surrounding its creation.").
133. See MITCHELL, THE SPECULATION ECONOMY, supra note 11, at 60–62 (discussing the problems associated with overcapitalization during the merger wave).
134. Id. at 95–98.
IV. The Legitimate Rights of Public Shareholders

A. State Law

The subject of existing legal rights of shareholders is so well-known as to merit relatively brief mention here. Simply put, and as a general matter, shareholders vote to elect directors; approve certain fundamental decisions made by directors—like amending the corporate charter, engaging in mergers and sales of substantially all of a corporation's assets, and, with qualification, adopting and amending by-laws—remove directors for cause; obtain access to certain corporate books and records; and receive material information with respect to their voting. The federal securities laws overlay these state-given rights with basic disclosure requirements. Whether or not these rights have been exercised meaningfully, it is fair to say that shareholders already have the right to be heard on some of the most essential aspects of corporate governance and finance.

As both the empirical data and theoretical arguments I have presented make clear, debt and retained earnings are by far the primary sources from which at least reasonably mature businesses finance their production. I have also argued that, to the extent that public shareholders are said to be specialists in risk bearing, the only risks they bear are those they create through the mechanism of the market. While it remains true that a shareholder can see her equity investment disappear in bankruptcy, both finance theory and the law presume that shareholders will diversify so as significantly to mitigate, if not eliminate, any such losses. As I have further shown, over the past thirty years debt increasingly has replaced retained earnings as the primary source of risk capital in American industrial corporations, thus leaving the public equity holders, whose corporate capital at risk is negligible, in legal control while managing the money put up by creditors who, while they have the ability to negotiate some degree of almost entirely negative contractual control through

135. See BAINBRIDGE, supra note 92, at 442–44 (providing an overview of the legal rights of shareholders); Bebchuk, supra note 5, at 844–47 (discussing shareholder rights shared throughout many of the states).

136. See BAINBRIDGE, supra note 92, at 443 ("Federal law governs the procedures by which shareholders vote and the disclosures to which shareholders are entitled.").

137. Indeed one famous justification for the director-protective business judgment rule is that shareholders do, or ought to, diversify and that if they fail to do so, they should receive no legal protection from even significant business mistakes. See, e.g., Joy v. North, 692 F.2d 880, 880–82 (2d Cir. 1982) (justifying the scope of the business judgment rule on this ground).
THE LEGITIMATE RIGHTS OF PUBLIC SHAREHOLDERS

This analysis leads to some conclusions about the appropriate place of public equity holders in American industrial corporations, and some questions about our current mode of regulation. If, as the development literature holds, information rights and exit rights are the principal mechanisms through which the public market makes itself of use in stimulating production, then it would seem logical to limit the rights of public equity holders precisely to the receipt of information, as is currently required under the federal securities laws, and of course the right to sell their shares, which follows both as a matter of corporate law and simple concepts of property. The right to participate in ongoing corporate affairs, such as by voting, appears to offer no benefit to corporate production and may, as I have been at pains to suggest throughout, create potentially dangerous distortions in managerial incentives. Thus, ideally (although most likely improbably), the right of public shareholders to vote should be eliminated. At a minimum, their rights should not be expanded or enhanced.

This is not to say that corporate governance should be revamped entirely. In the first place, the market for corporate control will still create a powerful incentive for managers to be attentive to shareholder returns. It may be that managers choose to avail themselves of takeover protections that activist shareholders abhor, which would of course diminish the effect of that market, but if this is a suboptimal practice we can assume, or at least postulate, that the market will discount for it and such managers will be punished through diminished share prices and perhaps a higher cost of capital. Whether or not the practice is suboptimal is, of course, a subject of lively debate. But it will allow the managers to make a determination as to whether they think that their ability to provide long-term value through the profitable production of goods

---

138. *Supra* Part II.B.

139. I do not address, as the issue is beyond the scope of my task here, how directors and managers would be appointed in the absence of shareholder elections. One possible suggestion is that shareholders and creditors vote, perhaps as one class or several, solely for the election of directors and nothing more. Another is to permit shareholders to vote for directors but to stretch their terms to, say, five years, as Martin Lipton has suggested, in order to diminish the effects of short-term market and shareholder pressure on management. Martin Lipton & Steven A. Rosenblum, *A New System of Corporate Governance: The Quinquennial Election of Directors*, 58 U. CHI. L. R. 187, 225–33 (1991) (proposing an alternative approach for electing directors); MITCHELL, CORPORATE IRRESPONSIBILITY, *supra* note 9, at 129–32 (discussing the possibility and benefits of quinquennial elections).

140. *See* MITCHELL, CORPORATE IRRESPONSIBILITY, *supra* note 9, at 130–34 (demonstrating the pressure that market forces place on directors to be attentive to shareholders' interests).
and services is greater than whatever benefit might result from market pressures to maintain high stock prices.

There is another aspect of state corporate governance law that should be maintained, and that is the law of fiduciary obligation. This is probably even more significant in the absence of voting rights. Despite their insignificant role in financing corporate productivity, public shareholders do put their money at risk through a legally and socially sanctioned mechanism whereby they are vulnerable to the actions of others. Thus, the traditional duties of care and loyalty, to the extent that they are effective, serve to limit the ability of managers to steal or shirk, while their freedom from voting pressure would permit them to manage the corporation as they see fit.

B. Information and Exit: Federal Securities Regulation

The federal securities laws perform different tasks than state corporate laws, and to the extent that difference is more or less complete, serve a salutary function. Because, as the development literature holds, the dissemination of information is one of the principal benefits of a public stock market, the mandatory disclosure system should naturally be maintained, as should anti-fraud and anti-manipulation laws that keep the markets honest (and these latter for much the same reasons that I argued for maintaining fiduciary obligation). Those aspects of federal law designed to enhance the practice of shareholder democracy, in particular the shareholder proposal rule, Rule 14a-8, and, depending upon the method chosen to select directors, the proxy rules of Section 14 would obviously serve no purpose in a regime of state corporate law in which shareholders were prohibited from voting. Thus, these

141. See Lawrence E. Mitchell, Fairness and Trust in Corporate Law, 43 DUKE L. J. 425, 480 (1993) ("Fiduciary duty, then, is an important contribution to establishing the conditions for the trust necessary to permit the corporation to exist and function . . . ").

142. See id. at 488–91 (arguing for strong fiduciary obligations in light of shareholders’ vulnerability to managerial misconduct).


aspects of federal regulation, those that mesh with the state law model of shareholder "ownership" of the corporation, as well as the considerable direct and indirect costs of maintaining them, would disappear.

C. Conclusion

Based on both theory and evidence, it seems reasonable to conclude that public shareholders serve only a very limited function in stimulating industrial production and economic growth in the United States and are potentially detrimental to the achievement of those goals. While the financial implications are highly nuanced, the legal implications are rather simple. We have little use for the congeries of rights that have developed to allow public shareholders to participate in the governance of those corporations as if they in any meaningful way made a contribution to improved economic performance. The case for empowering shareholders falls on the facts.
### Appendix A

<table>
<thead>
<tr>
<th>Year</th>
<th>Ratio of Retained Earnings to External Financing</th>
<th>Ratio of Capital plus Paid-in Capital or Capital Surplus to External Financing</th>
<th>Ratio of Accounts Payable to External Financing</th>
<th>Ratio of Long-Term Debt to External Financing</th>
<th>Ratio of Short-Term Debt to External Financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955</td>
<td>0.4368</td>
<td>0.4557</td>
<td>0.1422</td>
<td>0.3070</td>
<td>0.0950</td>
</tr>
<tr>
<td>1956</td>
<td>0.4362</td>
<td>0.4497</td>
<td>0.1443</td>
<td>0.3089</td>
<td>0.0971</td>
</tr>
<tr>
<td>1957</td>
<td>0.4333</td>
<td>0.4399</td>
<td>0.1441</td>
<td>0.3218</td>
<td>0.0943</td>
</tr>
<tr>
<td>1958</td>
<td>0.4204</td>
<td>0.4373</td>
<td>0.1472</td>
<td>0.3252</td>
<td>0.0903</td>
</tr>
<tr>
<td>1959</td>
<td>0.4138</td>
<td>0.4368</td>
<td>0.1420</td>
<td>0.3234</td>
<td>0.0977</td>
</tr>
<tr>
<td>1960</td>
<td>0.3958</td>
<td>0.4378</td>
<td>0.1331</td>
<td>0.3247</td>
<td>0.1044</td>
</tr>
<tr>
<td>1961</td>
<td>0.3808</td>
<td>0.4360</td>
<td>0.1395</td>
<td>0.3258</td>
<td>0.0988</td>
</tr>
<tr>
<td>1962</td>
<td>0.4027</td>
<td>0.4109</td>
<td>0.1627</td>
<td>0.3089</td>
<td>0.1174</td>
</tr>
<tr>
<td>1963</td>
<td>0.4152</td>
<td>0.4217</td>
<td>0.1373</td>
<td>0.3206</td>
<td>0.1204</td>
</tr>
<tr>
<td>1964</td>
<td>0.4188</td>
<td>0.4073</td>
<td>0.1381</td>
<td>0.3241</td>
<td>0.1305</td>
</tr>
<tr>
<td>1965</td>
<td>0.4082</td>
<td>0.3968</td>
<td>0.1392</td>
<td>0.3262</td>
<td>0.1377</td>
</tr>
<tr>
<td>1966</td>
<td>0.4097</td>
<td>0.3943</td>
<td>0.1434</td>
<td>0.3269</td>
<td>0.1354</td>
</tr>
<tr>
<td>1967</td>
<td>0.3931</td>
<td>0.3841</td>
<td>0.1428</td>
<td>0.3287</td>
<td>0.1444</td>
</tr>
<tr>
<td>1968</td>
<td>0.3588</td>
<td>0.3755</td>
<td>0.1435</td>
<td>0.3244</td>
<td>0.1566</td>
</tr>
<tr>
<td>1969</td>
<td>0.3387</td>
<td>0.3683</td>
<td>0.1378</td>
<td>0.3358</td>
<td>0.1582</td>
</tr>
<tr>
<td>1970</td>
<td>0.3393</td>
<td>0.3672</td>
<td>0.1358</td>
<td>0.3461</td>
<td>0.1510</td>
</tr>
<tr>
<td>1971</td>
<td>0.3429</td>
<td>0.3555</td>
<td>0.1434</td>
<td>0.3452</td>
<td>0.1560</td>
</tr>
<tr>
<td>1972</td>
<td>0.3402</td>
<td>0.3376</td>
<td>0.1539</td>
<td>0.3424</td>
<td>0.1661</td>
</tr>
<tr>
<td>1973</td>
<td>0.3263</td>
<td>0.3223</td>
<td>0.1588</td>
<td>0.3398</td>
<td>0.1792</td>
</tr>
<tr>
<td>1974</td>
<td>0.3394</td>
<td>0.3290</td>
<td>0.1575</td>
<td>0.3508</td>
<td>0.1627</td>
</tr>
<tr>
<td>1975</td>
<td>0.3538</td>
<td>0.3268</td>
<td>0.1654</td>
<td>0.3531</td>
<td>0.1547</td>
</tr>
<tr>
<td>1976</td>
<td>0.3703</td>
<td>0.3064</td>
<td>0.1789</td>
<td>0.3459</td>
<td>0.1688</td>
</tr>
<tr>
<td>1977</td>
<td>0.3664</td>
<td>0.3057</td>
<td>0.1838</td>
<td>0.3379</td>
<td>0.1727</td>
</tr>
<tr>
<td>1978</td>
<td>0.3585</td>
<td>0.3182</td>
<td>0.1818</td>
<td>0.3308</td>
<td>0.1692</td>
</tr>
<tr>
<td>1979</td>
<td>0.3374</td>
<td>0.3470</td>
<td>0.1788</td>
<td>0.3052</td>
<td>0.1690</td>
</tr>
<tr>
<td>1980</td>
<td>0.3046</td>
<td>0.3574</td>
<td>0.1684</td>
<td>0.3087</td>
<td>0.1655</td>
</tr>
<tr>
<td>1981</td>
<td>0.2886</td>
<td>0.3762</td>
<td>0.1521</td>
<td>0.2997</td>
<td>0.1720</td>
</tr>
<tr>
<td>1982</td>
<td>0.2612</td>
<td>0.3805</td>
<td>0.1480</td>
<td>0.2984</td>
<td>0.1730</td>
</tr>
<tr>
<td>1983</td>
<td>0.2302</td>
<td>0.3946</td>
<td>0.1503</td>
<td>0.2864</td>
<td>0.1688</td>
</tr>
<tr>
<td>1984</td>
<td>0.2007</td>
<td>0.4246</td>
<td>0.1324</td>
<td>0.2852</td>
<td>0.1578</td>
</tr>
<tr>
<td>1985</td>
<td>0.1749</td>
<td>0.4278</td>
<td>0.1301</td>
<td>0.2793</td>
<td>0.1627</td>
</tr>
<tr>
<td>1986</td>
<td>0.1657</td>
<td>0.4271</td>
<td>0.1219</td>
<td>0.2803</td>
<td>0.1706</td>
</tr>
<tr>
<td>1987</td>
<td>0.1645</td>
<td>0.4401</td>
<td>0.1178</td>
<td>0.2691</td>
<td>0.1731</td>
</tr>
</tbody>
</table>
### Appendix B

<table>
<thead>
<tr>
<th>Mar-98</th>
<th>Market Value</th>
<th>Operating Earnings</th>
<th>As Reported Earnings</th>
<th>Dividends</th>
<th>Buybacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun-98</td>
<td>8,956</td>
<td>90</td>
<td>78</td>
<td>33</td>
<td>29</td>
</tr>
<tr>
<td>Sep-98</td>
<td>8,125</td>
<td>83</td>
<td>72</td>
<td>34</td>
<td>38</td>
</tr>
<tr>
<td>Dec-98</td>
<td>9,942</td>
<td>93</td>
<td>69</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Mar-99</td>
<td>10,513</td>
<td>96</td>
<td>90</td>
<td>33</td>
<td>34</td>
</tr>
<tr>
<td>Jun-99</td>
<td>11,232</td>
<td>108</td>
<td>102</td>
<td>34</td>
<td>32</td>
</tr>
<tr>
<td>Sep-99</td>
<td>10,554</td>
<td>107</td>
<td>98</td>
<td>37</td>
<td>31</td>
</tr>
<tr>
<td>Dec-99</td>
<td>12,315</td>
<td>115</td>
<td>107</td>
<td>34</td>
<td>45</td>
</tr>
<tr>
<td>Mar-00</td>
<td>12,686</td>
<td>118</td>
<td>116</td>
<td>35</td>
<td>49</td>
</tr>
<tr>
<td>Jun-00</td>
<td>12,484</td>
<td>128</td>
<td>116</td>
<td>35</td>
<td>37</td>
</tr>
<tr>
<td>Sep-00</td>
<td>12,599</td>
<td>124</td>
<td>120</td>
<td>36</td>
<td>31</td>
</tr>
<tr>
<td>Dec-00</td>
<td>11,715</td>
<td>116</td>
<td>80</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Market Value</td>
<td>Operating Earnings</td>
<td>As Reported Earnings</td>
<td>Dividends</td>
<td>Buybacks</td>
</tr>
<tr>
<td>-------</td>
<td>--------------</td>
<td>--------------------</td>
<td>----------------------</td>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td>Mar-01</td>
<td>10,385</td>
<td>96</td>
<td>82</td>
<td>34</td>
<td>31</td>
</tr>
<tr>
<td>Jun-01</td>
<td>11,027</td>
<td>81</td>
<td>44</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td>Sep-01</td>
<td>9,437</td>
<td>83</td>
<td>47</td>
<td>38</td>
<td>35</td>
</tr>
<tr>
<td>Dec-01</td>
<td>10,463</td>
<td>91</td>
<td>50</td>
<td>36</td>
<td>33</td>
</tr>
<tr>
<td>Mar-02</td>
<td>10,502</td>
<td>99</td>
<td>84</td>
<td>35</td>
<td>30</td>
</tr>
<tr>
<td>Jun-02</td>
<td>9,091</td>
<td>107</td>
<td>63</td>
<td>38</td>
<td>31</td>
</tr>
<tr>
<td>Sep-02</td>
<td>7,518</td>
<td>107</td>
<td>79</td>
<td>36</td>
<td>35</td>
</tr>
<tr>
<td>Dec-02</td>
<td>8,107</td>
<td>110</td>
<td>28</td>
<td>39</td>
<td>31</td>
</tr>
<tr>
<td>Mar-03</td>
<td>7,827</td>
<td>115</td>
<td>110</td>
<td>36</td>
<td>30</td>
</tr>
<tr>
<td>Jun-03</td>
<td>9,001</td>
<td>119</td>
<td>103</td>
<td>38</td>
<td>28</td>
</tr>
<tr>
<td>Sep-03</td>
<td>9,208</td>
<td>133</td>
<td>116</td>
<td>40</td>
<td>34</td>
</tr>
<tr>
<td>Dec-03</td>
<td>10,286</td>
<td>138</td>
<td>122</td>
<td>47</td>
<td>39</td>
</tr>
<tr>
<td>Mar-04</td>
<td>10,461</td>
<td>147</td>
<td>141</td>
<td>42</td>
<td>43</td>
</tr>
<tr>
<td>Jun-04</td>
<td>10,623</td>
<td>158</td>
<td>142</td>
<td>43</td>
<td>42</td>
</tr>
<tr>
<td>Sep-04</td>
<td>10,398</td>
<td>157</td>
<td>132</td>
<td>46</td>
<td>46</td>
</tr>
<tr>
<td>Dec-04</td>
<td>11,289</td>
<td>167</td>
<td>130</td>
<td>50</td>
<td>66</td>
</tr>
<tr>
<td>Mar-05</td>
<td>10,820</td>
<td>164</td>
<td>154</td>
<td>49</td>
<td>82</td>
</tr>
<tr>
<td>Jun-05</td>
<td>10,890</td>
<td>178</td>
<td>167</td>
<td>49</td>
<td>81</td>
</tr>
<tr>
<td>Sep-05</td>
<td>11,083</td>
<td>170</td>
<td>161</td>
<td>49</td>
<td>81</td>
</tr>
<tr>
<td>Dec-05</td>
<td>11,255</td>
<td>182</td>
<td>156</td>
<td>55</td>
<td>104</td>
</tr>
<tr>
<td>Mar-06</td>
<td>11,660</td>
<td>187</td>
<td>177</td>
<td>53</td>
<td>100</td>
</tr>
<tr>
<td>Jun-06</td>
<td>11,497</td>
<td>199</td>
<td>182</td>
<td>54</td>
<td>117</td>
</tr>
<tr>
<td>Sep-06</td>
<td>12,020</td>
<td>207</td>
<td>193</td>
<td>55</td>
<td>110</td>
</tr>
<tr>
<td>Dec-06</td>
<td>12,729</td>
<td>197</td>
<td>182</td>
<td>62</td>
<td>105</td>
</tr>
<tr>
<td>Mar-07</td>
<td>12,706</td>
<td>200</td>
<td>191</td>
<td>58</td>
<td>118</td>
</tr>
<tr>
<td>Jun-07</td>
<td>13,350</td>
<td>214</td>
<td>194</td>
<td>59</td>
<td>158</td>
</tr>
<tr>
<td>Sep-07</td>
<td>13,470</td>
<td>184</td>
<td>134</td>
<td>61</td>
<td>172</td>
</tr>
<tr>
<td>Dec-07</td>
<td>12,868</td>
<td>133</td>
<td>69</td>
<td>67</td>
<td>142</td>
</tr>
<tr>
<td>Mar-08</td>
<td>11,511</td>
<td>145</td>
<td>135</td>
<td>62</td>
<td>114</td>
</tr>
<tr>
<td>Jun-08</td>
<td>11,163</td>
<td>148</td>
<td>112</td>
<td>62</td>
<td>88</td>
</tr>
<tr>
<td>Sep-08</td>
<td>10,181</td>
<td>143</td>
<td>86</td>
<td>61</td>
<td>90</td>
</tr>
</tbody>
</table>

Source: S&P 2008