

INFORMATIVE STOCK PRICES AND INDEPENDENT DIRECTORS

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This paper is drawn from a forthcoming article in the Stanford Law Review, *The Rise of Independent Directors in the US 1950-2005*, which associates the marked increase over the period in the fraction of independent directors on public boards (from 20% independents to 75% independents) with the entrenchment of the shareholder primacy paradigm and the increasing informativeness of stock market prices. This paper explores what it means to say that stock prices are more informative and the implications for corporate governance that follow.

The strategy of the paper is as follows. First the paper reproduces the introduction from the Stanford article and the data on the shift in board composition and summarizes the history. But the paper focuses specifically on the stock price informativeness strand and the corporate governance implications. Among other things, increasing stock price informativeness facilitates the rise of independent directors because it mitigates the potential debility of such directors in their knowledge about the firm. The paper provides empirical evidence that stock prices have indeed become more informative, including some evidence on increased disclosure by firms over the period. The paper then traces the regulatory measures that have facilitated this increased disclosure, including SEC mandates and permissions and new accounting requirements. So independent directors can now look to market prices as a useful measure of managerial performance and for some guidance about the firm's strategic direction.

On this view, does that make the stock price the measure of all things? There is ample evidence that the stock market is only mostly efficient, which generates the concern that automatic cueing to stock market signals in resource allocation could lead to significant systemic inefficiency. Perhaps the independent board can play a useful role in mediating between the firm and the stock market in a way that makes resource allocation more efficient overall. Existing corporate law and practices -- especially the poison pill -- institutionalize the board's "visible hand" in control market transactions. The consequence of these frictions is to slow down the pace of control market activity. This may allow for greater learning about the value of particular organizational, finance, and

strategic innovations before their wholesale application. In theory, then, such frictions would mean fewer bad deals and the fostering of a corporate ecology with more space for public firms to pursue currently disfavored strategic choices. (Going private deals are an obvious substitute; the premium paid by private equity investors may help separate the firms with good and bad market-disfavored strategies. But the transaction costs of going private deals are substantial and so the separation mechanism will be not available across all firms.)

This possible advantage of the independent board in the present paradigm may not be stable, however. The capacity of activist hedge funds to navigate around the poison pill demonstrates its fragility. On the other hand, hedge funds have thus far pursued strategic or governance changes only at the margin, not full takeovers, so the existing paradigm – which preserves significant autonomy for the independent board from stock market signals – may well be intact.

[Note: because of the excerpting, some of the footnote cross-references will be incorrect.]

INTRODUCTION

“Independent directors”—that is the answer, but what is the question?

The now-conventional understanding of boards of directors in the diffusely held firm is that they reduce the agency costs associated with the separation of ownership and control. Elected by shareholders, the directors’ role is to “monitor” the managers in view of shareholder interests. Who should serve on the board of a large public firm? Circa 1950, the answer was, as a normative and positive matter, that boards should consist of the firm’s senior officers, some outsiders with deep connections with the firm (such as its banker or its senior outside lawyer), and a few directors who were nominally independent but handpicked by the CEO. Circa 2006, the answer is “independent directors,” whose independence is buttressed by a range of rule-based and structural mechanisms. Inside directors are a dwindling fraction; the senior outside lawyer on the board is virtually an extinct species.

The move to independent directors, which began as a “good governance” exhortation, has become in some respects a mandatory element of corporate law. For controversial transactions, the Delaware courts condition their application of the lenient “business judgment rule” to board action undertaken by independent directors. The New York Stock Exchange requires most listed companies to have boards with a majority of independent directors¹ and audit and compensation committees comprised solely of independent directors. The NASD requires that conflict transactions be approved by committees consisting solely of independent directors. Post-Enron federal legislation requires public companies to have an audit committee comprised solely of independent directors. But why has the move to independent directors been so pronounced?

1. Unless the company has a 50% shareholder.

One of the apparent puzzles in the empirical corporate governance literature is the lack of correlation between the presence of independent directors and the firm's economic performance. Various studies have searched in vain for an economically significant effect on the overall performance of the firm. Some would deny there is a puzzle: theory would predict that firms will select the board structure that enhances the chance for survival and success; if competitive market pressure eliminates out-of-equilibrium patterns of corporate governance, the remaining diversity is functional. Others would note that corporate governance in the United States is already quite good, and thus marginal improvements in a particular corporate governance mechanism would expectedly have a small, perhaps negligible, effect.

The claim of this paper is that the rise of independent directors in the diffusely held public firm is not driven only by the need to address the managerial agency problem at any particular firm. "Independent directors" is the answer to a different question: how do we govern firms so as to increase social welfare (as proxied by maximization of shareholder value across the general market). This maximization of shareholder value may produce institutions that are suboptimal for particular firms but optimal for an economy of such firms. Independent directors as developed in the U.S. context solve three different problems: First, they enhance the fidelity of managers generally to shareholder objectives, as opposed to managerial interests or stakeholder interests. Second, they enhance the reliability of the firm's public disclosure, which makes stock market prices a more reliable signal for capital allocation and for the monitoring of managers at *other* firms as well as their own. Third, more controversially, they provide a mechanism that binds the responsiveness of firms to stock market signals but in a bounded way. The turn to independent directors serves a view that stock market signals are the most reliable measure of firm performance and the best guide to allocation of capital in the economy, but that a "visible hand," namely, the independent board, is needed to balance the tendency of markets to overshoot.

This Article develops this general theme through an account of the changing function of the board over the past fifty years, from the post-World War II era to the present. During this period, the board's principal role shifted from the "advising board" to the "monitoring board," and director independence became correspondingly critical. Although other factors are at work, there were two main drivers of the monitoring model and genuine director independence. First, the corporate purpose evolved from stakeholder concerns that were an important element of 1950s managerialism to unalloyed shareholder wealth maximization in the 1990s and 2000s. Inside directors or affiliated outside directors were seen as conflicted in their capacity to insist on the primacy of shareholder interests; the expectations of director independence became increasingly stringent.

Second, fundamental changes in the information environment reworked the ratio of the firm's reliance on private information to its reliance on information impounded in prevailing stock market prices. Over the period, the central planning capabilities of the large public firm became suspect. Instead, a Hayekian spirit, embodied in the efficient

capital market hypothesis, became predominant.² The belief that markets “knew” more than the managers of any particular firm became increasingly credible as regulators and quasi-public standard setters required increasingly deep disclosure and this information was impounded in increasingly informative stock prices. The optimal boundaries of the firm changed as external capital markets advanced relative to internal capital markets in the allocation of capital. The richer public information environment changed the role of directors. Special access to private information became less important. Independent directors could use increasingly informative market prices to advise the CEO on strategy and evaluate its execution, as well as take advantage of the increasingly well-informed opinions of securities analysts. Independents had positional advantages over inside directors, who were more likely to overvalue the firm’s planning and capital allocation capabilities. In the trade-off between advising and monitoring, the monitoring of managers in light of market signals became more valuable. The reliability of the firm’s public disclosures became more important. Indeed, by the end of the period, boards came to have a particular role in assuring that the firm provided accurate information to the market.

Thus, fidelity to shareholder value and to the utility of stock market signals found unity in the reliance on stock price maximization as the measure of managerial success. From a social point of view, maximizing shareholder value may be desirable if fidelity to the shareholder residual (as opposed to balancing among multiple claimants) leads to maximization of the social surplus. This is the shareholder primacy argument. Independently, maximizing shareholder value may be socially desirable if stock prices are so informative that following their signals leads to the best resource allocation. This is the market efficiency argument.

Over the period, boards eventually undertook measures that assured management’s responsiveness to stock market signals, in particular through the use of stock-related compensation and retention decisions based on stock market performance. But there was an additional twist in the board’s intermediation between managers and markets: the board, acting through the independent directors, came to have power to limit the potency of stock market signals in the takeover market. There was skepticism whether markets were perfect, even at the height of the prestige of the efficient capital market hypothesis. After the 1987 stock market crash, economists developed increasingly more persuasive accounts of how stock market prices—even though, on average, the best estimate of intrinsic value—could deviate for a substantial time period from economic fundamentals. The board gained power under state law to hinder the operation of the takeover market, i.e., to weigh the reliability of the market price as a measure of shareholder value at a particular time. The problem is this: given the imperfection of market prices, what is the optimal degree of responsiveness to price changes? Investors may optimally adjust portfolios of liquid financial assets on one time line; managers may optimally adjust

2. See F. A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519 (1945). Hayek addresses the problem of the society’s central planner, but his extolling of the superiority of the market in coordinating and guiding behavior becomes the ultimately successful critique of the planning capacities of the large firm heralded in books such as JOHN KENNETH GALBRAITH, *THE NEW INDUSTRIAL STATE* (4th ed. 1985).

The peculiar character of the problem of a rational economic order is determined precisely by the fact that the knowledge of the circumstances of which we must make use never exists in concentrated or integrated form, but solely as the dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess. Hayek, *supra*, at 519.

internal investment decisions over real assets on another. In light of potentially negative systematic effects from quick responses in the takeover market to imperfect market signals, it may be optimal to have an institution that could slow the pace of control market activity to test the market for price reversals. The “visible hand” of the well-functioning board could, in theory, serve this function.

Independent directors have a comparative advantage for these different tasks. They are less dependent on the CEO and more sensitive to external assessments of their performance as directors; they are less wedded to inside accounts of the firm’s prospects and less worried about the disclosure of potentially competitively sensitive information. They also have credibility in the “checking” of market signals against intrinsic measures of the firm’s prospects. In other words, genuinely independent directors might create significant value in the allocation of resources, not just in their firm but more generally as other firms are forced to adapt to the best performers. Thus, one of the hallmarks of the period was the development of various mechanisms of director independence aimed at producing directors who were independent in fact.

This emphasis on the critical role of independent directors as an efficiency-justified strategy for importing stock market signals into the firm’s (and the economy’s) decisionmaking will strike some as a radical interpretation of the history. I make no claim that the various actors have been fully aware of the implications of each step—much may have happened through inadvertence, and the role of independent directors could have been otherwise—but this is the end point of this non-teleological process.

This Article proceeds as follows. Part I reviews the overall trend of board composition of large U.S. public companies since 1950. On the basis of data assembled from a number of different sources, the fraction of independent directors for large public firms has shifted from approximately 20% in the 1950s to approximately 75% by the mid-2000s. Part I also reviews the strengthening of various mechanisms of director independence that enhanced the independence-in-fact of directors over the period. Part II surveys the empirical studies that fail to find significant economic effects from this pronounced move toward director independence and concludes that the studies are looking in the wrong place. The studies look at board composition differences across firms. Yet if the main advantage of independent directors is to help commit firms throughout the economy to a shareholder wealth maximization strategy, then systematic effects will swamp cross-sectional variation.³ Part III non-exhaustively canvasses the 1950-2005 period to explore one important driver in changing board composition: the shift toward shareholder wealth maximization as the dominant corporate purpose. Director independence became linked to the monitoring of managerial performance in order to serve shareholder ends. Part III also traces a complementary development: managers who once vigorously resisted board independence as a limitation to their autonomy came to champion the independent board as a buffer from the hostile takeover and as a substitute for greater government intervention in the wake of scandals.

3. This generalizes the argument made regarding hostile takeovers: that ultimately their benefits (costs) are not adequately reckoned by summing bidder and acquirer gains (losses), but rather in the systematic effects from a robust market in corporate control.

Part IV non-exhaustively canvasses the 1950-2005 period to explore another driver of the change in board composition: the increasing informativeness and value of stock market signals. Informativeness was enhanced by increased disclosure resulting from regulatory initiatives by the Securities and Exchange Commission and the quasi-public accounting standards setting authorities. New information processing technology and increasing investments in securities analysis helped make prices more informative as well. It's not that the disclosure system changed to accommodate a demand for independent directors. Rather, as stock prices became more informative, the concern about the independents' potential debility—their lack of a well-informed view about the firm—subsided. Indeed, an increasingly important element of the independent board's monitoring role came to be the appropriate use of market signals in executive compensation contracts and in CEO termination decisions. Additionally, directors came to have an increasingly important function in assuring the accuracy of the firm's financial disclosure, i.e., “controls monitoring.”

Part V concludes with the suggestion that the rise of independent directors, at least in the United States, is tied to a new corporate governance paradigm that looks to the stock price as the measure of most things. Maximizing the stock price serves two normative ends: promoting the interests of shareholders and making use of the information impounded by the market to allocate capital efficiently. In this time of increased shareholder activism, one important question is whether the enhanced independence of directors will create a space for a public firm to resist stock market pressure in the pursuit of currently disfavored business strategies (and whether this would be desirable) or whether the pressures that give rise to director independence will swamp this possibility.

I. CHANGING BOARD COMPOSITION, 1950-2005: THE RISE OF INDEPENDENT DIRECTORS AND DIRECTOR INDEPENDENCE

One of the most important empirical developments in U.S. corporate governance over the past half century has been the shift in board composition away from insiders (and affiliated directors) toward independent directors. This trend is consistent throughout the period and accelerates in the post-1970 sub-period. This Part describes the trend, looking at a number of studies that use different samples of firms and that apply somewhat different definitions of “independence.” In addition to the numerical shift, the independence-in-fact of directors has been buttressed in the post-1970 period by a series of rule-based and structural mechanisms. In its own way, the effort to create independence-in-fact is as striking as the numerical shift.

A. *Changing Board Composition, 1950-2005*

No single study traces the rise of independent directors over the 1950-2005 period. The study that best captures the changing board composition over the period is Lehn, Patro & Zhao's paper reporting the insider-outsider breakdown for all publicly traded U.S. firms that survived from 1935 through 2000, namely eighty-one predominantly large firms.⁴ Lehn et al. find a consistent decline in the average percentage of insiders over the

4. Kenneth Lehn, Sukesh Patro & Mengxin Zhao, Determinants of the Size and Structure of Corporate Boards: 1935-2000 (Nov. 2003) (unpublished manuscript, available at <http://ssrn.com/abstract=470675>). They describe their sample as all firms in the Center for Research on Security Prices (CRSP) database which survive over the period and

1950-2000 period, from approximately 50% to approximately 15%, with accelerating change after 1970.⁵ The available data, however, apparently do not readily permit a further breakdown of the “outside” directors into “affiliated” and “independent” directors over the entire period. Other studies, typically cross-sectional in nature, examine proxy filings to classify directors. The earliest such study was in 1970.⁶ The Securities and Exchange Commission (SEC) did a detailed survey covering 1977-78,⁷ the academic studies began in 1985, and the Investor Responsibility Research Center began its database for 1500 public firms in 1996. I have put together these studies to construct a “time series” showing the board composition trend over the 1950-2005 period,⁸ which is depicted graphically in Figure 1.⁹ These figures show a steady increase in the representation of independent directors on the board, from approximately 20% in 1950 to approximately 75% in 2005. This is a powerful change in board composition that calls out for an explanation.

for which data is also available in the Moody’s Industrial Manual. *Id.* at 12. The sample of course imperfectly represents the universe of firms existing at any point in time and tilts toward the largest firms. *Id.* Interestingly, the fraction of insiders monotonically increases over the 1935-1950 period, from approximately 45% to 50%. *Id.* at 36 tbl.1 panel C (presenting descriptive statistics of sample firms with five-year frequency in table format). The abovementioned survivorship bias in the sample suggests an adaptive quality in the shift away from insiders and toward independent directors in the post-1950 period.

5. This table drawn from the Lehn et al. data describes the shift over the period.

Percentage of Inside Directors, 1950-2000		
Year	Mean	Decade-to-decade percent change
1950	49%	n/a
1955	47%	
1960	43%	-12%
1965	42%	
1970	41%	-5%
1975	39%	
1980	33%	-20%
1985	30%	
1990	26%	-21%
1995	21%	
2000	16%	-38%

Source: *Id.* at 36 tbl.1 panel C (providing mean values). Percent change based on own calculations.

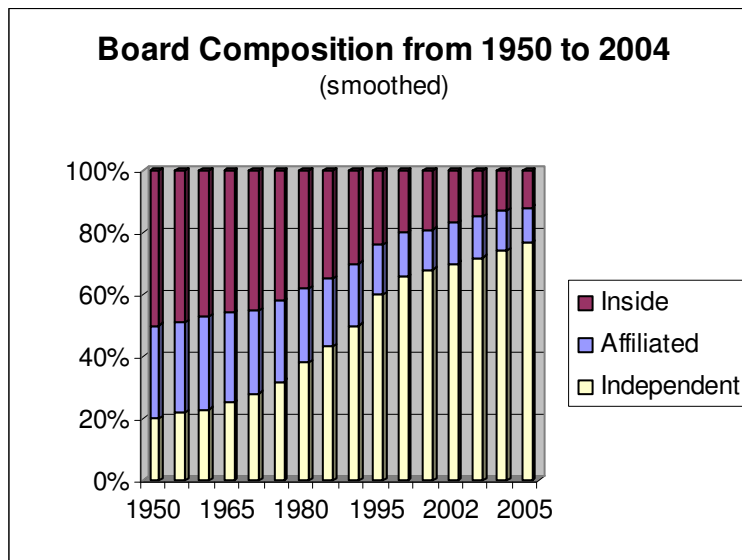
6. Ephraim P. Smith, *Interlocking Directorates Among the ‘Fortune 500,’* 3 ANTITRUST L & ECON. REV., Summer 1970, at 47, 48 (assessing board composition as sidelight to director interlocks).

7. STAFF OF S. COMM. ON BANKING, HOUSING, AND URBAN AFFAIRS, 96TH CONG., STAFF REPORT ON CORPORATE ACCOUNTABILITY 590-598, 598 tbl.2 (Comm. Print 1980) [hereinafter SEC STAFF REPORT] (surveying 1200 major firms drawn from NYSE, Amex, Nasdaq, and OTC/regional exchanges in 1978-79). The SEC study led to a rule proposal, subsequently withdrawn, that would have required precise categorization of the outside directors.

8. See *infra* app. tbl.1. Perhaps the right metaphor is to think of these figures as “snapshots on a string.”

9. Figure 1 is graphed using the Excel “smoothing” command.

Figure 1



The limitations of this demonstration are obvious: I have used cross-sectional studies to reclassify the Lehn et al. category of “outsiders” into the more useful “affiliated” and “independent” categories, assuming in particular that the 1970 breakdown of outsiders is applicable to the 1950-70 period for which there are no earlier cross-sectional studies. (In light of the history discussed below, it is likely that this *overstates* the fraction of independents on pre-1970 boards, which thus *understates* the change over the period.) Also, the various studies used different samples and undoubtedly applied different criteria in coding proxy disclosure about directors into the relevant classifications. These classification decisions would have been influenced by whether the researcher was trying to assess whether non-insiders augmented the corporation’s capacities (thus referring to affiliated directors as “instrumental” directors)¹⁰ or enhanced monitoring (calling affiliated directors “grey” directors).¹¹ Notwithstanding the inevitable noise, the overall trend that emerges is quite striking, as reflected by Figure 1 (a smoothed time-series pie chart). [Figure 2 is omitted]

There has been an additional trend in the latter part of the period toward what Bhagat and Black call “supermajority” independent boards.¹² As recently as 1989, boards with only one or two insiders were unheard of. In a Korn/Ferry 1989 survey of large public

10. E.g., Barry D. Baysinger & Henry N. Butler, *Corporate Governance and the Board of Directors: Performance Effects of Changes in Board Composition*, 1 J.L. ECON. & ORG. 101, 110 (1985).

11. E.g., Benjamin E. Hermalin & Michael S. Weisbach, *The Determinants of Board Composition*, 19 RAND J. ECON. 589, 591 (1988).

12. Sanjai Bhagat & Bernard Black, *The Non-Correlation Between Board Independence and Long-Term Firm Performance*, 27 J. CORP. L. 231, 239 (2002) [hereinafter Bhagat & Black, *Non-Correlation*].

companies, 67.5% reported three insiders and 32.5% reported four insiders.¹³ By 2003, the pattern was strikingly different: 65% reported two or fewer insiders; 35% reported three insiders; none reported more than three insiders.¹⁴ By 2004, under the influence of Sarbanes-Oxley and the stock exchange listing rules, the shift is virtually complete: 91% reported two or fewer insiders; 9% reported three insiders.¹⁵ Large public firms have moved to a pattern of one, perhaps two, inside directors and an increasing number of independent directors. Some academics and practitioners have regarded the emerging pattern as the cynosure of corporate governance because of its maximum control of managerial agency costs.¹⁶

B. Mechanisms of Enhanced Director Independence, 1950- 2005

The preceding section described the longterm numerical trend away from inside directors and toward independents. Nominally independent directors can of course be passive, ineffectual, and otherwise be found in management's pocket, as famously described in Myles Mace's 1971 book.¹⁷ In 1989, nearly two decades later, Jay W. Lorsch and Elizabeth MacIver argued that the independent director was still more likely to be a "pawn" than a "potentate."¹⁸ Nevertheless, one of the striking elements of the 1950-2005 period was the development of various mechanisms to create and enhance the independence of directors. The genesis of many of these mechanisms was the 1970s wave of corporate governance reform, which tried to establish preconditions for the monitoring board. Indeed, "independent director" entered the corporate governance lexicon only in the 1970s as the kind of director capable of fulfilling the monitoring role. Until then, the board was divided into "inside" and "outside" directors.¹⁹ Further developments favoring director independence occurred in the 1990s as part of the post-hostile bid settlement

13. KORN/FERRY INT'L, BOARD OF DIRECTORS SIXTEENTH ANNUAL STUDY 1989, at [x] ([1989]).

14. KORN/FERRY INT'L, 30TH ANNUAL BOARD OF DIRECTORS STUDY 2003, at 8-9 (2003); 30TH ANNUAL STUDY SUPPLEMENT, at 12 (2004) (reporting on 2002-03 proxy data; Diefenbacher calculations).

15. KORN/FERRY INT'L, 31ST ANNUAL BOARD OF DIRECTORS STUDY 2004, at 10 (2004) (reporting on 2003-04 proxy data; Diefenbacher calculations). See also SHEARMAN & STERLING LLP, TRENDS IN THE CORPORATE GOVERNANCE PRACTICES OF THE 100 LARGEST US PUBLIC COMPANIES 4 (2005), available at http://www.shearman.com/cg_survey05/ (follow "View Full Text" hyperlink) (reporting independent directors comprise 75% or more of the board of 81 of the top 100 companies in 2004 and 2005, and the CEO is the only non-independent director in 37 of the top 100 in 2005); Bus. Roundtable, Business Roundtable Corporate Governance Survey: Key Findings (Mar. 20, 2006), <http://www.businessroundtable.org/publications/publication.aspx?qs=2AC6BF807822B0F1AD34484> (reporting that 85% of its approximately 160 members expect to have a board in 2006 consisting of at least 80% independent directors, 98% expect that their boards will be at least 60% independent, and 42% expect an entirely independent board).

16. See, e.g., Michael C. Jensen, *The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems*, 48 J. FIN. 831, 865 (1993); Martin Lipton & Jay W. Lorsch, *A Modest Proposal for Improved Corporate Governance*, 48 BUS. LAW 59, 67-68 (1992) (recommending a board size of eight or nine directors, comprised of at least two independent directors for every one insider or affiliate, and arguing that "five or six independent directors, who are carefully selected, should provide the breath of perspective and diversity required").

17. MYLES L. MACE, *DIRECTORS: MYTH AND REALITY* 108 (1971); see also Laura Lin, *The Effectiveness of Outside Directors as a Corporate Governance Mechanism: Theories and Evidence*, 90 NW. U. L. REV. 898, 898-903, 912-17 (1996) (discussing the "managerial hegemony" theory which asserts that management controls the board regardless of its composition).

18. JAY W. LORSCH WITH ELIZABETH MACIVER, *PAWNS OR POTENTATES: THE REALITY OF AMERICA'S CORPORATE BOARDS* (1989).

19. Professor Mitchell argues that the principal role of the pre-1970s outside director was to provide cover for conflict transactions entered into by insiders and to provide a liability shield for insiders in other respects. He also suggests that this function still continues. See Lawrence E. Mitchell, *The Trouble with Boards* (Sept. 9, 2005) (unpublished manuscript, on file with author).

among institutional investors, managers, and boards.²⁰ The last wave, post-2002, was spurred by the Enron et al. board failures, which led to new efforts to strengthen director independence in light of the board's additional role of controls monitoring as well as performance monitoring.

Analytically, these mechanisms of director independence can be broken down into four categories: (1) tightening the standards and rules of disqualifying relationships; (2) increasing negative and positive sanctions, such as legal liability for fiduciary duty breach, reputational sanctions, and stock-based compensation; (3) development of intra-board structures, such as task-specific committees and designation of a "lead director"; and (4) reducing CEO influence in director selection and retention, for example, by the creation of a nominating committee staffed solely by independent directors. Without being Panglossian, it does seem that the accumulating effects of changes in each of these mechanisms, as well as the accumulating cultural shift fostered by the successive reform efforts, should have increased the independence-in-fact of directors over the period.

C. Summary of Part IB

This nonexhaustive survey of the mechanisms of director independence shows that reform efforts over the 1950-2005 period did, on balance, enhance substantially the conditions that foster director independence. The relationship rules created obvious protections, and the structural innovations within the board have been promising. Putting aside the independent nominating committee, which will have some pro-independence effect, other efforts to strengthen the shareholder hand in director selection did not succeed. However, it is reasonable to conclude that the cumulative effect of innovations in these various mechanisms significantly increased director independence over the period. But the difficult problem remains: independence is more a disposition, a state of mind, rather than a concrete fact. What might have been more significant than the mechanisms themselves was the constant advocacy of director independence that led to their adoption. Adoption of these various governance innovations both reflected a cultural change in the expectations of director behavior and helped create the cultural change. Thus the shift in the proportion of independent directors on the board from 20% in the 1950s to 75% by the mid-2000s is more than a superficial increase of nominally identified outsiders: board composition and board attitude have notably shifted toward independence-in-fact.

II. CHANGING BOARD COMPOSITION: THE SEARCH FOR EVIDENCE THAT IT MAKES A DIFFERENCE

Evidence that connects the increased presence of independent directors to shareholder benefit is weak at best. The empirical studies on the effects of board composition can be broken down into two types: (1) effects on firm performance, using, variously, accounting measures, stock price returns, and market valuation metrics such as tobin's q ; and (2) effects on discrete tasks, such as CEO compensation and termination and decisions in connection with takeovers, whether as acquirer or target.²¹ Teasing out the

20. See *infra* text accompanying notes 162-163.

21. The leading surveys are Sanjai Bhagat & Bernard Black, *The Uncertain Relationship Between Board*

effects of board composition from the many other factors that affect performance is economically and econometrically difficult,²² so the lack of a strong positive connection between board independence and performance is perhaps unsurprising. This has motivated the “discrete tasks” line of research, on the theory that even if ultimate performance effects are hard to find in the data, certain governance actions should have a bottom-line effect. Yet even for discrete tasks, there is only limited evidence that board independence generates differences in board behavior and the differences are not stark.

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3. *Understanding the evidence*

It is thus possible to read the U.S. evidence as suggesting that board independence has only minimal effects on board behavior and shareholder value. In my view this interpretation would be mostly wrong. First, the anomalous empirical results may have conventional explanations. The strongest explanation is the diminishing marginal returns hypothesis: most of the empirical evidence assesses incremental changes in board independence in firms where there is already substantial independence and after the cultural entrenchment of norms of independent director behavior. But, as I will argue, the most important effects of the move to independent directors, particularly over the long term, are systematic rather than firm specific and thus are unlikely to show up in cross-sectional studies. One systematic effect, the lock-in of shareholder value as virtually the exclusive corporate objective, could have benefits for early adopters perhaps, but other effects, such as the facilitation of accurate financial disclosure and corporate law compliance, have principally external effects.

i. Tradeoffs

One explanation for the weak evidence on director independence is a potential tradeoff between the different attributes that insiders and independents bring to a board. Yes, a higher fraction of independent directors may produce outcomes that could be associated with value-increasing governance. But there may well be costs. Inside directors or affiliated directors—outsiders with an interest—may contribute valuable advice and insights that are lost in a thoroughly independent board.^[fn omitted] Although the predominant model of board behavior has moved towards the monitoring board and away from the advisory board, boards still participate in the firm’s strategic planning and otherwise advise the CEO and the senior management team. If the monitoring and other

Composition and Firm Performance, 54 BUS. LAW. 921 (1999) [hereinafter Bhagat & Black, *Uncertain Relationship*]; Benjamin E. Hermalin & Michael S. Weisbach, *Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature*, FRBNY ECON. POL. REV., Apr. 2003, at 7; Jonathan L. Johnson et al., *Boards of Directors: A Review and Research Agenda*, 22 J. MGMT. 409 (1996). Bhagat and Black are more precisely focused on the role of independent directors.

22. For example, underperforming firms may add more independent directors in the hope that the governance change will improve performance; on cross-sectional comparison, that causal connection will be blurred. Alternatively, the tests may be underpowered, thus, in the absence of a relatively large impact, performance effects will be obscured by statistical noise. For example, if the average effect were +\$0.01 per firm for the 25% of firms that were early adopters of board independence, that would cash out to a nontrivial \$30 billion across \$12 trillion in equities but might be undetectable through conventional methodology. (Of course the undetectable effect could, in principle, be negative.)

governance functions are better in a predominantly independent board, perhaps the advising is not as good. ^[fn omitted]

ii. Sorting (optimal differences)

Another explanation for the data is a variant on the tradeoff hypothesis that looks to the diversity among firms. If there is no “one size fits all” for board composition, then the heterogeneity in the board composition data may reflect firms finding their optimal insider/independent mix. Take, for example, the cross-sectional data that regresses firm performance on the fraction of independent directors. Assume that firms differ in the optimal fraction because of firm-specific tradeoffs: for particular firms inside directors or affiliated outsiders may be more (less) useful, influenced perhaps by the relevant ownership structure or product market competition that reduces (increases) the managerial agency costs addressed by independent directors. ^[fn omitted] In any event, in a competitive market, we would expect firms to move toward their optimal governance structure. On this view, the regression results are expectedly economically insignificant—as is the general pattern—but only because out-of-equilibrium governance structures do not persist, not because director independence has little value for many firms.

The weakness, or rather, incompleteness, of the sorting hypothesis (as well as the general tradeoff hypothesis) is that it cannot account for the longterm secular trend towards director independence, a quite radical shift, as noted above, and mostly occurring over only a thirty year period. The story is not only the increasing average fraction of independent directors in public firms but also the increasing fraction of firms with only one or two inside directors, 90% according to the 2004 Korn/Ferry Study. It seems unlikely that the local, firm-by-firm pursuit of shareholder value could produce such a strong trend.

iii. Diminishing marginal returns

The most persuasive conventional explanation of the nominal results of the general empirical pattern is that director independence may well be positive for shareholder value but that above a critical fraction, the returns are diminishing, and, given the plausibility of firm-specific tradeoffs, sometimes may even be negative. Bhagat and Black, for example, say their negative performance measures are driven by firms with “super-majority” independent boards—instances where the board went beyond majority independent directors to only one or two insiders.

A significant part of the reason for the diminishing marginal returns from greater independence is the important institutional complement of hard and soft control markets that also help control managerial agency problems. In robust control markets managers face ouster for subpar performance, which in turn disciplines managerial performance. As will be elaborated on below, although hostile bids have become rare in the United States following the 1980s, their influence is still ubiquitous, particularly through the pervasive focus on shareholder value. This is built into managerial compensation packages through stock-related compensation, “golden parachutes” that blossom lucratively in a takeover, and termination decisions keyed to a lagging stock price. Moreover, the culture of shareholder value has become entrenched on U.S. boards, and, indeed, among managerial

elites. There is probably a critical threshold of independent directors that exposes the firm to significant control market pressure, both in the board's willingness to entertain a takeover bid and in the board's willingness to terminate an underperforming CEO. So long as that threshold is achieved, control market pressure has a greater effect than incrementally more vigorous board monitoring that might be associated with more independent directors.²³

iv. Firm specific vs. systematic effects

The evidence is also consistent with a view that the main effects of the change in board composition are systematic and that the firm-specific effects are very hard to isolate. In the US environment of substantial ownership by economically motivated institutional investors, a dominant pattern of board independence locks in shareholder value as the corporation's principal objective. This pattern changes the competitive environment for all firms, regardless of the board structure of any particular firm. Thus any firm-specific effects that might be associated with "early adoption" of greater board independence will be quickly obscured by competitive imitation. Assume, for example, that a firm with a predominantly independent board will be more likely to initiate cost-cutting to gain market share and increase profits. A rival firm, irrespective of board structure, is likely to imitate this pattern for competitive survival. The rival may change its degree of board independence to signal its intention to engage in similar behavior. But the new board composition may in turn lock the second firm into shareholder wealth maximizing strategies in other areas where it may not yet face a competitive threat. The point is that effects of changing board composition must be measured, from a shareholder point of view, across the economy of firms, particularly as a practice becomes dominant. This is econometrically very difficult.

The evidence is also consistent with changes in board composition as driven by factors that may serve general shareholder objectives, not firm specific factors. In the United States, regulators have turned to independent directors to help assure the reliability of financial disclosure. This began with the call for audit committees staffed by independent directors in the 1970s and culminated in the post-Enron reforms that look to independent directors to take control of critical elements of the disclosure process. To be sure, better disclosure has firm-specific benefits, insofar as it facilitates market monitoring of managerial performance. This occurs through more accurate stock price formation that can be used in both within-firm performance comparisons over time and cross-sectional comparisons with other comparably situated firms. It also occurs through more informative securities analyst evaluation of managerial performance, which can be reflected in narrative form as well in stock-picking advice. But better disclosure also generates benefits for other firms, i.e., interfirm externalities. By providing useful comparative information, it facilitates monitoring of other firms' managements (and thus may improve a rival's performance). It also provides competitively valuable information that other firms can use in its planning (and also may therefore improve a rival's performance). More generally, more accurate disclosure can lead to more informative

23. Note that arguments about thresholds and diminishing marginal effects would play differently in the United States, where a diffuse pattern of ownership leads to managerial agency problems, than it would in most other countries, where concentrated ownerships patterns produce controlling shareholder agency problems. A robust control market may constrain managerial agency costs but will not rein in controlling shareholders.

stock prices, as well as more accurate narratives, that can more efficiently guide the behavior of market actors. In short, if independent directors make the firm's disclosure more reliable, then markets presumably will be allocatively more efficient. Yet none of this systematic effect will appear in cross-sectional studies of firm performance (although the evidence that independent directors do a better job in controlling financial fraud is consistent with the presence of interfirm externalities). Finally the evidence is also consistent with changes in board composition that serve social interests that may not directly track shareholder interests. Independent directors may be more likely to promote the firm's compliance with legal norms. Some of the push for independent directors arose from efforts to control bribes and other questionable payments. Others have looked to independent directors to monitor the corporation's law compliance more generally. If independent directors are effective in this regard, the benefits (which in some cases may come at the expense of the firm's shareholders) have a society-wide reach. These effects, too, are not reflected in conventional empirical studies.

B. Summary of Parts I and II

Parts I and II have put together three important bodies of evidence on boards of U.S. public firms over the 1950-2005 period: first, the evidence of a strong trend toward an increasing fraction of independent directors; second, the evidence of increasing independence-in-fact for directors and boards; and third, the anomalous evidence that changes in board composition seem to have had no (or little) effect on firm performance as measured cross-sectionally. My argument is that the anomalous performance evidence does not undercut the case for independent directors because the empirical tests are looking in the wrong place. The major performance effects of board independence are systematic; and, as I argue below, the major drivers of the trend toward board independence are systematic as well. The independent board both reflects the shift toward shareholder value as the ultimate corporate objective and locks in the shareholder value criterion for the firm and for the economy of such firms. The independent board is made feasible by stock prices that are increasingly informative because of greater firm-specific disclosure; by enhancing the reliability of the firm's disclosure, the independent board helps to maintain stock price informativeness.

III. THE RISE OF SHAREHOLDER VALUE, 1950-2005

This Part traces some of the relevant history over the 1950-2005 period in the changing role of corporate boards, in which the "advising" board was replaced by the "monitoring" board. This compressed account attempts to weave together some of the principal factors that produced this change, but its emphasis is on the co-evolution of shareholder wealth maximization and board independence.

Boards are obviously not a creation of the late twentieth century. Adam Smith addressed the role of boards in the joint stock company and the difficulty in getting directors to monitor appropriately in 1776.²⁴ Nevertheless the post-World War II period

²⁴ ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS (1776), *available at* <http://www.econlib.org/LIBRARY/Smith/smWN.html> (para. V.1.103; republished online from edition by Edwin Cannan ed., Methuen and Co. 1904) ("Removal from an office which can be enjoyed only for the term of three years, and of which the lawful emoluments, even during that term, are so very small, seems to be the utmost punishment to

is an especially dynamic period in the history of boards because of the heightened competitive pressures that led to rapid changes in the board's role. The recent history is useful both because it makes us aware of different potential board functions, not all of which might have been conceived of by Adam Smith, and because of the changing weights of the different functions in our conception of the well-functioning board.

Many aspects of board function are jointly determined with the corporate purpose. For example, a corporation that evaluates managerial performance almost exclusively in terms of shareholder value will inevitably produce a board in composition and function quite different from a corporation in which managers are charged with trying to balance and in some way maximize total stakeholder value. As a positive matter, in competitive global capital and product markets, the shareholder value objective is likely to be of greater importance and therefore will drive the conception of the board.²⁵

The history shows us the stance of managers towards boards has changed considerably. In addition to compensation, managers are interested in autonomy, and, generally speaking, an activist independent board encroaches on managerial autonomy. Yet the history shows that as other forces become important, for example, the hostile takeover market or interventionist government regulation, managers embrace the idea of an independent board while in practice often resisting the mechanisms that would generate genuine independence.

Finally the history makes us aware that the idea of an independent board is a recent intervention into the organizational landscape. Its provenance is the corporate governance thinking of the 1970s and our experience with its entailments is still evolving. It is an organizational experiment that may prove to be a highly beneficial adaptation to a changing environment – or not.

This thumbnail sketch of the relevant history can be broken down into five periods, each focusing on a characteristic view of the corporation's most important objective and the board's corresponding function, and the prevalent managerial attitude. In the general trajectory, there is an increasingly tight link between the independent board and the priority of shareholder value.

which any committee-man is liable for any fault, except direct malversation, or embezzlement, either of the public money, or of that of the company; and the fear of that punishment can never be a motive of sufficient weight to force a continual and careful attention to a business to which he has no other interest to attend.”).

25. I mean to bracket for now the question of whether this corporate objective is efficient, and whether other goals might transcend efficiency. Certainly the thrust of current shareholder activism, much of which is propelled by public and union pension funds, is to advance the shareholder value objective. Some may find considerable irony in this.

E. The 2000s: new roles for independent directors and new standards of director independence

1. Introduction.

The collapse of Enron, WorldCom, and similar but less catastrophic disclosure failures vividly demonstrated weaknesses in the board governance system produced by the 1990s and pointed the way towards new roles for independent directors and standards of independence. The 1990s system depended on an independent board's contracting with managers using stock market-based measures of managerial success to determine both compensation and tenure. Appropriate operation of the contracts critically depended upon the quality of the firm's disclosure, since otherwise stock prices would not reflect managerial performance. Yet the managers whose compensation and tenure depended on these stock prices were principally responsible for producing the disclosure on which the contracts relied. Boards had simply failed to appreciate and protect against some of the moral hazard problems that stock-based compensation created, in particular, the special temptations to misreport financial results.²⁶ The principal objective of the Sarbanes-Oxley Act of 2002, then, was the protection of the integrity of financial disclosure, both through extensive new regulation of accountants and through new disclosure monitoring responsibilities imposed on directors.

2. Contractual vulnerabilities

As noted above, the favored form of performance-based compensation in the 1990s was a large load of plain vanilla stock options. The payoff from a stock option is asymmetric by design: unlimited upside potential, limited downside exposure. This is particularly the case where options are doled out so freely as to be almost free (i.e., no foregone cash compensation) and where underwater options may be repriced. The payoff from stock is itself asymmetric (and hence has been likened to an option), but a shareholder faces increasing loss as the stock price falls to \$0; the option-holding manager is "out of the money" at any point below the exercise price, usually well above \$0. Thus a too-rich stock option package can create a distinctive set of moral hazard problems.²⁷ First, and most obviously, stock options can be redistributive. Exercised stock options increase the number of shares outstanding and thus dilute the existing holders' claim on the firm's cash flows. Stock options grants are redistributive if the value of the options is greater than the executive services received; large or "mega" grants of non-expensed options seem likely candidates.

Second, more seriously, managers with large option grants may be strongly tempted to produce the results that the market expects through the manipulation of financial results, most typically through the overstatement of earnings. Several recent studies finds that the probability of accounting fraud, though small, nevertheless increases with the

26. The emerging evidence of questionable practices in the timing of stock option grants suggests that board members were insufficiently attentive to this temptation as well. See, e.g., Randall A. Heron & Erik Lie, *Does Backdating Explain the Stock Price Pattern Around Executive Stock Options Grants*, 83 J. FIN. ECON. 271 (2007). see Lucian Bebchuk et al., *Lucky Directors*, Harv. Law & Econ. Discussion Paper No. 573, 2006, available at <http://ssrn.com/abstract=952239> (finding favorable timing in option grants to outside directors that is inconsistent with sheer chance).

27. For further exploration of problems associated with the use of options, see Gordon, *What Enron Means*, *supra* note xError! Bookmark not defined..

amount of stock-based compensation, and increases as well with the fraction of total compensation that is stock-based.²⁸ The source of the temptation becomes apparent in comparing two forms of incentive compensation, cash bonuses and stock options. Bonus payments will typically increase linearly with earnings but the value of stock options can increase (decrease) exponentially because of the double effect that earnings changes have on stock prices. Earnings changes affect prices both through operation of the price/earnings ratio and through the impact on the market's perception of the company's growth rate and thus the p/e ratio itself.²⁹

Nevertheless, on the "chickens come home to roost" theory,³⁰ it might appear that achieving financial results through manipulation would be irrational, and thus not so serious a threat. The firm's true condition will eventually come to light, the stock price will fall, and the executives' options may well become worthless. (This is not to mention the potential legal sanctions for fraud.) But such reasoning does not appreciate the benefits and risks from the executive's perspective. Before the revelation, the executive may have become rich through prior option exercises (and a prompt sale of the underlying stock, or a "cashless exercise") at the inflated price; the firm might reprice the worthless options or grant some new ones; the necessary earnings restatement may be buried with some other extraordinary adjustment; or a positive shift in market conditions may overtake the earlier misrepresentation. Certainly under prevailing practices in the 1990s, even a significant restatement was unlikely to trigger an SEC enforcement action, much less a criminal prosecution, and any civil litigation would be resolved well short of a finding of fraud, meaning that either the D&O insurer or the company (but not executive) will fund any settlement. Thus as compensation came increasingly to consist of high-powered incentives like stock options and as the absolute level of potential stock option payout over a short period of time increased, management's temptations grew. This is the source of the most difficult moral hazard problem associated with the 1990s governance pattern.³¹

In short, managements had high-powered incentives with foreseeable moral hazard problems. The necessary institutional complement was high-powered monitoring by the board. This was missing at many firms.

28. These studies are canvassed in Jensen & Murphy, *supra* note x... See also David J. Denis et al., *Is there a Dark Side to Incentive Compensation?* (2005), <http://ssrn.com/abstract=695583>.

29. To take a simple example: Assume in year $t=1$ a company earns \$5 per share and its stock trades with a p/e ratio of 10, so the stock price is \$50 a share. In year $t=2$ the company earns an additional \$1 per share, that is, earnings increase by 20%. Assume there are 1 million shares outstanding and that the CEO has 50,000 options with a \$50 exercise price. A cash bonus will amount to some fraction of the total additional earnings, but obviously would never exceed \$1 million. By contrast, through operation of the p/e ratio alone, the additional \$1 of earnings produces a \$10 per share increase. But if it this 20% year-over-year improvement changes the market's perception of the company's growth rate and thus the p/e ratio, it will generate a much greater increase in the stock price. So, for example, if the p/e ratio increases from 10 to 15, the price will increase not from \$50 to \$60, but from \$50 to \$90. The effect on CEO wealth is amazing: an increase of \$2 million, double the total amount of additional earnings. Thus it is not surprising that earnings manipulations to generate and sustain a higher p/e ratio is more tempting as the level of options increases.

30. *Compare with In re Pure Resources, Inc., Shareholders Litigation*, 808 A.2d. 421, 446 (Del. Ch. 2002) (explaining the "goose and gander rule").

31. Another moral hazard problem arguably arose from the board's focus on stock price performance in its termination decision, see *supra* pp.167-69, which added to management's temptation to manipulate results.

3. Contracting failures

The problems with stock option packages arose not only from the asymmetric payoff structure but also from their very size. The temptation to manipulate earnings was presumably increasing with the size of the payoff. Certainly the risks of shareholder dilution were increasing with the size of the option package. Observers have debated whether boards pervasively failed in their obligation to establish arm's length bargaining with the senior managers.³² Regardless of the board's independence in other matters, it seems clear that independence was undercut in the setting of compensation. In some cases the CEO or other members of the management team participated in compensation committee activities. This participation included retaining the same consultants hired by senior managers for larger and more lucrative human resource assignments for the firm. Often nominally independent directors were not actually independent in this domain, either because of a pecuniary relationship with the firm that management could control or because of the "backscratch" problem that arose because of director interlocks. The conception of director "independence" had been insufficiently rigorous to manage the powerful managerial self-interest that was unleashed by the writing of increasingly rich executive compensation agreements.

4. Director independence reconsidered

The principle institutional failure that produced Enron and its ilk was the failure of the gatekeepers, especially the accountants, not the insufficiency of director independence.³³ Yet boards had not performed well either, including the failure to address management's undercutting of gatekeeper integrity. There certainly was a substantive case for enhancing the independence-in-fact of directors, particularly if the managerial agency problem was to be addressed through incentive-based compensation and termination contracts rather than through control markers. As post-Enron reform pressure mounted, managerial elites moved to ramp up board independence as an alternative to more intrusive regulation, in this way protecting managerial autonomy to the extent possible in the changed environment. The New York Stock exchange impaneled a corporate governance task force to restore public confidence and to show that private regulation could address the governance failures that Enron revealed without need for federal legislation. This was the origin of the tightened director independence requirements added to the NYSE's listing standards, including a compensation committees staffed solely by these more stringently qualified independents.³⁴ The Business Roundtable emphasized the importance of independent directors and importance of the board's role in "[f]ocusing on the integrity and clarity of the corporation's financial statements and financial reporting."³⁵ Just as it seemed that

32. Compare BEBCHUK & FRIED, *supra* note (managerial rent-seeking explanation for high compensation levels), with Jeffrey N. Gordon, *Executive Compensation: If There's a Problem, What's the Remedy? The Case for Compensation Discussion and Analysis*, 30 J. CORP. L. 675 (2005) (many other factors also important, perhaps more so in most cases).

33. See JOHN C. COFFEE, JR., *GATEKEEPERS: THE PROFESSIONS AND CORPORATE GOVERNANCE* (2006); John C. Coffee, Jr., *Gatekeeper Failure and Reform: The Challenge of Fashioning Relevant Reforms*, 84 B.U. L. REV. 301 (2004).

34. See *supra* notes 49-51, 106 and accompanying text.

35. Business Roundtable, *Principles of Corporate Governance*, 5 (May 2002), <http://www.brtable.org/pdf/704.pdf> (emphasis omitted).

managerial elites were going to succeed in defeating legislative action, the WorldCom scandal broke in spring 2002, which raised the saliency of corporate governance problems and created unstoppable momentum for the legislation that became Sarbanes Oxley. Ironically, then, some of the emphasis on director independence in the post-Enron environment is the byproduct of a failed effort to offer up stronger board monitoring to forestall legislative change. Most recently, managerial elites have invoked the independent board, especially its nominating committee, as part of its effort to beat back the SEC's proposal for limited shareholders access to the management proxy statement to make director nominations.

The post-Enron reforms lay the groundwork for a revised model of corporate governance. The model operates at many different levels. It ratchets up the liability for primary wrong-doers, particularly corporate officers. It imposes new duties, new liabilities, and a new regulatory structure on certain gatekeepers, accountants in particular but also lawyers and, in a fashion, securities analysts. The effect of the reforms on the board's role is to make the role of the independent director more important than ever. Both the federal securities law and the stock exchange listing requirements imposed more rigorous standards of director independence.³⁶ Boards, particularly the audit committee, are given a specific mandate to supervise the firm's relationship with the accountants and thus to oversee the corporation's internal financial controls and financial disclosure.³⁷ Boards are more likely to hear about their lawyers' concerns that the firm's managers are not in compliance with the federal securities laws or even state fiduciary duty.³⁸ Directors, then, will have a particularized monitoring role, what might be called "controls monitoring," in addition to "performance monitoring."

F. Summary

This brief partial history aims to give context to the secular trend observed in Part I: a dramatic shift in the composition of the board away from insiders and toward independents. The shift towards independent directors is reflected not just in the numbers or percentages but also in the likelihood of independence in fact. What the history also reveals is that the rise of the independent board is associated with an increasing orientation of the corporate purpose toward shareholder wealth maximization and with a growing role for the board in mediating between the firm and the stock market. The legal resolution of the hostile takeover battles of the 1980s was first, that the firm is not always up for sale (meaning the shareholders don't decide), but second, that the ultimate decisionmaker was not to be the highly conflicted managers but the somewhat conflicted board. The growing focus on director independence was stimulated by the desire to enhance the credibility of such decisionmaking to the relevant audiences, particularly increasingly active institutional investors. But the board's mediation between the firm and market was not limited to accepting or refusing a hostile takeover bid. Rather, in acceptance of the claim that the managerial goal was to maximize shareholder value, boards increasingly employed stock prices in compensation arrangements and in making

36. See *supra* notes 49-52, 106-108 and accompanying text.

37. *Id.*

38. See Sarbanes-Oxley Act, §§ 307, as implemented by 17 C.F.R. Part 205 (adopted by Implementation of Standards of Professional Conduct for Attorney, Securities Exchange Act Rel. No. 47276, 79 SEC Docket 11 (Jan. 29, 2003).

termination decisions. Managers were thus exposed to “soft-form” stock market pressure rather than the “hard form” pressure of hostile bids. What was insufficiently recognized in this transformation is the importance of a new role for the board: the monitoring of financial controls and disclosure. Stock market prices were not spontaneous creations; they could be manipulated and inflated by self-interested managerial action, and the new approach that incorporated stock prices into both compensation and termination created powerful incentives for such behavior. This would place new and greater demands on the monitoring capacity of boards and would lead in turn to more rigorous standards of director independence.

III. THE INCREASING INFORMATIVENESS OF STOCK PRICES, 1950-2005

A. Introduction

This part argues that the rise of independent directors is partly explained by the increasing informativeness of stock prices over the 1950-2005 period. As more information about the firm is impounded in the stock price, insiders lose a privileged claim of insight about the firm’s performance and prospects. More importantly, the nature of performance monitoring changes. As stock prices become more informative, the directors’ monitoring role increasingly consists of using stock price metrics to measure the firm’s performance over time and against relevant intra-industry comparisons. This is not to deny the existence of private information nor the value of the directors’ critical perspective on stock market measures, particularly over short time frames. Nevertheless, in light of the positional conflicts that undermine insiders’ capacity to monitor senior management, the increasing informativeness of stock prices changes the comparative advantage of independent directors. The independents’ information debilities decrease and their monitoring advantages become more apparent.

An informal model may help to clarify the point. Assume that directors’ monitoring capabilities are a function of two variables, information about the firm (which includes information about expected future results as well as current results) and independence from the senior management team. Start with a polar case, a private firm, in which there is no public disclosure and thus no stock market prices that impound disclosure. The tradeoff between firm-specific information and independence may favor a predominantly inside board, even for monitoring purposes. Independent directors (which excludes significant shareholders or their agents or other affiliated directors) have insufficient incentives to become informed and get no help from public investors’ assessment of value. Uninformed independence has limited value; hence we should expect to see more insiders on the board. Assume instead that the firm is public. As the market becomes increasingly well informed about the firm’s performance and prospects, the directors get increasing help in understanding the firm from competitive stock price formation (and softer forms of market feedback, such as analysts’ reports). The independents’ information deficit is ameliorated. All other things equal, from the monitoring perspective, board composition will shift in favor of the independents. In other words, holding other things constant, the percentage of insiders (independents) should be decreasing (increasing) in the degree of stock price informativeness.

There is a second explanatory element that followed from the increasing informativeness of stock prices over the period. Managers increasingly turned to stock market signals for strategic guidance, rather than relying solely on internally-generated information. This too undermined the case for insiders on the board. The 1950s firm embodied a strong belief in the power of bureaucratic rationality to accurately sense and determine the appropriate strategy, indeed, of bureaucratic rationality's power to shape the market environment in which the firm operated. The success of this managerial form was celebrated by Alfred Chandler's *Strategy and Structure* (1962), which emphasized the importance of management's information gathering, forecasting, planning, and resource allocation.³⁹ Indeed, as firms undertook more complex tasks of planning and organization, many companies apparently replaced outside directors with insiders, precisely because of their deep knowledge.⁴⁰ Moreover, information was power. As Chandler observed: since senior managers "provided the board and the stockholders and, of course, any government or regulatory agency with whatever detailed data about the company these groups might want, their actions were controlled only negatively by their legal superiors."⁴¹

But it was actually the 1960s conglomerate firm that reflected the high water mark of the managerial belief in internally generated information as the ultimate strategic tool. Managers took the multidivisional or "M-form" structure that had evolved in the early 20th century to manage the large firm that focused on a unitary, if complex, business⁴² and extended it to the management of diverse business units that had no necessary relation to one another. The conglomerate was premised on the belief that the headquarters team could outperform external capital markets in monitoring the managers of diverse business units and in making appropriate resource allocations among them.⁴³ The failure of several conglomerates in the 1970s, the evidence of the general inefficiency of the conglomerate form,⁴⁴ and the successful leveraged bust-up of many conglomerates in the 1980s led to an emphasis on "focus" in drawing the boundaries of the firm.⁴⁵ One important implication of this shift was heightened appreciation of stock market prices as a guide to capital and other resource allocation as against internally generated information in the complex firm. The insiders' firm-bound information did not necessarily give them superior insight into how best to monitor managers or allocate

39. ALFRED D. CHANDLER, JR., *STRATEGY AND STRUCTURE: CHAPTERS IN THE HISTORY OF THE INDUSTRIAL ENTERPRISE* 99, 149, 152, 282, 291-92, 396 (1962). Chandler sounds similar themes about the rise of "managerial capitalism" (the "visible hand"): although the market "remained the generator of demands for good and services . . . modern business enterprise took over the functions of coordinating flows of goods through existing processes of production and distribution, and of allocating funds and personnel for future production and distribution." ALFRED D. CHANDLER, JR., *THE VISIBLE HAND: THE MANAGERIAL REVOLUTION IN AMERICAN BUSINESS* 1 (1977).

40. See PETER F. DRUCKER, *THE NEW SOCIETY: THE ANATOMY OF INDUSTRIAL ORDER* 223 (1993).

41. CHANDLER, *STRATEGY AND STRUCTURE*, *supra* note 39, at 314.

42. The M-form structure replaced "the centralized, functionally departmentalized or unitary (U-form) structure" that proved a much less efficient way to manage large enterprise. Oliver E. Williamson, *The Modern Corporation: Origins, Evolution, Attributes*, 19 J. ECON. LITERATURE 1537, 1555 (1981). Identifying and describing this shift was Chandler's signal achievement in *STRATEGY AND STRUCTURE*, *supra* note 39.

43. Williamson, *supra* note 42, at 1557-60.

44. See GILSON & BLACK, *supra* note 46 (summarizing evidence).

45. See, e.g., Philip G. Berger & Eli Ofek, *Bustup Takeovers of Value-Destroying Diversified Firms*, 51 J. FIN. 1175 (1996); Sanjai Bhagat et al., *Hostile Takeovers in the 1980s: The Return to Corporate Specialization*, BROOKINGS PAPERS ON ECONOMIC ACTIVITY, MICROECONOMICS (SPECIAL ISSUE) 1 (1990);

capital. An independent director looking to increasingly informative stock prices might have insight unbiased by the internal perspective.⁴⁶

There are many reasons to believe that stock prices have become more informative over the 1950-2005 period. First, important empirical work by financial economists shows that individual stock price movements over the period became increasingly decoupled from overall market movements, meaning that firm-specific factors became increasingly influential. This greater firm-specific return variation is best explained, in the U.S., in terms of increasingly informative stock prices. Second, firms in fact have been disclosing increasingly more information, as measured by a simple survey of public filings over the period. Third, the SEC's disclosure regime has promoted more disclosure, and more useful disclosure, through: (i) mandatory disclosure of information that firms were unlikely to disclose voluntarily, (ii) permissive disclosure of information (like projections) that the SEC had previously prohibited, and (iii) prescriptive standardization that has made comparisons easier. Fourth, the pronouncements of the Financial Accounting Standards Board (and its predecessors) have led to the disclosure of more value relevant information and also aided uniformity. Fifth, a grab bag of other factors also have made stock prices more informative, including an increase in the number of analysts and other investment professionals, the rise of mutual funds and other institutional investors with sufficient scale to undertake securities research, and information technology and information dissemination mechanisms that lower the cost of securities research.

B. *Market-Level Empirical Evidence on Stock Price Informativeness: Synchronicity and R^2*

Important recent work by financial economists provides evidence that U.S. stock prices have become more informative over a long time frame, particularly since 1950. Using a 1926-1995 time series, Morck et al. (2000) show that the movement of U.S. stock prices has become less "synchronous" over time, meaning that a decreasing fraction of stocks move up or down together.⁴⁷ (See Figure 3 below). This pattern gains importance in light of cross-country evidence that shows that synchronicity is inversely related to capital market development. Emerging market economies exhibit a high degree of synchronous stock price movement; developed market economies exhibit a low degree. Moreover, although U.S. stock price volatility has remained roughly constant over the period, an increasing percentage of the returns on individual stocks is attributable to firm-specific factors, rather than market factors. This effect is captured by a variable called R^2 , which measures the extent to which the market model accounts for

46. Thus the increasing informativeness of stock prices helps address the "monitoring vs. managing" tradeoffs that some thought were inherent in the independent board. See, e.g., Jill E. Fisch, *Taking Boards Seriously*, 19 CARDOZO L. REV. 265 (1997).

47. See Randall Morck et al., *The Information Content of Stock Markets: Why Do Emerging Markets Have Synchronous Stock Price Movements?*, 58 J. FIN. ECON. 215 (2000). The article's principal thrust is a cross-country study of cross-sectional variation in synchronous stock price movements, which shows much greater synchronicity in emerging markets than in developed markets. The paper also explores U.S. time series data, noting the sharp changes over time. See also Merritt B. Fox et al., *Law, Share Price Accuracy, and Economic Performance: The New Evidence*, 102 MICH. L. REV. 331 (2003);

the variation in stock returns. As with synchronicity, R^2 has declined over the 1926-1995 period, particularly since 1950.⁴⁸ (See Fig. 4 below).

Morck et al. attribute the declines in synchronicity and R^2 to an increasing payoff to arbitrageurs from a focus on firm-specific factors rather than market-wide factors, including speculation and fads. Looked at from the cross-country perspective, the value of a firm-specific focus is principally a function of the levels of property right protection and investor protection. For the U.S., where these institutions have been relatively stable, particularly in the post-1950 period, the increasing information content of prices seems likely to account for the decline in synchronicity and R^2 . Durnev et al. (2003) support this argument with evidence that firms with lower R^2 exhibit a higher correlation between current stock returns and future earnings.⁴⁹ This suggests that R^2 reflects the extent to which information about future returns is impounded into the stock price. Thus, the post-1950 decline in average R^2 for U.S. stocks can be taken as a measure of the increasing informativeness of stock prices during the period.⁵⁰

48. For confirmation of the decline of R^2 in the U.S. in the post-1960 period, see Cambell et al., *Have Individual Stocks Become More Volatile? An Empirical Exploration of Idiosyncratic Risk*, 56 J. FIN. 1, 23-25 (2001).

49. Art Durnev et al., *Does Greater Firm-Specific Return Variation Mean More or Less Informed Stock Pricing?*, 41. J. ACCT. RES. 797 (2003) (covering 1983-1995 period). See also Art Durnev et al., *Value-Enhancing Capital Budgeting and Firm-specific Stock Return Variation*, 59 J. FIN. 65 (2004) (marginal changes in Tobin's-q performance measure are positively correlated with increased informativeness as measured by R^2); Qi Chen et al., *Price Informativeness and Investment Sensitivity to Stock Price*, REV. FIN. STUDIES (forthcoming 2007), available at <http://rfs.oxfordjournals.org/cgi/content/abstract/hhl024v1> (showing that the R^2 measure of private information impounded in stock prices predicts sensitivity of corporate investment to stock price); but see Kewei Hou et al., *R^2 and Price Inefficiency* (Fisher Coll. of Bus. Working Paper. No. 2006-03-007 2006), available at <http://ssrn.com/abstract=954559> (finding negative relationship between R^2 and overreaction-driven price momentum, which suggests connection between R^2 and inefficiency and citing to other working papers skeptical of positive relationship to efficiency).

50. Other empirical work also supports the disclosure/informativeness link by showing that stock returns of firms with higher AIMR-FAF (Association for Investment Management Research-Financial Analysts Federation) corporate disclosure ratings are better predictors of future earnings changes. See, e.g., David S. Gelb & Paul Zarowin, *Corporate Disclosure Policy and the Informativeness of Stock Prices*, 7 REV. ACCT. STUD. 33 (2002).

Figure 3

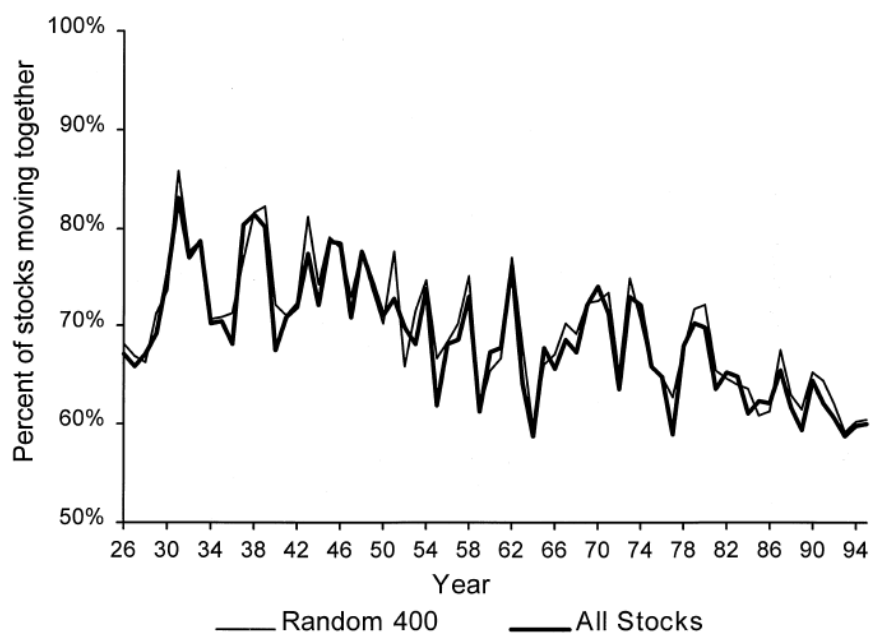


Fig. 2. The declining synchronicity of U.S. stock prices. The fraction of stocks moving together each month from 1926 to 1995 using all available U.S. stocks and using a portfolio of 400 stocks randomly chosen each month. Returns include dividend income and are from the Center for Research in Securities Prices.

Source: Morck et al, 58 J. Fin. Econ. at 221, fig 2.

Figure 4

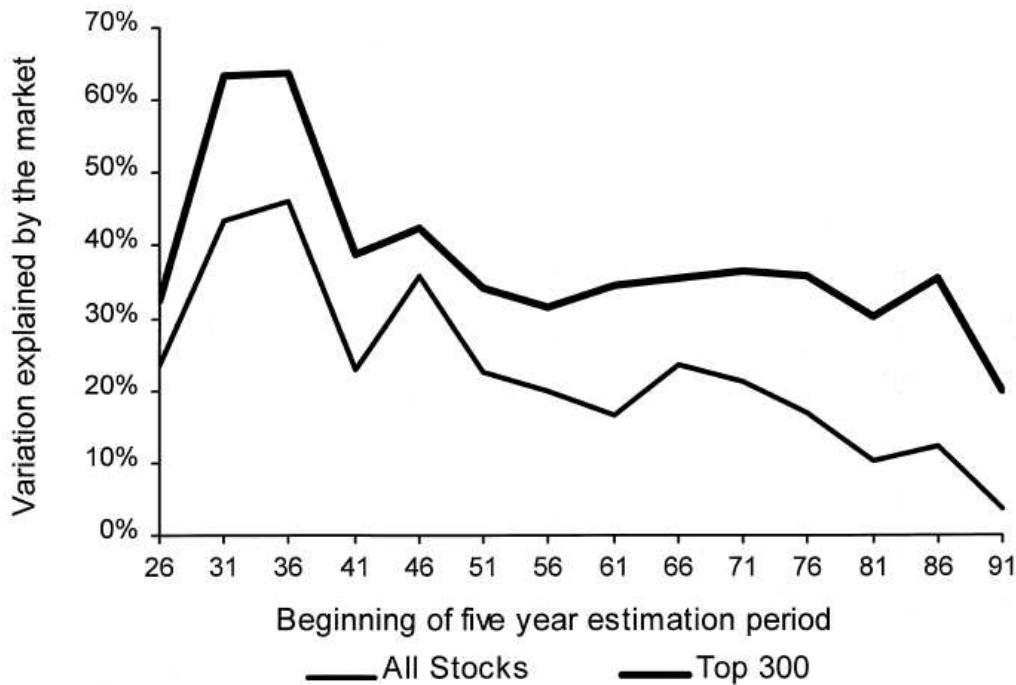


Fig. 3. The declining fraction of U.S. stock return variation explained by the market. The fraction of U.S. stock return variation explained by the value-weighted market index is estimated by running a simple market model regression of using monthly returns including dividend income for sequential disjoint four year periods from 1926 to 1995, using all available U.S. stocks and a portfolio of 400 stocks randomly chosen each period. Returns and indexes include dividend income and are from the Center for Research in Securities Prices.

Source: Morck et al, 58 J. Fin. Econ. at 222, fig 3.

C. Firm-Level Empirical Evidence of More Disclosure by Firms

The stock market evidence that increasingly more firm-specific information has been impounded into stock prices is supported by additional evidence that examines the disclosure practices of firms. We conducted a simple survey to assess the amount of public firm disclosure over the 1950-2004 period.⁵¹ The general strategy was to look at the key annual disclosure document required by the SEC, the Form 10-K, for a sample of large public firms over the period. The Form 10-K includes a narrative description of the firm, its businesses, and its competitive situation, as well as detailed financial

51. Benjamin Whetsell bore the laboring oar in this project.

information. A major driver, if not the principal driver, of the growth in Form 10-K disclosure has been changing SEC requirements and new accounting pronouncements.⁵² Important information that firms “voluntarily” disclosed would ordinarily be subject to subsequent inclusion in the Form 10-K, so it seemed that the Form 10-K would be a good general disclosure indicator.

We measured the Form 10-K in different categories: the number of total pages, the number of pages of financial information, the number of notes to the financial statements, and the number of pages of notes. Our sample was drawn from the 71 firms that have appeared in the Fortune 500 since its inception in 1955, and the page counts were based on Form 10-Ks on digitized microcards from Thompson ONE Banker, microfiche, and film microcards. Where only annual reports were available (typically the case before 1969, when regulatory change more clearly distinguished the Form 10-K from the annual report), we subtracted pages that, on the basis of section headings and content, were not Form 10-K material (picture spreads, etc.). Occasionally the Form 10-K included detailed information about employee retirement plans, specifically, informational pamphlets for employees, that would be of dubious value to an investor. We omitted these from the page count. More generally, Form 10-Ks identify key contracts (such as loan agreements) that are occasionally attached but more often are “made available” elsewhere. Such exhibits were not included in the tally. Nor did we count the pages of material about the issuer’s officers and directors, board structure, and executive compensation that is typically incorporated by reference into a Form 10-K from the issuer’s Form 14A, the proxy statement. Mandatory proxy statement disclosure has certainly increased during the period, so non-inclusion of this material will understate the level of additional disclosure.

As Table 2 and Figure 5 illustrate, the number of pages in all categories substantially increased over the period. The average number of pages in a Form 10-K was approximately 16 in 1950, 18 in 1960, 24 in 1969, but grew rapidly in the subsequent decades, hitting 125 in 2000, and, in the post-Sarbanes-Oxley world, 165 in 2004. The financials (including notes) grew from 4 pages in 1950 and 1960 to 10 pages in 1970, 23 in 2000, and 38 in 2004. The number of notes to the financial statements grew in parallel, from 5 notes in 1950 to 19 notes in 2000 and 2004. Most of the increase in the length of the financials was from the addition of notes.

This reflects an enormous increase in firm-specific disclosure over the period. The “take-off” point for the rapid growth in these disclosure categories was in the 1970s. As described above, this is the decade of corporate governance upheaval, and, in terms of board composition, the point at which the number of insiders began to decline and independents to increase.

52. See *infra* text accompanying notes 314-376.

Table 2

Date	Total 10-K Pages	Financials Pages	Notes Number	Notes Pages
1951	15.71	4.41	5.20	1.20
1955	17.37	4.26	6.22	1.26
1960	18.37	4.47	6.68	1.34
1965	19.42	4.47	6.89	1.26
1970	40.56	10.17	12.67	6.22
1975	61.53	13.16	14.47	9.26
1980	74.70	13.95	17.20	9.85
1985	75.15	12.00	16.95	8.40
1990	88.60	13.55	18.60	9.73
1995	105.75	19.15	19.15	14.75
2000	126.10	23.20	19.15	18.70
2004	166.25	38.15	19.85	33.30

Table 2. The increase in disclosure by US firms. Based Form 10-Ks from 1951-2004 for a sample (n=20) of Fortune 500 firms drawn from the 77 firms that have continuously made public disclosure, 1955-2004. Once the firm is drawn by a random process, its Form 10-Ks are tracked throughout the period. Not every firm has data for every year. “Financials pages” includes notes pages. Page counts are equally weighted. There is no adjustment for firm size, other than its inclusion in the Fortune 500.

Figure 5

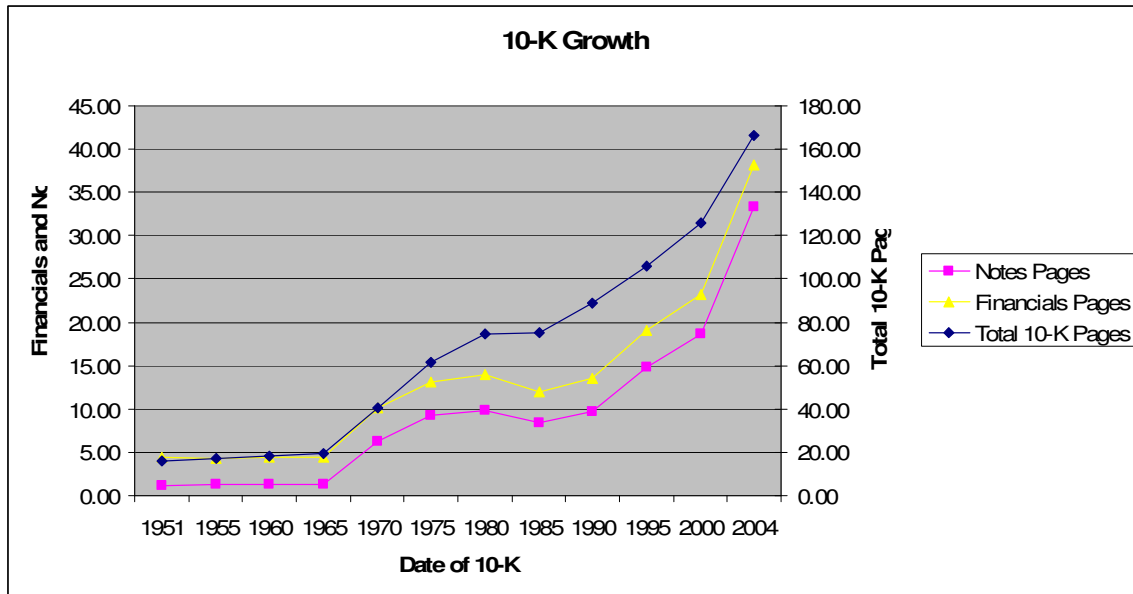


Figure 5. The increase in disclosure by US firms, annual data, broken down by total Form 10-K pages (right axis), total pages of financial data (including notes) (left axis) and number of notes (left axis). Page counts are equally weighted to produce annual averages. n=20.

D. Additional Disclosure Because of SEC Regulation

Changes in SEC disclosure regulation have led to considerably more disclosure, and more useful disclosure, over the 1950-2005 period and have thus enhanced the informativeness of stock prices. SEC regulatory action has affected disclosure in three ways. First, some actions have been *disclosure forcing*, leading to more information disclosure than would have voluntarily occurred. Second, some actions have been *disclosure permitting*, eliminating barriers to disclosures that firms would make voluntarily. Third, some actions have been *disclosure standardizing*, making firm-specific disclosure more readily comparable across firms.

The claim that SEC action enhanced the level of disclosure over the period depends only in part on the case for mandatory disclosure, since some of the most important interventions over the period were first, the elimination of barriers to forward-looking disclosure that firms wanted to make and investors wanted to have and, second, the establishment of disclosure conventions that made disclosure more useful. Without engaging the mandatory disclosure debate in full force,⁵³ it seems to me straightforward that an effective regulator could mandate disclosure of information that firms would not voluntarily disclose and that would otherwise not be available to the market. First, because disclosure affects shareholder monitoring, managers would exercise discretion to produce suboptimal disclosure from the shareholder point of view. Suboptimal disclosure is one element of managerial agency costs, and good mandatory disclosure policy can help overcome it. Second, because disclosure often reveals competitively sensitive information, optimal disclosure from a firm-specific perspective is suboptimal from a social perspective. Shareholders of any particular firm face a classic prisoner's dilemma: full disclosure by *other* firms enables better managerial monitoring because of comparative performance benchmarks, yet each firm's locally rational course is not to disclose. Mandatory disclosure overcomes this collective action problem and produces particular gains when shareholders are diversified. Third, the alternative way of delivering information to the market, insider trading, is a noisy, awkward vehicle for disclosure, and in any event has probably declined in importance since the SEC began its enforcement efforts in the 1960s.⁵⁴

1. Disclosure forcing

Section 13(a) of the 1934 Securities Exchange Act requires public companies listed on an exchange to file annual and quarterly reports as prescribed by the SEC. The practice of sending annual reports to security holders apparently derived from early state

53. This is ably canvassed in Fox et al., *supra* note 47, at 335-44. See also Allen Ferrell, *The Case for Mandatory Disclosure in Securities Regulation Around the World* (Harvard John M. Olin Discussion Paper Series, Paper No. 492, 2004), available at <http://ssrn.com/abstract=631221>.

54. See, e.g., *In re Cady, Roberts & Co.*, 40 S.E.C. 907 (1961); *SEC v. Texas Gulf Sulphur Co.*, 401 F.2d 833 (1968) (en banc), *cert. denied* 394 U.S. 976 (1969).

corporate and tax law requirements for the annual filing of financial statements and for the issuer's distribution of such reports, sometimes only upon request, to all security holders or a certain proportion of security holders.⁵⁵ The New York Stock Exchange independently required the distribution of annual and quarterly reports for listed companies in 1933.⁵⁶ In 1942, the SEC required that an annual report "containing such fi[n]ancial statements for the last fiscal year as will, in the opinion of the management, adequately reflect the position and operations of the issuer" be sent to security holders in connection with a management proxy solicitation for the annual election of directors.⁵⁷ Professor Loss's 1961 edition of *Securities Regulation* suggests, through an absence of discussion, that the SEC during the 1950s did not attempt to deepen disclosure.⁵⁸ To the contrary, the SEC backed down in 1953 on a proposal to require quarterly reports, and, in its subsequent adoption of a semiannual reporting requirement, permitted, in effect, informal financial statements.⁵⁹ The SEC appeared to be deferring to managers, who, among other reasons, objected to possible competitive disadvantage from disclosure, despite the protestations of securities analysts, "who reported through their national organization that their efforts to obtain voluntary agreement from companies to provide quarterly sales reports had been discouraging."⁶⁰ Managerial deference seemed to be a theme of the Eisenhower-era SEC, reflected in a narrowing of shareholder access to the management proxy, as well as budgetary cutbacks for the agency.⁶¹

i. Disclosure integration.

In the ensuing decades, however, beginning around 1970, there were many new disclosure requirements.⁶² It is sufficient for illustrative purposes here to sketch some of the most important, including the development of segment reporting beginning in 1969 and the development of "management discussion and analysis" (MD&A) beginning in 1972. But a pervasive source of disclosure deepening over the period was the effort to "integrate" the disclosure requirements of the 1933 and 1934 securities acts. As famously argued by Milton H. Cohen in 1966, the happenstance enactment sequence of the 1933 Act (addressing public offerings) followed by the 1934 Act (addressing secondary market activity) distorted the disclosure system.⁶³ In light of the small number of public offerings

55. See 2 LOUIS LOSS, *SECURITIES REGULATION* 825 (2d ed. 1961). But cf. David F. Hawkins, *The Development of Modern Financial Reporting Practices Among American Manufacturing Corporations*, 37 BUS. HIST. REV. 135, 142-43 (1963) (showing only some states required distribution).

56. 2 LOSS, *supra* note 55, at 804-08.

57. Exchange Act Release No. 3347, 1942 WL 34864 (Dec. 18, 1942).

58. See 2 LOSS, *supra* note 55, at 809-57.

59. *Id.* at 815-16.

60. *Id.* at 815. See also Hawkins, *supra* note 55, at 140-42, 160-161 (persistence of competitive concerns about disclosure). The major effort of the reformers was aimed at broadening the coverage of Securities Exchange Act disclosure to include public companies that were not listed on an exchange. See, e.g., JOEL SELIGMAN, *THE TRANSFORMATION OF WALL STREET* 310-14 (1982); Philip A. Loomis, Jr., *The Securities Exchange Act of 1934 and the Investment Advisors Act of 1940*, 28 GEO. WASH. L. REV. 214, 220, 226-228 (1959);. These efforts culminated in the Securities Acts Amendments of 1964, Pub. Law No. 88-467, 78 Stat. 565.

61. See SELIGMAN, *supra* note 60, at 265-73.

62. See generally 2 LOUIS LOSS & JOEL SELIGMAN, *SECURITIES REGULATION* 599-751 (3d ed. rev. 1999).

63. Milton H. Cohen, "Truth in Securities" Revisited, 79 HARV. L. REV. 1340, 1341-42 (1966). For a dissenting

and the massively greater volume of share turnover in secondary market trading, “integration” of the two schemes should proceed by building on the continuous disclosure pattern of the 1934 Act, he argued. Thus, a seasoned issuer should market securities through a 1933 Act registration process that relied substantially on information already disclosed to the market through the 1934 Act filings. “Yet, as a broad generalization, the disclosure process under the 1934 Act (apart from proxy solicitations) appears never to have been taken quite as seriously as under the 1933 Act, very likely because of differences in the attendant liabilities and sanctions and in Commission procedures.”⁶⁴

The SEC came to embrace the project of disclosure integration wholeheartedly.⁶⁵ It saw that robust continuous disclosure was an essential component, and thus at every turn it sought to ratchet up the 1934 Act periodic filings to the same depth and currency as would be expected of a 1933 Act registration statement. Notably, in 1977 the SEC adopted Regulation S-K, which prescribes the substance and form of non-financial disclosure for *both* 1933 Act and 1934 Act filings.⁶⁶ Similarly, through Regulation S-X and various accounting pronouncements, the SEC has developed a common standard for the substance and form of financial disclosure for filings under both acts whose consequence is much deeper disclosure for 1934 Act filings than previously.⁶⁷

ii. Segment reporting

In 1969, the SEC began to require firms to disclose “industry segment” data, meaning disclosure that broke out revenues and income for separate lines of business.⁶⁸ The impetus for this change was the conglomerate merger movement of the 1960s, in which firms expanded through unrelated diversification. Under the prevailing consolidation rules, the operating and financial results of substantial enterprises could disappear into undifferentiated totals. This created problems for antitrust enforcement as well as shareholder monitoring. Although some firms voluntarily disclosed line-of-business results, the overwhelming majority did not.⁶⁹ The SEC’s initial approach was to require

view, which argues that Congress would not have contemplated 1933 Act disclosure requirements incorporated into 1934 Act filings, see Paul G. Mahoney, *Mandatory Disclosure as a Solution to Agency Problems*, 62 U. CHI. L. REV. 1047, 1081-88 (1995) (arguing that 1934 Act disclosure was aimed at controlling self-dealing and other duty of loyalty problems, not enhancing stock price accuracy).

64. Cohen, *supra* note 63, at 1361.

65. The key moments were the so-called “Wheat Report” in 1969, SEC. AND EXCHANGE COMM’N, DISCLOSURE TO INVESTORS: A REAPPRAISAL OF FEDERAL ADMINISTRATIVE POLICIES UNDER THE ’33 AND ’34 ACTS (CCH) (Oct. 1969) (named after the director of the small group which prepared the report, Commissioner Francis M. Wheat), and the “Sommer Report” in 1977, H. COMM. ON INTERSTATE & FOREIGN COMMERCE, 95TH CONG., 1ST SESS., REPORT OF THE ADVISORY COMM. ON CORP. DISCLOSURE TO THE SEC. AND EXCH. COMM’N (Comm. Print 1977) (named after the committee’s chairman, former Commissioner A.A. Sommer, Jr.). See 2 LOSS & SELIGMAN, *supra* note 62, at 599-624.

66. Industry Segment Reporting, Securities Act Release No. 5893, Exchange Act Release No. 14,306, Investment Company Act Release No. 10,070, 42 Fed. Reg. 65,554 (Dec. 30, 1977). See 2 LOSS & SELIGMAN, *supra* note 62, at 627-724.

67. See *id.*, at 724-32.

68. This is account is based principally on SELIGMAN, *supra* note 60, at 433-38, and 2 LOSS & SELIGMAN, *supra* note 62, at 654-64.

69. See Daniel W. Collins, *SEC Product-Line Reporting and Market Efficiency*, 2 J. FIN. ECON. 125, 126 & nn.2-3 (1975). Of 600 firms surveyed, 21 had some segment reporting in 1967, 93 in 1968, and 194 in 1969 (the last year in

segment disclosure for a “product-line” that accounted for at least ten percent of the firm’s total revenues or pre-tax income, but giving management considerable discretion to define product lines and address issues like common costs and intra-company transfers. Although this initial formulation of segment reporting was sharply criticized for the discretion given managers (by the FTC, for example), contemporary empirical studies found that the additional disclosure still enabled investors to better anticipate future earnings and improved the accuracy of analysts’ earnings forecasts.⁷⁰

By 1977, the SEC’s Advisory Committee on Corporate Disclosure weighed in on the question, reporting, among other things, “the almost universal dissatisfaction analysts express with the level of segmentation currently provided by the registrants in SEC disclosure documents.”⁷¹ Acting quickly, the SEC simply embraced the recently (1976) promulgated accounting standard that imposed a more exacting test based on “whether products and services are related (and, therefore, should be grouped into a single industry segment) or unrelated (and, therefore, should be separated into two or more industry segments)”⁷² Although the standard admitted of certain management discretion, it added to investors’ capacity to see the different elements of the business.

Twenty years later, in 1997 the Financial Accounting Standards Board revisited the question with a new accounting standard that framed segment disclosure in terms of the enterprise’s internal organization. Among other features, a “segment” is a component of the enterprise “[w]hose operating results are regularly reviewed by the enterprise’s chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance,” in effect, a profit center approach.⁷³ The goal was to move away from the subjectivity of the industry approach, which had been gamed by some large firms that reported all their activities as occurring in one large industry. In contrast, the internal organization approach was designed to permit financial statement users “to see an enterprise ‘through the eyes of management[.]’ [which] enhances a user’s ability to predict actions or reactions of management that can significantly affect the enterprise’s prospects for future cash flows.”⁷⁴ The structure of Regulation S-K, which requires reporting in terms of “generally accepted accounting principles,” automatically

the shadow of impending regulatory change). The survey did not test the voluntary disclosure against the ultimate regulatory standard.

70. See *id.*; Daniel W. Collins, *SEC Line-of-Business Reporting and Earnings Forecasts*, 4 J. BUS. RES. 117 (1976). Compare Bertrand Horwitz & Richard Kolodny, *Line of Business Reporting: A Rejoinder*, 9 BELL J. ECON. 659 (1978) (viewing the effect negatively) with Richard R. Simonds & Daniel W. Collins, *Line of Business Reporting and Security Prices: An Analysis of an SEC Disclosure Rule: Comment*, 9 BELL J. ECON. 646 (1978) (rebutting Horwitz and Kolodny’s argument). Among other things, Collins’ 1975 study showed that differences in stock price movements between firms that did and did not voluntarily disclose segment data disappeared after 1970.

71. 2 LOSS & SELIGMAN, *supra* note 62, at 659 (quoting Sommer Report, *supra* note 65).

72. See Financial Accounting Standards Board, Statement of Financial Accounting Standards No. 14, Financial Reporting for Segments of a Business Enterprise ¶ 100 (1976). The standard used a ten percent threshold for revenues, profits (losses), and assets.

73. Financial Accounting Standards Board, Statement of Financial Accounting Standards No. 131, Disclosure About Segments of an Enterprise and Related Information ¶ 10(b) (1997).

74. *Id.* ¶ 60.

picked up this further elaboration of the segment reporting requirement.⁷⁵ The reformulated segment accounting standard, as incorporated into mandatory disclosure, provided new information to the market and thus made stock prices more informative.⁷⁶

What bears underscoring about segment reporting, then, is that it makes available to the market information about the separate businesses within the firm that the firm itself has collected for internal management purposes. Seeing the information from management's perspective, investors can better measure the firm's past performance and can better predict the future. This makes stock prices more informative. Moreover, the various regulatory changes in segment reporting over the period made "external" segments (i.e., what is disclosed) more closely reflect the firm's "internal" segments. This increase in "congruency" made the resulting disclosure increasingly reliable throughout the period and thus enhanced informativeness.⁷⁷

iii. Management's discussion and analysis

In 1974 the SEC began to require a so-called "Management's Discussion and Analysis" to be added to disclosure documents to provide a narrative account of the financial results and, in particular, to provide a managerial perspective on material changes. Initially these changes were to be measured in quantitative terms.⁷⁸ In 1980 the SEC considerably broadened the MD&A requirement in response to criticisms of the quantitative test. The new full title is quite descriptive: "Management's Discussion and Analysis of Financial Condition and Results of Operations."⁷⁹ As the SEC later explained, "MD&A is intended to give the investor an opportunity to look at the company through the eyes of management by providing both a short and long-term analysis of the business of the company."⁸⁰

75. Reg. S-K, 17 C.F.R. § 229.101(b) (Financial Information About Segments) (2006). It is also noteworthy that Item 101 also requires financial information about geographic areas, another way to disaggregate overall results into national segments. *Id.* § 229.101(d).

76. See Bruce K. Behn et al., *The Predictive Ability of Geographic Segment Disclosures by U.S. Companies: SFAS No. 131 vs. SFAS No. 14*, 1 J. INT'L ACCT. RES. 31 (2002) (using a sample of 172 of the largest 1000 firms and finding that new standard led to more informative geographic sales data that increased reliability of forecasting models); Don Herrmann & Wayne B. Thomas, *An Analysis of Segment Disclosures Under SFAS No. 131 and SFAS No. 14*, 14 ACCT. HORIZONS 287, 287 (2000) (finding that in a sample of 100 of the 250 largest U.S. firms and finding that under new accounting standard, more firms reported segments, and reported segments in more detail; authors concluded that the change in reporting requirements had a "relatively significant impact on the disclosure of segment information"); Donna L. Street et al., *Segment Disclosures Under SFAS No. 131: Has Business Segment Reporting Improved?*, 14 ACCT. HORIZONS 259 (2000) (finding that in a sample of 160 of the 1000 largest firms, fewer firms claimed to operate in one line-of-business, more segments reported, and more detail in segment reports);.

77. Laureen A. Maines et al., *Implications of Proposed Segment Reporting Standards for Financial Analysts' Investment Judgments*, 35 J. ACCT. RES. (SUPPLEMENT) 1 (1997).

78. The quantitative threshold was non-trivial: a ten percent change in revenues or expenses from the prior period coupled with a two percent change in net income. See Securities Act Release No. 5520, Exchange Act Release No. 10,961, 39 Fed. Reg. 31,894 (Sept. 3, 1974). This discussion follows 2 LOSS & SELIGMAN, *supra* note 62, at 688-98, and Fox et al., *supra* note 47, at 369-70.

79. See Reg. S-K, 17 C.F.R. § 229.303.

80. Concept Release on Management's Discussion and Analysis of Financial Condition and Operations, Securities Act Release No 6711, Exchange Act Release No. 24,356, 38 SEC Docket 145 (Apr. 17, 1987).

A major goal of the 1980 reformulation of MD&A was to advise investors how things might change, not just a retrospective account of why they did. Management was called upon to “identify known trends or uncertainties” that could have material positive or negative results for any of earnings, liquidity or capital resources. In particular, MD&A was to “focus specifically on material events and uncertainties known to management that would cause reported financial information not to be necessarily indicative of future operating results or of future financial condition.”⁸¹ Although historically the SEC had been quite skeptical of forward-looking information,⁸² MD&A disclosure required firms to project “known trends or uncertainties” onto the company’s future prospects.⁸³

Although the MD&A formulation remained substantially unchanged in the 1980-2000 period, the SEC prodded firms at various times to provide richer accounts of prospective developments that could affect future performance.⁸⁴ The Enron shock revealed the way that off-balance sheet and other contingent liabilities could affect future prospects (to put it mildly), and, in 2003 the SEC added substantial new requirements in this area to MD&A.⁸⁵

The SEC’s efforts to promote deeper discussion of the firm’s financial statements are reflected in the growth of MD&A disclosure over the period. As Table 3 indicates, the average length of MD&A disclosure in Form 10-Ks among the sampled firms grew significantly, from two pages (1974, the original requirement) to four pages (1980, expanded version) to six pages (1990) to 11 pages (2000). The effect of the new post-Enron disclosure requirements and the generally heightened demand for a heads-up on risk factors was dramatic: average MD&A more than doubled to twenty-four pages (2004).

Table 3. Increases in Management Discussion and Analysis 1974-2004

Date	1974	1975	1980	1985	1990	1995	2000	2004
MD&A Pages	1.88	2.61	3.5	4.45	5.85	8.8	10.6	24.05

81. Reg. S-K, 17 C.F.R. § 229.303(a), Instruction 3.

82. See *infra* Part IV.D.2.

83. Reg. S-K, 17 C.F.R. §229.303(a)(3)(ii).

84. See, e.g., Concept Release on Management’s Discussion and Analysis of Financial Condition and Operations, Securities Act Release No. 6711, Exchange Act Release No. 24,356, 38 SEC Docket 145 (Apr. 17, 1987); Management’s Discussion and Analysis of Financial Condition and Results of Certain Operations; Certain Investment Company Disclosures, Securities Act Release No 6835, Exchange Act Release No. 26,831, Investment Company Act Release No. 16,961, 43 SEC Docket 1330 (May 18, 1989).

85. See Disclosure in Management’s Discussion and Analysis About Off-Balance Sheet Arrangements and Aggregate Contractual Obligations, Securities Act Release No. 8182, Exchange Act Release No. 47,264, 79 SEC Docket 1251 (Jan.28, 2003) (adding Regulation S-K Item 303(a)(4) (“Off-balance sheet arrangements”) and Item 303(a)(5)(“Tabular disclosure of contractual obligations,” which focuses on long-term financing contracts). These new MD&A requirements respond to the mandate in Section 401(a) of the Sarbanes-Oxley Act for enhanced disclosure in this area. *Id.*

One important question is whether mandatory MD&A did in fact make stock prices more informative. Conceivably (if improbably) the information had been otherwise communicated to the market through indirect means. Fox et al. test the proposition with an application of the R^2 methodology referred to above. In a before-after test of the effects of MD&A, they find that the new regime leads to earlier disclosure of information with earnings implications, meaning that the R^2 for a group of firms expected to be slow disclosers is *lower* after the new regulation.⁸⁶ This implies that post-MD&A, stock price changes derive less from market-wide movement and more from firm-specific factors. Such evidence supports the view that disclosure-forcing regulatory action can and did make stock prices more informative.⁸⁷

2. Disclosure permitting

One of the most significant SEC actions with respect to stock price informativeness over the period was to permit the disclosure of “soft” or “forward-looking” information that many firms wanted to disclose (often because of investor and analyst pressure) but were constrained from doing so.⁸⁸ From the 1930s through 1973, the SEC prohibited the disclosure of earnings projections or other forward-looking information, at one point, declaring that projections were per se misleading.⁸⁹ Multiple factors played a role in the SEC’s position, including: an investor protection mindset framed in terms of the least sophisticated investor; an intellectual conservatism that mimicked the accountant’s traditional reliance on historical information, in which the verifiability of figures trumped the possible utility of projections; and a cross-cutting belief that investors, given the “facts,” were as competent as managers to make projections.⁹⁰ An influential 1970 article by Professor Homer Kripke, a one-time SEC staffer, rebutted these various concerns: Managements, which were already generating such projections in internal decisionmaking, had immense advantages over investors in such forecasting. The efficient market would protect unsophisticated investors against non-credible projections

86. See Fox et al., *supra* note 47, at 370-78 (using the period before implementation of the 1980 changes as the baseline).

87. Another important recent empirical test of mandatory disclosure’s role in stock price informativeness is provided by Allen Ferrell, *Mandated Disclosure and Stock Returns: Evidence from the Over-the-Counter Market* (Harvard John M. Olin Discussion Paper Series, Paper No. 453, 2003), available at <http://ssrn.com/abstract=500123>. See also Michael Greenstone et al, *Mandated Disclosure, Stock Returns, and the 1964 Securities Acts Amendments*, 121 Q. J. Econ. 399 (2006).

88. In general, this account is based on 2 LOSS & SELIGMAN, *supra* note 62, at 629-48; JOHN C. COFFEE, JR. & JOEL SELIGMAN, *SECURITIES REGULATION: CASES AND MATERIALS* 231-33 (9th ed. 2003); Mahoney, *supra* note 63, at 1105-07. See also Garry F. Goldring, Note, *Mandatory Disclosure of Corporate Projections and the Goals of Securities Regulation*, 81 COLUM. L. REV. 1525 (1981); Kimberly Till, Note, *The SEC Safe Harbor for Forecasts—A Step in the Right Direction?*, 1980 DUKE L.J. 607 (1980).

89. See Securities Act Release No. 5699, Exchange Act Release No. 12,371, 9 SEC Docket 472 (Apr. 23, 1976) (withdrawing earlier statement relating to projections of future economic performance).

90. For a sense of the zeitgeist of the SEC staff, see Harry Heller, *Disclosure Requirements Under Federal Securities Regulation*, 16 BUS. LAW. 300, 307 (1961).

because of the role of analysts and sophisticated investors in price formation. In any event, knowingly false projections were subject to SEC anti-fraud rules.⁹¹

In 1973, the SEC announced its intention to permit but not require disclosure of projections that met various criteria for reliability and general dissemination.⁹² Therein lay the rub, because firms and their advisers were quite concerned about liability for projections that subsequently turned out otherwise. For almost five years and several iterations of proposals, the SEC struggled to produce a satisfactory “safe harbor rule,” eventually succeeding in 1979.⁹³ Rule 175 provided that a “forward looking statement” is not a “fraudulent statement . . . unless it is shown that such statement was made or reaffirmed without a reasonable basis or was disclosed other than in good faith.” “Forward looking statement” was defined broadly to include projections of revenues and various financial items as well as earnings, and statements of management’s “plans and objective for future operations.”⁹⁴

Notwithstanding the safe harbor protections and generally favorable judicial interpretations,⁹⁵ firms and their advisors became leery in light of attorney-driven shareholder plaintiff litigation in the 1990s and succeeded in including in the Private Securities Litigation Reform Act of 1995 (“PLSRA”) statutory protection for forward looking information.⁹⁶ New section 27A of the 1933 Securities Act and new section 21E of the 1934 Act provide a safe harbor for a forward-looking statement that is identified as such and “is accompanied by meaningful cautionary statements identifying important factors that could cause actual results to differ materially from those in the forward-looking statement.”⁹⁷

There is some uncertainty about firms’ willingness to make forward-looking statements outside the mandatory provisions of MD&A.⁹⁸ For example, some evidence suggests that as many as half of the firms in the high-tech area, where the prediction of

91. Homer Kripke, *The SEC, the Accountants, Some Myths and Some Realities*, 45 N.Y.U. L. REV. 1151, 1197-99 (1970).

92. See Securities Act Release No. 5362, Exchange Act Release No. 9984, 1973 WL 149257 (Feb. 2, 1973) (describing prior history and intention to change in light of strong consensus reflected in public hearings and comments).

93. See Securities Act Release No. 6084, Exchange Act Release No. 15,944, 1979 WL 181199 (June 25, 1979) (adopting rule 175, 17 CFR § 230.175).

94. The parallel 1934 Act rule was Rule 3b-6.

95. See COFFEE & SELIGMAN, *supra* note 88, at 232-33.

96. Private Securities Litigation Reform Act § 102 (amending Securities Act of 1933 § 27A, 15 U.S.C. § 77z-2 (1994), Securities Exchange Act of 1934 § 21E, 15 U.S.C. § 78u-5 (1994)).

97. Securities Act of 1933 § 27A(c)(1)(A)(i), Securities Exchange Act of 1934 § 21E(c)(1)(A)(i). The statutory safe harbor essentially brigades Rule 175 with the “bespeaks caution” approach of courts in construing the safe harbor in suits alleging securities fraud.

98. Compare Marilyn F. Johnson et al., *The Impact of Securities Litigation Reform on the Disclosure of Forward-Looking Information by High Technology Firms*, 39 J. ACCT. RES. 297, 306-07 (2001) (before PSLRA, only forty-four percent of sample of high tech firms made voluntary forward-looking disclosure; fifty-percent made such disclosure after PSLRA), with David M. Levine & Adam C. Pritchard, *The Securities Litigation Uniform Standards Act of 1998: The Sun Sets on California’s Blue Sky Laws*, 54 BUS. LAW. 1, 43 & n.219 (1998) (citing trade association survey that found seventeen percent of firms made voluntary forward-looking statements pre-PSLRA).

future trends is particularly important, voluntarily provide forward-looking information.⁹⁹ But many practitioners believe that making projections entails unacceptable legal risk, given possible new duties to update a projection once made.¹⁰⁰ The PSLRA may have encouraged more firms to disclose projections and other forward-looking information.¹⁰¹ In any event, disclosure-permitting regulation has made firms freer to provide forward-looking information across a broad domain of the firm's activity, which will make stock prices more informative.

3. *Disclosure standardizing*

Apart from the effect on the volume of disclosure from mandatory rules, SEC regulation played an important role in standardizing how disclosure was made. This too made stock prices more informative. Conceivably pressure from investors and analysts would have led firms to make more extensive disclosure over the period. Such voluntary disclosure would have itself made stock prices more informative. But SEC standardization made disclosure more valuable by reducing the information processing costs for analysts and investors of firm-specific information. Moreover, standardization made inter-firm comparisons easier as well. The consequence was information that was more quickly and completely impounded in stock prices.

E. *Additional Disclosure Because of Accounting Pronouncements and Changes*

Although the debates about the connection between mandatory disclosure and stock price informativeness have focused on SEC action, another important source of disclosure regulation has been the standard setting bodies of the accounting profession, the Financial Accounting Standards Board ("FASB") and its predecessors.¹⁰² We have already seen the interaction of accounting standards with SEC disclosure requirements in the case of segment reporting. In the first instance, the SEC promoted segment reporting and the accounting standard setters followed; subsequently FASB tightened the standard and the SEC followed. In many other cases, however, the accounting standard setters were at the leading edge, in effect mandating additional disclosure with the adoption of new accounting standards. The dissolution of the Accounting Principles Board and its replacement by FASB in 1973 had two important consequences: first, an increase in the output of accounting standards; second, enhanced authoritativeness of the announced

99. See Johnson et al, *supra* note 98, at 306-07.

100. See, e.g., Harvey L. Pitt & Matt T. Morley, *Through A Glass Starkly: A Practical Guide for Management's Forward-Looking Disclosures*, 7 INSIGHTS 3 (1993); see also *Backman v. Polaroid Corp.*, 910 F.2d 10, 17 (1st Cir. 1990); *In re Phillips Petroleum Securities Litigation*, 881 F.2d 1236, 1245 (3d Cir. 1989).

101. See Johnson et al., *supra* note 98, at 323 (finding evidence of "a significant post-Act increase in both the frequency of firms issuing forecasts and the mean number of forecasts issued. . . . primarily attributable to managers issuing more long horizon forecasts of good news and short horizon forecasts of bad news"). But see Levine & Pritchard, *supra* note 98, at 46-48 (finding at best only a small change in frequency of voluntary forward-looking statements).

102. For accounts of this succession and why FASB's predecessors were deemed inadequate, see 2 LOSS & SELIGMAN, *supra* note 62, at 733-51; GILSON & BLACK, *supra* note -- at 578-586. On the SEC decision to privatize the setting of accounting standards despite its undoubted power to set them, see COFFEE & SELIGMAN, *supra* note 88, at 67 n.1.

standard and less tolerance for deviations. These developments led to more disclosure and also greater standardization of existing and new disclosure requirements. In both respects, new accounting standards during the period enhanced the informativeness of stock prices.

This is not the place to canvass the myriad accounting standards changes over a fifty year period, but there are several examples that demonstrate the importance of new accounting standards as expanding the scope of mandatory disclosure and enhancing stock price informativeness. Four seem particularly noteworthy: first, APB No. 22, *Disclosure of Accounting Policies*, adopted in 1972; second, SFAS No. 52, *Foreign Currency Translation*, 1982; third, SFAS No. 95, *Statement of Cash Flows*, 1987; and fourth, SFAS No. 106, *Employers' Accounting for Post-Retirement Benefits Other Than Pensions*, 1990.

1. APB No. 22, Disclosure of Accounting Policies (1972)

APB Opinion No. 22 mandates that “a description of all significant accounting policies of the reporting entity should be included as an integral part of the financial statements” (paragraph 8). Frequently, accounting permits alternative presentations for a particular transaction or account. The Opinion requires the firm to state which convention it is following, which avoids confusion in cases where alternatives exist and enhances comparability of data across firms. At least one contemporary study demonstrates the value of the Opinion. In a before-after survey of 120 firms, Rao showed that before adoption of APB No. 22, approximately seventy-five percent of firms disclosed common accounting policies, such as the conventions they followed for depreciation and amortization. After adoption, ninety-seven percent did.¹⁰³ The Opinion seems to have made disclosure more informative by reducing accounting confusion.

2. SFAS No. 52, Foreign Currency Translation (1982)

SFAS No. 52 addressed some of the failings of a predecessor accounting standard, SFAS No. 8 (1975), which was a first attempt to address systematically the accounting problems that arose in foreign operations. Unfortunately, SFAS No. 8 did not take a functional approach, meaning that “firms were compelled to report foreign currency gains and losses that bore little correspondence to the economic effects that they were actually experiencing.”¹⁰⁴ SFAS No. 52 remedied this and provided better disclosure by requiring firms to measure the results of foreign operations in the foreign country’s “functional currency,” typically (but not always) the local currency. The translation technique of SFAS No. 8 had, in effect, required the U.S. dollar as the functional currency for all

103. Kailis J. Rao, *An Evaluation and Empirical Study of the Disclosure of Accounting Policies in Published Financial Statements*, 30 J. FIN. 1160, 1160 (1975).

104. Lawrence Revsine, *The Rationale Underlying the Functional Currency Choice*, 59 ACCT. REV. 505, 505 (1984).

countries. Various contemporary studies suggest that the change enriched the information environment.¹⁰⁵

3. SFAS No. 95, *Statement of Cash Flows* (1987)

SFAS No. 95 responded to a change in valuation methodology associated with the leveraged buyouts of the 1980s, namely, a focus on cash flow as opposed to accounting earnings as a critical measure of enterprise value, on the view that cash flow was less distorted by accounting conventions. Investors and other users of financial statements wanted better and more standardized measures of cash flow. SFAS No. 95, which required cash flow reporting, replaced APB Opinion No. 19, *Reporting Changes in Financial Position*, 1971, which had required instead a “change in financial position” under a formula that could be confused with a cash flow measure.¹⁰⁶

The informativeness of earnings and cash flow has been a major topic in the accounting literature, which investigates the information content (“value relevancy”) of a profitability indicator by measuring its association with returns. Earnings are demonstrably a primary indicator; whether cash flow disclosure provided additional information was an open question.¹⁰⁷ Before SFAS No. 95, most studies reported mixed results. But after SFAS No. 95, the results of cash flow studies sharply changed; there appears to be no doubt that cash flow disclosure as required by SFAS No. 95 enhances stock price informativeness.¹⁰⁸ Cash flows are particularly informative when the firm reports outlier earnings (meaning out of line with prior years and thus not likely to persist),¹⁰⁹ for firms that are cash-dependent because of high leverage or shorter operating cycles,¹¹⁰ and for firms where earnings management¹¹¹ or fraud¹¹² is a risk.

105. See, e.g., Billy S. Soo & Lisa Gilbert Soo, *Accounting for the Multinational Firm: Is the Translation Process Valued by the Stock Market?*, 69 ACCT. REV. 617 (1994) (examining market incorporated foreign translation gain and loss information reported in stockholders’ equity under SFAS 52 when valuing equity securities); David A. Ziebart & David H. Kim, *An Examination of the Market Reactions Associated with SFAS No. 8 and SFAS No. 52*, 62 ACCT. REV. 343 (1987) (showing event studies found positive market response upon adoption of SFAS No. 52 but negative response upon adoption of SFAS No. 8 and interim FASB decisions postponing final action).

106. APB Opinion No. 19 was an apparently unsuccessful attempt to improve on a 1963 predecessor, APB Opinion No. 3, *The Statement of Source and Application of Funds*. See Earl A. Spiller & Robert L. Virgil, *Effectiveness of APB Opinion No. 19 in Improving Funds Reporting*, 12 J. ACCT. RES. 112 (1974) (presenting a before-after study of 143 firms and concluding that the new Opinion did not substantially improve on APB Opinion No. 3).

107. See generally Ashiq Ali, *The Incremental Information Content of Earnings, Working Capital from Operations, and Cash Flows*, 32 J. ACCT. RES. 61 (1994).

108. See, e.g., C.S. Agnes Cheng et al., *Earnings Permanence and the Incremental Information Content of Cash Flows from Operations*, 34 J. ACCT. RES. 173 (1996).

109. C.S. Agnes Cheng & Simon S.M. Yang, *The Incremental Information Content of Earnings and Cash Flows from Operations Affected by Their Extremity*, 30 J. BUS. FIN. & ACCT. 73 (2003) (finding that cash flow disclosure has mixed impact on firm valuation, with greatest impact when earnings are high and cash flows are moderate).

110. Mark DeFond & Mingyi Hung, *An Empirical Analysis of Analysts’ Cash Flow Forecasts*, (USC Leventhal Sch. of Acct. Working Paper, 2001), available at <http://ssrn.com/abstract=265773>.

111. Paul M. Healy & James M. Wahlen, *A Review of the Earnings Management Literature and Its Implications for Standard Setting*, 13 ACCT. HORIZONS 365 (1999).

112. Thomas A. Lee et al., *The Difference Between Earnings and Operating Cash Flow as an Indicator of Financial Reporting Fraud*, 16 CONTEMPORARY ACCT. RES. 749 (1999).

4. SFAS No. 106, *Employers' Accounting for Post-Retirement Benefits Other Than Pensions* (1990)

Before SFAS No. 106, employers accounted for post-retirement benefits on a cash basis. An actual payout produced an expense, meaning “pay as you go.” SFAS No. 106 requires firms to account for post-retirement benefits on an accrual basis, meaning expensed over the life of an employment contract, not on a cash basis. For a young employee hired today, a firm must accrue—meaning take as a charge to earnings—an actuarially determined amount reflective of future post-retirement benefits, even though there is no current cash payment. (SFAS No. 106 also mandates extensive disclosure about pension plan funding and payment projections.) The accounting standard requires companies to account for distant post-retirement obligations (like retiree health care benefits) that in many cases were grossly under-funded,¹¹³ made perhaps cavalierly without full appreciation of the ultimate liability,¹¹⁴ and which were poorly disclosed to investors.¹¹⁵

There appears to be general agreement that this post-retirement benefit disclosure mandated by the new accounting standard added to the informational landscape and led to more fine-grained evaluation by investors.¹¹⁶ It certainly had a powerful effect on observed behavior by firms, triggering wide-scale cutbacks in post-retirement health benefits in anticipation of the 1993 effective date.¹¹⁷ Presumably managers believed that shareholders would take account of the earnings impact of a non-cash accrual, reflecting, as it did, a genuine future liability.

In sum, what these examples show is that throughout the 1950-2004 period, particularly in the post-1970 period, the FASB's accounting standard setting process has added to the informativeness of stock prices by requiring more disclosure and by limiting the variations in the presentation of similar information.

F. *Other Factors Enhancing the Informativeness of Stock Prices*

Several other additional factors also have made stock prices more informative over the period, including an increase in the number of analysts and other investment professionals, the rise of mutual funds and other institutional investors with sufficient scale to undertake securities research, and information technology and information dissemination mechanisms that lower the cost of securities research. For example,

113. Eli Amir, *The Market Valuation of Accounting Information: The Case of Postretirement Benefits Other Than Pensions*, 68 ACCT. REV. 703 (1993).

114. Financial Accounting Standards Board (FASB), Statement of Financial Accounting Standards (SFAS) No. 106, *Employers' Accounting for Postretirement Benefits Other than Pensions*, ¶¶ 124-26.

115. *Id.*

116. See, e.g., Amir, *supra* note 113. Eli Amir, *The Effect of Accounting Aggregation on the Value-Relevance of Financial Disclosures: The Case of SFAS No. 106*, 71 ACCT. REV. 573 (1996); Paquita Y. Davis-Friday et al., *The Value Relevance of Financial Statement Recognition vs. Disclosure: Evidence from SFAS No. 106*, 74 ACCT. REV. 403 (1999).

117. See Jensen & Murphy, *supra* note --.

membership in the Financial Analysts Federation, the national association of securities analysts, grew from approximately 2400 in 1950 to approximately 11,750 in 1967.¹¹⁸ By 2000, the successor organization, the CFA Institute,¹¹⁹ had approximately 38,500 North American members (45,750 worldwide),¹²⁰ and in 2005, more than 70,000 members worldwide.¹²¹ There are simply many more people devoting their careers to assessing firm valuations.

This rise in the number of security analysts is linked on the demand side to the increasing stake of financial intermediaries that invest in sufficient scale to make economical use of securities research. The value of institutional ownership increased dramatically during the period. As Table 4 indicates, institutional investors owned domestic equities valued at a mere \$12 billion in 1950 (approximately 9% of U.S. domestic equity market capitalization) and only \$56 billion in 1960 (14%). Over the remainder of the period, institutional investor ownership skyrocketed, both in absolute terms and as a fraction of the market value of U.S. domestic equity. As of 2004, institutions owned \$9.6 trillion in equity, representing 68% of the market value of U.S. firms.¹²² With these sums at stake, the competitive focus on firm-specific information has become ever more intense.

Table 4.

Year	Institutional Ownership (Billions of USD)	Institutional Ownership, Fraction of U.S. Market Cap
1950	\$12	9%
1955	\$30	11%
1960	\$56	14%
1965	\$115	16%
1970	\$266	33%
1975	\$345	43%
1980	\$599	42%
1985	\$1,183	55%
1990	\$1,713	53%
1995	\$4,201	56%
2000	\$8,874	58%
2004	\$9,632	68%

118. 2 LOSS & SELIGMAN, *supra* note 62, at 609 (citing 1969 Wheat Report)..

119. The CFA Institute is the new name of the Association for Investment Management and Research, which was created in the 1990 merger of the Financial Analysts Federation and the Institute of Chartered Financial Analysts. *See* History of CFA Institute, <http://www.cfainstitute.org/aboutus/overview/history.html> (last visited Feb. 18, 2007).

120. *See* ASS'N FOR INVESTMENT MGMT. AND RES., 2002 ANNUAL REPORT: PLACING INVESTORS FIRST 40 (2002), <http://www.cfainstitute.org/aboutus/reports/pdf/ar2002.pdf>.

121. *See* ASS'N FOR INVESTMENT MGMT. AND RES., 2005 ANNUAL REPORT: SERVING THE GLOBAL INVESTMENT COMMUNITY 27 (2005), http://www.cfainstitute.org/aboutus/reports/pdf/cfa_ar_final.pdf.

122. Compiled from Federal Reserve System, Flow of Funds, Table L213 (compilation provided by Bogle Financial Markets Research Center, email of Sept. 26, 2006 with attached spreadsheet in file with author.)

Source: Federal Reserve System, Flow of Funds, annual series, Table L213 and calculations based thereon by the Bogle Financial Markets Research Center. Figures are in nominal dollars. (compilation provided by Bogle Financial Markets Research Center, email of Sept. 26, 2006 with attached spreadsheet in file with author.)

The growth and spread of information technology has expanded access to firm-specific data, lowering the costs of securities research and increasing the informativeness of stock prices. Originally SEC documents were made available at the SEC's offices in Washington, and lawyers of a certain vintage can remember a booming trade in services that would physically copy documents using increasingly better copying technology for shipment to users, or, in urgent cases, for reading over the telephone of crucial provisions. Beginning in the mid-1980s, required in the 1990s, companies made electronic filings with the SEC's EDGAR system (for "Electronic Data Gathering, Analysis, and Retrieval").¹²³ Initially private firms, like Disclosure, Inc., compiled databases of this information for resale, but as the internet became increasingly robust in the 1990s, highly-detailed firm-specific information became available to all at virtually no cost, and the proprietary databases became ever more sophisticated in their flexibility of data presentation and manipulation. The rise of the computer, then the personal computer, drastically reduced the cost of information processing, which fostered cross-sectional and time-series analysis of a firm's performance.¹²⁴ As costs fell, sophisticated information gathering and analysis became increasingly "democratized"; it's not just institutional investors with these capabilities. All of these factors contributed to the informativeness of stock prices over the period.

CONCLUSION: A NEW CORPORATE GOVERNANCE PARADIGM

This paper starts with a puzzle. There is a powerful trend in favor of independent directors for public firms in the United States, yet the empirical evidence adduced thus far gives us no convincing explanation. The paper suggests that this trend reflects two interrelated developments in the U.S. political economy. First is the shift to shareholder value as the primary corporate objective; the second is the greater informativeness of stock market prices. The overriding effect is to commit the firm to a shareholder wealth maximizing strategy as best measured by stock price performance. Stock prices are taken as the measure of most things. In this environment, independent directors are more valuable than insiders. They are less committed to management and its vision. Instead, they look to outside performance signals and are less captured by the internal perspective, which, as stock prices become more informative, becomes less valuable. They can be more readily mobilized by legal standards to help provide the public goods of more accurate disclosure and better compliance with law. In this way, independent directors are an essential part of a new corporate governance paradigm. In the United States, independent directors have become a complementary institution to an economy of firms directed to maximize shareholder value. Thus, the rise of independent directors, a very

123. Important Information About EDGAR, <http://www.sec.gov/edgar/aboutedgar.htm>; see Donald C. Langevoort, *Information Technology and the Structure of Securities Regulation*, 98 HARV. L. REV. 747, 758 n.41 (1985).

124. *Id.* at 757-59.

important change in the political economy landscape, should be evaluated in terms of this overall conception of how to maximize social welfare.

Although this new paradigm is bound up with the use of stock market signals in the monitoring of managers, including the evaluation of management's strategic choices, it also opens up space for a distinctive role for the independent board: deciding when prevailing prices misvalue the firm and its strategies. In light of imperfectly efficient capital markets, such a role may be efficiency-based rather than an ineradicable residue of agency costs. For a particular firm, a disfavored strategy may in fact maximize shareholder value over a reasonable time horizon. If the market got it wrong, rejecting its signals may lead to putting the firm's assets to highest and best use. But the most significant efficiency gains (or losses) are systematic: idiosyncratic decisions of an independent board may keep a particular subsector of the economy from converging too rapidly on a today's conventional wisdom.

The board's role in this regard is most vividly expressed in the case of an unwanted takeover bid, which if the board resists, will ultimately be decided through an election contest rather than an immediate market test, under current Delaware law. Presumably the shareholders who would (almost always) accept a premium tender offer would (almost always) vote for directors who would be receptive to the premium offer. The difference between the two mechanisms of acceptance are transaction costs and time. On the imperfectly efficient markets view, this small dose of sand in the gears may give markets the opportunity to test predictions of how to create value before the prescription has been universally applied. Some frictions may be efficient. Note that this element of the new paradigm is not inconsistent with maximizing shareholder value; it merely imagines a somewhat longer horizon for its realization rather than today's stock price.

One open question is whether the independent board has even this independence from the stock market. Before, barring the arrival of a hostile bidder, the board had substantial insulation from shareholder pressure. The costs of maintaining a proxy contest interacted with the collective actions problems of diffuse share ownership to produce this result. After the advent of hostile takeovers, the adoption of the pill reinvigorated the board's importance. Now, however, as institutional ownership approaches seventy percent of the market and activist shareholders have learned to coordinate their activities without triggering either the notice obligations of the federal securities laws or the target's poison pill, independent boards have much less space to protect an idiosyncratic strategy. The apogee of a corporate governance paradigm resting on independent directors and the independent board may also mark the moment of its decline.