ECLIPSE OF THE PUBLIC CORPORATION

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Abstract

The publicly held corporation has outlived its usefulness in many sectors of the economy. New organizations are emerging. Takeovers, leveraged buyouts, and other going-private transactions are manifestations of this change. A central source of waste in the public corporation is the conflict between owners and managers over free cash flow. This conflict helps explain the prominent role of debt in the new organizations. The new organizations' resolution of the conflict explains how they can motivate people and manage resources more effectively than public corporations. McKinsey Award Winner.

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The publicly held corporation, the main engine of economic progress in the United States for a century, has outlived its usefulness in many sectors of the economy and is being eclipsed. New organizations are emerging in its place—organizations that are corporate in form but have no public shareholders and are not listed or traded on organized exchanges. These organizations use public and private debt, rather than public equity, as their major source of capital. Their primary owners are not households but large institutions and entrepreneurs that designate agents to manage and monitor on their behalf and bind those agents with large equity interests and contracts governing the distribution of cash.

Takeovers, corporate breakups, divisional spin-offs, leveraged buyouts, and going-private transactions are the most visible manifestations of a massive organizational change in the economy. These transactions have inspired criticism, even outrage, among many business leaders and government officials, who have called for (and won) regulatory and legislative restrictions. The backlash is understandable. Change is threatening; in this case the threat is aimed at the senior executives of many of our largest companies.

Despite the protests, this organizational innovation should be encouraged. By resolving the central weakness of the large public corporation—the conflict between

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owners and managers over the control and use of corporate resources—these new organizations are making remarkable gains in operating efficiency, employee productivity, and shareholder value. Over the long term, they will enhance U.S. economic performance relative to our most formidable international competitor, Japan, whose companies are moving in the opposite direction. The governance and financial structures of Japan's public companies increasingly resemble U.S. corporations of the mid-1960s and early 1970s—an era of gross corporate waste and mismanagement that triggered the organizational transformation now under way in the United States.

Consider these developments of the 1980s:

• The capital markets were in transition. The total market value of equity in publicly held companies tripled during the decade of the 80s—from $1 trillion in 1979 to more than $3 trillion in 1989. But newly acquired capital came increasingly from private placements, which have expanded more than ten times since 1980, to a rate of $200 billion in 1988. In 1989, private placements of debt and equity accounted for more than 40% of annual corporate financings. Meanwhile, in every year since 1983, at least 5% of the outstanding value of corporate equity disappeared through stock repurchases, takeovers, and going-private transactions. Finally, households are sharply reducing their stock holdings.[1]

• The most widespread going-private transaction, the leverage buyout, became larger and more frequent. In 1988, the total value of the 214 public-company and divisional buyouts exceeded $77 billion—nearly one-third of the value of all mergers and acquisitions. The total value of the 75 buyouts in 1979 was only $1.3 billion (in constant 1988 dollars), while the 175 buyouts completed in 1983 had a total value of $16.6 billion. This process was just getting started; the $77 billion of LBOs in 1988 represented only 2.5% of outstanding public-company equity. (See the table "Rise of the LBO.")

[1] Equity values based on trends in the Wiltshire Index. Private-placement data from IDD Information Services, as published in Bartlett (1989).

• Entire industries were reshaped. In the mid-eighties the leading U. S. truck and automobile tire manufacturers were independent and diversified public corporations. By 1989 each was a vastly different enterprise. Uniroyal went private in 1985 and later merged its tire-making operations with those of B.F. Goodrich to form a new private company call Uniroyal Goodrich. In late 1986, Goodyear borrowed $2.6 billion to repurchase nearly half its outstanding shares to fend off a hostile tender offer by Sir James Goldsmith. It retained its core tire and rubber business while moving to divest an array of unrelated operations, including its Celeron oil and gas subsidiary, California-to-Texas oil pipeline, aerospace operation, and Arizona resort hotel. In 1987, GenCorp issued $1.75 million of debt to repurchase more than half its outstanding shares. It divested several operations, including its General Tire subsidiary, to pay down the debt and focus on aerospace and defense. Last year, Firestone was sold to Bridgestone, Japan's largest tiremaker, for $2.6 billion, a transaction that created shareholder gains of $1.6 billion.

Developments as striking as the restructuring of our financial markets and major industries reflect underlying economic forces more fundamental and powerful than financial manipulation, management greed, reckless speculation, and the other colorful epithets used by defenders of the corporate status quo. The forces behind the decline of the public corporation differ from industry to industry. But its decline is real, enduring, and highly productive. It is not merely a function of the tax deductability of interest. Nor does it reflect a transitory LBO phase through which companies pass before investment bankers and managers cash out by taking them public again. Nor, finally, is it premised on a systematic fleecing of shareholders and bondholders by managers and other insiders with superior information about the true value of corporate assets.

TABLE 1

THE RISE OF THE LBO

	Public-Company Buyouts		Divisional Buyouts		
YEAR	Number	Average Value (in millions of 1988 dollars)	Number	Average Value (in millions of 1988 dollars)	Total Value of Buyouts (in billions of 1988 dollars)
1979	16	$ 64.9	59	$ 5.4	$ 1.4
1980	13	106.0	47	34.5	3.0
1981	17	179.1	83	21.0	4.8
1982	31	112.2	115	40.7	8.2
1983	36	235.8	139	58.2	16.6
1984	57	473.6	122	104.0	39.7
1985	76	349.4	132	110.1	41.0
1986	76	303.3	144	180.7	49.0
1987	47	466.7	90	144.2	36.0
1988	125	487.7	89	181.3	77.0

Source: George P. Baker, "Management Compensation and Divisional Leveraged Buyouts," unpublished dissertation, Harvard Business School, 1986. Updates from W.T. Grimm, Mergerstat Review, 1988. Transactions with no public data are valued at the average price of public transactions.

The current trends do not imply that the public corporation has no future. The conventional twentieth-century model of corporate governance—dispersed public ownership, professional managers without substantial equity holdings, a board of directors dominated by management-appointed outsiders—remains a viable option in some areas of the economy, particularly for growth companies whose profitable investment opportunities exceed the cash that they generate internally. Such companies can be found in industries like computers and electronics, biotechnology, pharmaceuticals, and financial services. Companies choosing among a surplus of profitable projects are unlikely to invest systematically in unprofitable ones, especially when they must regularly turn to the capital markets to raise investment funds.

The public corporation is not suitable in industries where long-term growth is slow, where internally generated funds outstrip the opportunities to invest them profitably, or where downsizing is the most productive long-term strategy. In the tire industry, the shift to radials, which last three times longer than bias-ply tires, meant that manufacturers

needed less capacity to meet world demand. Overcapacity inevitably forced a restructuring. The ten-fold increase in oil prices from 1973 to 1981, which triggered worldwide conservation measures, forced oil producers into a similar retrenchment.[2]

Industries under such pressure today include steel, chemicals, brewing, tobacco, television and radio broadcasting, wood and paper products. In these and other cash-rich, low-growth or declining sectors, the pressures on management to waste cash flow through organizational slack or investments in unsound projects is often irresistible. It is in precisely these sectors that the publicly held corporation has declined most rapidly. Barring regulatory interference, the public corporation is also likely to decline in industries such as aerospace, automobiles and auto parts, banking, electric power generation, food processing, industrial and farm implements, and transportation equipment.

The public corporation is a social invention of vast historical importance. Its genius is rooted in its capacity to spread financial risk over the diversified portfolios of millions of individuals and institutions and to allow investors to customize risk to their unique circumstances and predilections. By diversifying risks that would otherwise be borne by owner-entrepreneurs and by facilitating the creation of a liquid market for exchanging risk, the public corporation lowered the cost of capital. These tradable claims on corporate ownership (common stock) also allowed risk to be borne by investors best able to bear it, without requiring them to manage the corporations they owned.

From the beginning, though, these risk-bearing benefits came at a cost. Tradable ownership claims create fundamental conflicts of interest between those who bear the risk (the shareholders) and those who manage risk (the executives). The genius of the new organization is that they eliminate much of the loss created by conflicts between owners and managers, without eliminating the vital functions of risk diversification and liquidity once performed exclusively by the public equity markets.

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[2] For more analysis of the oil industry, see Jensen (1989).

In theory, these new organizations should not be necessary. Three major forces are said to control management in the public corporation: the product markets, internal control systems led by the board of directors, and the capital markets. But product markets often have not played a disciplining role. For most of the last 60 years, a large and vibrant domestic market created for U.S. companies economies of scale and significant cost advantages over foreign rivals. Reversals at the hands of the Japanese and others have not been severe enough to sap most companies of their financial independence. The idea that outside directors with little or no equity stake in the company could effectively monitor and discipline managers who selected them has proven hollow at best. In practice, only the capital markets have played much of a control function in the corporation—and for a long time they were hampered by legal constraints.

Indeed, the fact that takeover and LBO premiums average 50% above market price illustrates how much value public-company managers can destroy before they face a serious threat of disturbance. Takeovers and buyouts both create new value and unlock value destroyed by management through misguided policies. I estimate that transactions associated with the market for corporate control unlocked shareholder gains (in target companies alone) of more than $500 billion between 1977 and 1988—more than 50% of the cash dividends paid by the entire corporate sector over this same period.

The widespread waste and inefficiency of the public corporation and its inability to adapt to changing economic circumstances have generated a wave of organizational innovation over the last 20 years—innovation driven by the rebirth of “active investors.” By active investors I mean investors who hold large equity or debt positions, sit on boards of directors, monitor and sometimes dismiss management, are involved with the long-term strategic direction of the companies they invest in, and sometimes manage the companies themselves.

Active investors are creating a new model of general management. These investors include LBO partnerships such as Kohlberg Kravis Roberts and Clayton &

Dubalier; entrepreneurs such as Carl Icahn, Ronald Pereleman, Laurence Tisch, Robert Bass, William Simon, Irwin Jacobs, and Warren Buffett; the merchant banking arms of Wall Street houses such as Morgan Stanley, Lazard Frères and Merrill Lynch; and family funds such as those controlled by the Pritzkers and the Bronfmans. Their model is built around highly leveraged financial structures, pay-for-performance compensation systems, substantial equity ownership by mangers and directors, and contracts with owners and creditors that limit both cross-subsidization among business units and the waste of free cash flow. Consistent with modern finance theory, these organizations are not managed to maximize earnings per share but to maximize *value*, with a strong emphasis on cash flow.

More than any other factor, these organizations' resolution of the owner-manager conflict explains how they can motivate the same people, managing the same resources, to perform so much more effectively under private ownership than in the publicly held corporate form.

In effect, LBO partnerships and the merchant banks are rediscovering the role played by active investors prior to 1940, when Wall Street banks such as J. P. Morgan and Co. were directly involved in the strategy and governance of the public corporations they helped create. At the height of his prominence, Morgan and his small group of partners served on the boards of U.S. Steel, International Harvester, First National Bank of New York, and host of railroads, and were a powerful management force in these and other companies.

Morgan's model of investor activism disappeared largely as a result of a series of populist laws and regulations approved in the wake of the Great Depression. These laws and regulations—including the Glass-Steagall Banking Act of 1933, the Securities Exchange Act of 1933, the Securities Exchange Act of 1934, the Chandler Bankruptcy Revision Act of 1938, and the Investment Company Act of 1940—may have once had their place. But they also created an intricate web of restrictions on company "insiders" (corporate officers, directors, or investors with more than a 10% ownership interest),

restrictions on bank involvement in corporate reorganizations, court precedents, and business practices that raised the cost of being an active investor. Their long-term effect has been to insulate management from effective monitoring and to set the stage for the eclipse of the public corporation.

Indeed, the high cost of being an active investor has left financial institutions and money management firms, which control one-third of all corporate equity in the United States, almost completely uninvolved in the major decisions and long-term strategies of the companies their investors own. They are almost never represented on corporate boards. They use the proxy mechanism rarely and usually ineffectively, notwithstanding efforts by the Council of Institutional Investors and other shareholder activists to gain a larger voice in corporate affairs.

All told, institutional investors are remarkably powerless; they have few options to express dissatisfaction with management other than to sell their shares and vote with their feet. Corporate managers criticize institutional sell-offs as examples of portfolio cleaning and short-term investor horizons. One guesses these same managers much prefer churning to a system in which large investors on the boards of their companies have direct powers to monitor and correct mistakes. Managers really want passive investors who can't sell their shares.

The absence of effective monitoring led to such large inefficiencies that the new generation of active investors arose to recapture the lost value. These investors overcome the costs of outmoded legal constraints by purchasing entire companies—and using debt and high equity ownership to force effective self-monitoring.

A central weakness and source of waste in the large public corporation is the conflict between shareholders and managers over the payout of free cash flow—that is, cash flow in excess of that required to fund all investment projects with positive net present values when discounted at the relevant cost of capital. For a company to operate efficiently and maximize value, free cash flow must be distributed to shareholders rather

than retained. But this happens infrequently; senior management has few incentives to distribute the funds, and there exist few mechanisms to compel distribution.

A vivid example is the senior management of Ford Motor Company, which sits on nearly $15 billion in cash and marketable securities in an industry with excess capacity. Ford's management has been claiming that it needs such a large financial cushion to help it weather the next industry slump—rather than deliberating about effectively distributing the excess cash to its owners so they can decide how to reinvest it.

Ford is not alone, Corporate managers generally don't disgorge cash unless they are forced to do so. In 1988, the 1,000 largest public companies (by sales) generated total funds of $1.6 trillion. Yet they distributed only $108 billion in dividends and another $51 billion through share repurchases.[3]

Managers have incentives to retain cash in part because cash reserves increase their autonomy vis-à-vis the capital markets. Large cash balances (and independence from the capital markets) can serve a competitive purpose, but they often lead to waste and inefficiency. Consider a hypothetical world in which companies distribute excess cash to shareholders and then must convince the capital markets to supply funds as sound economic projects arise. Shareholders are at a great advantage in this world, where management's plans are subject to enhanced monitoring by the capital markets. Wall Street's analytical, due diligence, and pricing disciplines give shareholders more power to quash wasteful projects.

Managers also resist distributing cash to shareholders because retaining cash increases the size of the companies they run—and managers may have incentives to expand company size beyond that which maximizes shareholder wealth. Compensation is

[3] Calculated from Standard & Poors Compustat file.

one of the most important incentives. Many studies document that increases in executive pay are strongly related to increases in company size rather than value.[4]

The tendency of companies to reward middle managers through promotions rather than annual performance bonuses also creates a cultural bias towards growth. Organizations must grow to generate new positions to feed promotion-based reward systems.

Finally, corporate growth enhances the social prominence, public prestige, and political power of senior executives. Rare is the CEO who wants to be remembered as presiding over an enterprise that makes fewer products in fewer plants in fewer countries than when he or she took office—even when such a course increases productivity and adds hundreds of millions of dollars of shareholder value. The perquisites of the executive suite can be substantial, and they usually increase with company size.

The struggle over free cash flow is at the heart of the role of debt in the decline of the public corporation. Bank loans, mezzanine securities, and high-yield bonds have fueled the wave of takeovers, restructuring, and going-private transactions. The combined borrowings of all non-financial corporations in the United States approached $2 trillion in 1988, up from $835 billion in 1979. The interest charges on these borrowings represent more than 20% of corporate cash flows, high by historical standards.[5]

This perceived "leveraging of corporate America" is perhaps the central source of anxiety among defenders of the public corporation and critics of the new organizational forms. But most critics miss three important points. First, the trebling of the market value of public-company equity over the last decade means that corporate borrowing had to increase to avoid a major *de*leveraging.

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[4] (Murphy 1985).

[5] Federal Reserve Board, Balance Sheets of the U.S. Economy.

Second, debt creation *without retention of the proceeds of the issue* helps limit the waste of free cash flow by compelling managers to pay out funds they would otherwise retain. Debt is in effect a substitute for dividends—a mechanism to force managers to disgorge cash rather than spend on empire-building projects with low or negative returns, bloated staffs, indulgent perquisites, and organizational inefficiencies.

By issuing debt in exchange for stock, companies bond their managers' promise to pay out future cash flows in a way that simple dividend increases do not. "Permanent" dividend increases or multiyear share repurchase programs (two ways public corporations can distribute excess cash to shareholders) involve no contractual commitments by managers to owners. It's easy for managers to cut dividends or scale back share repurchases.

Take the case of General Motors. On March 3, 1987, several months after the departure of GM's only active investor, H. Ross Perot, the company announced a program to repurchase up to 20% of its common stock by the end of 1990. As of mid-1989, GM had purchased only 5% of its outstanding common shares, even though its $6.8 billion cash balance was more than enough to complete the program. Given managers' poor performance over the past decade, shareholders would be better off making their own investment decisions with the cash GM is retaining. From 1977 to 1987, the company made capital expenditures of $77.5 billion while its U.S. market share declined by 10 points.

Borrowing allows for no such managerial discretion. Companies whose managers fail to make promised interest and principal payments can be declared insolvent and possibly hauled into bankruptcy court. In the imagery of G. Bennett Stewart and David M. Glassman, "Equity is soft, debt hard. Equity is forgiving, debt insistent. Equity is a

pillow, debt a sword."[6] Some may find it curious that a company's creditors wield far more power over managers than its public shareholders, but it is also undeniable.

Third, debt is a powerful agent for change. For all the deeply felt anxiety about excessive borrowing, "overleveraging" can be desirable and effective when it makes economic sense to break up a company, sell off parts of the business, and refocus its energies on a few core operations. Companies that assume so much debt they cannot meet the debt service payments out of operating cash flow force themselves to rethink their entire strategy and structure. Overleveraging creates the crisis atmosphere managers require to slash unsound investment programs, shrink overhead, and dispose of assets that are more valuable outside the company. The proceeds generated by these overdue restructurings can then be used to reduce debt to more sustainable levels, creating a leaner, more efficient and competitive organization.

In other circumstances, the violation of debt covenants creates a board-level crisis that brings new actors onto the scene, motivates a fresh review of top management and strategy, and accelerates response. The case of Revco D.S. Inc., one of the handful of leveraged buyouts to reach formal bankruptcy, makes the point well.

Critics cite Revco's bankruptcy petition, filed in July 1988, as an example of the financial perils associated with LBO debt. I take a different view. The $1.25 billion buyout, announced in December 1986, did dramatically increase Revco's annual interest charges. But several other factors contributed to its troubles, including management's decision to overhaul pricing, stocking, and merchandise layout in the company's drugstore chain. This mistaken strategic redirection left customers confused and dissatisfied, and Revco's performance suffered. Before the buyout, and without the burden of interest payments, management could have pursued these policies for a long period of time, destroying much of the company's value in the process. Within six months, debt served as

[6] (Stewart and Glassman 1988).

a brake on management's mistakes, motivating the board and creditors to reorganize the company before even more value was lost.[7]

Developments at Goodyear also illustrate how debt can force managers to adopt value-creating policies they would otherwise resist. Soon after his company warded off Sir James Goldsmith's tender offer, Goodyear chairman Robert Mercer offered his version of the raiders' creed: "Give me your undervalued assets, your plants, your expenditures for technology, research and development, the hopes and aspirations of your people, your stake with your customers, your pension funds, and I will enhance myself and the dealmakers."[8]

What Mr. Mercer failed to note is that Goodyear's forced restructuring dramatically increased the company's value to shareholders by compelling him to disgorge cash and shed unproductive assets. Two years after his bitter complaint, Thomas Barrett, who succeeded Mercer as Goodyear's CEO, was asked whether the company's restructuring had hurt the quality of its tires or the efficiency of its plants. "No," he replied. "We've been able to invest and continue to invest and do the things we've needed to do to be competitive."[9]

Robert Mercer's harsh words are characteristic of the business establishment's response to the decline of the large public corporation. What explains such vehement opposition to a trend that clearly benefits shareholders and the economy? One important factor, as my Harvard Business School colleague Amar Bhide suggests, is that Wall Street now competes directly with senior management as a steward of shareholder wealth. With its vast increases in data, talent and technology, Wall Street can allocate capital among competing businesses and monitor and discipline management more effectively than the

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[7] (Phillips 1988).

[8] (Industry Week 1987).

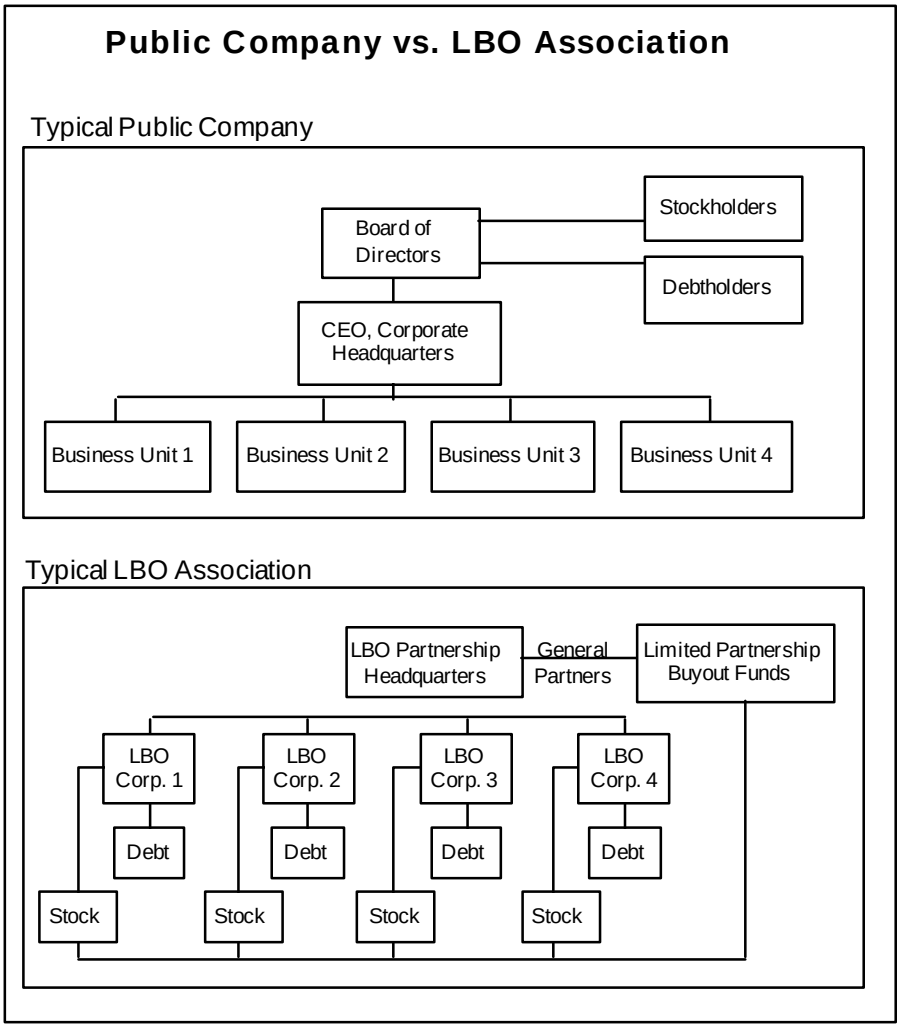
[9] (Hicks 1989).

CEO and headquarters staff of the typical diversified company. KKR's New York offices or Irwin Jacob's Minneapolis base are direct substitutes for corporate headquarters in Akron or Peoria. CEOs worry that they and their staffs will lose lucrative jobs in favor of competing organizations. Many are right to worry; the performance of active investors versus the public corporation leaves little doubt as to which is superior.

Active investors are creating new models of general management, the most widespread of which I call the LBO Association. A typical LBO Association consists of three main constituencies: an LBO partnership that sponsors going-private transactions and counsels and monitors management in an on-going cooperative relationship; company managers who hold substantial equity stakes in an LBO division and stay on after the buyout; and institutional investors (insurance companies, pension funds, and money management firms) that fund the limited partnerships that purchase equity and lend money (along with banks) to finance the transactions.

Much like a traditional conglomerate, LBO Associations have many divisions or business units, companies they have taken private at different point in time. KKR, for example, controls a diverse collection of 19 businesses including all or part of Beatrice, Duracell, Motel 6, Owens-Illinois, RJR Nabisco, and Safeway. But LBO Associations differ from publicly held conglomerates in at least four important respects. (See the illustration, "Public Company vs. LBO Association.")

Management incentives are built around a strong relationship between pay and performance. Compensation systems in LBO Associations usually have higher upper bounds than do public companies (or no upper bounds at all), tie bonuses much more closely to cash flow and debt retirement than to accounting earnings, and otherwise closely link management pay to divisional performance. Unfortunately, because these companies are private, little data are available on salaries and bonuses.



Public data are available on stock ownership, however, and equity holdings are a vital part of the reward system in LBO Associations. The University of Chicago's Steven Kaplan studied all public-company buyouts from 1979 through 1985 with a purchase price of at lease $50 million.[10] Business-unit chiefs held a median equity position of 6.4% in their unit. Even without considering bonus and incentive plans, a $1,000 increase in shareholder value triggered a $64 increase in personal wealth of business-unit chiefs. The median public-company CEO held only .25% of his company's equity. Counting *all* sources of compensation—including salary, bonus, deferred compensation, stock options,

[10] (Kaplan 1990).

and dismissal penalties—the personal wealth of the median public-company CEO increased only $3.25 for a $1,000 increase in shareholder value.[11]

Thus the salary of the typical LBO business-unit manager was almost 20 times more sensitive to performance than that of the typical public company manager. This comparison understates the true differences in compensation. The personal wealth of managing partners in an LBO partnership (in effect, the CEOs of the LBO Associations) is tied almost exclusively to the performance of the companies they control. The general partners in an LBO Association typically receive (through overrides and direct equity holdings) 20% or more of the gains in the value of the divisions they help manage. This implies a pay-for-performance sensitivity of $200 for every $1,000 in added shareholder value. It's not hard to understand why an executive that receives $200 for every $1,000 increase in shareholder value will unlock more value than an executive who receives $3.25.

LBO Associations are more decentralized than publicly held conglomerates. The LBO Association substitutes compensation incentives and ownership for direct monitoring by headquarters. The headquarters of KKR, the world's largest LBO partnership, had only 16 professionals and 44 additional employees in 1986. In contrast, the Atlanta headquarters of RJR Nabisco employed 470 people when KKR took it private in 1986 in a $25 billion transaction. At the time of the Goldsmith tender offer for Goodyear, the company's Akron headquarters had more than 5,000 people on its salaried payroll.

It is physically impossible for KKR and other LBO partnerships to become intimately involved in the day-to-day decisions of their operating units. They rely instead on stock ownership, incentive pay that rewards cash flow, and other compensation techniques to motivate managers to maximize value without bureaucratic oversight. My survey of 7 LBO partnerships found an average headquarters staff of 13 professionals and

[11] (Jensen and Murphy 1990).

19 non-professionals that oversees almost 24 business units with total annual sales of more than $11 billion. (See the table, “LBO Partnerships Keep Staff Lean.”)

LBO Associations rely heavily on leverage. The average debt ratio (long-term debt as a percentage of debt plus equity) for public companies prior to a buyout is about 20%. The Kaplan study shows the average debt ratio for an LBO is 85% on completion of the buyout.

TABLE 2

LBO PARTNERSHIPS KEEP STAFF LEAN

LBO PARTNERSHIP	Year Started	Number of Professionals	Number of Nonprofessionals	Number of Business Units	Combined Annual Revenues (in billions of dollars)
Berkshire Partners	1986	14	6	15	$ 1.0
Butler Capital	1979	8	14	33	2.3
Clayton & Dubilier	1976	10	11	8	4.8
Gibbons Green van Amerongen	1969	6	7	12	5.3
Kohlberg Kravis Roberts	1976	16	44	19	58.7
Thomas H. Lee Co.	1974	15	12	25	8.0
Odyssey Partners	1950	19	39	53	n.a.

Intensive use of debt dramatically shrinks the amount of equity in a company. This allows the LBO general partners and divisional managers to control a large fraction of the total ownership without requiring huge investments they would be unable to make or large grants of free equity. For example, in a company with $1 billion in assets and a debt ratio of 20%, management would have to raise $80 million to buy 10% of the equity. If that same company had a debt ratio of 90%, management would have to raise only $10 million to control a 10% stake. By concentrating equity holdings among managers and LBO partners, debt intensifies the ownership incentives that are so important to efficiency.

High debt also allows LBO Associations and other private organizations to tap the benefits of risk diversification once provided only by the public equity market. Intensive use of debt means much of it must be in the form of public, high-yield, noninvestment-grade securities, better known as junk bonds. This debt, which was pioneered by Drexel Burnham Lambert, reflects more the risk borne by shareholders in the typical public company. Placing this public debt in the well-diversified portfolios of large financial institutions spreads equity-like risk among millions of investors, who are the ultimate beneficiaries of mutual funds and pension funds—without requiring those risks to be held as equity. Indeed, high-yield debt is probably the most important and productive capital market innovation in the last 40 years.

LBO Associations have well-defined obligations to their creditors and residual claimants. Most buyout funds are organized as limited partnerships in which the partners of the sponsoring LBO firm serve as general partners. The buyout fund purchases most of the equity and sometimes provides debt financing. The limited partnership agreement denies the general partner the right to transfer cash or other resources from one LBO division to another. That is, all returns from a business must be distributed to the limited partners and other equity holders of that business. Such binding agreements reduce the risk of unproductive reinvestment by prohibiting cross-subsidization among LBO units. In effect, the LBO sponsor must ask its institutional investors for permission to reinvest funds, a striking difference from the power of public-company managers to freely shift resources between business units.

The management, compensation, and financial structures of the LBO Association square neatly with the rebirth of active investors. Institutional investors delegate the job of being active monitors to agents best qualified to play the role. The LBO partnership bond their performance by investing their own resources and reputations in the transaction and taking the bulk of their compensation as a share in the companies' increased value.

To be sure, this delegation is not without its tensions. The fact that LBO partnerships and divisional managers control the LBO Association's small equity base but hold little of the debt creates incentives for them to take high-risk management gambles. If their gambles succeed, they reap large rewards by increasing their equity values; if their gamble fails, creditors bear much of the cost. But the reputational consequences of such reckless behavior can be large. As long as creditors behave rationally, an LBO partnership that tries to profit at the expense of its creditors or walks away from a deal gone sour will not be able to raise funds for future investments.

To date, the performance of LBO Associations has been remarkable. Indeed, it is difficult to find any systematic losers in these transactions, and almost all of the gains appear to come from real increases in productivity. The best studies of LBO performance reach the following conclusions:

• LBOs create large gains for shareholders. Studies estimate that the average total premium to public shareholders ranges from 40% to 56%.[12] Kaplan finds that in buyouts that go public again or are otherwise sold (which occurs on average 2.7 years after the original transaction) total shareholder value increases by an average of 235%, or nearly 100% above market-adjusted returns over the same period.[13] These returns are distributed about equally between prebuyout shareholders and the suppliers of debt and equity to the transaction. Prebuyout shareholders earn average market-adjusted premiums of 38%, while the total return to capital (debt plus equity) for buyout investors is 42%. This return to buyout investors is measured on the total purchase price of the LBO, not the buyout equity. Because equity returns are almost a pure risk premium, and therefore independent of the amount invested, they are very high. The median market-adjusted return on buyout equity is 785% or 125% per year.

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[12] (Amihud 1989).

[13] That is, returns net of the returns that would normally be earned on these securities, given their level of systematic risk (beta) and general market returns.

• Value gains do not come at the expense of other financial constituencies. Some critics argue that buyout investors, especially managers, earn excessive returns by using inside information to exploit public shareholders. Managers do face severe conflicts of interest in these transactions; they cannot simultaneously act as buyer and agent for the seller. But equity-owning mangers who are not part of postbuyout management teams systematically sell their shares into LBOs. This would be foolish if the buyout were significantly underpriced in light of inside information, assuming that these nonparticipating insiders have the same inside information as the continuing management team. Moreover, LBO auctions are becoming common; underpriced buyout proposals (including those initiated by management) quickly generate competing bids.

No doubt some bondholders have lost value through going-private transactions. By my estimate, RJR Nabisco's prebuyout bondholders lost almost $300 million through the downgrading of their claims on the newly leveraged firm. This is a small sum in comparison to the $12 billion in total gains the transaction produced. As yet, there is no evidence that bondholders lose on average from LBOs. Evidence on LBOs through 1986 does show that holders of convertible bonds and preferred stock gain a statistically significant amount and that straight bondholders suffer no significant gains or losses.[14]

New data may document losses for bondholders in recent transactions. But the expropriation of wealth from bondholders should not be a continuing problem. The financial community is perfecting many techniques, including poison puts and repurchase provisions, to protect bondholders in the event of substantial restructurings. In fact, versions of these loss-prevention techniques have been available for some time. In the past, bondholders such as Metropolitan Life, which sued RJR Nabisco over the declining value of the company's bonds, chose not to take the lower yields the capital markets would require in return for protection.

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[14] (Marais, Schipper et al. 1989).

• LBOs increase operating efficiency without massive layoffs or big cuts in research and development. Studies of the operating characteristics of post-buyout companies find substantial productivity gains. Kaplan finds that average operating earnings increase by 42% from the year prior to the buyout to the third year after the buyout. Cash flows increased by 96% over this same period. Other studies document significant improvements in profit margins, sales per employee, working capital inventories, and receivables.[15] Those who doubt these findings might take a moment to scan the business press, which has chronicled the impressive post-buyout performance of companies such as Levi Strauss, A.O. Scott, Safeway, and Weirton Steel.

Importantly, employment does not fall systematically after buyouts, although it does not grow as quickly as in comparable companies. Median employment for all companies in the Kaplan study, including those engaged in substantial divestitures, increased by nearly 1%. Companies without significant divestitures increased employment by 5%.

Moreover, the great concern about the effect of buyouts on R&D and capital investment is unwarranted. The low-growth companies that make the best candidates for LBOs don't invest heavily in R&D to begin with. Of the 76 companies in the Kaplan study, only seven spent more than 1% of sales on R&D before the buyout. Another recent study shows that R&D as a fraction of sales grows at the same rate in LBOs as in comparable public corporations.[16] According to Kaplan's study, capital expenditures are 20% lower in LBOs than in non-LBO companies. Because these cuts are taking place in low-growth or declining industries and are accompanied by a doubling of market adjusted value, they appear to be coming from reductions in low-return projects rather than productive investments.

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[15] In addition to Kaplan, see Smith (1990). See also Lichtenberg and Siegal (1990).

[16] (Lichtenberg and Siegel 1990).

• Taxpayers do not subsidize going-private transactions. Much has been made of the charge that large increases in debt virtually eliminate tax obligations of an LBO. This argument overlooks the five sources of additional tax revenues generated by buyouts: capital gains taxes paid by pre-buyout shareholders; capital gains taxes paid on post-buyout asset sales; tax payments on the large increases in operating earnings generated by efficiency gains; tax payments by creditors who receive interest payments on the LBO debt; and taxes generated by more efficient use of the company's total capital.

Overall, the U.S. Treasury collects an estimated 230% more revenues in the year after a buyout than it would have otherwise and 61% more in long-term present value. The $12 billion gain associated with the RJR Nabisco buyout will generate net tax revenues of $3.3 billion in the first year of the buyout; the company paid $370 million in federal taxes in the year before the buyout. In the long term, the transaction will generate total taxes with an estimated present value of $3.8 billion.[17]

• LBO sponsors do not have to take their companies public for them to succeed. Most LBO transactions are completed with a goal of returning the reconfigured company to the public market within three to five years. But recent evidence indicates that LBO sponsors are keeping their companies under private ownership. Huge efficiency gains and high-return asset sales produce enough cash to pay down debt and allow LBOs to generate handsome returns as going concerns. The very proliferation of these transactions has helped create a more efficient infrastructure and liquid market for buying and selling divisions and companies. Thus LBO investors can "cash out" in a secondary LBO or private sale without recourse to a public offering. One recent study finds that only 5% of the more than 1,300 LBOs between 1981 and 1986 have gone public again.[18]

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[17] (Jensen, Kaplan et al. 1989).

[18] (Muscarella and Vetsuypens 1990).

Public companies can learn from LBO Associations and emulate many of their characteristics. But this requires major changes in corporate structure, philosophy, and focus. They can reduce waste of free cash flow by borrowing to repurchase stock or pay large dividends. They can alter their charters to encourage large investors or experiment with alliances with active investors such as Lazard Frères' Corporate Partners fund. They can increase equity ownership by directors, managers, and employees. They can enhance incentives through pay-for-performance systems based on cash flow and value rather than accounting earnings. They can decentralize management by rethinking the role of corporate headquarters and dramatically shrinking their staffs.

Some corporations are experimenting with such changes—FMC, Holiday, and Owens-Corning—and the results have been impressive. But only a coordinated attack on the status quo will halt the eclipse of the public company. It is unlikely that such an attack will proceed fast enough or go far enough.

Who can argue with a new model of enterprise that aligns the interests of owners and managers, improves efficiency and productivity, and unlocks hundreds of billions of dollars of shareholder value? Many people, it seems, mainly because these organizations rely so heavily on debt. As I've discussed, debt is crucial to management discipline and resolving the conflict over free cash flow. But critics, even some who concede the control function of debt, argue that costs of leverage outweigh the benefits.

Wall Street economist Henry Kaufman, a prominent critic of the going-private trend, issued a typical warning when he asserted: "Any severe shock—a sharp increase in the interest rates in response to Federal Reserve credit restraint, or an outright recession that makes the whole stock market vulnerable, or some breakdown in the ability of foreign firms to bid for pieces of U.S. companies—will drive debt-burdened companies to the government's doorstep, to plead for special assistance."[19]

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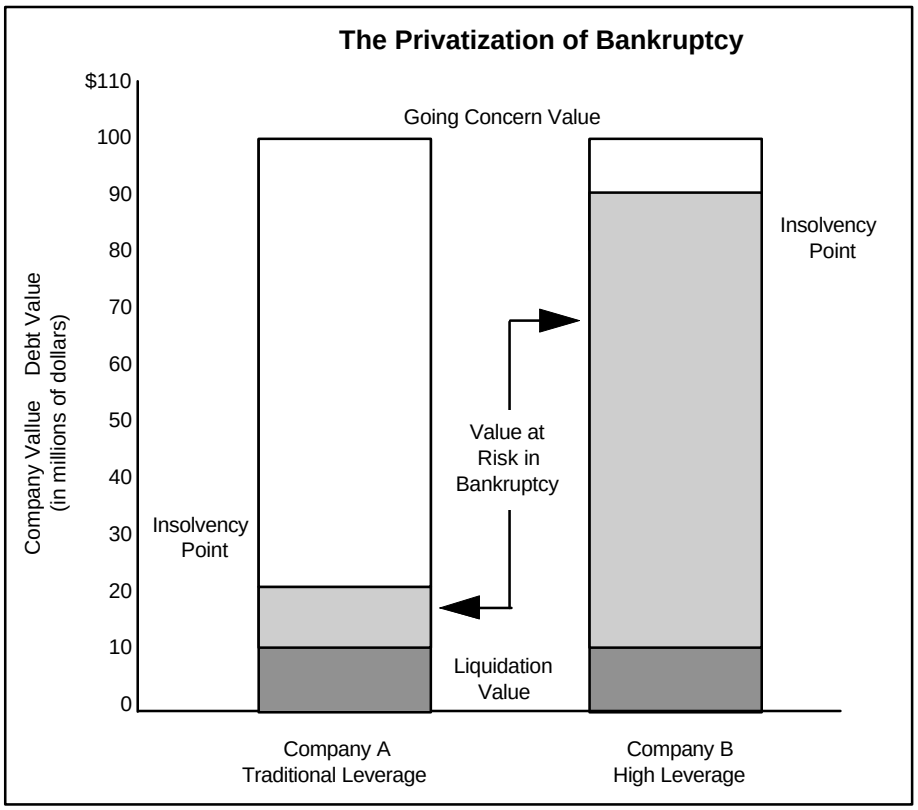
[19] (Kaufman 1989).

The relationship between debt and insolvency is perhaps the least understood aspect of this entire organizational evolution. New hedging techniques mean the risk associated with a given level of corporate debt is lower today and it was five years ago. Much of the bank debt associated with LBOs (which typically represents about half of the total debt) is done through floating-rate instruments. But few LBOs accept unlimited exposure to interest rate fluctuations. They purchase caps to set a ceiling on interest charges or use swaps to convert floating-rate debt into fixed-rate debt. In fact, most banks require such risk management techniques as a condition of lending.

Critics of leverage also fail to appreciate that insolvency in and of itself is not always something to avoid—and that the costs of becoming insolvent are likely to be much smaller in the new world of high leverage than in the old world of equity-dominated balance sheets. The proliferation of takeovers, LBOs, and other going-private transactions has inspired innovations in the reorganization and work out process. I refer to these innovations as "the privatization of bankruptcy." LBOs *do* get into financial trouble more frequently than public corporations do. But few LBOs ever enter formal bankruptcy. They are reorganized quickly (a few months is common), often under new management, and at much lower costs than under a court-supervised process.

How can insolvency be less costly in a world of high leverage? Consider an oversimplified example. Companies A and B are identical in every respect except for their financial structures. Each has a going-concern value of $100 million (the discounted value of its expected future cash flows) and a liquidation or salvage value of $10 million. Company A has an equity-dominated balance sheet with a debt ratio of 20%, common for large public companies. Highly leveraged Company B has a debt ratio of 85%, common for LBOs. (See the illustration, "The Privacy of Bankruptcy.")



Now both companies experience business reversals. What happens? Company B will get in trouble with its creditors much sooner than Company A. After all, Company B's going-concern value doesn't have to shrink very much for it to be unable to meet its payments on $85 million of debt. But when it does run into trouble, its going-concern value will be nowhere near its liquidation value. If the going-concern value shrinks to $80 million, there remains 470 million of value to preserve by avoiding liquidation. So Company B's creditors have strong incentives to preserve the remaining value by quickly and efficiently reorganizing their claims outside the courtroom.

No such incentives operate on Company A. Its going-concern value can fall dramatically before creditors worry about their $20 million of debt. By the time creditors do intervene, Company A's going-concern value will have plummeted. And if Company A's value falls to under $20 million, it is much more likely than Company B to be worth less than its $10 million salvage value. Liquidation in this situation is the likely and rational outcome, with all its attendant conflicts, dislocations, and costs.

The evolving U.S. system of corporate governance and finance exhibits many characteristics of the postwar Japanese system. LBO partnerships act very much like the main banks (the real power center) in Japan's *keiretsu* business groupings. The *keiretsu* make extensive use of leverage and intercorporate holdings of debt and equity. Banks commonly hold substantial equity in their client companies and have their own executives help them out of difficulty. (For years, Nissan has been run by an alumnus of the Industrial Bank of Japan, who became CEO as part of the bank's effort to keep the company out of bankruptcy.) Other personnel, including the CFOs, move frequently between banks and companies as part of an on-going relationship that involves training, consulting, and monitoring. Japanese banks allow companies to enter formal bankruptcy only when liquidation makes economic sense—that is, when a company is worth more dead than alive. Japanese corporate boards are composed almost exclusively of insiders.

Ironically, even as more U.S. companies come to resemble Japanese companies, Japan's public companies are becoming more like U.S. companies of 15 years ago. Japanese shareholders have seldom had any power. The banks' chief disciplinary tool, their power to withhold capital from high-growth, cash-starved companies, has been vastly reduced as a result of several factors. Japan's victories in world product markets has created ready alternatives to bank loans, while deregulation has liberalized corporate access to these funds. Finally, new legal constraints prevent banks from holding more than 5% of the equity of any company, which reduces their incentive to engage in active monitoring.

Today many of Japan's large public companies are flooded with free cash flow far in excess of their opportunities to invest in profitable internal growth. In 1987, more than 40% of Japan's large public companies had no net bank borrowings—that is, cash balances larger than their short- and long-term borrowings. Toyota, with a cash hoard of

$10.4 billion, more than 25% of its total assets, is commonly referred to as the Toyota Bank.[20]

In short, Japanese managers are increasingly unconstrained and unmonitored. They face no effective internal controls, little control from the product markets their companies already dominate, and fewer controls from the banking system because of self-financing, direct access to capital markets, and lower debt ratios. Unless shareholders and creditors discover ways to prohibit their managers from behaving like U.S. managers, Japanese companies will make uneconomic acquisitions and diversification moves, generate internal waste, and engage in other value-destroying activities. The long-term result will be the growth of bureaucracy and inefficiency and the demise of product quality and organizational responsiveness—until the waste becomes so severe it triggers a market for corporate control to remedy the excesses.

The Japanese remedy will reflect that country's unique legal system and cultural practices. But just as hostile takeovers, LBOs, and other control transactions went from unacceptable behavior in the U.S. to a driving force in corporate restructuring, so too will they take hold in Japan—once the potential returns outweigh the costs and risks of challenging the corporate status quo.

Meanwhile, in the United States, the organizational changes revitalizing the corporate sector will create more nimble enterprises and help reverse our losses in world product markets. As this profound innovation continues, however, people will make mistakes. To learn, we have to push new policies to the margin. It will be natural to see more failed deals.

There are some worrisome structural issues. I look with discomfort on the dangerous tendency of LBO partnerships, bolstered by their success, to take more of their

[20] Average (book value) debt ratios fell from 77% in 1976 to 68% in 1987. Given the 390% increase in stock prices over this period, market-value debt ratios fell even more dramatically. Figures calculated from the NEEDS Nikkei Financials file for all companies on the First Section of the Tokyo Stock Exchange.

compensation in front-end fees rather than in back-end profits earned through increased equity value. As management fees and the fees for completing deals get larger, the incentive to do deals, rather than good deals, also increases. Institutional investors (and the economy as a whole) are best served when the LBO partnership is the last member of the LBO Association to get paid and when the LBO partnership gets paid as a fraction of back-end value of the deals including losses.

Moreover, we have yet to fully understand the limitations on the size of this new organizational form. LBO partnerships are understandably tempted to increase the reach of their talented monitors by reconfiguring divisions as acquisition vehicles. This will be difficult to accomplish successfully. It is likely to require bigger staffs, greater centralization of decision rights, and dilution of the high pay-for-performance sensitivity that is so crucial to success. As LBO Associations expand, they run the risk of recreating the bureaucratic waste of the diversified public corporation.

These and other problems should not cloud the remarkable benefits associated with the eclipse of the public corporation. What surprises me is how few mistakes have occurred thus far in an organizational change as profound as any since World War II.

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