# *Financial Innovation and Corporate Mergers*

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Merger and acquisition activity is the statistical reflection of the various ways to reshuffle "business assets" among competing management teams. In perfect long-run equilibrium, each asset, alone or combined with other assets, will be owned and controlled by the team that places the highest value on it. So, in response to the question, "What causes today's merger boom?" we should look to recent economic shocks in the market for corporate control. A moderately informed observer can point to several legal, economic, and regulatory shocks that might imply wholesale reshuffling of corporate assets among competing management teams. Innovations in the financial markets, the subject of this paper, have played an important and high-profile role in the story of recent merger activity.

The considerable media fascination with such financial innovations as junk bonds, poison pills, and lock-ups is due to their being convenient targets of attack in the political arena, where a flat-earth type debate rages on the proper regulatory policy for these transactions. The degree of media attention, therefore, is not a reliable indicator of the object's true economic importance. Two-tier tender offers, for example, have become so closely associated with evil intent that the Delaware state courts have created a nearly separate body of state law to throttle them, despite the lack of any empirical evidence that they cause the harm that the courts claim they do. In this convoluted political debate, it often happens that innovations having little direct effect on the pace of takeover activity become invaluable rhetorical excuses for regulatory and judicial actions, which themselves have significant direct effects on this economic activity.

My purpose here is to examine the connection between financial

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innovations and merger and takeover activity. In so doing, I will be forced to assess the relative impacts of several innovations through two distinctly different avenues of influence—political and economic. To set the stage somewhat, I will first review the major changes in the merger and acquisition market over the last decade or so, describing briefly the increased scope of activity and its probable causes. This discussion will be uncomfortably speculative and suggestive. No one has yet systematically examined this important question of causation, perhaps because these events are too recent.

From this background, I will next try to identify the financial innovations that are of any real or claimed consequence. Using whatever published data and other resources are available, I will offer some judgments about the economic and political effects of these innovations. I will treat the economic and the "regulatory and political" effects separately.

The conclusion will emphasize the very strong difference between the economic and the political importance of many innovations. I argue that in many respects the regulation of tender offers seems to be repeating the history of antitrust policy, where strong economic myths, together with compelling political forces, dictated the building of an effective policy restricting acquisitions. Although both policies make little economic sense, they have powerful effects on tomorrow's financial innovations, spurring efforts to evade the costly effects of regulation and deterring other innovations that otherwise would be profitable to pursue. Just as the suffocating antitrust restrictions of the 1960s helped spur the economically inefficient trend towards corporate conglomeration, today's restrictions on secretly acquiring footholds in prospective target firms will help spur the invention of new devices that enable entrepreneurs to earn returns on their investments in public information. I will end with some guesses and cautious predictions about the factors that will guide future innovations and the changes in the political and regulatory structure we might expect.

## *The Rise in Merger and Acquisition Activity Since 1980*

Corporate takeovers and mergers have become very big business in the 1980s. A few figures are enough to make this point vivid. The Office of the Chief Economist of the Securities and Exchange Commission estimates that shareholders of target firms in successful tender offers from 1981 through 1986 received payments in excess of $54 billion over the value of their holdings before the tender offers. Including mergers and leveraged buyouts, W. T. Grimm & Co. estimates total premiums over the same period to be $118.4 billion. If we assume that most corporate restructurings are motivated by the same factors driving mergers and tender offers, then we should add another roughly $100 billion in premiums to shareholders since 1980. It is no wonder that today's most popular subject among top managers of public firms is creating shareholder value.

## *Legal and Regulatory Changes in the Market for Control*

There are several broad explanations for this record activity in mergers and acquisitions. The same trends explain why the bulk of this activity has been concentrated on large publicly traded firms, and how this has shaped much of the political response to the modern merger boom. I begin by considering the major regulatory and judicial changes that have helped to spur mergers, takeovers, and restructurings since 1980.

### *Pro-Merger Antitrust Policy*

The "Chicago school" of antitrust regulators was ushered in as part of the Reagan administration's general plan to deregulate American businesses. By all appearances, antitrust policy has changed dramatically since their arrival in 1980. Horizontal mergers, completely taboo before 1980, have become common, even between huge public firms. Vertical mergers, involving firms in different industries, have rarely faced serious antitrust challenge, quite unlike the frequent challenges based on exotic economic theories during the 1960s and 1970s. It is too early to tell whether this new mergers-for-efficiency doctrine will long rule, but one factor suggests that these changes are durable, if not permanent. That factor is the increasing reliance on international competition—a global marketplace viewpoint—to protect the consumer public from monopolistic behavior.

Whatever the true reasons for the policy shift, it is clear that the firms most affected are the large, publicly traded ones whose sheer size made them takeover-proof under the old antimerger antitrust policy. The data show a marked increase in the size of the target firms in the 1980s compared with the 1970s. The average market value for targets of tender offers made in the 1980s is $327.4 million, which is over four times the average size of targets from the 1970s. Moreover, in recent times the hostile targets are double the size, on average, of the friendly targets of tender offers, a disparity absent in the pre-1980 cases.

Under the old antitrust rules, the acquirers were principally large conglomerate firms. The 1980s bidder is more commonly a medium-sized competitor in the same or a related industry, or some partnership aiming to take the target private and sell the major pieces to the target's competitors. Ironically, it is by this very process that the conglomerates of yesterday are being dismantled through "bust-up" restructurings, many to defend against takeover attempts.

## *Industrial Deregulation*

Another goal of the Reagan revolution was industrial deregulation. This new competition has further heightened the upward trend in merger activity, especially horizontal mergers that involve competing firms. For this reason, industrial deregulation's effects have been greatly enhanced by the simultaneous relaxation of antitrust restrictions on horizontal combinations. Deregulation has been a significant shock in several major industries over the last decade, including oil and gas, airlines, broadcasting, trucking, railroads, intercity bus lines, telecommunications, securities, and banking.

Although seldom complete, deregulation has in all cases forced on market participants a sudden new reliance on market competition. This generally has resulted in technological and managerial innovations to cope with the more competitive conditions. In view of the wrenching changes accompanying deregulation, it is no surprise that merger and acquisition activity usually increases significantly, at least for the first few years after the onset of deregulation. Some recent data show that industries deregulated since 1980 have accounted for a disproportionate fraction (over half) of the merger and acquisition activity over this period.

## *Court Decisions on State Antitakeover Laws*

The 1982 U.S. Supreme Court decision in *Edgar v. Mite* effectively struck down the dozens of state antitakeover laws that had been enacted since the mid-1970s. In striking down the Illinois Act, the Court held that the law violated the commerce clause as well as the supremacy clause. The commerce clause was violated because state antitakeover laws regulate many nationwide transactions, thus seriously interfering with interstate commerce. The supremacy clause was violated because state laws effectively infringe on federal prerogatives as set forth in the Williams Act. In their 1982 ruling, the majority embraced a sweeping free-market philosophy towards the market for corporate control. Justice White wrote that the Illinois law distorted the "reallocation of economic resources to the highest-valued use, a process which can improve efficiency and competition."

In a startling reversal, however, the Supreme Court on April 21, 1987 dealt a stunning blow to "corporate raiders" by upholding the new Indiana statute blocking hostile takeovers. This ruling has already incited a rush to copy Indiana's strictures and has given courage to those defending the even tougher New York and New Jersey laws from constitutional challenge.

Nonetheless, the impotence of state securities regulators during most of the 1980–87 period is an important reason why takeovers have been so active. State regulators apparently have powerful political incentives to protect hometown corporations from hostile takeover attempts, even if national economic welfare is best served by a passive policy. Probably, this is because the employees, managements, and local economic interests that can benefit from protection have a visible and vocal presence within the state, whereas in most cases the great majority of shareholders of these large national firms reside out of state.

Although the recent Wall Street scandals threaten the trend, the courts since 1980 have retreated from their activist role in protecting the independence of hostile takeover targets. In previous decades, courts were quick to grant injunctions and restraining orders against hostile bids. Now, most courts rely on the federal regulation embodied in the Williams Act, with its emphasis on adequate disclosure and "cooling-off" periods for target shareholders, and seldom impose further restrictions on the process.

This changed attitude has been brought about in part by the embarrassment caused when past court actions blocking premium bids imposed huge capital losses on shareholders. These experiences have made judges skeptical of the motives of the incumbent management who argued that target shareholders were being victimized by the "raid" on the firm. The prevailing judicial attitude is to promote effective auctions for target firms that have been put "in play" by a premium bid, without undue favoritism towards any competing bidder. Incumbent target managers often have been forced to compete openly with the hostile raider using recapitalizations and going-private transactions. This has increased the odds that the typical target will be restructured, while reducing the odds that the original hostile bidder will oversee the restructuring.

## *Financial Innovations Affecting Merger Activity*

The past two decades have brought profound changes in the financial markets, ranging from the deregulation of the securities industry and the growing institutionalization of equity ownership to the invention of various weapons of war such as poison pills and two-tier tender offers. This section catalogs the most important or often-mentioned of these innovations. The reader should be forewarned that I apply the term "innovation" quite liberally, lumping together trends and modified financial instruments under the same general heading. My rule is, if it's new and it affects merger and acquisition activity, then it's eligible for at least passing mention on this list.

### *The Rise of Institutional Investors*

The most fundamental change in the securities markets over the past two decades has been the growing fraction of equity ownership and trading that is accounted for by institutional investors. This proportion has increased from about 5 percent in the early 1960s to between two-thirds and three-quarters today. Many factors have coincided to cause this. The pension fund laws of the 1970s, deregulation of fixed commission rates in 1975, and the rising demand by small investors for portfolio investment opportunities have all contributed to this trend. There appears to be nothing ahead that would reverse the increasing professionalism of the stockholder population.

Perhaps the most important consequence of this institutionalization is that it increases the mobility of capital, especially to the control-oriented investor seeking large accumulations over short time periods. But, it does more. It sharpens the capital market's pencil for valuations, increasing the monitoring of the productivity of managerial strategies while it provides predatory pools of capital to facilitate the arbitrage process of aligning current market value with maximum "break-up" value. Both forces help bring about a more competitive market for corporate control.

### *Increased Skill in Valuing Corporate Assets*

As the market has increased for sophisticated analysis of hypothetical valuations of bundles of corporate assets, the degree of specialization and overall quality of valuation analysis have also increased. The development of mathematical approaches for valuing options and futures and the remarkable advances in computer technology used in the valuation business have had profound effects on the way professionals in this field conduct their work. Together with the increased disclosure requirements for public corporations and the growth in the number of security analysts, these developments tend to improve the informational efficiency of the capital markets, making them more amenable to control-oriented security transactions where valuation accuracy is so important.

### *High-Yield Bonds*

So-called "junk bonds," which are non-investment-grade corporate bonds, have been among the most controversial recent innovations. The spotlight has been directed at several recent hostile takeover attempts of large targets that were financed by junk bonds, which are mostly sold to wealthy investors and have recently been available to investors through mutual funds. In truth, junk bonds have had a far greater impact among the thousands of medium-sized and small firms that issue junk bonds to raise capital for new business investments than they have had on the financing of takeovers. These smaller issuers use junk bonds because they cannot at the time obtain investment-grade ratings, and because junk bonds can have advantages over bank borrowings, the other major source of non-equity capital to those firms.

The innovation behind the junk bond of the 1980s, as distinct from the "fallen angel" junk bonds that were investment-grade when originally issued, is the improved technical analysis of the issuing firm's prospects for repaying the debt in the event of business problems. Also, unlike investment-grade bonds, junk bonds do not have many covenants, which are various restrictions designed to protect bondholders in times of financial distress. The junk bond is designed for use in highly leveraged and risky circumstances, with more flexibility to facilitate recapitalizations and workouts and without rigid covenants that would run too great a risk of bankruptcy if used in these situations.

The explosive growth in junk-bond issues by scores of medium-size firms has undoubtedly created large savings in financing costs to issuers. During the 1980s, junk bonds have become a major vehicle for raising corporate capital and they should continue to be so for some time. Their notorious reputation was made beginning in 1985, when junk bonds first were used to finance hostile takeovers. Although junk bonds accounted for under 15 percent of total financings for successful tender offers in 1985, their visibility was enhanced because the targets were large and well-known. Also, junk bonds were associated with failed takeover attempts early on, which did not help their image. But, in the past two years junk bond financing has become a major source of financing for all kinds of tender offers—hostile, friendly, management buyouts, and financial restructurings. They are used on both offense and defense, and by both raider and management bidder.

Equally important, substitute financing vehicles, such as merchant-bank type arrangements by highly capitalized securities firms and more traditional bank financing, have also become more competitive in serving the bidder in search of the large target. The wide availability of these excellent substitutes for junk bonds in the takeover market suggests that taxing the junk-bond bidder will not have a large effect on the pace of takeover activity. Nor would such a tax necessarily tilt the scales towards the target in takeover contests.

## *Leveraged Buyouts*

Although leveraged buyouts and other types of going-private transactions have been around for many years, their numbers have grown dramatically during the 1980s, and volume has increased disproportionately because of the unprecedented size of the targets. Like other control transactions, leveraged buyouts provide large premiums to shareholders. They also virtually guarantee a capital structure loaded with debt, and make interest servicing and debt reduction the focus of the business, at least in the near term.

Unlike most takeovers or mergers, leveraged buyouts do not have directly observable measures of the post-transaction profitability of the target. The bidder is not a public firm, so there is no stock-price response to the news of the bid. Also, because the target becomes a private firm upon execution of the leveraged buyout, there is generally no way to measure the change in the value of the target after it is taken private. An important exception (almost too important, indeed, to be useful!) is the case when the target later goes public, providing a clear indication of how very well leveraged buyouts can work out, when they work out. Still, the main evidence that they create large increases in value is the persistent willingness of managers and investors to invest so heavily in this form of reorganization.

Some excellent academic work on leveraged buyouts has shed hazy light on the intriguing question, "Where do the gains come from?" Tax savings provide an important, but not dominant, part of the answer. There do not appear to be any mystical "financing" gains, as is implied by the theory that "debt is simply cheaper than equity." And it is difficult to believe that the behavioral value of endowing managers with enormous, highly leveraged equity positions can account for a significant part of the 30 percent average premium over market value typically paid in leveraged buyouts.

Rather, the value created by leveraged buyouts has probably resulted from fundamental changes in the operating strategies of the firms. Generally wholesale reallocations of corporate assets occur, changes that mainly result from managements viewing their firms in the way that a takeover investor would. The financial innovations behind leveraged buyouts are the improved precision of the valuations that determine debt capacity and the new debt instruments that provide the financing. According to the free cash flow theory advanced by Jensen, the use of high leverage is itself a major innovation that could be the key to understanding the process of value creation. Jensen's theory is that high leverage is necessary to ensure that managers in these industries do not over-invest, and that burdensome interest payments accomplish this efficiently. Using a premium stock buy-back financed with debt, the firm essentially makes immediately available to shareholders the present capitalized value of creating this "guarantee."

This theory fits especially well the facts of the recent leveraged buyout and merger activity in several mature industries that happen to generate vast amounts of cash because of past investments, such as oil and gas, broadcasting, tobacco, forest products, and food. The paring away of underperforming business units that so often accompanies these leveraged restructurings can often be interpreted simply as admissions by top managers that past strategies for using the cash, such as mergers for diversification, have not been productive. As such, they lend further credence to management's pledge to pay out future free cash flow to shareholders.

## *Innovative Use of the Tax Code*

Several important new financial techniques have been developed to facilitate the payment of corporate income directly to shareholders. They commonly benefit shareholders by partially avoiding the "double taxation" of corporate income, at the expense of largely making the cash flow unavailable for corporate reinvestment. The royalty trust has been widely used in the natural resources industry. The master limited partnership, pioneered by T. Boone Pickens, Jr., is another organizational innovation tailored for minimum tax burden on shareholders; it operates to best advantage in the declining industries with few opportunities for reinvestment.

## *Summary*

This completes the list of the major factors that have caused both the increased pace of merger and takeover activity since 1980 and the increased concentration on large targets. The principal legal and regulatory changes are the Reagan administration's relaxation of antitrust policy and industrial deregulation. Also noteworthy are the U.S. Supreme Court's rejection in 1982 of state antitakeover laws and, more recently, the increased focus by the courts on protecting target shareholders from incumbent managers as well as from the bidder.

Turning to the financial innovations contributing to the merger frenzy, the most important has been the rebirth of the mutual fund. Dormant since the Great Depression, the mutual fund and its close cousins have returned to dominate the equities markets. The ascendancy of the professional investor and specialized, high-powered investment research have transformed the market for corporate control, making this market operate with greater efficiency and swifter execution. The widespread use of leveraged buyouts provides a dramatic example of the innovations in the management of the firm's capital structure, and the high-yield bond an example of the many innovations in the financing of huge control-oriented transactions. Also evident in the 1980s are the tax-driven innovations, such as the royalty trust and the master limited partnership, that reduce taxes for shareholders receiving direct payouts of corporate income.

Together, these forces can probably account for much of the recent increase in merger, takeover, and leveraged buyout activity. Although the experts could easily expand this list of notable innovations, and we will turn to these additions next, I will argue that they are of less fundamental importance for understanding the pace and character of merger and acquisition activity in the 1980s than are the factors discussed above. The innovations described below are recorded more properly as endogenous responses to the more powerful forces spurring hostile takeovers and restructuring of large firms. They are mostly innovative tactics that have been influential in a limited number of takeover battles, but they have no significant long-term effect on the balance of power between outside bidders and targets.

Some will object to this claim when it is applied to particular big-name tactics such as poison pills. But, the attention here is on the counterfactual question: what would have been the ultimate change in outcome and "total welfare" if the tactical innovation had not been invented? It turns out that this is a tough test for these seemingly important innovations in offensive and defensive tactics.

## *Innovations in Takeover Tools and Tactics*

Although not all fall neatly under a single heading, I will nonetheless assign each "innovation" to the category of "offensive tactics" or of "defensive tactics."

### *Offensive Tactics*

*Two-tier tender offers*. One of the most talked-about offensive tactics is the innovative use of the two-tier tender offer. This kind of offer provides a large premium for a controlling fraction of tendered stock (apportioned pro rata to tendering shareholders) and a smaller premium (usually offered later in a second-stage merger) for the remaining stock, often using securities of the bidder or junk bonds as consideration.

The two-tier tender offer is widely believed to be an effective offensive weapon in hostile takeovers, for its ability to stampede shareholders into tendering for the front-end premium simply to avoid the much lower back-end premium. It is argued that the two-tier offer thereby allows bidders to pay less for targets than they would using uniform-premium offers.

The rise to popularity of two-tier offers, however, can be largely accounted for by two other factors. One, they are more commonly used by medium-size bidders for large targets, in order to reduce the financial risk of the offer by putting an upper limit on the number of shares that can receive the high front-end premium. Second, the Securities and Exchange Commission quite inadvertently encouraged the use of pro-rated offers in 1979 when it increased the minimum-offer period for tender offers to 20 business days, while leaving at 10 calendar days the minimum period for the pro-rata pool for partial and two-tier offers. This discrepancy created a tactical advantage to bidders making pro-rata instead of any-or-all offers, because the former gave shareholders only 10 days to respond. The Commission increased the minimum period for holding open pro-rata pools to 20 business days in 1984, and the surge in two-tier offers that began in 1980 has subsided significantly.

Because they have been used most frequently in hostile contests for large targets, and usually by relatively small bidders, two-tier offers have received disproportionate attention from the media. More important, the courts have accorded special meaning to the hostile two-tier threat, linking it to the highly leveraged bust-up takeovers that can have especially large effects on the welfare of local communities, employees, and other non-stockholder "constituencies" of the corporation. The Delaware Supreme Court has created a safe harbor for management's unilateral use of defensive tactics having tremendous potential for shareholder harm, such as exclusionary self-tender offers and poison pills, in order to counter the special threat to shareholders allegedly posed by two-tier offers. An empirical study of all tender offers made during 1981–85 finds that two-tier tender offers do not result in lower blended premiums than any-or-all offers and thus do not coerce shareholders into accepting inferior offers (Office of the Chief Economist 1985a).

*Sweeping-the-street takeovers.* In a handful of recent cases, the winning bidders purchased their controlling blocks in the open market, usually dealing with very few sellers. Jeffries and other firms have recently become specialty middlemen in forming a control block for private "auction" to the competing parties in hostile contests. These cases are controversial because the winning bidders effectively gained great advantage by sidestepping the burdensome Securities and Exchange Commission regulations under the Williams Act, enraging the losing bidders and tweaking some noses at the Commission. Although at least one target has escaped takeover using the open market purchase (Carter Hawley Hale in 1984), street-sweeping has been more to the advantage of outside bidders. So far, however, street-sweeping has not become a common practice. It is bold and potentially effective, but it brings intense inspection by the regulators and related legal risks.

## *Defensive Tactics*

The list of defensive innovations is long, including unilateral management actions, shareholder charter amendments, and state regulations. Led by the notorious poison pill, these innovations reflect extraordinary imagination by inventor-advisers and great courage by their pioneering users. Their initiations have almost always incited furious legal challenges and have provided exciting grist for the media.

Although classified as defensive tactics, most of these tactics are used in practice to generate auctions as often as they are to preserve the independence of the target. Whether this result reflects the innovation itself or the court-laid rules governing their use, it is clear that promoting auction bidding is the only widely accepted rationale for employing most of these new defensive tools.

*Poison pills*. "Poison pill" describes a family of shareholder rights agreements that, when triggered by an event such as a tender offer for control or the accumulation of a specified percentage of target stock by a hostile acquirer, provide target shareholders with rights to purchase additional shares or to sell shares to the target at very attractive prices. These rights, when triggered, impose significant economic penalties on a hostile acquirer.

Since its introduction in late 1982, the poison pill has become the most popular and controversial device used to defend against hostile takeover attempts. These devices are effective deterrents because of two striking features. First, poison pills can be cheaply and quickly redeemed by target management if a hostile acquirer has not pulled the trigger, which encourages the potential acquirer to negotiate directly with the target's board. Second, if not redeemed, the poison pill makes hostile acquisitions prohibitively expensive in most cases. Moreover, the 1985 ruling by the Delaware Supreme Court in *Moran v. Household International* allows managements to unilaterally adopt poison pills without requiring voting approval by shareholders.

Invented by Marty Lipton, the famous New York takeover lawyer, the original "flip-in" pill operates by preventing the second-stage merger that generally follows a tender offer for control. It does this by allowing target shares to be converted into shares of the acquirers' stock on very favorable terms in the second-stage merger, which prospect gives shareholders incentives not to tender in the first place.

This ingenious invention actually builds on a long-standing provision of convertible securities which provides for the possibility that the security into which another security is convertible might be swallowed up in a future merger. This provision, therefore, simply allows the acquirer's shares to become that security. The poison pill uses this basic provision to fashion a prohibitive takeover defense, because of the attractiveness of the terms of conversion.

Although most experts felt the original flip-in pill was invincible, Sir James Goldsmith purchased a controlling position in Crown Zellerbach in 1984 using open market purchases and avoided that pill's lethal financial poison by eschewing the second-stage merger. This end run by Goldsmith led to the inventions of the flip-over pill and the discriminating pill, which are triggered by hostile share accumulation and/or by "acts of control" by outside investors, and which automatically provide the benefits to passive target shareholders when triggered rather than in a second-stage merger.

Hostile acquirers in turn have resorted to "imaginary" tender offers, heavily publicized informal offers made in a letter to the target management. These non-offer offers do not trigger the poison pill, but they create potential liability for target managements that ignore or reject this immediate prospect for premiums to shareholders without offering satisfactory alternatives for creating shareholder value.

*Dual-class recapitalizations*. These plans restructure the equity of a firm into two classes having different voting rights. Although not a recent invention, dual-class recapitalizations have become much more common and controversial in today's active takeover market. The New York Stock Exchange has recently proposed to abandon its long-standing rule of one share, one vote, to accommodate corporate management's growing demand for dual-class structures and to counter the trend of firms to list over-the-counter to meet this demand.

In addition to the recent surge of interest in existing plans, there have been some innovative wrinkles in new dual-class plans, most notably the length-of-time method first used by American Family Corporation. This method involves a change in voting rights of the same common stock based on the length of time the shares are held. All current outstanding common stock becomes "long-term" on the recapitalization, with each holder entitled to 10 votes per share. But, any share traded or sold after the effective date of the recapitalization becomes a "short-term" share and has only one vote, rising to 10 votes only after it has been held continuously for a substantial period of time (generally, four years). This idea of linking voting power to length of time owned has been borrowed by the drafters of the New York and New Jersey antitakeover laws, which disallow hostile acquirers who do not receive prior approval from target management from doing a second-stage merger or from engaging in a list of controlling actions for at least five years after obtaining control.

*Fair-price charter amendments*. The fair-price amendment is an innovation that uses the common supermajority voting provision, long familiar in corporate democracy, to fashion a specific deterrence to two-tier takeover attempts. Invented in the late 1970s, the fair-price amendment has surged to popularity with 487 firms voting in such amendments between 1983 and 1985. Here is how they work.

Most state corporation laws set the minimum approval required for mergers and other important control transactions at either one-half or two-thirds of the voting shares. Supermajority amendments require the approval by holders of at least two-thirds and sometimes as much as nine-tenths of the voting power of the outstanding common stock. These provisions can apply either to mergers and other business combinations or to changes in the firm's board of directors or to both. Pure supermajority provisions are very rare today, having been replaced by similar provisions that are triggered at the discretion of the board of directors. The board has discretion to waive the supermajority provisions allowing friendly mergers to proceed unimpeded.

The fair price amendment is simply a supermajority provision that applies only to nonuniform, two-tier takeover bids that are opposed by the target's board of directors. Uniform offers that are considered "fair" circumvent the supermajority requirement, even if target management opposes them. Fairness of the offer is determined in several ways. The most common fair price is defined as the highest price paid by the bidder for any of the shares it has acquired in the target firm during a specified period of time.

*State antitakeover laws.* The new state antitakeover laws of recent years have been crafted to meet the defensive needs of hometown corporations (not necessarily their owners) within the legal constraints established by the 1982 U.S. Supreme Court decision in *Edgar v. Mite.* As already mentioned, the provisions of the new laws borrow ideas from poison pills, charter amendments, and dual-class recapitalizations. The Indiana statute that was upheld by the U.S. Supreme Court in April 1987 requires in essence a proxy contest by stripping voting power from a hostile stock accumulator unless he calls for, pays for, and wins a shareholder vote (one that excludes shares of the acquirer and the management). The Supreme Court was convinced that these measures did not unduly interfere with principles governing federal regulations of nationwide takeovers, with the necessary delay of the control transactions imposed by the voting requirement being the most obvious inconsistency. (Securities and Exchange Commission regulations set the minimum offer period at 20 business days.)

Although the Indiana law is burdensome to hostile acquirers, it pales in comparison with the New York and New Jersey laws. These disallow second-stage mergers, changes in business and financial strategies, major asset sales, or changes in business locations for five years after crossing various stockholding thresholds unless the acquirer has received permission from the target's board of directors. These bold laws lean heavily on the dubious concept that long-term holders are entitled to better treatment than short-term holders. A revealing exception is made by these laws for, naturally, management-backed takeover bids. The U.S. Supreme Court will have a difficult time fitting these provisions into the federal regulatory scheme. If it does, then these super-delay state laws will fundamentally alter the tactical balance of power in takeover battles for years to come.

*Lock-ups, no-shop clauses, and break-up fees.* These contractual devices have become very common in today's numerous auction-style takeovers. They all are intended to facilitate bidding or to provide an advantage or special incentive to a particular bidder. A lock-up is an option granted to a favored white-knight bidder to purchase a prized asset of the target at a favorable price in the event that an unsolicited third-party bid defeats the white knight's bid. The lock-up induces a friendly bid by discouraging competition from unwanted outsiders.

Similarly, the break-up fee is a direct payment to a favored bidder (usually a management buyout offer) in the event that the bidder's offer fails and it is not the bidder's fault. The no-shop clause is a weak prohibition on target management from seeking competitive offers, and is usually sought by a leveraged buyout group before they incur expenses putting together an offer.

The courts keep a close eye on the use of these provisions, trying to ensure that target managers do not violate their fiduciary obligations to shareholders. Because of this critical judicial oversight these clauses generally are not as airtight as their names imply.

# *Financial Innovations and the Political Debate*

According to the view of the Chicago school, regulatory policies are determined by competing self-interest groups. This approach is fruitfully applied to the case of tender-offer regulation. Financial innovations, and the popular theories used to understand them, have a reciprocal relation to takeover regulation. Innovations and new theories can directly influence policy, as regulators cope with these market shocks to "political equilibrium." The reverse is also true; specific regulations have an equally strong effect on financial innovations, as takeover strategists cope with these regulatory shocks to "market equilibrium."

## *Financial Innovations and the Mythology of Takeovers*

Several popular theories have been prominent in the 20-year debate about the proper regulation of takeovers. The "corporate piracy" myth provided the rhetorical foundation for the 1968 Williams Act, the 1970 amendments, and the panoply of tender-offer rules promulgated by the Securities and Exchange Commission during the 1970s. This myth was that the short, speedy, first-come first-served offers prevalent during the 1960s were the work of corporate raiders, who financed the premium offer for control by looting the assets of the non-tendering minority shareholders. Although this theory had virtually no empirical support, it was embraced by the large and enthusiastic political coalition then clamoring for comprehensive regulation of tender offers. The basic "disclosure and delay" provisions of the Williams Act were intended to eliminate corporate piracy and their shareholder-stampeding tactics by mandating detailed bidder disclosures and providing sufficient time for shareholders to decide whether or not to tender into any particular offer.

This disclosure-and-delay regulatory approach has been the major cause of the rise of the auction-style takeover contest. Such a policy makes it difficult for those who first discover profitable takeover opportunities to fully realize the economic rewards to their information. Although several innovations have preserved some incentives to search for these opportunities, the reigning "auction" policy works by making takeover information a public good once discovered, thereby promoting competitive bidding from white knights (free-riders) and alternative corporate restructurings (mimicry).

The response by takeover entrepreneurs has been to develop other means of capturing some returns to their information despite these public-good regulations. Two avenues have become popular: foothold positions and so-called "greenmail." Rule 13-D of the Williams Act mandates that acquirers of over 5 percent of the stock of a public company disclose their ownership level and intentions within 10 days of crossing the 5-percent threshold. Takeover entrepreneurs have been investing more heavily in large footholds, in some cases going well beyond 5 percent during the 10-day "window" allowed under current Rule 13-D. The success of this tactic has earned it the wrath of takeover opponents. Congressional proposals now circulating for tender-offer reform all contain a provision to narrow the 10-day window to one day, and to reduce the disclosure threshold below the current 5 percent.

Footholds are economically beneficial to hostile bidders because they can provide a profit in the increasingly common event that a white knight or a management-backed restructuring or going-private offer defeats the original bid. Accepting greenmail payments, which are targeted block repurchases where the hostile acquirer sells his foothold position back to the target at a premium and agrees to a standstill provision blocking takeover attempts for several years, are another controversial way that hostile acquirers can maintain incentives for searching for takeover opportunities in today's disclosure-and-delay regulatory environment.

The auction regulatory policy has been strengthened considerably by the recent changes in the Hart-Scott-Rodino antitrust law. The law requires all prospective purchasers of more than $25 million of a target's equity to disclose their identity and future plans to the antitrust authorities and to the target before crossing this ownership threshold. This is potentially a powerful deterrent to footholds because it would almost eliminate the acquirer's ability to purchase the target stock before its price reacts to the news of the acquisition.

Until recently, this pre-purchase disclosure rule was easily sidestepped by hostile bidders using a shell firm to make the actual stock purchases. This "loophole" was recently closed by the Federal Trade Commission in reaction to the wave of antitakeover sentiment accompanying the Boesky insider-trading scandal. Today, potential acquirers must file except when the bidding entity is a partnership in which no party has majority control—the Pickens Group's current bid for Newmont Mining is the first example of this tactic. Despite Pickens's innovative response, the Commission's tightening of disclosure rules under Hart-Scott-Rodino (done, incidentally, with no antitrust rationale) appears to be a significant deterrent to hostile foothold acquisitions.

Closely related to the "corporate piracy" myth that served as a rhetorical foundation for the Williams Act is the more sophisticated, but equally faulty, myth that takeovers result from inefficient stock-market pricing. This very common theory of takeovers assumes that, because targets are undervalued by the stock market, a savvy bidder can offer a substantial premium for the target that is still comfortably below the target's intrinsic value. According to this theory, it is the duty of target managements to defend vigorously against even high-premium offers in order to protect shareholders' true interests. Remaining independent, it is argued, will offer shareholders over the long run the higher intrinsic value instead of the immediate takeover premium.

Thus a new, less extreme version of the "piracy" theory was developed in the courts and the policy arena, based not on stampeding shareholders with (now illegal) "coercive" offers, but on a fundamental inefficiency in the stock market. Again, virtually no systematic evidence was offered by undervaluation proponents to validate this theory. However, this lack of supporting evidence did not dampen its reception in legislatures, courts, and the public arena. It is impossible to know whether this theory per se was decisive in influencing the development of legal and legislative opinion, or whether it was simply an expedient excuse for bowing to local political pressures. But the undervalued target theory became the prominent rationale for increased state regulation and for pro-target relief by the courts. Strong evidence against undervaluation and in support of an efficient market for corporate control has been published by several financial economists. This evidence is based on analyses of the stock price performance of targets that defeated completely unwanted takeover bids. The studies show that targets defeating hostile bids lose virtually all of the increase in value associated with the tender offer. Their post-defeat values revert to approximately the level (on a market-adjusted basis) obtaining before the instigation of the hostile bid. The conclusion is that without change of control or fundamental restructuring and changed investment policies, price reversion occurs.

This evidence demonstrates that the market does not, on average, learn anything new or different about target firms' intrinsic values through the tender offer process, despite the tremendous attention lavished on targets and the huge amounts of information traded among market participants during takeover contests. The evidence thus strongly suggests that these target firms were not "languishing," ignored and undervalued, in the market prior to the onset of unwanted takeover activity. If the target companies were indeed undervalued, then the flood of new information about targets' intrinsic values should have brought about fundamental price corrections even in the event of takeover defeats. In over 85 percent of cases studied, however, there were price reversions, not corrections, for targets mounting successful defenses.

The 1980s push for takeover curbs by the powerful business lobby has featured a modern myth based on more serious allegations of capital-market inefficiency. The new "myopic stock market" theory is based on an allegation that market participants, and particularly institutional investors, are concerned almost exclusively with the short-term earnings performance and tend to undervalue corporations engaged in long-term activity. From this viewpoint, any corporation planning for long-term development will become undervalued by the market as its resource commitments to the long term depress its short-term earnings.

Critics of this theory point out that it is blatantly inconsistent with an efficient capital market. Indeed, if the market systematically undervalues long-run planning and investment, it implies harmful economic consequences that go far beyond the costs of inefficient takeovers. Fortunately, no empirical evidence has been found to support this theory. In fact, a study of 324 firms with high research and development expenditures and of all 177 takeover targets between 1981 and 1984 shows evidence that: (1) increased institutional stock holdings are not associated with increased takeovers of firms; (2) increased institutional holdings are not associated with decreases in research and development; (3) firms with high research and development expenditures are not more vulnerable to takeovers; and (4) stock prices respond positively to announcements of increases in research and development expenditures (Office of the Chief Economist, Securities and Exchange Commission, 1985b).

Further evidence opposing the myopia theory is provided by Hall (1987) and by McConnell and Muscarella (1985). Hall studies data on acquisition activity among manufacturing firms from 1977 to 1986. She presents evidence that much acquisition activity has been directed towards firms and industries that are less intensive in R&D activity. She also finds that firms involved in mergers show little difference in their pre- and post-merger R&D performance compared with industry peers. McConnell and Muscarella in a study of 658 capital expenditure announcements show that stock prices respond positively to announcements of increased capital expenditures, on average, except for exploration and development announcements in the oil industry.

Even as this myopic stock market myth continues to receive great attention in the public debate, there has appeared an equally powerful rhetorical argument to limit takeover activity. Rising from the Boesky scandal, this cynical theory is that takeovers are the result of arbitrager manipulation. Although it is vague and imprecise, the general idea is that "arbs" gang up on targets and somehow manufacture a merger in order to reap windfall gains. "Nice work if you can get it" would be the likely response of the knowledgeable observer, because the theory doesn't explain how the arbitragers convince bidders to make billion-dollar offers at huge premiums over market price just to provide windfalls to arbitragers, who, clearly, are among the least likely professions to be the object of such intense loyalty from corporate managers. As a rhetorical weapon, however, even this unlikely story has proved effective at galvanizing grass-roots support for curbs on takeovers.

## *Financial Innovations and Public Regulation*

Innovations are often direct results of public regulation. The surge of "funny-money" takeovers between 1968 and 1970 reflected the exclusion of noncash tender offers from the original 1968 Williams Act. In 1970, these offers were brought under the new Securities and Exchange Commission rules, and the noncash offers became as infrequent as before. The two-tier tender offer, as mentioned earlier, became headline material because the Commission inadvertently disadvantaged any-or-all offers and created a tactical edge for users of two-tier offers. The shell bidder, so frustrating to financial economists doing stock-price studies on returns to bidders, is largely a result of the Hart-Scott-Rodino disclosure rules. The recent adjustments in these rules will certainly make the partnership-bidder innovation by Pickens a common device in future hostile takeover attempts.

Even the ingenious poison pill probably would never have been created if the first-generation state antitakeover laws had been upheld, and not rejected, in 1982 by the U.S. Supreme Court. The same can be said of the controversial widespread use of dual-class recapitalizations to concentrate voting control without concentrating equity participation. In this field, necessity is indeed the mother of invention.

This guarantees that tomorrow's innovative tactics will be shaped by today's regulatory reforms. As the reforms take shape, we can predict at least in some degree what these future innovations will try to accomplish. At the broadest level, there will be continued efforts to "end-run" the Williams Act by using open-market purchases and by developing new kinds of non-offer offers. The few bold street-sweeping takeovers that we have seen in the past few years manifest both the demand to end-run the rules and the decisive advantage such end runs can provide. Their very effectiveness, however, guarantees that the Securities and Exchange Commission and the Congress will continually react to eliminate end-run tactics as they are invented, because the entire purpose of the regulatory scheme is threatened by effective end-run tactics. The Commission and the Congress are currently developing new rules defining tender offers that bring all large accumulations of stock under the rules, thereby eliminating street-sweeping and other changes of control without public offers. Nevertheless, we can look for the cycle to continue as takeover tacticians innovate to find ways around the rules and as regulators respond to these innovations.

## *Conclusions*

The merger boom of the 1960s and its predecessors were all accompanied by populist concern over growing concentration of economic power. The current merger boom is unique, for it is part of a revolutionary restructuring of many large corporations. The controversy today swirls around hostile takeovers and the widespread changes that appear to be prompted by them. Large public corporations are restructuring, boosting leverage and paying out huge windfalls to stockholders, paring down their businesses to focus on so-called "core" operations, going private, spinning off divisions. There is the old concern about horizontal concentration, but the overwhelming attention has been directed at bust-up transactions, hostile stock purchases, and the offensive and defensive tactics used in hostile raids.

I have listed the major economic trends and financial innovations that have helped fuel this merger and takeover activity. The more lenient antitrust laws, industrial deregulation, and the fall of state antitakeover laws are the major policy changes spurring acquisitions and restructurings. Also, the rise of institutional investors, advances in valuation technologies, the invention of new-issue high-yield bonds and the leveraged buyout lead the list of market changes encouraging mergers.

I also have attempted to unravel some of the complex interactions between financial innovations and public policy. The main message from this discussion is that there is an action-reaction cycle between the two, with innovations spurring new rules and the rules begetting new innovations.

Looking into the future, the most important policy questions are these: 1) What will the Congress do in response to the Wall Street scandals? and 2) How will the courts mediate between managers' fiduciary duty to shareholders and the business judgment rule that shields managers? The answers to these questions will in turn affect tomorrow's financial innovations and the development of new tactics in the takeover business.

The answer to the first question will disappoint defenders of takeovers. The Congress appears likely to lengthen the delays and restrict the ability to accumulate secret foothold positions. This will be a recurring theme in the foreseeable future. After all, the ultimate takeover deterrence is to make completely inappropriable the returns to arbitraging corporate control, to discovering profitable ways to redeploy assets bundled together in public firms, and to improving on the profitability of businesses by replacing incumbent managers with more talented ones.

The political coalition against hostile takeovers has newfound strength in the wake of the Boesky scandal. We can expect it to invest in developing new rules and regulations that make privately discovered information by potential raiders fully public, discouraging this activity in the first place. The federal and state regulations have been evolving steadily towards this ultimate goal, and the proposed new rules largely continue this trend.

There will be incentives also to invent popular economic theories to justify these rules and minimize the political opposition from the voting public. Expect even relatively shaky empirical studies or ad hoc and untested claims of market inefficiency to receive exaggerated attention in the congressional debate, if they tend to support takeover restrictions.

The answer to the second question (How will the courts mediate between managers' fiduciary obligation and the business judgment rule?) helps shed light on the incentives facing the takeover entrepreneurs. The courts have been increasingly reluctant to interfere with the market-determined outcomes of takeover battles. Although they have allowed such pro-management devices as poison pills to be used, they have also set high standards for users to meet their fiduciary obligations. The net result is that the courts have come to support the auction process. This result exacerbates in some cases the public-good problem discussed earlier, but it also means that target managers can only go so far to protect their jobs. Indeed, so long as value maximization is the rule of the courts, target managers will be under heavy pressure to restructure and mimic the takeover entrepreneur's strategies.

Therefore, we can look for bidders to invest in tactics and devices that enable them to profit from their valuable information. On the other side, the defensive experts will invent ways to help guarantee that hostile bidders are always outbid and to prevent their secret accumulations of stocks. It is likely that poison pills will proliferate and become specialized, that contests will become even more drawn out and litigious, that proxy contests will multiply, that state laws will be the subject of much attention as the courts find new limits, and that the internationalization of takeover contests will become headline material.

We will not, however, see the Business Roundtable elect Boone Pickens to its chairmanship. Nor will we see the Securities and Exchange Commission's Office of the Chief Economist win a service award from Senator Proxmire. And we can, with equal confidence, rule out any chance that the takeover reforms of today and tomorrow will threaten harm to the Wall Street takeover lawyers, investment bankers, or U.S. academic economists who endlessly debate these issues.

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# Discussion


## Frank W. Haydu, III*


Gregg Jarrell has done an admirable job of focusing on the different political and economic factors involved in the merger and acquisition boom of the 1980s. While there are few areas we would disagree on (except as to emphasis), I will discuss his paper by examining three separate questions.

First, I will focus on the causes of today's merger boom as seen through the eyes of a non-academic merger and acquisition professional. Next, I will provide my own answer to the question, "What is the major financial innovation of the 1980s?" and finally, I will examine the question, "What will/should the Congress do in response to the Wall Street scandals?"

My hope is that the discussion of these three questions will illuminate and further Gregg Jarrell's conclusion that there is a complex action-reaction cycle occurring between financial innovations and public policy, and that this cycle is likely to continue.

## What Are the Causes of Today's Merger Boom?

Entrepreneurs intent on building conglomerates led the merger boom of 1968 to 1971. The typical acquirer perceived increased shareholder values in terms of ever-increasing gross sales or earnings and the accumulation of assets. This view was confirmed by the market value and price-earnings multiples assigned by Wall Street to many conglomerates. The period was characterized by numerous stock and funny-money transactions. Cash was paid only to the most conservative sellers.


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In my opinion, the primary cause of the current merger boom is the upward movement in valuations that has continued uninterrupted since 1982, when interest rates peaked. The number of multiple owners of certain merger and acquisition properties within the past five years is reminiscent of the cyclical real estate marketplace.

This valuation surge and the resultant merger and acquisition boom have been fueled by the following factors:

(1) Easing of the regulatory environment.
(2) Increased availability of debt and equity financing.
(3) Decreasing cost of debt and equity during the past six years, enhanced by the intense competition between financial institutions seeking to participate in the large-transaction marketplace.
(4) Perception that rising valuations might continue, especially in light of recently publicized Japanese stock market multiples.
(5) Creative exit strategies for leveraged buyout players, allowing the recycling of capital and profits into subsequent transactions. The recent Avis leveraged buyout transaction—initiated by WESRAY, followed by initial public offerings in Europe and the United States, followed by an Employee Stock Ownership Plan take-out—illustrates the sophistication and innovation of today's traders. Obviously the bull market has provided the fertile soil for these transactions to mature.
(6) Expanding institutional and public funds' appetite for leveraged buyout participations. The $300 million raised by Merrill Lynch for their new ML—Lee Acquisition Fund allows even the small investor an opportunity to join the game. For Wall Street cynics, the end of our current merger mania must be nearing as we find new ways for the small investor to lose money.
(7) Large corporate restructurings, which provide a supply of new divestiture candidates as they react to their own vulnerability.

The past five years have been characterized by an increasingly positive environment for mergers and acquisitions. How long this action-"positive"-reaction cycle will continue is anyone's guess. I foresee a downward cycle occurring, once interest rates reverse course and the initial public offering market dampens.

## *What Is the Major Financial Innovation of the 1980s?*

Gregg Jarrell has attempted to summarize the various offensive and defensive innovations that have evolved during the 1980s, with considerable success. However, from my own point of view, the rapid access to public capital markets (through initial public offerings) is the major financial innovation. Perhaps my thinking is colored by my own participation in the Gibson Greeting Card transaction, which was one of the first acquisitions to be taken public after less than 12 months of new ownership. If undercapitalization is one of the two primary reasons for business failure (the other being poor management), then this innovation or new application of an old technique has changed the risk/reward criteria for leveraged buyout players. The completion of the initial public offering provides leveraged buyout promoters with liquidity and profits that can in turn be used for subsequent acquisitions; the higher initial public offering valuation helps foster the continuing positive environment for additional leveraged buyout transactions. It seems to me that an action-reaction cycle is at work even within this one innovation.

## *What Will/Should the Congress Do in Response to the Wall Street Scandals?*

It is difficult to predict the actions of the Congress until the full scope of the scandal is understood. The insider-trading conviction of Ivan Boesky might prove to be only a footnote to the alleged manipulation and misuse of securities laws engaged in by the investment banking community. "Stock-parking" arrangements, the sale of junk bonds, and conflicts of interest will continue to be a focus of investigators. My own view, based on one year with a major investment banking firm and a dozen years as a principal in numerous transactions, is that the securities industry must police itself. Chinese Walls between merger and acquisition departments and arbitrage departments are a joke. Brokers who engage in questionable business practices must be let go, even when they are large producers. Young MBAs with little experience should not be receiving annual salaries of over $200,000 (or $1,000,000). The industry needs to encourage business schools to teach ethics as well as greed.

I agree fully with Gregg Jarrell's assessment of the direction the Congress is likely to follow; however, legislation should also focus on the abuses of management. Greenmail should be banned from the merger and acquisition landscape. Transactions where senior managers end up as owners of divisions need to be more thoroughly investigated. And finally, while the Congress can't legislate ethics, it needs to encourage the securities industry and corporate management to act ethically and carry out their fiduciary obligations to *all* shareholders.

## *Conclusion*

Preparing for this conference has given me a greater insight into the world of mergers and acquisitions that has evolved through the 1980s.

Gregg Jarrell has given us all a better understanding of the action-reaction cycle that results from the interaction of financial innovation and public policy, and he has caused at least one transactionally oriented professional to take stock of the environment he plays in.