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ORGANIZATIONAL CHANGES AND VALUE CREATION IN LEVERAGED BUYOUTS
The Case of The O.M. Scott & Sons Company*

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This study documents the organizational changes that took place at the O.M. Scott & Sons Company in response to its leveraged buyout. Our findings confirm that both the pressure of servicing a heavy debt load and management equity ownership lead to improved performance. Equally important at Scott, however, and undocumented in large-sample studies, are debt covenants restricting how the cash required for debt payments can be generated, the adoption of a strong incentive compensation plan, a reorganization and decentralization of decision making, and the relationship between managers, the leveraged buyout sponsors, and the board of directors.

1. Introduction

1.1. A brief history of the company

In December 1986, the O.M. Scott & Sons Company (Scott), the largest producer of lawn care products in the U.S., was sold by the ITT Corporation (ITT) in a divisional leveraged buyout. Scott, located in Marysville, Ohio, was founded in 1870 by Orlando McLean Scott to sell farm crop seed. Beginning in 1900, the company began to sell weed-free lawn seed through the mail, and in the 1920s, introduced the first home lawn fertilizer, the first lawn

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Table 1

Financial performance and divestiture and acquisition activity of ITT Corporation, 1978–1986.[a]

Year	Units acquired[b]	Units divested[b]	Earnings per share	Dividends per share	Stock return	Market return
1978	2 [$198]	0 [$0]	$4.66	$2.05	−6.1%	9.0%
1979	9 [$35]	17 [$74]	2.65	2.25	4.1	22.3
1980	2 [$35]	17 [$564]	6.12	2.45	27.5	30.5
1981	4 [$13]	9 [$82]	4.58	2.62	11.2	−3.5
1982	3 [$38]	7 [$498]	4.75	2.70	19.7	20.2
1983	3 [$26]	11 [$126]	4.50	2.76	45.7	21.4
1984	NA	8 [$638]	2.97	1.88	−30.5	5.9
1985	NA	23 [$1455]	1.89	1.00	31.9	27.9
1986	NA	12 [$597]	3.23	1.00	39.1	17.0

[a]Acquisition and divestiture activity as reported in ITT 10-K reports, NA indicates not available in these reports. Acquisitions for 1984–1986 were not reported by year, but the total amount is $208 million. Stock returns are annual returns. The market return is the CRSP value-weighted return.

[b]Number of units and value in $millions given in brackets.

spreader, and the first patented bluegrass seed. In fiscal 1988, Scott had sales of $197 million and employed 792 people.

Scott was closely held until 1971, when it was purchased by ITT. Scott became a part of the consumer products division of the huge conglomerate, and operated as a wholly owned subsidiary for 14 years. In 1984, ITT began a series of divestitures, prompted by a decline in financial performance and rumors of takeover and liquidation. Table 1 presents a summary of ITT's financial performance and of the number of companies it bought and sold from 1978 to 1986. In January 1985, ITT announced that it would divest $1.7 billion in assets. The object of these sales was to 'streamline ITT into a telecommunications, insurance, and high technology company'. On January 17, 1985, an article in the *Wall Street Journal* identified Scott as one of the businesses that 'could be included among the certain companies' ITT wanted to sell. On November 26, 1986, ITT announced that the managers of Scott, along with Clayton & Dubilier (C&D), a private firm specializing in leveraged buyouts, had agreed to purchase the stock of Scott and another ITT subsidiary, the W. Atlee Burpee Company. The deal was closed on December 30, 1986, and represented 25% of ITT's total dollar divestitures for the year.

Table 2

Financing of Clayton & Dubilier's purchase of O.M. Scott & Sons Company from ITT Corporation, 12/31/86, sources and uses of funds.

Sources of Funds		
Bank revolving credit agreement ($137 million available)	$77,000,000	37%
Bank working capital loan	$44,000,000	21%
Subordinated notes	$50,300,000	24%
Subordinated debentures	$19,600,000	9%
Common stock	$20,000,000	9%
Total	$210,900,000	100%
Uses of Funds		
Purchase of Scott and Burpee	$151,000,000	72%
Repayment of indebtedness to ITT	$52,600,000	25%
Transactions fees	$5,000,000	2%
Working capital	$2,300,000	1%
Total	$210,900,000	100%

Clayton & Dubilier secured financing for the sale. Table 2 describes the financial structure of Scott after the buyout. Bank loans and the sale of notes and debentures raised $190.9 million. Another $20 million was raised through the sale of equity: 61.4% of the shares were held by the C&D partnership, 20.6% by debtholders, 17.5% by Scott management and employees, and 0.4% by Joseph Flannery, a board member who had been involved in another C&D deal. Immediately following the buyout, Scott's capital structure consisted of 91% debt.

Large-sample studies of leveraged buyouts have documented median levels of post-buyout management equity ownership and leverage strikingly similar to those at Scott. Kaplan (1989), Muscarella and Vetsuypens (1989), and Smith (1989) analyze leveraged buyouts and post-buyout operating performance for samples of 76, 72, and 58 firms, respectively. Kaplan and Smith document median post-buyout equity ownership by management of 22.6% and 16.7%, respectively, and median post-buyout leverage of about 90%.

Scott's operating performance improved dramatically following the buyout. See table 3. Between the end of December 1986 and the end of September 1988, earnings before interest and taxes increased by 56%. Over the same period, sales were up 25%. These increases were not caused by a reduction in spending on research and development, or spending on marketing and distribution: R&D spending increased by 7%, and marketing and distribution spending by 21%. Capital spending increased by 23% after the buyout. Largely through attrition, average annual full-time employment dropped by about 9%. Average working capital requirements were reduced by a total of $23.1 million over this same 21-month period, falling from 37.5% to 18.4% of sales. All three large-sample studies cited above find that over two to four

Table 3

Financial and operating data for O.M. Scott & Sons Company [$000,000s].

	Pre-buyout: Year ended 12/30/86	Post-buyout: Year ended 9/30/88	Percent change
	Income Statement		
EBIT	$18.1	$28.2	55.8%
Sales	$158.1	$197.1	24.7%
Research & development	$4.1	$4.4	7.3%
Marketing & distribution	$58.4	$70.7	21.1%
	Balance Sheet[a]		
Average working capital	$59.3	$36.2	−39.0%
Total assets	$243.6	$162.0	−33.5%
Long-term debt	$191.0	$125.8	34.1%
Adjusted net worth	$20.0	$38.3	91.5%
	Other		
Capital expenditures	$3.0	$3.7	23.3%
Employment	868	792	−8.9%

[a]Balance sheet figures are reported at the close of the buyout transaction. Adjusted net worth is GAAP net worth adjusted for accounting effects of the buyout under APB no. 16. In Scott's case the bulk of the adjustment is adding back the effects of an inventory write-down of $24.7 million taken immediately after the buyout.

years following the buyout operating income increases by an average of 40%. Smith examines changes in accounting line items and finds no evidence that repair and maintenance expenditures are postponed, or that research and development expenditures are reduced. In addition, she provides evidence that firms manage working capital more closely after a buyout, documenting a significant reduction in both days receivables and inventories during the post-buyout period.

1.2. Purpose of our study

By the objective measures used in the large-sample studies, Scott appears to be a typical buyout: its post-buyout leverage, equity ownership, and operating performance are close to the median values reported in those studies.[1] The authors interpret their results as being consistent with an agency theory of the firm in which high leverage and managerial equity ownership lead to improved incentives and consequently improved operating

[1]Scott's increase in capital expenditures appears atypical, given Kaplan's result that on average capital expenditures fall by 20% after a leveraged buyout.

Table 4

Titles of the individuals interviewed as a part of the data collection process.

At O.M. Scott & Sons Company
President and Chief Executive Officer, Board Member
Chief Financial Officer
Assistant Treasurer and Head of Working Capital Task Force (now Treasurer)
General Counsel
Director of New Process Development
Vice President, Associate Relations
Assistant Vice President, Associate Relations
Manager of Contract Operations
Plant Manager
At Clayton & Dubilier
Chairman of the Board of O.M. Scott and Clayton & Dubilier Partner
Member of the Board, Liaison to O.M. Scott, Clayton & Dubilier Partner

performance. The studies do not, however, actually document any organizational changes resulting from an LBO. They cannot, therefore, explore the organizational links between buyouts and improved operating performance. Documenting these organizational changes is essential if researchers are to understand the mechanisms by which changes in a firm's financial structure affect organizational performance.

This study documents the organizational changes that took place at Scott in response to its LBO. The structure of the Scott organization and the way managers made decisions changed radically after the buyout. Our analysis of the data leads us to conclude that the organizational changes at Scott were a response to three factors: i) the constraints imposed on the organization by high leverage, ii) changes in the way managers were compensated, and iii) changes in the way Scott's top managers were monitored and advised.

The factors that led to improved operating performance are examined in detail below. Each of the next three sections covers one of the factors crucial to organizational change at Scott: the constraints of high leverage, changes in incentives and compensation, and changes in the monitoring of top managers. Section 5 summarizes the organizational changes that took place, and section 6 presents our conclusions.

Our analysis focuses on the effect of each factor on the alignment of incentives across the firm's claimants. The combination of equity ownership and close monitoring by the board of directors aligns managers' interests with those of the firm's shareholders. The large debt burden and incentive compensation based on cash measures of performance give managers the incentive to operate the firm in a way that generates cash, while the debt covenants and equity ownership prevent managers from taking actions that would damage firm value in the long run.

1.3. Data collection

The data used in this study are drawn from both public and private sources, including extensive interviews with C&D partners and managers at all levels of the Scott organization, confidential internal documents, prospectuses, ITT 10-K reports, and the *Wall Street Journal*. Table 4 lists the titles of all the individuals we interviewed. The confidential data (both quantitative and interview quotations) presented in this study were released by the company for publication here. We had access to other data that are too sensitive for publication. Where applicable we describe the conclusions from our analysis of these data, though we are unable to publish the data themselves.

2. Constraints of high leverage

2.1. Cash requirements for debt service

Scott's senior debt consists of floating-rate working capital loans and borrowings against a $137 million revolving credit agreement. A group of six major banks, headed by Manufacturers Hanover Trust, provides this capital, as well as a standby letter of credit for up to $2 million. The interest rate on the loans is either the agent's reference rate plus 1.5% or LIBOR plus 3.5%, with interest periods of one, three, or six months, both at Scott's option. There is a repayment penalty of 2.5% if the loans are repaid with other than internally generated funds or the proceeds of a public equity offering. These loans are secured by substantially all of Scott's assets. After the buyout, Scott hedged some of its floating-rate obligations by entering into an agreement with lenders that limited the interest rate adjustment to a maximum increase of 2%. The rate of interest has averaged 10.25% over the post-buyout period. In addition to interest payments, the credit agreement includes a principal repayment schedule that requires the principal amount to be repaid by the end of calendar 1994.

Scott's subordinated debt consists of unsecured 13% notes to mature in 1996, and unsecured $13\frac{1}{2}\%$ debentures to mature in 1998. The notes are senior to the debentures, but junior to the bank debt. The subordinated debt was originally sold to 16 financial institutions. These institutions sold the debt to the public in February of 1988. Sinking-fund payments are required for both the notes and the debentures. By maturity two-thirds of the principle amount of the notes and three-fourths of the principle amount of the debentures will have been set aside.

The amount of cash required to service the debt was substantially greater than Scott's prebuyout cash flow. In the first year after the buyout interest expense was $15 million, in the second year it was $18.5 million. Additional cash is required to pay down bank borrowings and make sinking-fund payments as follows:

1989: $ 7.9 million,
1990: $ 9.0 million,
1991: $ 9.0 million,
1992: $ 9.0 million,
1993: $ 9.0 million,
1994: $28.0 million,
1995: $22.0 million,
1996: $ 5.0 million,
1997: $ 5.0 million.

In 1986, the year before the buyout, Scott's *EBIT* (earnings before interest and taxes) was only $18.1 million. Table 3 presents a summary of Scott's income statement and balance sheet before and after the buyout.

2.2. Debt covenants

With so much pressure on the organization to generate cash, managers may be tempted to take actions that help service the debt but do damage to the value of the firm. Such actions are detrimental to all of the firm's claimholders, including the debtholders. Debtholders are interested in the firm's ability to generate cash over the life of the debt agreement.[2] Debt covenants serves as a contract that restricts managers' ability to use value-reducing methods to generate cash or take other actions that reduce debtholder value.

If a firm defaults, managers are forced to negotiate with lenders to resolve the situation, or if no agreement can be reached to seek protection from creditors under Chapter 11. Resolution of a default or Chapter 11 generally involves replacing debt claims with equity claims, leading to a substantial dilution of the existing equity. A default is costly not only to equityholders, but to managers, since it may force them to surrender control of the company to a bankruptcy court. There is also a risk to managers of losing their jobs. Gilson (1989) finds that 44% of the CEOs of firms in financial distress lose their jobs as a part of the recovery process.

Restrictive covenants can also help control potential conflicts of interest between equityholders and debtholders. In highly leveraged organizations such as Scott the benefit to equityholders of taking actions that reduce debtholder wealth, for example paying themselves a liquidating dividend

[2]This assumes that the value of the debtholder's claim on the organization as a going concern is generally higher than the value of the claim in liquidation. Jensen (1989) argues that in a highly levered firm this is likely to be true and that creditors will therefore tend to work out default situations rather than force Chapter 11 or liquidation.

from the proceeds of a loan or making a 'lottery ticket' investment, can be large.[3]

The covenants in Scott's debt agreements are summarized in table 5. They restrict certain economic and financial activities and require the maintenance of certain levels of accounting-based measures of performance. With the exception of priority, the covenants of the subordinated issues are similar and are therefore discussed collectively. The accounting-based covenants are defined in terms of audited figures. Each year Scott's financial statements are prepared in compliance with Generally Accepted Accounting Principles, and audited by Coopers & Lybrand. This is done to assure the credibility of the reports to debtholders, to assure the ability to continue to raise funds in the debt market, and to have an audited track record should the company be taken public again in the future.

Scott's bank credit agreement restricts the firm's investment and production decisions. Managers are allowed discretion in the choice of specific projects, but annual capital expenditures are restricted to specific dollar amounts set forth in a schedule. Scott can dispose only of assets that are worn out or obsolete and have a value of less than $500,000. No changes in the corporate structure, for example mergers or the acquisition of assets, are allowed. Hence, although Scott's credit agreement does not dictate production decisions, the firm is indirectly required to continue in the same economic activity. Cash dividends to stockholders are prohibited, as is the issuance of additional debt other than the debt securities outstanding at closing.

The subordinated debt covenants define restrictions on many of the same items restricted in the credit bank agreement, but the covenants are looser. Dividends, for example, are not prohibited, but a complex set of conditions must be met for dividends to be allowed. Similarly, control changes are not prohibited, but all subordinated debentures are required to be redeemed in the event of a change in control. Redemption also becomes mandatory if Scott's net worth falls below a specified level. Asset sales are not prohibited, but the covenants require that 75% of the proceeds from the sale of a business segment be applied to the repayment of debt in order of priority.

The overall effect of the covenants is to restrict both the source of funds for scheduled interest and principal repayments and the use of funds in excess of this amount. Cash to pay debt obligations must come primarily from operations or the issuance of common stock. It cannot come from asset liquidation, stock acquisition of another firm with substantial cash balances, or the issuance of additional debt of any kind. Excess funds can only be spent

[3]The role of debt covenants in controlling the conflict of interest between debtholders and equityholders is developed in Smith and Warner (1979). They classify the actions that equityholders can take to benefit themselves at the expense of debtholders as i) asset substitution, ii) claim dilution, iii) underinvestment, and iv) dividend payout.

Table 5

Summary of debt covenants of Scott borrowings to finance the buyout.

	Bank debt restriction	Subordinated debt restriction
	Economic Activities Restricted	
Sale of assets	• Only worn-out or obsolete assets with value less than $500,000 can be sold	• 75% of proceeds must be used to repay debt in order of priority
Capital expenditures	• Restricted to specific $ amount each year debt is outstanding	• None
Changes in corporate structure	• Prohibited	• Mandatory redemption if change in control • No acquisition if in default • Must acquire 100% equity of target • Must be able to issue $1.00 additional debt without covenant violation after acquisition
	Financing Activities Restricted	
Issuance of additional debt	• Capitalized leases: max = $3,000,000 • Unsecured credit: max = $1,000,000 • Commercial paper: max = amount available under revolving credit agreement	• Additional senior debt: max = $15,000,000 • For employee stock purchases: max = $4,250,000 • Pre-tax cash flow/interest expense: min = 1.0 for four quarters preceding issuance
Payment of cash dividends	• Prohibited	• Prohibited if in default • Prohibited if adjusted net worth < $50,000,000
	Accounting-Based Restrictions	
Adjusted net worth[a]	• Specific min at all times, min increases from $20.5 million in 1986 to $43.0 million after 1992	• If adjusted net worth falls below $12.0 million then must redeem $17.0 million notes and $5 million debentures both at 103
Interest coverage	• Min 1.0 at end of each fiscal quarter	• None
Current ratio	• Min 1.0 at end of each fiscal quarter	• None
Adjusted operating profit	• Min at end of each fiscal quarter, min increases from $22.0 million in 1987 to $31.0 million after 1990	• None

[a]Adjusted net worth and adjusted operating profit are the GAAP numbers adjusted for accounting effects of the buyout under APB no. 16. In Scott's case the bulk of the adjustment is adding back the effects of an inventory write-down of $24.7 million taken immediately after the buyout.

on capital goods in accordance with the schedule, and cannot be spent on acquisitions or dividends to shareholders. Therefore, once the capital expenditure limit has been reached, excess cash must be either held, spent in the course of normal operations, or used to pay down debt ahead of schedule. Assuming the capital expenditure limits are set appropriately, the high leverage in conjunction with the debt covenants serves to reduce the free cash flow problem in a way that is not damaging to the long-run viability of the firm's operations.[4]

Additional bank agreement restrictions require Scott to maintain specific levels of consolidated net worth and the current ratio at all times. A required level of adjusted operating profit and interest coverage must be attained at the end of each fiscal quarter. These restrictions can be viewed as indicators of potential future problems. Even if Scott is currently able to service its debt obligations, the firm can still violate one of these accounting-based constraints. Such violation constitutes a technical default and brings managers and bankers together to renegotiate the terms of the loan.

The constraints imposed by the covenants can be relaxed at the discretion of the lender, though it is likely that the lender will be able to negotiate better terms in exchange. For example, if lenders can be convinced that a particular default was not the result of a financial problem, or that a new project prohibited by the covenants would increase firm value, they have an incentive to waive the default because it increases the value of their claim. In fact, despite the covenant that prohibits mergers and the acquisition of assets, Scott's lenders have recently agreed to allow Scott to acquire Hyponex, a garden and lawn products company, for $111 million.

3. Changes in incentives and compensation

3.1. Management equity ownership

The final distribution of equity in the post-buyout Scott organization was the product of negotiations between C&D and Scott management. ITT took no part in these negotiations, nor were Scott managers able to negotiate with C&D prior to the close of the sale. ITT sold Scott through a sealed bid auction in which the winner would own 100% equity in the former subsidiary. Eight firms bid for Scott, and although bidding was open to all types of

[4]Jensen (1986) defines free cash as cash generated by the firm in excess of what is required to fund all positive NPV projects. The most valuable use of these funds is to pay them out to investors.

potential buyers, seven of the eight bidders were buyout firms. The parent was interested primarily in obtaining the highest price for the division.

Scott managers did not participate in the buyout negotiations, and therefore had no opportunity to extract promises or make deals with potential purchasers prior to the sale. Scott managers had approached ITT several years earlier to discuss the possibility of a management buyout at $125 million. At that time ITT had a no-buyout policy. The stated reason for this policy was that a management buyout posed a conflict of interest.

Each potential bidder spent about one day in Marysville and received information on the performance of the unit directly from ITT. Prior to Martin Dubilier's visit, Scott managers felt that they preferred C&D to the other potential buyers because of its reputation for working well with operating managers. The visit did not go well, however, and C&D fell to the bottom of the managers' list. According to Tadd Seitz, president of Scott:

> To be candid, they weren't our first choice. It wasn't a question of their acumen, we just didn't think we had the chemistry. But as we went through the controlled bid process, it was C&D that saw the greatest value in Scott.

There is no evidence that ITT deviated from its objective of obtaining the highest value for the division, or that it negotiated in any way on behalf of Scott managers during the buyout process. C&D put in the highest bid. ITT did not consider management's preferences and accepted this bid even though managers were left to work with one of their less favored buyers. If ITT paid little attention to management's preferences in selecting a buyout firm, the distribution of common stock ownership after the sale clearly received no attention from the parent company.

Immediately following the closing, Clayton & Dubilier controlled 79.4% of Scott's common stock. The remaining shares were packaged and sold with the subordinated debt. C&D was under no obligation to allow managers equity participation in Scott, and clearly managers' funds were not required to consummate the deal. On the basis of their experience, C&D partners viewed management equity ownership as a way to provide managers with strong incentives to maximize firm value. Therefore, after Clayton & Dubilier purchased Scott, it began to negotiate with managers concerning the amount of equity they would be given the opportunity to purchase. C&D did not sell shares to managers reluctantly, in fact, it insisted that managers buy equity and that they do so with their own, not the company's, money. The ownership structure that resulted from the sale can be viewed as the ownership structure that C&D felt gave managers optimal incentives.

Table 6 presents the distribution of common stock ownership across investors and managers. There were 24,250,000 shares outstanding, each of

Table 6

Owners of common stock of O.M. Scott & Sons Company after the leveraged buyout, as of 9/30/88.[a]

	Number of shares [000's]	Percent of shares outstanding
Clayton & Dubilier private limited partnership	14,900	61.4%
Subordinated debtholders	5,000	20.6%
Mr. Tadd Seitz, President, CEO	1,063	4.4%
Seven other top managers (250,000 shares each)	1,750	7.2%
Scott profit sharing plan	750	3.1%
Twenty-two other employees	687	2.8%
Mr. Joseph P. Flannery, Board Member	100	0.4%
Total	24,250	100.0%

[a]All shares were purchased by owners at $1 per share. Percentages don't foot due to rounding error.

which was purchased for $1.00. As the general partner of the private limited partnership that invested $14.9 million in the Scott buyout, Clayton & Dubilier controlled 61.4% of the common stock. The Clayton & Dubilier partners who are responsible for overseeing Scott operations own shares of Scott through their substantial investment in the C&D limited partnership. Subordinated debtholders owned 20.6% of the equity.

The remaining 17% of the equity was distributed among Scott's employees. Eight of the firm's top managers contributed a total of $2,812,500 to the buyout and so hold as many shares, or 12% of the shares outstanding. Tadd Seitz, president of Scott, held the largest number of shares (1,062,500, or 4.4% of the shares outstanding). The seven other managers purchased 250,000 shares apiece (1% each of the shares outstanding). As a group, managers borrowed $2,531,250 to finance the purchase of shares. Though the money was not borrowed from Scott, these loans were guaranteed by the company. The purchase of equity by Scott managers represented a substantial increase in their personal risk. Bob Stern, vice-president of Associate Relations,[5] recalled that his spouse sold her interest in a small catering business at the time of the buyout; they felt that the leverage associated with the purchase of Scott shares was all the risk they could afford.

Top management had some discretion over how common shares were distributed and, although C&D did not encourage it, issued shares to Scott's employee profit-sharing plan and other employees of the firm. Although they allowed managers to distribute the stock more widely, C&D partners felt

[5]Scott refers to all of its employees as 'associates'. Stern's position, therefore, is equivalent to vice-president of human resources or personnel.

that the shares would have stronger incentive effects if they were held only by top managers. As Craig Walley, Scott's General Counsel, described it:

> We [the managers] used to get together on Saturdays during this period when we were thinking about the buyout to talk about why we wanted to do this. What was the purpose? What did we want to make Scott? One of our aims was to try to keep it independent. Another was to try to spread the ownership widely. One of the things we did was to take 3% of the common stock out of our allocation and put it into the profit-sharing plan. That took some doing and we had some legal complications, but we did it. There are now 56 people in the company who own some stock, and that number is increasing. Compared to most LBOs that is really a lot, and Dubilier has not encouraged us in this.

A group of 11 other managers bought an additional 687,500 shares (2.84% of the total) and the profit-sharing plan bought 750,000 shares (3.09%). These managers were selected for the right to purchase stock not by their rank in the organization, but because they would be making decisions considered critical to the success of the company.

The substantial equity holdings of the top management team, and their personal liability for the debts incurred to finance their equity stakes, led them to focus on two distinct aspects of running Scott. One was the need to avoid even technical default on the company's debt, for although such default was unlikely to lead to liquidation, it very likely would have led to a reduction in the managers' fractional equity holdings (due to dilution in a debt-for-equity conversion), and thus a significant reduction in the managers' wealth. Thus the equity ownership served to bond managers to honor the debt covenants.

A second important effect of equity ownership was to encourage managers to make decisions that increased the value of the company, whether or not the violation of a debt covenant was imminent. Because managers owned a capital value claim on the firm, they had an incentive to meet debt obligations and avoid default in a long-term value maximizing way. Short-sighted decision making would reduce the value of the managers' equity, and thus reduce their wealth.

Under this combination of incentives, value-reducing behavior will not occur unless the only way to avoid default is to make suboptimal decisions *and* the cost to managers of default is greater than the loss in equity value from poor decision making. Here, because default is so costly to managers, they may, for example, reduce investment in brand-name advertising, or cut back on research and development or the maintenance of plant and equipment to meet debt obligations. As evidenced in table 3, none of this type of activity was observed at Scott: the company's high leverage combined with covenants and management equity ownership provided managers with the incentive to generate the cash required to meet the debt payments without bleeding the company.

3.2. *Changes in incentive compensation*

Among the first things Clayton & Dubilier did after the buyout was to selectively increase salaries and begin to develop a new management compensation plan. A number of managers who were not participants in the ITT bonus plan became participants under the C&D bonus plan. The new plan substantially changed the way managers were evaluated, and increased the fraction of salary that a manager could earn as a bonus. While some of these data are confidential, we are able to describe many of the parameters of C&D's incentive compensation plan and compare it with the ITT compensation system.

3.2.1. *Salaries*

Almost immediately after the close of the sale the base salaries of some top managers were increased. The president's salary increased by 42%, and the salaries of other top managers increased as well. Henry Timnick, a C&D partner who works closely with Scott, explains the decision to raise salaries:

> We increased management salaries because divisional vice-presidents are not compensated at a level comparable to the CEO of a free-standing company with the same characteristics. Divisional VPs don't have all the responsibilities. In addition, the pay raise is a shot-in-the-arm psychologically for the managers. It makes them feel they will be dealt with fairly and encourages them to deal fairly with their people.

In conversations with managers and C&D partners it became clear that C&D set higher standards for management performance than ITT. Increasing the minimum level of acceptable performance forces managers to work harder after the buyout or risk losing their jobs. Indeed, managers did work harder after the buyout; there was general agreement that the management team was putting in longer hours at the office. Several managers used the term 'more focused' to describe how their work habits had changed after the buyout. Therefore, an increase in base salary may have been necessary to make managers equally well off before and after the buyout.

The increase in compensation also serves as remuneration for increased risk bearing. As reported earlier, Scott managers borrowed substantially to purchase equity in their company. Requiring managers to hold equity and using strong incentive compensation in addition increases managers' exposure to firm-specific risk. Because they cannot diversify this risk away, managers will require an increase in the level of pay as compensation.

Finally, C&D may have increased salaries because Scott managers are more valuable to C&D than they were to ITT. Consistent with this, managers at Scott felt that ITT was much less dependent on them than Clayton & Dubilier. One Scott manager noted: 'When ITT comes in and buys a company, the entire management team could quit and they wouldn't blink.' C&D was not, however, completely dependent on incumbent managers to run Scott. Several Clayton & Dubilier partners had extensive experience as operating managers. These partners were available to run Scott if necessary, and had on several occasions stepped in to run C&D buyout firms. They did not, however, have the specific knowledge about the Scott organization that incumbent managers had. If part of the value created by the buyout results from giving managers an incentive to use their specific knowledge about the firm more efficiently, then Scott managers would be preferred by C&D to its own operating partners. We believe that this is the case.

ITT had created a control system that allowed headquarters to manage a vast number of businesses, but did not give managers the flexibility or incentive to use their specialized knowledge of the business to maximize the value of the division. C&D relied much more heavily on managers' firm-specific knowledge, hence the incumbent management team was more valuable to the buyout firm. C&D was willing to pay managers more to reduce the risk of the managers quitting, and depriving Scott and C&D of this valuable knowledge.

3.2.2. Bonus

The bonus plan was completely redesigned after the buyout. The number of managers who participated in the plan increased, and the factors that determined the level of bonus were changed to reflect the objectives of the buyout firm. In addition, both the maximum bonus allowed by the plan and the actual realizations of bonus as a percentage of salary increased by a factor of two to three.

After the buyout 21 managers were covered by the bonus plan. Only ten were eligible for bonuses under ITT. The maximum payoff under the new plan ranged from 33.5% to 100% of base salary, increasing with the manager's rank in the company. For each manager, the amount of the payoff was based on the achievement of corporate, divisional, and individual performance goals. The weights applied to corporate, divisional, and individual performance in calculating the bonus varied across managers. For division managers, bonus payoff was based 35% on overall company performance, 40% on divisional performance, and 25% on individual performance. Bonuses for corporate staff managers weighed corporate performance at 50%, and personal goals at 50%.

Table 7

Bonus paid to top ten managers at O.M. Scott & Sons Company as a percentage of year-end salary, listed by rank in the organization before (1985–1986) and after (1987–1988) the buyout.

	Before the buyout		After the buyout	
	1985	1986	1987	1988
	18.3%	26.6%	93.8%	57.7%
	14.0%	23.4%	81.2%	46.8%
	12.8%	18.8%	79.5%	46.0%
	13.3%	20.6%	81.2%	48.5%
	11.2%	19.4%	80.7%	46.8%
	10.5%	17.1%	76.5%	46.0%
	7.1%	10.8%	29.6%	16.6%
	6.1%	22.9%	78.0%	46.7%
	4.6%	6.3%	28.7%	16.8%
	5.1%	6.6%	28.4%	16.4%
Mean	10.3%	17.3%	65.8%	38.8%

At the beginning of each fiscal year performance targets (or goals) were set, and differences between actual and targeted performance entered directly into the computation of the bonus plan payoffs. All corporate and divisional performance measures were quantitative measures of cash utilization, and were scaled from 80 to 125, 100 representing the attainment of target. For example, corporate performance was determined by dividing actual earnings before interest and taxes (*EBIT*) by budgeted *EBIT*, and dividing actual average working capital (*AWC*) by budgeted *AWC*, and weighting the *EBIT* ratio at 75% and the *AWC* ratio at 25%. The resulting number, expressed as a percentage attainment of budget, was used as a part of the bonus calculation for all managers in the bonus plan.

The plan was designed so that the payoff was sensitive to changes in performance. This represented a significant change from the ITT bonus plan. As Bob Stern, vice-president of Associate Relations, commented:

> I worked in human resources with ITT for a number of years. When I was manager of staffing of ITT Europe, we evaluated the ITT bonus plan. Our conclusion was that the ITT bonus plan was viewed as nothing more than a deferred compensation arrangement: all it did was defer income from one year to the next. Bonuses varied very, very little. If you had an average year, you might get a bonus of $10,000. If you had a terrible year you might get a bonus of $8,000, and if you had a terrific year you might go all the way to $12,500. On a base salary of $70,000, that's not a lot of variation.

Table 7 presents actual bonus payouts for the top ten managers as a percent of salary for two years before and two years after the buyout. Fig. 2

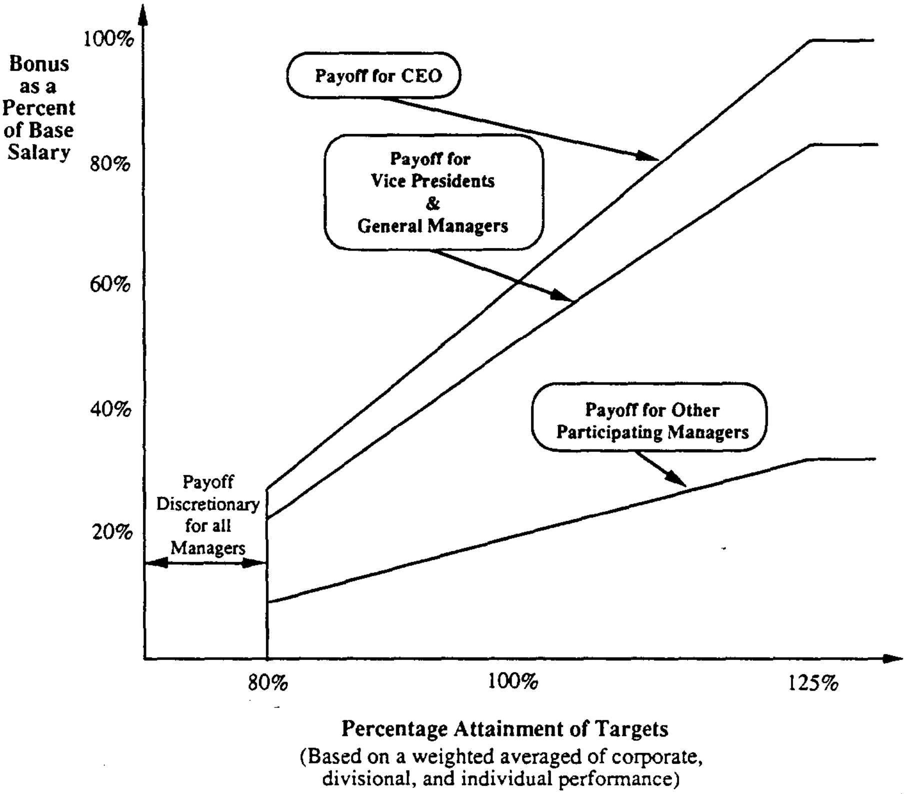

Fig. 1. Bonus payoff function under the post-buyout incentive compensation plan for three levels of management.

graphically illustrates these data. The new bonus plan gives larger payouts and appears to generate significantly more variation in bonuses than occurred under ITT. Average bonuses as a percent of salary for the top ten managers increased from 10% and 17% in the two years before the buyout to 66% and 39% in the two years after, a period during which operating income increased by 42%. There also appears to be a bigger cross-sectional variation in bonus payout across managers within a given year. In the two years prior to the buyout, bonus payout ranged from 5% to 27% of base salary, whereas over the two years following the buyout, it ranged from 16% to 94% of base salary.

In addition to measures that evaluated management performance against quantitative targets, each manager had a set of personal objectives that were tied into the bonus plan. These objectives were set by the manager and his or her superior, and their achievement was monitored by the manager's supe-

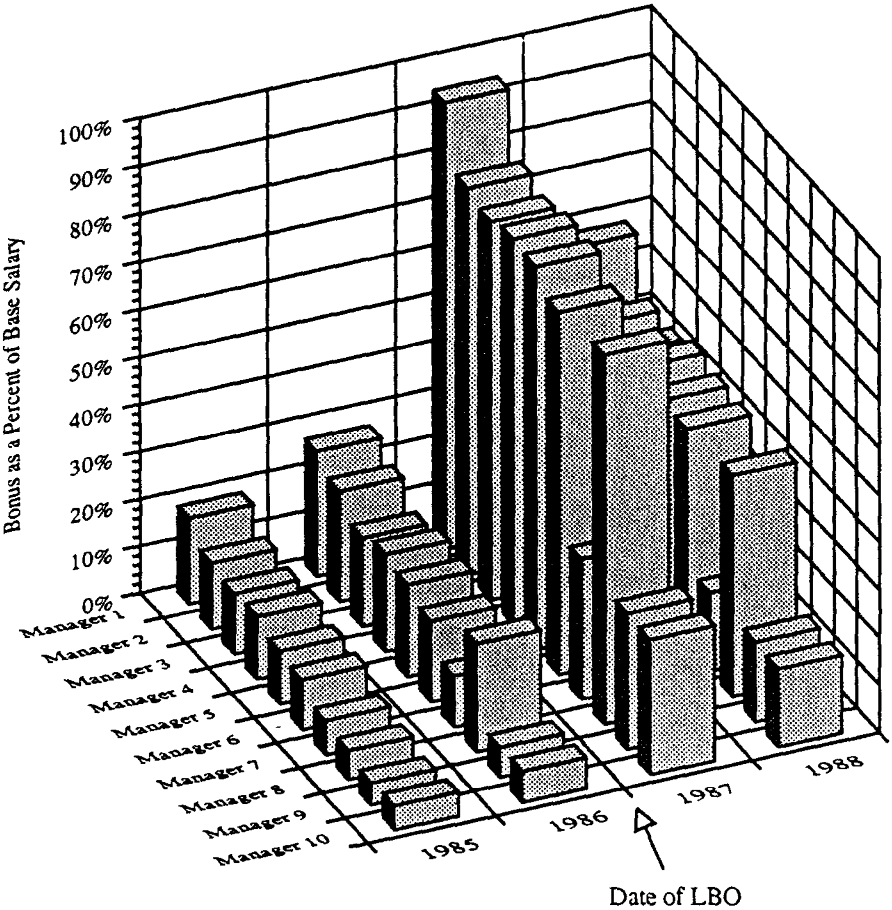

Fig. 2. Bonuses for top ten managers in the two years before and the two years after the LBO. *Data source*: Table 7.

rior. Personal objectives were generally measurable and verifiable. For instance, an objective for a personnel manager was to integrate the benefits package of a newly acquired company with that of Scott within a given period. An objective for the president of the company was to spend a fixed amount of time out of Marysville, talking to retailers and salespeople. At the end of the year, the manager's superior would evaluate whether the manager had achieved these objectives, and would quantify the achievement along the same 80–125 point range. This rating was then combined with the quantitative measures to come up with a total performance measure.

The weighted average of corporate, divisional, and personal target achievements was then used to determine total bonus payoffs. Fig. 1 shows how payoffs were determined. If a manager achieved an 80% weighted average attainment of target goals, the payoff varied from about 30% of salary for the CEO to about 10% for lower-level managers. At 125% attainment, bonuses varied from about 100% to about 30%. Between 80% and 125%, bonus payouts as a percentage of salary varied linearly with target attainment. Below 80%, payments were at the discretion of the president and the board.

The combination of equity ownership by eight top managers, and a much more highly 'leveraged' bonus plan for thirteen more, changed the incentives of the managers at Scott substantially. For those managers who held equity, the bonus plan, with its emphasis on *EBIT* and working capital management, served to reinforce the importance of cash generation. Those who did not hold equity, and were thus unaffected by the potential loss in equity value that would attend a violation of the debt covenants, were still induced to make the generation of cash a primary concern.

4. The monitoring of top managers

4.1. Purpose and composition of the board

The purpose of Scott's board of directors was to monitor, advise, and evaluate the CEO. As Henry Timnick describes it:

> The purpose of the board is to make sure the company has a good strategy and to monitor the CEO. The CEO cannot be evaluated by his management staff, so we do not put the CEO's people on the board. Scott's CFO and the corporate secretary attend the meetings, but they have no vote. The outside directors are to be picked by the CEO. We will not put anyone on the board that the CEO doesn't want, but we [C&D] have to approve them. We do not view board members as extensions of ourselves, but they are not to be cronies or local friends of the CEO. We want people with expertise that the CEO doesn't have. The CEO should choose outside directors who are strong in areas in which he is weak.

At the close of the buyout Scott's board had five members. Only one, Tadd Seitz, was a manager of the firm. Of the remaining four, three were C&D partners; Martin Dubilier was the chairman of the board and voted the stock of the limited partnership, Henry Timnick was the C&D partner who worked most closely with Scott management, and Alberto Cribiore, the third C&D partner, was a financing specialist. The outside director was Joe Flannery, then CEO of Uniroyal, which had been taken private by Clayton & Dubilier in 1985. Later, Flannery left Uniroyal and became a C&D partner. He stayed on the Scott board, becoming an inside, rather than outside, director.

Over the next few years three new directors were added; one was an academic, one was a consumer products expert, and one, Don Sherman, was the president of Hyponex, the company acquired by Scott. The academic, Jim Beard, was one of the country's leading turf researchers. Henry Timnick described the process of putting him on the board.

> Our objective was to find the best turf specialist and researcher in the country. We wanted someone to keep us up with the latest developments and to scrutinize the technical aspects of our product line. We found Jim Beard at Texas A&M. It took Jim a while to be enthusiastic about being on the board, and it took Tadd a while to figure out how to get the most out of Jim. After Jim was appointed to the board, we encouraged Tadd to have Jim out on a consulting basis for a couple of days. Now Tadd is making good use of Jim.

Seitz and Timnick were considering an individual with extensive experience in consumer products businesses to be the second outside director. They chose Jack Chamberlain, who had previously run GE's Consumer Electronics Division, Lenox China, and Avon Products. All board members were stockholders; upon joining the board they were given the opportunity to purchase 50,000 shares at adjusted book value. All the directors chose to own stock.

This board structure was typical for a C&D buyout. Martin Dubilier explains:

> We have tried a number of board compositions and we found this to be the most effective. If you have too many insiders the board becomes an operating committee. Outsiders fortify the growth opportunities of the firm.

The board of directors met quarterly. A subset of the board, the executive committee, met monthly. The executive committee was made up of Martin Dubilier, Tadd Seitz, and Henry Timnick. In their meetings they determined policy, discussed personnel matters, and tested Seitz's thinking on major issues facing the firm. The board meetings were more formal, usually consisting of presentations by members of the management team other than Seitz.

4.2. The operating partner

In each of C&D's buyouts a partner with extensive operating experience serves as the liaison between the firm's managers and C&D. The operating partner functions as an advisor and consultant to the CEO, not a decision maker. Henry Timnick was Scott's liaison partner. He had been CEO of a division of Mead that was purchased through a leveraged buyout and had since worked with several of C&D's other buyout firms. Timnick spent severai weeks in Marysville after the buyout closed. Following that he was in touch with Seitz daily by telephone and continued to visit regularly.

Timnick would advise Seitz, but felt it was important that Seitz make the decisions. When he and Seitz disagreed, Timnick told him: 'If you don't believe me, go hire a consultant, then make your own decision.' Initially, Seitz continued to check with Timnick, looking for an authorization for his decisions. Henry Timnick explains:

> Tadd kept asking me 'Can I do this? Can I do that?' I told him, 'You can do whatever you want so long as it is consistent with Scott's overall strategy.'

This consultative approach to working with Scott managers was quite different from ITT's approach. Martin Dubilier explains:

> ITT challenges managers not to rock the boat, to make budget. We challenge managers to improve the business. Every company takes on the personality of its CEO. Our main contribution is to improve his performance. All the rest is secondary.

Scott managers confirmed Dubilier's assessment. Meetings between ITT managers and Scott managers were large and quite formal, with as many as 40 members of ITT's staff present. Scott managers found the meetings antagonistic, with the ITT people working to find faults and problems with the operating unit's reported performance. By meeting the formal goals set by ITT, Scott could largely avoid interference from headquarters. Avoiding such interference was an important objective. As Paul Yeager, CFO, describes it:

> Geneen [then CEO of ITT] said in his book that the units would ask for help from headquarters; that the units came to look at headquarters staff as outside consultants who could be relied upon to help when needed. I have worked in many ITT units, and if he really thought that, then he was misled. If a division vice-president went to headquarters for help, in effect he was saying, 'I can't handle it.' He wouldn't be a vice-president for very long.

5. Organizational changes and changes in decision making

The organizational changes and changes in decision making that took place at Scott after the buyout fall broadly into two categories: improved working capital management and a new approach to product markets. These changes were not forced on managers by C&D. The buyout firm made some suggestions, but the specific plans and their implementation were the responsibility of Scott managers. Few of the changes in managerial actions represent keenly innovative or fundamentally new insights into management problems. As one observer noted: 'It ain't rocket science.' These changes, however, led to dramatic improvements in Scott's operating performance.

Management's ability did not change after the buyout, nor did the market or the assets they were managing. The only changes were in the incentive structure of the firm, as described in sections 2 through 4, and in the management control systems. According to Scott managers, the biggest difference between working at Scott before and after the buyout was an increase in the extent to which they could make and implement decisions without approval from superiors. ITT maintained control over its divisions through an inflexible formal planning and reporting structure. Changing a plan required approval at a number of levels from ITT headquarters, and a request for a change was likely to be denied. In addition, because ITT was shedding its consumer businesses, Scott managers found their requests for capital funds were routinely denied. After the buyout, Seitz could pick up the phone and propose changes in the operating plan to Timnick. These changes were likely to be accepted. This, of course, improved the company's ability to respond quickly to changes in the marketplace.

5.1. The working capital task force

Shortly after the buyout, a task force was established to coordinate the management of working capital throughout the company. The members of the task force were drawn from every functional area. The group was charged with reducing working capital requirements by 42%, or $25 million, in two years. They exceeded this goal, reducing average working capital by $37 million. The task force helped Scott managers learn to manage cash balances, production, inventories, receivables, payables, and employment levels more effectively.

5.1.1. Cash management

Before the buyout, Scott's managers never had to manage cash balances. John Wall, assistant treasurer and chairman of the working capital task force, describes how cash was controlled under ITT:

> Under the ITT system, we needed virtually no cash management. The ITT lock box system swept our lock boxes into Citibank of New York. Our disbursement bank would contact ITT's bank and say we need $2 million today and it automatically went into our disbursement account.

To control cash flow in its numerous businesses, ITT established a cash control system that separated the collection of cash from cash disbursements.

Receipts went into one account and were collected regularly by ITT's bank; once deposited, these funds were not available to divisional managers. Cash to fund operations came from a different source, through a different bank account. This system allowed ITT to centrally manage cash and control divisional spending.

When Scott was a division of ITT, cash coming into Scott bore little relation to the cash Scott was allowed to spend. In contrast, after the LBO, all of Scott's cash was available to managers to spend. They needed to establish a system to control cash so that operations were properly funded, and to meet debt service requirements. Wall describes the process:

> In the first six months after the LBO we had to bring in a state-of-the-art cash management system for a business of this size. We shopped a lot of treasury management systems and had almost given up on finding a system that would simply let us manage our cash. We didn't need a system that would keep track of our investment portfolios because we had $200 million borrowed. Finally, we found a product we could use. Under the LBO cash forecasting has become critical. I mean cash forecasting in the intermediate and long range. I don't mean forecasting what is going to hit the banks in the next two or three days. We could always do that, but now we track our cash flows on a weekly basis and we do modeling on balance sheets, which allows us to do cash forecasting a year out.

5.1.2. Production and inventories

Between 1986 and 1988, the efforts of the task force increased the frequency at which Scott turned over its inventory from 2.08 to 3.20 times per year – an increase of 54%. During this period both sales and the number of products produced increased. Because Scott's business is highly seasonal, inventory control was always a management problem. Large inventories were required to meet the spring rush of orders; however, financing inventories was a cash drain. Scott's production strategy under ITT exacerbated the inventory problem. Before the buyout, Scott produced each product once a year. Slow-moving products were produced during the slow season, so that long runs of fast-moving products could be produced during the busy season. Before the spring buying began almost an entire year's worth of sales were in inventory.

The old production strategy took advantage of the cost savings of long production runs, but under ITT, managers did not consider the tradeoff between these cost savings and the opportunity cost of funds tied up in inventory. The cash requirements of servicing a large debt burden, the working capital-based restrictions in the debt agreements, and the inclusion of working capital objectives in the compensation system gave managers a strong incentive to consider this opportunity cost. As Wall explained it:

> What the plant managers had to do was to figure out how they could move the production of the slow-moving items six months forward. That way the products we used to make in May or early June would be made in November or December. Now [instead of producing long runs of a few products] production managers have to deal with setups and changeovers during the high-production period. It requires a lot more of their attention.

Managing inventories more effectively required that products be produced closer to the time of shipment. Because more setups and changeovers were necessary the production manager's job became more complicated. Instead of producing a year's supply of one product, inventorying it, then producing another product, managers had to produce smaller amounts of a variety of products repeatedly throughout the year.

Inventories were also reduced by changing purchasing practices and inventory management. Raw material suppliers agreed to deliver smaller quantities more often, reducing the levels of raw materials and finished goods inventories. Through close tracking, Scott managed to reduce inventory levels without increasing the frequency of stock-outs of raw materials or finished goods.

5.1.3. Receivables and Payables

Receivables were an important competitive factor, and retailers expected generous payment terms from Scott. After the buyout, however, the timing of rebate and selling programs was carefully planned, allowing Scott to conserve working capital. Scott also negotiated with suppliers to obtain more favorable terms on prices, payment schedules, and delivery. Lorel Au, manager of Contract Operations, stated:

> Within two months of the LBO, the director of manufacturing and I went out to every one of our contract suppliers and went through what a leveraged buyout is, and what that means. We explained how we were going to have to manage our business. We explained our new goals and objectives. We talked about things like just-in-time inventory, talked terms, talked about scheduling. Some suppliers were more ready to work with us than others. Some said, 'OK, what can we do to help?' In some cases, a vendor said, 'I can't help you on price, I can't help you on terms, I can't help you on scheduling.' We said: 'Fine. Good-bye.' We were very serious about it. In some cases we didn't have options, but usually we did.

The company succeeded in getting suppliers to agree to extended terms of payment, and was able to negotiate some substantial price cuts from major suppliers in return for giving the supplier a larger fraction of Scott's business.

Scott managers felt that the buyout put them in a stronger bargaining position vis-a-vis their suppliers. Wall states:

> One reason we were able to convince our suppliers to give us concessions is that we no longer had the cornucopia of ITT behind us. We no longer had unlimited cash.

The suppliers understood that if they did not capitulate on terms, Scott would have to take its business elsewhere or face default.[6]

5.1.4. Employment

Scott had a tradition of being very paternalistic toward its employees and was a major employer and corporate citizen in the town of Marysville. Some have argued that an important source of cash and increasing equity value in buyouts is the severing of such relationships.[7] There is no evidence of this at Scott. Scott's traditional employee relations policies were maintained, and neither wages nor benefits were cut after the buyout. Scott continues to maintain a large park with swimming pool, tennis courts, playground, and other recreational facilities for the enjoyment of employees and their families. The company also continues to make its auditorium, the largest in Marysville, available for community use at no charge.

The company did begin a program of hiring part-time employees during the busy season, rather than bringing on full-time employees. This allowed Scott to maintain a core of full-time, year-round employees who enjoyed the full benefits plan of the company, while still having enough people to staff the factory during busy season. Largely through attrition, average annual full-time employment has dropped by about 9% over the first two years after the buyout.

5.2. Approaches to the Product Markets

Scott is the major brand name in the do-it-yourself lawn care market, and has a reputation for high-quality products. Ed Wandtke, a lawn industry

[6]Schelling (1960) supports the idea that increased bargaining power can occur as the result of a precarious financial situation. He states: 'The power to constrain an adversary may depend on the power to bind oneself. ... In bargaining, weakness is often strength, freedom may be freedom to capitulate, and to burn bridges behind one may suffice to undo an opponent. ...[M]ore financial resources, more physical strength, more military potency, or more ability to withstand losses ... are by no means universal advantages in bargaining situations; they often have a contrary value.'

[7]Shleifer and Summers (1988).

analyst and partner of All Green Management Consultants Inc., states:

> O.M. Scott is ultra high price, ultra high quality. They absolutely are the market leader. They have been for some time. No one else has the retail market recognition. Through its promotions, Scott has gotten its name so entrenched that the name and everything associated with it – quality, consistency, reliability – supersede the expensive price of the product.

In 1987, Scott had a 34% share of the $350 million do-it-yourself market. Industry experts report, however, that the market had been undergoing major changes since the early 1980s. Indeed, Scott's revenue fell by 23% between 1981 (the historical high at that time) and 1985. The buyout allowed Scott managers the flexibility to adapt to the changing marketplace, assuring a future for the company.

The do-it-yourself market was shrinking because an increasing number of consumers were contracting with firms to have their lawns chemically treated. Seitz had proposed that Scott enter this segment of the professional lawn care market for years, but ITT continually vetoed this initiative. Among the first actions taken after the buyout was the creation of a group within the professional division whose focus was to sell to the commercial turf maintenance market. Within two years, the segment comprised 10% of the sales of the professional division, and was growing at a rate of almost 40% per year.

Scott's position in the do-it-yourself market was challenged by the growth of private label brands that were sold at lower prices and a shift in volume away from Scott's traditional retailers – hardware and specialty stores – to mass merchandisers. Under ITT Scott managers did not try to develop new channels of distribution. Timnick described it as too 'risky' an experiment for ITT. The company's post-buyout acquisition of Hyponex gave Scott access to the private label market. Wandtke argues:

> With Hyponex, Scott will capture a greater percentage of the home consumer market. Hyponex is a much lower priced product line. It gives them [Scott] access to private labeling, where they can produce product under another label for a lesser price. ...This will improve their hold on the retail market.

The acquisition of Hyponex represented a major response to the changes taking place in Scott's product markets. Hyponex was a company virtually the same size as Scott, with $125 million in sales and 700 employees, yet the acquisition was financed completely with bank debt. The successful renegotiation of virtually all of Scott's existing debt agreements was required to consummate the transaction. Because the new debt was senior to the existing notes and debentures, a consent payment of $887,500 was required to persuade bondholders to waive restrictive covenants. That such an expansionary acquisition was possible only $2\frac{1}{2}$ years after the buyout demonstrates the flexibility of the LBO as an organizational form. It also demonstrates the ability of the contracting parties to respond to positive NPV projects that might appear to be blocked by the post-LBO company's capital structure.

6. Conclusions

Our findings confirm the results of large-sample studies – that the pressure of servicing a heavy debt load and management equity ownership lead to improved performance. Equally important in the Scott organization, however, and undocumented in large-sample studies, are the debt covenants that place restrictions on how the cash required for debt payments can be generated, the adoption of a strong incentive compensation plan, a reorganization and decentralization of decision making, and the relationship between Scott managers, the Clayton & Dubilier partners, and the board of directors.

We attribute the improvements in operating performance after Scott's leveraged buyout to changes in the incentive, monitoring, and governance structure of the firm. Managers were given strong incentives to generate cash and were allowed more decision-making authority, but checks were established to guard against behavior that would be damaging to firm value. In the Scott organization, high leverage was effective in forcing managers to generate cash flow in a productive way largely because debt covenants and equity ownership countered short-run opportunistic behavior. Value was created by decentralizing decision making largely because managers were closely monitored and supported by an expert board of directors who were also equityholders.

We view this study as a first step toward the development of a theory of how organizations respond to radical changes in their financial structure and how these changes affect managerial behavior. Our results are applicable to organizations with other combinations of high leverage, management equity ownership, and active boards of directors, such as venture-backed high-technology firms or public companies that undertake leveraged recapitalizations. For example, if counterbalancing incentives are important, we should observe restrictive covenants and management equity ownership in leveraged recapitalizations. If it is important to couple a strong bonus plan with equity ownership to motivate managers, then why do we not observe such bonus plans in venture-backed startup companies? Further research can help us determine the relative importance of these factors and their interactions in determining optimal organizational forms.

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