



ADVANCED TOPICS IN FINANCE AND ACCOUNTING

**THE  
NEW  
CORPORATE  
FINANCE**  
Where Theory  
Meets Practice

**ONALD H. CHEW, JR.**

# **THE NEW CORPORATE FINANCE**

**Where Theory  
Meets Practice**

**EDITED BY**

**Donald H. Chew, Jr.**

Stern Stewart & Co.

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### **THE NEW CORPORATE FINANCE**

**Where Theory Meets Practice**

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# INTRODUCTION: FINANCIAL INNOVATION IN THE 1980s

*by Donald H. Chew, Jr., Stern Stewart & Co.*

The past 30 years have witnessed remarkable changes in the theory and practice of corporate finance. Beginning with the work of Franco Modigliani and Merton Miller in the late 1950s, the evolution of the "modern" theory of corporate finance into its present shape has both anticipated and responded to a wave of innovations in corporate practice. The late '50s saw the first tender offers by corporations for other public companies—a development that, with the aid of "contingent" bank financing, contributed to the building of leveraged conglomerates in the 1960s. The 1970s gave rise not only to original-issue "junk bonds," but to stock options and a host of other exchange-traded "derivatives" such as futures on foreign exchange, interest rates, and commodity prices.

It was during the 1980s, however, that the rate of financial innovation accelerated most dramatically. Building on the success of the futures markets established in the '70s, the '80s spawned an astonishing variety of new "risk management" tools: (1) currency, interest rate, and commodity swaps; (2) exchange-traded options on foreign currencies, interest rates, and commodity prices; (3) futures on stock market indexes, as well as other new futures contracts on an expanding range of currencies, interest rates, and commodity prices; and (4) "hybrid" debt securities combining standard debt issues with forward- or option-like features. At the same time, a burgeoning junk bond market, besides furnishing capital for promising growth companies too small to obtain investment-grade credit ratings, was also making possible an unprecedented wave of leveraged acquisitions, large stock buybacks, divestitures, spin-offs, and multi-billion dollar LBOs—all of which have been yoked together under the name of "corporate restructuring."

As the pace of innovation quickened, moreover, the relationship between theory and practice became more dynamic. On the one hand, theoretical advances helped stimulate the process of inno-

vation. Indeed, the 1980s can be viewed as a decade in which Wall Street first adopted and then pushed to their limits principles of financial economics that most practicing businessmen once dismissed as hopelessly arcane. But if theory has affected practice, the flood of new corporate securities, risk management approaches, and organizational structures has provided financial economists with a vast laboratory in which to observe and test the workings of our capital markets. And, as should become clear from the articles in this book, such experimentation is helping finance scholars extend and, in some cases, revise their thinking—which in turn promises to influence corporate practice in the 1990s.

## THE CONSEQUENCES OF CORPORATE RESTRUCTURING

Before tracing the progression of academic thought that contributed to the new developments in corporate finance, let's briefly examine the economic consequences of financial innovation. What has really been accomplished by all this change? And to begin with the most controversial, let's consider the case of corporate restructuring.

In the popular mind the verdict on leveraged restructuring has already been pronounced. As a result of the cluster of bankruptcies starting in 1989, the popular outrage over the S&L debacle, and the depressed economic climate of the 1990s, Wall Street is now being subjected to a backlash of public opinion, political scrutiny, and "reregulation" reminiscent of the 1930s. On the one hand, corporate restructuring brought about a pronounced trend toward smaller, less diversified, more efficient—and in some cases private—corporations. But, in the process of streamlining corporate America, the leveraged restructuring movement also enriched a breed of capitalists known as "corporate raiders" while imposing painful changes upon some corporate managers, employees, and local

communities. It is, predictably, these latter effects the mass media and politicians have seized upon. Those few media accounts of LBOs and leveraged takeovers that manage to expand their focus beyond the “morality play” of private greed and misery almost invariably reach the same conclusion: Leveraged restructurings and other forms of “financial engineering” are destroying the competitive future of American industry by forcing shortsighted cutbacks in employment, R&D, and capital investment.

From financial economists, however, we are hearing a very different assessment of the *public* consequences of corporate restructuring. A large and growing body of academic research suggests the leveraged restructuring movement created enormous increases in stockholder value—and thus, presumably, major improvements in corporate efficiency. On the basis of this research, Harvard professor Michael Jensen has offered \$650 billion as a conservative estimate of the stockholder gains arising from mergers, takeovers, divestitures, spin-offs, and LBOs over the period 1976 to 1990. These numbers represent only the gains to the “sellers” in such transactions, not to the “buyers” (a group which includes those raiders whose allegedly vast profits became a favorite media target during the ‘80s). Nor does this estimate include the value of efficiency improvements by companies pressured by the *threat* of takeover into reforming without a visible transaction.

As Jensen also reports, a growing body of work on LBOs and other leveraged recapitalizations has documented significant improvements in corporate operating efficiency—improvements that would appear to justify much of the stock price increases accompanying these transactions. Moreover, there is no evidence in such companies of major cutbacks, on average, in employment, maintenance expenditures, or R&D. Indeed, at the height of leveraged restructuring activity, the U.S. economy was near the midpoint of a 92-month expansion that saw record-high percentages of people employed, as well as steady increases in corporate capital spending and R&D.

Of course, many of the highly leveraged transactions (HLTs) executed in 1986 and thereafter have gotten into trouble—in large part, as Jensen argues, because of a gross misalignment of incentives between dealmakers and investors that led to systematic overpayments. And thus part of the stockholders gains from HLTs have come at the expense of the bondholders and lenders that fi-

nanced the deals. But Jensen places a likely upper bound of \$50 billion on total losses to bondholders, banks, and other creditors from leveraged transactions. The current recovery of the junk bond market, together with the recent relaxation by bank regulators of the HLT constraints, suggests that eventual losses may well turn out to be far less than this estimate.

Such losses, it’s also important to recognize, are dwarfed not only by the stockholder gains from restructuring, but also by losses on commercial real estate loans. Such loans are by far the largest troubled asset category for S&Ls (junk bonds hardly show up in the statistical analysis!), not to mention many commercial banks. And if pushed to speculate, I would argue that such real estate losses, along with the regulatory reaction and “credit crunch” they have provoked, are the primary contributors to the current weakness of the economy.

Some macro data recently released by the Commerce Department are also sharply inconsistent with the popular claim that the restructuring of the ‘80s weakened the international competitiveness of the U.S. manufacturing sector. According to the U.S. Bureau of Labor Statistics, the productivity of U.S. manufacturing increased dramatically between 1982 and 1990, while the real unit costs of labor declined sharply. Partly reflecting such productivity gains as well as the depreciation of the dollar, the export of U.S. goods and services increased by 75% in real terms during the six-year period 1985-1991. Such continuing export growth is all the more encouraging, given the depressed condition of most of the world’s developed economies since the beginning of 1989.

## THE 1990s: INNOVATION AND THE CREDIT CRUNCH

Today, of course, leveraged restructuring is down (though not altogether out), and there are few signs of a well-functioning corporate control market. The only “hostile” deal of note in the ‘90s to date has been AT&T’s acquisition of NCR, a transaction that suggests a return to the diversifying acquisitions of the ‘60s and ‘70s—the very activity that provided many opportunities for corporate raiders in the first place. And, as if to reinforce that lesson of the ‘80s, AT&T’s market value predictably dropped by some 15% during the month after the deal was first announced. (For corporate finance theorists, it was also edifying to watch AT&T’s

management volunteer to raise the purchase price when granted the ability to use “pooling” rather than “purchase” accounting.)

But if the scale of leveraged restructuring is now greatly diminished, financial innovation is continuing on the other major front established in the '80s: corporate risk management. The corporate use of futures, swaps, and options, while rising steadily throughout the '80s, has if anything accelerated in the 1990s. Rather ironically, the regulatory crack-down on one form of financial innovation—LBOs and other HLTs—has provided the impetus for another by contributing greatly to the credit crunch. As I argue below, the '90s have seen a flurry of new securities—notably derivatives and “hybrid” debt instruments incorporating derivatives—designed to help smaller, riskier companies raise capital in the face of restrictive credit conditions.

The primary reason for the strength of corporate interest in risk management is thus somewhat different today from what it was 10 years ago. The rise and expansion of new kinds of futures, swaps, and options during the late '70s and early '80s was primarily a capital market response to the sharp increases in the volatility of exchange rates, interest rates, and commodity prices. Besides offering investors and corporations a low-cost means of hedging against such price volatility, these new markets also provided financially sophisticated corporations with opportunities for financing “arbitrages.” For example, combining zero-coupon, yen-denominated debt issues with yen-dollar currency swaps reportedly enabled some large, well-known corporations to reduce their all-in funding costs below that of the U.S. Treasury. And creating “synthetic” fixed-rate debt by coupling floating-rate issues with interest rate swaps reportedly reduced the cost to riskier borrowers of conventional fixed-rate funding (although the extent of the cost savings from this strategy has surely been exaggerated).

When coupled with increased price volatility, the high *level* of interest rates in the early 1980s also contributed to another innovation in corporate risk management: the proliferation of new kinds of corporate hybrid debt issues. Hybrids are so called because they effectively combine a conventional straight fixed-rate debt issue with a forward- or option-like feature. One familiar example is convertible debt, which amounts to lower-coupon debt combined with an option (technically, a warrant) on the firm's equity.

What is distinctive about the hybrid debt instruments of the '80s is that their payoffs, instead of being tied to the issuing company's stock price, were linked to a growing variety of *general* economic variables. In 1980, for example, Sunshine Mining issued bonds whose principal repayment was tied to future silver prices. Subsequent corporate hybrids introduced in the '80s indexed principal or interest payments to exchange rates, interest rates, stock market indices, and the prices of commodities such as oil, gold, copper, and natural gas. Such securities were designed to enable somewhat riskier companies—typically those with significant exposures to commodity prices—to reduce their interest payments to manageable levels by giving bondholders, in effect, an equity-like participation in corporate profits.

The 1990s are also proving, as a recent *New York Times* article put it, “Hot Times for Hybrids.” Unlike the '80s, however, the current stimulant to hybrids is not the level of interest rates (which are quite low by recent standards), but rather the pronounced widening of credit *spreads* that now exists for all but blue-chip borrowers. Such spreads reflect not only a natural market “correction” in response to recent bank and bondholder losses, but also the effect of the severe regulatory constraints imposed on all non-investment-grade debt beginning in 1989.

As Charles Smithson and I have argued (see “*The Uses of Hybrid Debt in Managing Corporate Risk*”), many companies today are using hybrid debt to lower their risk profiles, and thus their current interest payments. By lowering interest payments and stabilizing the expected level of (after-interest) operating cash flow, such innovative instruments are enabling issuers to avoid the disproportionately higher funding costs now imposed on corporate borrowers. In this sense, financial innovation in the form of new hybrid debt securities is playing a role much like that of junk bonds in the early '80s: They are allowing riskier companies to raise capital on economic terms, thus helping them weather the restrictive financing climate of the '90s.

Such securities innovation also provides yet another illustration of Merton Miller's conception of regulatory change as “the grain of sand in the oyster” that irritates the financial system into invention. The continuing proliferation of new forms of hybrid debt into the '90s demonstrates once again the ingenuity of our capital markets in circumventing regulatory obstacles to economic growth.



## THE BEGINNINGS OF MODERN THEORY

With this allusion to Professor Miller, let's turn from this survey of more recent changes in corporate financial practices to a brief account of the development of the theory.

The modern theory of *corporate* finance begins with the well-known "irrelevance" propositions formulated by Franco Modigliani and Merton Miller in the late 1950s and early 1960s. Given the dramatic recapitalizations of the '80s, typically accompanied by large increases in stockholder value, it may seem odd to begin with the notion that corporate financial policies "do not matter." The M&M propositions are the natural starting point because they represent the first attempt to apply rigorous economic logic to corporate financial decision-making in aggregate.

In so doing, Miller and Modigliani began the transformation of the study of corporate finance from what then amounted to an apprenticeship system transmitting folklore between generations—in effect, the traditional Harvard Business School case-study approach—into a more systematic and scientific discipline. (The Nobel Prizes awarded first to Modigliani in 1985 and then to Miller in 1990 are only the most visible acknowledgments of the aspirations of corporate finance to the internal consistency and predictive power of a "hard" science.)

But what do the M&M "irrelevance" propositions really say about financial decision-making? Paradoxically, the M&M capital structure propositions appear to say that a company's financial policy—whether it chooses to fund its operations with debt or equity, and what kinds of securities it chooses to issue—have no material effect on the value of its shares. And the twin companion to this capital structure proposition seems to say that the firm's dividend policy—the fraction of earnings it chooses to pay out to stockholders rather than retain—also has no effect on market value. That value, according to M&M, is determined solely by corporate investment and operating decisions, by those "real" decisions that produce the firm's operating cash flows. (More precisely, the value of the firm was formulated by M&M as the discounted present value of "future cash flows from the firm's present assets and future growth opportunities," net of "the additional investment necessary to initiate and sustain those flows.")

Corporate capital structure and dividend decisions were accordingly viewed as nothing more than ways of dividing up the operating cash flows produced by the business and repackaging them for distribution to investors. And, as long as such "merely financial" decisions are assumed not to affect the "real" decisions in any systematic way—for example, provided management behaves the same whether its debt-to-equity ratio is 30 percent or 300 percent—then such financial decisions "do not matter."

But, as Miller himself said in his 1989 reassessment of *"The Modigliani-Miller Propositions After Thirty Years"* (in this book),

*the view that capital structure is literally irrelevant or that "nothing matters" in corporate finance, though still sometimes attributed to us, is far from what we ever actually said about the real-world applications of our theoretical propositions.*

The M&M propositions were intended to hold only under a deliberately restrictive set of conditions, the most important of which are as follows: (1) there are no significant differences in the tax treatment accorded different securities; (2) reliable information about the firm's earnings prospects is freely available to investors (and, by implication, what management knows about the future is not significantly different from what investors know); and (3) corporate investment decisions, as mentioned above, are not influenced by financing (or dividend) choices.

What, then, do the M&M propositions have to say to corporate practitioners, to those financial executives who get paid a lot of money to make decisions that purportedly do not matter? There are really two distinct messages: a negative one and a positive one.

The negative one is captured in Stewart Myers's formulation that "there is no magic in leverage." Investment bankers who market debt instruments to their clients are fond of showing them the wonderful effect of increasing leverage on pro forma earnings per share. The message of Miller and Modigliani is that this effect is an illusion. It is true that if companies issue debt and use the proceeds to retire their shares, then EPS will go up as long as the return on invested capital simply exceeds the after-tax corporate borrowing rate—which, of course, is hardly an acceptable standard of profitability. What such analysis fails to mention is that, as companies take on more financial leverage, the risk of the equity rises commensurately.

And as the risk of the equity increases, stockholders increase their required rate of return, the P/E of the firm goes down, and the net effect is a wash.

One of the accomplishments of LBOs and other leveraged recaps was to reveal the fundamental futility of “managing earnings” by manipulating accounting techniques. The leveraged restructuring movement thus held out another important lesson for corporate managers: Until the hostile takeover movement came to an abrupt halt around the middle of 1989, public companies that continued to make uneconomic investment and financing decisions guided by the old accounting yardsticks were creating opportunities for aggressive investors piercing the veil of accounting statements to focus on underlying cash flow. To corporate raiders and other investors in private (or highly leveraged) companies, EPS was clearly irrelevant! All that mattered to them was the expected ability of the business to generate adequate cash flow to service the debt and leave themselves with a large enough return on their equity investment to justify the large financial risk.

In short, the discounted cash flow valuation framework stemming from the Chicago school principle of market efficiency—and tirelessly advocated by my colleague Joel Stern over the past 20 years—was being put to use daily during the restructurings of the '80s. Unfortunately, it was not the majority of professional corporate executives who came to understand that “earnings per share don't count,” but rather the corporate raiders who were supplanting them. (In fact, a Lou Harris poll conducted as recently as 1989 showed that 55% of corporate managers continue to believe that earnings are a more important determinant of corporate stock prices than cash flow.)

Now let's turn to the positive side of the argument. The positive import of the M&M propositions, and thus their main message to corporate practitioners, can be seen by turning the propositions “upside down”—as Clifford Smith likes to say—“and standing them on their heads.” That is, if changes in corporate financial or dividend policy cause significant changes in stock values, they are likely to do so only for the following reasons: (1) they affect taxes paid by issuers or investors; (2) they provide a credible “signal” to investors of management's confidence (or lack thereof) in the firm's future earnings; or (3) they affect the probability that management will operate as efficiently as possible, undertaking only profitable investments and returning “excess” capital to investors.

## **BEYOND THE IRRELEVANCE PROPOSITIONS: TAX AND SIGNALLING EFFECTS**

The academic process of relaxing each of these conditions was begun by Miller and Modigliani themselves almost 30 years ago. In the so-called “tax-adjusted” M&M proposition presented in a 1963 paper, they argued that the benefits of substituting tax-deductible interest payments for non-deductible (and thus potentially twice-taxed) dividend payments could push the optimal capital structure toward 100% debt—provided, of course, the offsetting costs of high leverage were not too great.

In the early 1960s, of course, the world did not conform to this vision, and M&M were inclined to dismiss their model, in Miller's words, as “simply another inconsequential paradox arising from an economist's frictionless dreamworld.” Facing the reality of corporate debt-equity ratios in the early 1960s that were not much higher than they were in the low-tax 1920s, Miller recalls,

*we seemed to face an unhappy dilemma: either corporate managers did not know (or perhaps care) that they were paying too much in taxes; or something major was being left out of the model. Either they were wrong or we were....[Our thinking] suggested that the high bond ratings in which the management took so much pride may actually have been a sign of their incompetence; that the managers were leaving too much of their stockholders' money on the table in the form of unnecessary corporate income tax payments.*

*In sum, many finance specialists, myself included, remained unconvinced that the high-leverage route to corporate tax savings was either technically unfeasible or prohibitively expensive in terms of expected bankruptcy or agency costs.*

In the 1980s, this kind of tax “arbitrage” between debt and equity likely played some role in every leveraged acquisition or recapitalization accomplished by Wall Street. Debt-equity ratios in LBOs, and in some public recaps, achieved levels that Miller described as “far beyond anything we ever dared use in our classroom illustrations of the tax advantage.” Of the rise of junk bonds, Miller says simply, “The only puzzle is why it took so long.

But tax savings alone, as Miller noted in his Nobel Prize speech, could not account for the “size of the observed LBO premiums.” And Miller himself quali-



fied the tax-adjusted M&M proposition in his 1976 Presidential Address to the American Finance Association. Entitled “Debt and Taxes,” the paper argued that the tax savings of corporate debt financing were exaggerated by the failure to account for any *increase* in taxes paid by the holders of corporate debt. To the extent such holders are taxable (although many clearly are not), some of the savings from converting equity into debt will be offset by the increase in taxes paid by the new debtholders.

Some financial economists have attempted to take finance theory beyond capital structure irrelevance by exploring the possibility that corporate financial decisions provide “signals” to investors about the firm’s earnings prospects. To the extent management knows more about the firm’s prospects than outside investors, corporate choices among financing alternatives—indeed, the very attempt to raise outside capital—could communicate “insider” information about the company’s future. To take the most obvious case, large block sales of stock by insiders are almost always accompanied by significant decreases in share values.

But while signalling theories help explain why the market typically reacts negatively to announcements of equity offerings, and positively to major exchange offers to retire equity with new debt, they have not furnished a convincing explanation of how (value-maximizing) corporations in the aggregate choose their capital structures. As Miller himself concluded in his 1986 paper on “The Informational Content of Dividends,” none of the signalling models has provided—nor is one likely to provide—a signalling “equilibrium” in which one dividend or financial policy is clearly superior to another. That is, even though signalling theories offer a plausible explanation of how investors interpret *changes* in corporate leverage and payout ratios, they nevertheless fail to address the questions of optimal capital structure and dividend policy.

## **FURTHER BEYOND THE IRRELEVANCE PROPOSITION: THE RISE OF AGENCY COST THEORY**

Perhaps the most significant departure from the M&M irrelevance propositions—one with more definite import for financial policy—can be traced to a 1976 paper written by Michael Jensen and William Meckling called “Theory of the Firm: Managerial Behavior, Agency Costs, and Capital Struc-

ture.” What the theory of “agency costs” accomplished was to call attention to the potential loss in value of public corporations caused by the divergence of interest between management and shareholders. Most finance scholars, including Jensen and Meckling, began by arguing that the agency costs of separating ownership from control could not be too great for several reasons: product market competition (including challenges from foreign competitors) as well as a market for executive labor should both serve to limit the natural tendency of management to pursue its own interest at the expense of shareholders; and management incentive plans are presumably designed to reduce this conflict of interest. If all of these fail to join managerial and stockholder interests, then a vigorously operating takeover market—in academic parlance, the “market for corporate control”—should prevent self-serving managers from entrenching themselves. But the size and consistency of the stockholders gains from the leveraged restructurings of the ’80s suggest otherwise.

The relevance of “agency cost” theory to developments in the 1980s was set forth in Jensen’s 1986 paper, “The Agency Costs of Free Cash Flow: Corporate Finance and Takeovers,” published in the *American Economic Review*. Jensen’s “Free Cash Flow” theory said, in short, that leveraged acquisitions, stock repurchases, and management buyouts of public companies were adding value to corporations by squeezing capital out of organizations that had few profitable growth opportunities. Subjecting companies in mature industries to the “discipline” of high leverage was also intensifying the search for operating efficiencies.

Before the wave of hostile takeovers and LBOs in the 1980s, corporate managements in mature industries could continue their customary practice of reinvesting excess capital (“free cash flow”) in their core businesses even while the expected returns to capital at the margin were falling lower and lower. Or, if things got bad enough, they would choose to diversify into unrelated businesses through acquisition. (For example, oil companies facing a massive “free cash flow” problem in the early ’80s responded initially by choosing both strategies, thus inviting the attention of Boone Pickens.) The massive substitution of debt for equity in the ’80s provided a systematic solution to this “free cash flow” problem by converting discretionary dividend payments into contractual, and considerably more demanding, payments of interest and principal. As Miller himself rephrased Jensen’s

argument, "By accepting such heavy debt-service burdens, the managers made a binding commitment to themselves and to the other residual equity holders against yielding to the temptations to pour the firm's good money down investment ratholes."

**The Re-Emergence of Active Investors.** Besides returning excess capital to investors and curbing uneconomic reinvestment, the replacement of equity by debt also allowed for the concentration of equity ownership among large investors. In *"Corporate Control and the Politics of Finance"* (in this book), Jensen argues that such concentration facilitated the rise—or, more precisely, the re-emergence of—"active investors" in the U.S., a group that includes "Warren Buffet, Carl Icahn, Sir James Goldsmith, and the principals of KKR and Forstmann Little." Active investors, as Jensen defines them, are those holding large blocks of a company's stock (sometimes its debt as well) who "actually monitor management, sit on boards, are sometimes involved in dismissing management, are often intimately involved in the strategic direction of the company." On occasion (witness Warren Buffet's recent assumption of the chairmanship of Salomon Brothers), they even manage.

Active investors are by no means a new phenomenon. In the Japanese and German economies, Jensen maintains, large-block stockholders, notably commercial banks, have long been the most effective force binding management's interests to those of its stockholders. And, prior to the enactment of Glass Steagall and other legislative acts of the 1930s and '40s, investment and commercial bankers like J.P. Morgan played a similar role in the U.S., sitting on boards of directors, monitoring management, and sometimes enforcing changes in management.

But, over the 50-year period between 1930 and the beginning of the '80s, the rift between corporate ownership and control continued to grow. Between 1937 and 1990, according to Jensen and Kevin Murphy, the percentage equity ownership of the CEOs of the largest U.S. companies fell 10-fold, from roughly 3 percent to less than .03 percent today. Corporations also became much larger over this period, but only by a factor of 3 or 4 times (in real dollars), thus implying a 60-70% reduction in the real dollar investment of corporate CEOs in their own companies' stocks.

As for the sharp growth in the size of U.S. companies since the '30s, part of it was undoubtedly justified by scale economies in some businesses. But perhaps the largest contributor to such corporate

growth was the trend toward corporate conglomeration initiated during the late 1960s—a development that, although initially welcomed by stockholders, ended up contributing significantly to the negative real returns to stockholders over the decade of the 1970s.

For Jensen, the rise of the LBO held out an economic solution to "massive inefficiencies" arising from the corporate conglomerate movement—which in turn was a predictable consequence of the growing separation of ownership and control. Indeed, Jensen views "LBO associations" such as KKR and Forstmann Little as "new organizational forms" that compete directly with the headquarters of large public conglomerates. They are said to accomplish with professional staffs that number in the 30s or 40s what many hundreds of headquarters employees are supposed to do in public conglomerates.

"In effect," Jensen argues, "the LBO association substitutes incentives provided by compensation and ownership for the direct monitoring and centralized decision-making in the typical corporate bureaucracy." In the average Fortune 1000 firm, Jensen reports, the CEO's total compensation changes by \$3 for every \$1000 change in shareholder value. By comparison, the average CEO in an LBO firm experiences a change of \$64 per \$1000. And the partners of the LBO firm itself (the KKR's of this world), which is the proper equivalent of a conglomerate CEO, earn close to \$200 per \$1000 change in value. Given such dramatic concentrations of ownership and improvements in the pay-to-performance correlation, it is not surprising that researchers are now finding major operating improvements in firms that have gone private.

**The Privatization of Bankruptcy?** In equally provocative fashion, Jensen also argued that the highly leveraged transactions of the '80s, though clearly more likely to get into financial trouble, created far stronger incentives to reorganize troubled companies outside of court. Such a shift in incentives was leading, at least in the first part of the '80s, to a Japanese-like "privatization of bankruptcy" in which active investors (like the main banks in Japanese *keiretsu*) were using low-cost means (typically involving exchange offers) to avoid our costly and chronically inefficient Chapter 11 process.

This "privatization" movement, however, came to an abrupt halt in 1989 as a result of regulatory interference with the junk bond and credit markets, a change in the tax code, and a misguided bankruptcy court ruling. As Jensen also acknowledges, however, our private capital markets were by no means blameless in

provoking this regulatory overreaction. A gross misalignment of incentives (which Jensen calls a “contracting failure”) between dealmakers and suppliers of capital in LBOs and other HLTs led to a concentration of overpriced deals in the latter years of the 1980s. But capital market adjustments to this problem—including larger equity commitments, lower upfront fees, and more conservative deal prices—were already well underway when the set of regulatory initiatives launched in 1989 overrode them, thereby adding significantly to HLT defaults and bankruptcies.

Workout veteran David Schulte (adviser to Revco and partner with Sam Zell in putting together the billion dollar Zell-Chilmark Fund), confirms Jensen’s argument in the following assessment of current trends in reorganization:

*I’ve always hated bankruptcy. The problem I have with Chapter 11 is that it takes a business problem and turns it...into a legal case. I don’t know what a guy who wears a black robe has to offer that the parties in interest can’t do privately themselves...If we could devise a simple way for exchange offers to work outside of Chapter 11...investors would be well served and we’d all be a lot better off. In short, I’d like to have a non-bankruptcy bankruptcy. It’s virtually impossible to do an out-of-court deal right now. All in all, 1990 was a very bad year for exchange offers.*

Part of the current difficulties in reorganizing troubled companies outside of court can be traced to the dispersion of claims among creditors. In the last half of the ‘80s, the problem of systematic overpayments was greatly compounded by the sale of the debt to public junk bondholders (whom, it now appears, could only be induced to reorganize their claims through the agency of Milken and Drexel) and commercial banks’ practice of “participating” or “assigning” rather than holding their loans. All this ensured that if companies did get into trouble, then private reorganizations would be very difficult.

And when troubled companies, unable to reach an out-of-court consensus, then filed for protection under Chapter 11, some of the problems would only be exacerbated. As described by articles in the closing section of this book, the unanimity provisions of the Trust Indenture Act, the grant of “exclusivity” to management (and routine extensions thereof), and failures to enforce strict priority of claims all serve only to intensify fighting among creditors. In so doing, they also remove any incentive for interested parties to provide unbiased information about the underlying

value of the firm, thus making creditor consensus all the more difficult to reach.

Noted bankruptcy lawyer Leonard Rosen sums up the current situation as follows:

*I always thought that the purpose of a workout was first to create the biggest possible pot, and then to fight about the division of the pot afterwards. That was the spirit in which workouts used to be done in the old days....*

*What worries me [today]...is that, if creditor fights about the division of the pot start at the beginning of the process, then nobody’s probably paying attention to more fundamental questions like: Have we got the right management running the business? And are they making the right strategic and operating decisions?...We’re starting the fights so early, spending so much energy on the intercreditor struggle, and creating such divisiveness in the process that we’re making it much less likely that companies will be restructured quickly and economically.*

Jensen and other economists argue that much of the intensity of intercreditor conflicts built into our current Chapter 11 process could be eliminated simply by auctioning the control of bankrupt companies to the highest bidder. Such a process, which is already well-developed in countries like Germany, would effectively separate the valuation of the assets from destructive squabbles over how that value is to be divided among claimholders. Such an auction process would also help preserve operating value by shielding the day-to-day management of Chapter 11 companies from such potentially destructive conflicts.

Insulating operations from claimholder conflicts is, of course, what Chapter 11 is supposed to accomplish. And the process actually appears to have worked quite well in some cases. For example, Allied and Federated Stores have re-emerged from bankruptcy after incurring legal and administrative costs of only about 3% of total asset value; and operations remain fundamentally profitable (indeed, stores like Bloomingdale’s were reporting record operating earnings throughout their stay in Chapter 11). Such well-managed reorganizations, however, should not be allowed to obscure the sheer waste of investor value in cases like Eastern Airlines and Revco (see Karen Wruck’s “What Really Went Wrong With Revco?”). It is the latter cases that expose the fundamental flaws in the current system.

In sum, the movement toward a “privatization of bankruptcy” described by Jensen has been de-

railed (although the new movement toward “pre-packaged” bankruptcy represents a promising hybrid between a private workout and formal bankruptcy). And thus the “costs of financial distress” today appear considerably higher than economists like Jensen once predicted. But the verdict is not yet in. Financial economists are now mining a rich new lode of data to determine if bankruptcy costs are indeed as large as critics of restructuring have made them out to be. Findings from this research, besides contributing to the ongoing debate about optimal capital structure, will also likely affect future developments in corporate practice.

### **BACK TO THE FREE CASH FLOW PROBLEM (WITH A DIGRESSION ON THE MEDIA)**

We are told almost daily by the financial press that corporate America suffers from an underinvestment problem—from a failure to invest in new technologies, modern plant and equipment, and the education of its workforce. All this may well be true (especially in cases where management bonuses are determined largely by near-term EPS). Moreover, as Michael Jacobs argues convincingly in his book *Short-Term America*, shareholders of U.S. companies may rationally demand higher and quicker payoffs because they have virtually no power to influence corporate policy.

What we are almost never told by the press, however, is that much of corporate America has also long had a chronic “overinvestment” problem. The case of RJR-Nabisco documented in *Barbarians at the Gate* is undoubtedly one of the most flagrant cases (remember Ross Johnson’s insisting to John Greeniaus that he find a way to spend the “excess” profits of his tobacco division rather than raise stockholder expectations by revealing its true profit potential). But the fact that Johnson was held up by *Fortune* as a model corporate leader only a month before the LBO suggests that major inefficiencies in cash-rich companies may be not only widespread, but very difficult to detect by outsiders. And the large stockholder gains from the corporate control transactions of the ‘80s are suggestive evidence of the systematic waste of shareholder capital by companies dedicated to growth at all cost.

Why is it important that such growth be checked? At the end of the 1970s, when the Dow was trading around 900 and the outlook for corporate America was far from bright, Lester Thurow complained in his apocalyptic bestseller *The Zero-*

*Sum Society* that “mixed” economies like ours—those in which government was always intervening to “correct” free-market solutions that were politically unacceptable—had one very serious (and to Thurow irremediable) problem. Such economies could not bring about the large-scale “disinvestment” in declining industries, with the resulting cuts in employment and real wages, necessary to release growth capital for emerging industry.

When I heard Thurow repeat this point in a speech at MIT in the mid-80s, I raised my hand and objected that the then burgeoning leveraged restructuring movement was a free-market solution to precisely that “disinvestment” problem. The widespread substitution of temporary debt capital for more permanent equity—in leveraged takeovers, leveraged buyouts, and leveraged buybacks—was forcing excess capital out of companies in mature industries like oil and gas, tobacco, forest products, publishing, broadcasting, tires, food processing, and commodity chemicals.

It is no coincidence, moreover, that while billions of dollars of capital were being squeezed out of our largest companies and returned to stockholders, the venture capital industry was booming. Funding for the U.S. venture capital industry achieved its peak in 1987, close to the time when the volume of leveraged restructurings was reaching its own high point. At the same time, the small and medium-sized U.S. companies that prospered throughout the ‘80s were contributing to record employment and capital spending.

Today, of course, the economy is in recession. Widespread failures in the S&L industry, combined with a number of highly-publicized cases of troubled leveraged transactions, have led to a significant re-regulation of our financial markets. With the eclipse of the new issue market for junk bonds, the application of HLT rules to commercial bank lending, and new restrictions on insurance companies, funding for large highly-leveraged transactions has all but disappeared and there are few signs of a well-functioning corporate control market.

In one sense, the financial press is right in attributing part of the current conditions in our debt and takeover markets to too many unsound transactions. Such transactions, as Jensen argued, have been overpriced by their promoters and, as a consequence, overleveraged. What seems equally clear, however, is that intense political pressures to curb the corporate control market have greatly compounded the existing problems, creating a capital

shortage for non-investment-grade companies, and thereby contributing significantly to the recession.

The media, as suggested earlier, have played no small role in inflaming popular opinion and bringing political forces to bear on private economic activity. Populist attacks on Wall Street financiers and concentrations of financial power continue to be the order of the day for most mass-market publications. Even business publications such as the *Wall Street Journal* (at least the front-page stories) and *Forbes* resort increasingly to the techniques of muckraking sensationalism while avoiding all but the most simplistic economic analysis.

Perhaps the nadir of this kind of journalism was a piece by Susan Faludi on KKR's LBO of Safeway Stores that, ironically, won a Pulitzer prize for "explanatory" journalism. The irony stems from the fact that, from an economist's perspective, the Safeway LBO is one of the most unambiguously successful of the leveraged transactions of the '80s. Although now considerably smaller, the company has become extraordinarily profitable, capital spending (largely on store renovation) has increased significantly, and employee morale has improved in large part because the increased profitability has restored the basis for future growth. And while journalists are doubtless continuing their obsession with a handful of unfortunate individuals displaced by such changes, financial economists from the Harvard Business School are now at work anatomizing the transformation of Safeway into a remarkably efficient competitor.

There are a number of reasons why the quality of business journalism in this country continues to be poor. Although the business establishment undoubtedly furnishes the media with a major portion of its advertising revenues, it is probably unnecessary to go much beyond the incentives of the press to appeal to the mass markets, to the "man on the street," to arrive at the heart of the problem. As American movie producers and popular novelists have long understood, the American public is most responsive to stories that pit simple goodness against unmistakable evil. In this modern-day "morality play," the principal requirement is that heroes and villains be clearly distinguished from one another, and that all ambiguity be suppressed. The more heinous the villain, the greater the pleasure taken in his defeat (another essential requirement of popular American film) by the forces of good.

In economic life, however, all successful actions come at a cost, all change that increases social

wealth comes at the expense of some groups and individuals. In this world where choices are rarely between good and evil, but only between the lesser of two evils (for all change causes pain to some), it is often the most callous-seeming actions that produce the greatest benefits for the economy at large. Those benefits, and their beneficiaries, cannot be detected—much less subjected to measurement—by the unaided eye of the journalist.

To return to our earlier argument, the primary accomplishment of the leveraged restructuring movement has been to stimulate general economic growth by forcing resources (people and capital) out of mature or shrinking industries and into vital ones. In the typical newspaper account, we learn much about the personal plights of employees who lose their jobs. But what the average journalist fails to acknowledge is that not all employment and corporate investment are "good for the economy," and that overall growth depends importantly on the ability to transfer people and capital from where they are not needed to where they are. Such mobility of resources, in the long run, is likely not only to add to stockholder wealth, but to increase total employment and corporate spending. And by each of these indicators of general economic performance, the 1980s were very productive indeed. (The fact that wage rates have fallen in some industries, so often deplored by market critics, is in fact a sign that the control market was doing its job in making our industry more competitive internationally.)

In the typical journalistic account of a leveraged takeover, we also generally learn very little about why the acquirer (or "raider") can afford to pay large premiums over current value to buy out the existing stockholders. Such premiums are invariably attributed to market undervaluation, which in turn is ascribed to the shortsightedness of investors. Rarely is there an account of the corporate inefficiencies and expected operating changes that typically make the payment of such premiums possible (though *Barbarians at the Gate* surely provides the first). And never have I seen a story that attempts to trace the subsequent path of stockholder capital liberated by restructurings and then describe the productive activities and new employment that capital eventually makes possible.

Private distress makes good copy, as always, but social benefits are difficult to detect with the journalist's tools. Here the statistical methods and abstract "truths" of the economist must serve.

## A WORD ABOUT THIS BOOK

This book consists of 57 articles written, for the most part, by financial economists. The articles are divided into seven sections. The first presents more recent evidence attesting to the efficiency of our capital markets, and the remaining six examine the implications of market efficiency for the following aspects of corporate management: (1) evaluating capital investment opportunities; (2) setting capital structure and dividend policies; (3) raising capital and choosing among the continually broadening spectrum of financing vehicles; (4) managing corporate risks (including the corporate uses of derivatives such as futures, swaps, and options); (5) corporate restructuring designed to increase stockholder value; and (6) reorganization of financially troubled companies.

Each of these 57 articles was published previously in one of three publications for which I

served as founding editor: the Continental Bank's *Journal of Applied Corporate Finance* and its two predecessors, the *Midland Corporate Finance Journal* (1983-1987) and the *Chase Financial Quarterly* (1981-1982). The fundamental aim of each of these publications has been the same: To "translate" outstanding research in corporate finance—conducted primarily by academics at our business schools and published in academic journals—into reasonably plain English for corporate executives, and to provide a meeting ground for theorist and practitioner by stressing the practical import of the research.

In closing, I would like to thank my colleagues Joel Stern and Bennett Stewart for their help in launching this now ten-year publishing effort. My largest debt, however, is to all the financial economists that have contributed to these publications, making them—and thus this book—possible.



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