

1997

Debt Financing and Motivation

George G. Triantis

Follow this and additional works at: <http://scholarship.richmond.edu/lawreview>



Part of the [Business Organizations Law Commons](#)

Recommended Citation

George G. Triantis, *Debt Financing and Motivation*, 31 U. Rich. L. Rev. 1323 (1997).

Available at: <http://scholarship.richmond.edu/lawreview/vol31/iss5/3>

This Article is brought to you for free and open access by the Law School Journals at UR Scholarship Repository. It has been accepted for inclusion in University of Richmond Law Review by an authorized editor of UR Scholarship Repository. For more information, please contact scholarshiprepository@richmond.edu.

ARTICLES

DEBT FINANCING AND MOTIVATION

*George G. Triantis**

I. INTRODUCTION

An individual's performance in a given activity is a function of her effort and her competence, as well as her surrounding conditions. Effort, in turn, can be divided into three characteristics: direction, intensity and duration. Intensity and duration of effort reflect the individual's motivation with respect to the given activity. Motivation is the product of a cognitive process that anticipates the outcomes of effort and, particularly, the degree to which the individual will be satisfied or dissatisfied with her performance. While individuals might define satisfaction in terms of input (i.e., the amount of effort applied to the task), they more typically set standards for output (i.e., performance) that are derived from internal and external sources. Performance is commonly judged by a dichotomous success-failure standard as opposed to a graduated metric standard. This standard has both a prospective and retrospective impact on motivation. For example, an individual is motivated to raise her effort to avoid failure, and, if failure occurs, she may be motivated to redirect, intensify or prolong future effort to avoid the recurrence of failure.

* Nicholas E. Chimicles Research Professor in Business Law and Regulation, University of Virginia. This is a slightly revised text of the George E. Allen Chair Lecture of February 24, 1997. I am grateful for the research assistance of Jason Krikorian and the comments of my colleague, John Monahan.

The debate over corporate governance has raised concerns about not only the direction (e.g., managerial entrenchment or empire building activities), but also the intensity of managerial effort in public corporations (e.g., shirking). Equity and debt financing of corporate investments differ in the manner in which their distinctive financial characteristics motivate managers. As a general proposition, equity sets a graduated standard that tells managers to use their best efforts to maximize the value of the firm's stock. In contrast, debt imposes fixed repayment obligations on the firm and, therefore, can be analyzed as establishing a dichotomous measure of performance: either the firm meets its payment obligations (success) or it defaults (failure).¹ Recently, scholars have pointed to this feature of debt as an advantage of corporate leveraging. However, the superiority of a stark success-failure standard of performance in promoting individual effort is controversial in other contexts—for example, the education of children in the United States—because of a concern about the potential debilitating effects of both the prospect and the occurrence of failure on the motivation of at least some types of individuals.

Part II presents the case for the motivational virtue of debt in the context of the optimal capital structure debate. Part III draws on cognitive theories of action to propose that, by defining outcomes according to the success or failure of meeting fixed obligations, debt may either increase or decrease managerial motivation, depending on the degree of leverage and the cognitive characteristics of individual managers. Part IV discusses the potential negative *ex post* motivational effects of corporate failure on managers that may spill over into other segments of their lives. The case in favor of the motivational virtue of debt financing is undermined by the existence of a significant negative motivational externality borne by society—ironically, the same community that encourages debt financing through the tax deduction for interest payments.

1. To be sure, there are varying degrees to which the firm may fall short of meeting its debt obligations. Since managers, however, are typically replaced when a firm becomes insolvent, the degree of insolvency may have little bearing on their motivation. See *infra* note 10 and accompanying text.

II. DEBT FINANCING AND THE CONTROL OF MANAGERIAL AGENCY PROBLEMS

In their pure forms, debt and equity financing contracts may be distinguished in terms of both their financial and governance characteristics. First, debtholders are owed fixed amounts payable according to an agreed schedule. Depending on the cash flow and the solvency of the firm, the debtholders may receive less than these amounts; but, they are never entitled to more. Debtholders enjoy priority over equityholders: in the event of the dissolution or liquidation of the firm, the value of its assets is used to pay debt claims before equity. Equityholders are residual claimants, and, by definition, their returns may vary in either direction with the fortunes of the firm. They may receive periodic dividends, but typically realize the value of their interests either by selling their shares to other investors or exchanging them for cash in the dissolution of the firm. Second, holders of equity control the decisions of the firm through their rights to vote and replace the board of directors and to enforce the directors' fiduciary obligations to the firm. Debtholders derive their leverage over firm decisions from the contractual right to enforce their debts against the borrower's assets in the event of default.

Finance theorists have long struggled with the capital structure puzzle: assuming that a firm may finance its activities by issuing either stock or debt in its pure form, what is the optimal mix of debt and equity in a firm's capital structure? The capital structure debate has been informed by two types of agency problems that arise in public corporations because of divergent interests among the two groups of capital investors (debt and equity) and the agents who conduct the firm's activities (the managers). When investors delegate decision making authority to their agents, these agents are tempted to make decisions that serve their own interests rather than those of their principals. This conflict gives rise to managerial agency problems. In addition, given the differences in the financial characteristics of debt and equity described above, the two groups of investors have divergent interests with respect to many firm decisions. Therefore, to the extent that one group of investors (usually assumed to be the equityholders) captures the loyalty of management, it may cause decisions to be made

that benefit that group to the detriment of the other investors (usually debtholders). This gives rise to financial agency problems. The collective objective of the firm is to preserve the gains from the division of investor and managerial functions, while minimizing the cost of managerial and financial agency problems.

It is fairly well accepted that debt has a mixed effect on corporate agency problems. While the existence of debt in a firm's capital structure aggravates financial agency problems, it can mitigate managerial agency problems. Corporate governance scholarship has focused primarily on equity-centered mechanisms that police the self-interested behavior of management, such as stockholder voting and the market for corporate control. Debt contracts have a relatively under-appreciated role in deterring, detecting and correcting managerial slack—that is, lapses in managerial competence or effort, as well as excessive managerial compensation or perquisite consumption.² Instances of managerial slack may be deterred directly by debt covenants that proscribe them. To the extent that deterrence is not perfect and managerial slack nevertheless occurs, a debtholder can contribute to the correction of such slack in several ways. It may compel the replacement of managers by enforcing its debt or triggering bankruptcy.³ The lender may instead use the threat of enforcement to persuade incumbent managers to correct the slack. Alternatively, while a lender's enforcement may not be severe enough to force the termination of incumbent managers, it might signal the detection of slack to other stakeholders who can intervene more effectively to redress the problem.⁴

While corporate governance properly seems to contemplate active stakeholder monitoring and intervention in the management of the firm, it is clear that these methods of controlling managerial slack are costly. In many cases, it may be more cost-effective to rely on ex ante measures that correct incentives and need little or no monitoring. The fixed periodic obligations that distinguish debt from equity are themselves recognized as

2. See George G. Triantis & Ronald J. Daniels, *The Role of Debt in Interactive Corporate Governance*, 83 CALIF. L. REV. 1073, 1074-75 (1995).

3. See F.H. Buckley, *The Termination Decision*, 61 UMKC L. REV. 243, 246-52 (1992).

4. See Triantis & Daniels, *supra* note 2, at 1080-81.

mechanisms that discipline managerial misbehavior and require minimal monitoring activity. In two widely cited articles,⁵ Michael Jensen observed that the cash flow produced by some corporations, particularly in mature or declining industries, cannot be profitably reinvested in opportunities available to the respective firms and should therefore be distributed to investors. Instead, managers tend to appropriate this free cash flow by consuming perquisites or by slackening their efforts. Alternatively, they may use the cash to expand the operations of the firm in unrelated areas where it has no comparative advantage, but where such expansion may enhance the managers' prominence and prestige in industry, political and social circles. The existence of periodic fixed debt obligations forces managers to disgorge the cash flow and put it in the hands of investors who can invest it profitably.⁶ Dividends or share repurchases have a similar effect. Yet, Jensen argued that debt is a more reliable mechanism because the consequences of missing a scheduled debt repayment are typically far more grave than those that follow a reduction in dividends or a decision not to repurchase stock.

Jensen also noted that debt is a powerful agent for change.⁷ A heavy debt load can induce a manager to sell off parts of the firm's business and focus energies on core operations. More generally, it forces managers to rethink their strategies and induces directors to reconsider the structure and composition of their management team.⁸ In a more recent article, Judge

5. See Michael C. Jensen, *Agency Costs of Free Cash Flow, Corporate Finance and Takeovers*, 76 AM. ECON. REV. 323 (1986) [hereinafter Jensen, *Agency Costs*]; Michael C. Jensen, *Eclipse of the Public Corporation*, HARV. BUS. REV., Sept.-Oct. 1989, at 61 [hereinafter Jensen, *Eclipse*].

6. Jensen notes that "debt is in effect a substitute for dividends—a mechanism to force managers to disgorge cash rather than spend it on empire-building projects with low or negative returns, bloated staffs, indulgent perquisites, and organizational inefficiencies." Jensen, *Eclipse*, *supra* note 5, at 67.

7. See *id.*

8. Overleveraging creates the crisis atmosphere managers require to slash unsound investment programs, shrink overhead, and dispose of assets that are more valuable outside the company. The proceeds generated by these overdue restructurings can then be used to reduce debt to more sustainable levels, creating a leaner, more efficient and competitive organization.

In other circumstances, the violation of debt covenants creates a board-level crisis that brings new actors onto the scene, motivates a fresh

Frank Easterbrook made a similar argument by referring to debt as an incentive device that leads to greater managerial effort.⁹ In outlining the effect of leveraged managerial buyouts, Easterbrook observed that a manager holds a larger fraction of the residual claim in her firm after a buyout and therefore shares to a greater degree in the financial rewards and costs of her efforts. Easterbrook took his case one step further and presented a more general claim about debt: it promotes greater effort by placing managers "close to the margin."¹⁰

Perhaps more important, after a firm promises to pay out most of its cash flow to holders of debt, it is eternally skating on thin ice. Managers (at least top managers) realize that deficiencies in their own efforts could cause the firm to fail And in competition, in which a few percent reduction in total costs of production spells the difference between industry leadership and failure, effects of this kind may be decisive even if they are "small" by absolute standards.¹¹

Such claims about the desirable incentive effect of debt and of the prospect of failure does not acknowledge the existence of a limit to the motivational virtue of corporate leveraging. Raising the proportion of debt in a firm's capital structure beyond a certain point raises serious concerns about both the ex ante motivational effects of debt and the ex post effects of failure. First, to use Easterbrook's metaphor, the manager's worry about falling through thin ice does not always lead to superior performance; it may instead lead to a fatalistic sense that effort might be wasted in a futile cause. Part IV applies cognitive motivational theories to suggest the conditions under which effort enhancement or reduction is likely to occur. Second, the failure of a firm may have a destructive effect on the future motivation of individual managers both at and away from their jobs. The corporation may not have to bear this cost if it replaces its managers shortly after failure. The negative externalities

review of top management and strategy, and accelerates response.

Id.

9. See Frank H. Easterbrook, *High-Yield Debt as an Incentive Device*, 11 INT'L REV. L. & ECON. 183 (1991).

10. See *id.*

11. *Id.* at 186.

from perceived personal failure, however, are borne by the community. As a matter of public policy, therefore, we should be as concerned about the loss in value of individuals (i.e., both private and public investment in human capital) due to motivational externalities of corporate failure, as we are about the loss of synergies that are threatened by the liquidation of a firm that defaults on its debt obligations. Part IV extends the analysis to consider the potential motivational costs of debt over multiple periods.

III. DEBT FINANCING AS A GOAL SETTING MECHANISM

In Jensen's and Easterbrook's paradigms, debt operates as an incentive device in the following manner. A leveraged firm is obligated to make periodic payments to its creditors and therefore must produce the cash flow to do so. If the firm fails to meet its debt obligations and defaults, its creditors may enforce their claims by removing assets from the firm. As a separate consideration, if the value of the firm's assets falls below the amount of its debt, the firm becomes insolvent and its creditors may invoke proceedings to liquidate the firm. In cases of either creditor enforcement or the initiation of insolvency proceedings, corporate executives experience a sense of failure and are at risk of being replaced.¹² The performance (in terms of cash flow and firm asset value) that is necessary to avoid these consequences rises with the degree to which the firm is financed by debt rather than equity. As a result, managers in highly leveraged firms are driven to work harder than their counterparts in less leveraged firms where there is greater tolerance for slack in either cash flow or asset value.

This theory is oversimplified because it assumes that managers respond to the threat of punishment in a predictable and monotonic fashion. Leveraging increases the expected punishment for managerial slack by raising the probability that the firm will not meet the implied cash-flow or asset-value target.

12. This conclusion appears to hold even if the debtor firm is reorganized rather than liquidated. See Stuart C. Gilson, *Bankruptcy, Boards, Banks and Blockholders*, 27 J. FIN. ECON. 355, 369-71 (1990); Lynn M. LoPucki & William C. Whitford, *Corporate Governance in the Bankruptcy Reorganization of Large, Publicly Held Companies*, 141 U. PA. L. REV. 669, 723 (1993).

The model postulates that managers respond to this threat by working harder to avoid failure. If managerial effort, however, is regulated by the anticipated consequences of corporate default or insolvency, then predictions as to the direction and magnitude of the motivational effect of debt must rest on the cognitive process by which individuals anticipate future outcomes and convert them into motivators of action.

In order to establish a general framework for analyzing this cognitive process, I make the following simplifying assumptions. A corporation has a single manager who has no financial stake in the firm. The manager makes all the decisions of the firm except the capital structure decision, which is made by investors as a group. The investors decide the optimal mix of debt and equity financing using only motivational criteria: they select the mix of fixed and residual obligations that provides the optimal incentives for the manager to exert effort in carrying out her responsibilities. The firm can default on its debt only by failing to meet a scheduled repayment obligation; creditor rights upon insolvency in the balance sheet sense are disregarded. Payment default causes corporate failure, which gives rise to an exogenous determination and significant probability that the manager will be replaced. This risk of job (and income) loss is the only externally imposed punishment for the firm's failure that is borne by the manager.

The motivational benefits of debt may be restated in terms of goal setting theory, one of the most accepted cognitive theories of motivation. The issuance of debt in the scenario described above sets challenging goals for periodic cash flows. The firm's managers accept these goals as their personal goals (with greater or lesser degrees of enthusiasm, as I explain below). These goals provide direction for managerial action and promote effort and persistence in the pursuit of the goal.¹³ Three core predictions of goal setting theory have been the subject of considerable empirical testing and lend support to the professed motivational virtue of corporate debt. First, specific goals are more effective in motivating higher performance than general goals, such as to do one's best.¹⁴ In this sense, debt is to be preferred

13. See EDWIN A. LOCKE & GARY P. LATHAM, A THEORY OF GOAL SETTING & TASK PERFORMANCE 86-108 (1990).

14. See Albert Bandura & Daniel Cervone, *Self-Evaluative and Self-Efficacy Mech-*

to equity because it encourages the manager to set specific cash flow goals. This prescription is reinforced by the second prediction that proximal goals have a greater positive effect on performance than distal goals.¹⁵ The periodic payment obligations may give rise to more immediate goals than the pressure to maximize the value of equity over a longer time horizon.

The third core prediction is that, within some outer limits, more difficult goals tend to motivate higher levels of effort and performance than easier goals.¹⁶ The mix of debt and equity in a firm's capital structure can therefore be adjusted to provide challenging, specific and periodic goals for its manager. The link between goal level and performance motivation, however, is not sufficiently direct to warrant an irrebuttable inference that managers can be motivated to achieve larger net cash flows simply through the higher goals that are implicitly assigned when the firm issues a greater proportion of debt. The direction and magnitude of the effect of goal levels on performance is moderated by a number of factors. Most important for the purposes of this paper is the commitment of the actor to the goal and the actor's general sense of her ability to perform (her "self-efficacy"¹⁷). Other factors include the actual ability of the actor, the complexity of the task and the availability of periodic feedback.¹⁸

Individuals perform better when they are more rather than less committed to a challenging goal. Therefore, if increasing

anisms Governing the Motivational Effects of Goal Systems, 45 *J. PERSONALITY & SOC. PSYCHOL.* 1017 (1983); Edwin A. Locke et al., *Goal Setting and Task Performance: 1969-1980*, 90 *PSYCHOL. BULL.* 125, 129 (1981).

15. See, e.g., ALBERT BANDURA, *SOCIAL FOUNDATIONS OF THOUGHT AND ACTION: A SOCIAL COGNITIVE THEORY* 474-77 (1986) [hereinafter BANDURA, *SOCIAL FOUNDATIONS*]; Albert Bandura & Dale H. Schunk, *Cultivating Competence, Self-Efficacy, and Intrinsic Interest Through Proximal Self-Motivation*, 41 *J. PERSONALITY & SOC. PSYCHOL.* 586, 587, 593-94 (1981).

16. See, e.g., Edwin A. Locke, *Toward a Theory of Task Motivation and Incentives*, 3 *ORG. BEHAV. AND HUMAN PERFORMANCE* 157-89 (1968); Anthony J. Mento et al., *A Meta-Analytic Study of the Effects of Goal Setting on Task Performance: 1966-1984*, 39 *ORG. BEHAV. AND HUMAN DECISION PROCESSES* 52, 74-77 (1987).

17. The concept of self-efficacy is a central component in the social-cognitive theories developed by Albert Bandura. Bandura defines self-efficacy as one's judgment of "how well one can execute courses of action required to deal with prospective situations." Albert Bandura, *Self-Efficacy Mechanism in Human Agency*, 37 *AM. PSYCHOL.* 122, 122-23 (1982).

18. See generally LOCKE & LATHAM, *supra* note 13, at 173-225.

the difficulty of a goal causes a reduction in commitment, the overall effect of raising a goal level may be decided by a trade-off between the positive effect of a higher goal level and the negative effect of lower commitment.¹⁹ Most people eventually reject goals they consider to be well beyond their reach. Expectancy theory is a rational choice theory of motivation that embodies this notion of a concave effort function in a principle of maximization of expected value of effort.²⁰ An actor exerts effort up to the point that the cost of further effort exceeds the expected gains from such effort. Therefore, goal commitment, and hence motivation, is a function of the actor's subjective assessment of: (i) the expected value of external and internal outcomes that result from the actor's achieving or failing to achieve the targeted level of performance; and (ii) the subjective probability that increased effort will produce that level of performance.²¹

In the very stylized example in this paper, the probability that the manager loses her job following corporate failure is affected by neither the degree of leverage nor by the discrepancy between the goal and the performance. Under those conditions, the expected value of external consequences that follow success or failure in meeting targeted performance does not change as the required performance level is raised by increased leverage. Nevertheless, there may be greater intrinsic satisfaction that follows success in meeting a more challenging goal and a correspondingly smaller sense of dissatisfaction following failure. As a firm sets higher goals for cash flow production, the

19. See, e.g., *id.* at 130.

20. A classic treatise in this field is VICTOR H. VROOM, *WORK AND MOTIVATION* (1964).

21. An individual's commitment is affected by her view of conception of the goal as a learning or performance goal. Her perspective depends on her attitude toward innate abilities, such as intelligence. Those individuals who conceive of intelligence as an incremental skill that is continually enhanced by experiences see goals as opportunities to develop their competencies (learning goals). Those who view intelligence as an innate and stable entity view goals as performance demonstrations of their proficiencies. The concern over the difficulty of goals is much more pronounced when the individual belongs to the latter group because failure is a much more serious threat to one's self-esteem and social standing. See Carol S. Dweck, *Intrinsic Motivation, Perceived Control, and Self-Evaluation Maintenance: An Achievement Goal Analysis*, in 2 *RESEARCH ON MOTIVATION IN EDUCATION* 289 (R.E. Ames & C. Ames eds., 1985).

probability of meeting those goals falls. Without a compensating increase in the valence of achieving those goals, the actor's commitment is likely to fall off.²² Empirical studies have shown that commitment can decline as the goal becomes more difficult and the individual's perceived chances of reaching it declines.²³

In the discussion thus far, the firm's fixed obligations present the manager with an all-or-nothing proposition, at least with respect to external factors: she keeps her job if the obligations are met and risks losing it if they are not. Yet, in reality, the manager of a marginally solvent debtor in default may have a much better chance of keeping her job than the manager of a marginally insolvent firm. A series of studies have examined the interaction between external incentives and goal difficulty, and their combined effect on performance. There is some evidence that difficult goals operate better when combined with a graduated incentive system rather than an all or nothing scheme.²⁴ The purported motivational value of debt, however, seems to be based on the fact that it creates a specific goal for the manager. A regime of piecemeal incentives may undermine the clear distinction between success and failure that injects the goal with specificity.

The effect of increases in goal difficulty cannot be described in universal terms. It depends (some would say hinges) on how each individual views her ability to control events that affect

22. An opposite problem might result if the increase in goal difficulty is not accompanied by a reduction in commitment. This combination can create pressure on the actor leading to emotional states—notably, stress and anxiety—that can be detrimental to performance. Debilitating anxiety is more likely if managers have less training or self-efficacy. See BANDURA, *SOCIAL FOUNDATIONS*, *supra* note 15, at 447.

23. See LOCKE & LATHAM, *supra* note 13, at 147. In a similar vein, Gilbert Brim, the Director of the MacArthur Foundation Research Network on Successful Mid-Life Development, writes:

Where is the right level of difficulty? . . . One way to describe a level of difficulty is in terms of the probability that our action will succeed or fail. Research on artificial tasks shows that we are most strongly motivated to try to achieve success when we know the risk of failure to be about fifty-fifty. The joy of winning is enhanced by the threat of failure. Activities that involve no risk cannot provide the joy of achievement.

GILBERT BRIM, *AMBITION: HOW WE MANAGE SUCCESS AND FAILURE THROUGHOUT OUR LIVES* 32 (1992).

24. See LOCKE & LATHAM, *supra* note 13, at 138-39.

her life. In the social cognitive theory of action, this central characteristic is known as self-efficacy: a person's judgment of her capabilities to organize and execute courses of action required to achieve designated performance demands. The importance of perceived self-efficacy is described by Albert Bandura:

It is partly on the basis of self-beliefs of efficacy that people choose what challenges to undertake, how much effort to expend in the endeavor, how long to persevere in the face of difficulties, and [these beliefs] affect their vulnerability to stress and despondency in the face of difficulties and failures.²⁵

The rate at which individuals reduce their commitment to an increasingly difficult goal depends on their perceived self-efficacy, which determines their assessment of the probability of meeting the performance standard. Some commentators suggest that individuals will strive most and perform best when presented with difficulties that they perceive to be "just manageable."²⁶

The success in achieving a goal is also determined by the actor's ability to develop strategies that are suited to the demands of the task. Although this paper is concerned with motivation, a brief digression may illustrate a problem that difficult goals may create with respect to the direction of effort. Empirical studies have shown that the setting of goals, particularly specific and challenging goals, stimulate planning and strategy development. Individuals characteristically draw on their training and past experience, as well as their observations of others attempting similar tasks. An important part of strategy development may also be experimentation with a variety of alternative approaches. There are circumstances, however, in which specific, challenging goals do not promote, and may in fact harm, performance of complex tasks.²⁷ For instance, if one has

25. Albert Bandura, *Self-Regulation of Motivation and Action Through Internal Standards and Goal Systems*, in *GOAL CONCEPTS IN PERSONALITY AND SOCIAL PSYCHOLOGY* 19, 29 (Lawrence A. Pervin ed., 1989).

26. See BRIM, *supra* note 23, at 29-49.

27. As with many other goal mechanisms, self-efficacy has been argued to affect the strategies followed in performance. Those with a low sense of self-efficacy are more likely to adopt erratic thought processes in developing strategies. See, e.g., Robert Wood & Albert Bandura, *Effect of Perceived Controllability and Performance Stan-*

had little experience or training, difficult specific goals may discourage learning and experimentation with alternative techniques. At the other extreme, Locke and Latham comment that

specific, hard goals may push individuals with hard goals into a less than systematic "scramble" to find a strategy that will get immediate results, whereas those with easy goals, do best goals, or learning goals are more likely, or at least equally likely, to take the time to use a more careful, systematic approach.²⁸

Michael Jensen called debt an agent for change.²⁹ If it is set at too high a level, however, it may either paralyze strategy reformulation or lead to an undirected scramble for new strategies.³⁰ Either consequence is a cost imposed by the adverse effect of excessive leveraging on the direction of managerial effort.

In sum, the challenging and specific goals that are implicitly set by corporate leveraging may not yield benefits in performance. In particular, if set too high, they may reduce the probability and, hence, the expected value of achieving the implicit goal of a cash flow sufficient to meet fixed debt obligations. As a result, these goals may reduce the intensity of effort. In addition, if the goals are too difficult, they may impede the development of optimal business strategy either by discouraging learning through change or by causing a random scramble.

Even if the difficulty of the goal does not discourage effort and impair performance in the pursuit of that goal, the reduced likelihood of success may impair the prospect of high performance in subsequent periods. People react to failure in different

dards on Self-Regulation of Complex Decision Making, 56 J. PERSONALITY & SOC. PSYCHOL. 805 (1989).

28. LOCKE & LATHAM, *supra* note 13, at 105. Locke and Latham cite a study by Wood and Bandura which found that subjects who were told that a game was a learning device used better analytic strategies and performed better than subjects who were told the game would indicate how good a manager each of them was. *See id.*

29. *See supra* note 7 and accompanying text.

30. This tendency may be reinforced by the preference of managers for risky ventures when their firm is on the brink of insolvency. *See* Susan Rose-Ackerman, *Risk Taking and Ruin: Bankruptcy and Investment Choice*, 20 J. LEGAL STUDIES 277 (1991).

ways. Those who doubt their capabilities will tend to lower their goals and efforts in the next period. On the other hand, those with high self-efficacy may be spurred by the discrepancy between performance and goals to increase their efforts next time around and even to accept more challenging goals with greater intensity of effort.³¹

Some people have an unshakable sense of self-efficacy that survives countless failures. In general, however, the link between self-efficacy and performance is bidirectional; failure can lead to lower self-confidence or self-efficacy, depending on the explanations that individuals adopt for their failure.³² The reduction in self-efficacy may be reflected in the next period by a reluctance to accept similar goals and less effectiveness in performing to the required standard. This may in fact produce a downward spiral in which failures in each period decrease the difficulty of goals chosen in the next, the commitment to the goals and the likelihood that those goals will be achieved.³³ In this vein, there is a growing body of literature addressing the psychological cycles that may result from job loss. In the more extreme case, a cycle of failures may contribute to the phenomenon of learned helplessness that is discussed below.

IV. THE MOTIVATIONAL COSTS OF FAILURE

The theory of learned helplessness was spawned by the following observation in animals. Dogs in a shuttle box learned to turn off electric shocks by jumping over a barrier. When other dogs, however, were strapped down in harnesses so as to be unable to stop the shocks, they later were passive and deficient

31. See BANDURA, SOCIAL FOUNDATIONS, *supra* note 15, at 470-71.

32. Bandura states:

Goals not only provide direction and create incentives for action, they also figure prominently in the development of self-efficacy. Without standards against which to measure their performances, people have little or no basis for judging how they are doing, nor do they have much basis for gauging their capabilities.

Id. at 470.

33. Contrast to the high performance cycle described by Locke and Latham that is characterized by a cycle of triumphs over successively higher goals. See Edwin A. Locke & Gary P. Latham, *Work Motivation: The High Performance Cycle*, in WORK MOTIVATION 3 (U. Kleinbeck et al. eds., 1990).

in learning the escape response when placed in circumstances in which they could turn off the shock by jumping over the barrier.³⁴ Uncontrollable events have been shown to have similar effects in humans. In one study, college students were divided into three groups. Individuals in the first group could stop a loud noise by pushing a button four times (controllable noise). Individuals in the second group experienced loud noise that was terminated independently of their responses (uncontrollable noise). Individuals in the third group experienced no noise (no noise). The individuals from all three groups were then subjected to a test in which each individual could terminate loud noise simply by moving a lever in a hand shuttle box from one side of the box to the other. The typical subject in the uncontrollable noise group failed to escape the noise and listened passively to the noise in the test session.³⁵

Generally, learned helplessness is manifest in the display of inappropriate passivity: that is, a lack of effort to meet the demands of a situation with which the actor could cope.³⁶ This passivity follows in the wake of uncontrollable events: that is, the occurrence of events that are perceived to be unrelated to the behavior of the individual.³⁷ Finally, learned helplessness results because the perceived uncontrollability is inappropriately generalized to new situations. The key to the formulation of learned helplessness is that the individual gives up trying because of internal doubt about her effectiveness rather than because she expects that environmental contingencies have made action futile. Hence, learned helplessness may be viewed as an extreme case of the debilitating effect of performance outcomes on self-efficacy and motivation. It has also been suggested that learned helplessness has detrimental cognitive ef-

34. See J.B. Overmier & Martin E.P. Seligman, *Effects of Inescapable Shock Upon Subsequent Escape and Avoidance Responding*, 63 J. COMP. & PHYSIOLOGICAL PSYCHOL. 28, 28-33 (1967); Martin E.P. Seligman & Steven F. Maier, *Failure to Escape Traumatic Shock*, 74 J. EXPERIMENTAL PSYCHOL. 1-9 (1967).

35. See D.S. Hiroto, *Locus of Control and Learned Helplessness*, 102 J. EXPERIMENTAL PSYCHOL. 187, 187-93 (1974).

36. The definition of learned helplessness is adapted from CHRISTOPHER PETERSON ET AL., *LEARNED HELPLESSNESS: A THEORY FOR THE AGE OF PERSONAL CONTROL* 228-29 (1993).

37. It is interesting that learned helplessness may result from uncontrollable events that have bad or good outcomes. Failure is therefore a subset of uncontrollability involving bad outcomes. See *id.* at 54-55.

fects on performance by impairing the learning process and the emotional state of the individual.

The extent to which helplessness is generalized is determined by the manner in which the individual explains the causes of uncontrollable outcomes. In other words, the process by which uncontrollable events produce helplessness deficits is mediated by the causal explanations that individuals assign to the uncontrollable events. In the late 1970s, a group of psychologists suggested that three parameters of causal explanations are central in predicting the boundaries of learned helplessness.³⁸ First, the explanation may be internal (some attribute of the actor) or external (some attribute of the circumstances that would cause the same consequences to be suffered on any other individual in a population relevant to the actor). External explanations (e.g., the task was extremely difficult) are associated with universal helplessness, while internal explanations (e.g., I am prone to errors) lead to personal helplessness.³⁹ Second, the cause may be stable or unstable over time. For example, lack of ability is often an internal and stable explanation because ability is generally not perceived as variable over time, while lack of effort is an internal and unstable explanation.⁴⁰ The distinction between stable and unstable explanations predicts the boundaries of generalization of helplessness deficits over time. Third, the explanation may be located along a continuum between global and specific causes. Lack of innate ability to perform a specific task may be internal, stable and specific, while lack of intellectual stamina may be internal, stable and global. The specific-global dimension predicts the generalization of helplessness across situations. Individuals differ in explanatory styles. Their vulnerability to the learned helplessness phenomenon is a function of their tendency to explain adverse events as the result of internal, stable and global causes.

Suppose that the firm described in Part III defaults on its debt and is forced into liquidation. To some extent, this adverse outcome is viewed by the manager as uncontrollable. In a world

38. See Lyn Y. Abramson et al., *Learned Helplessness in Humans: Critique and Reformulation*, 87 J. ABNORMAL PSYCHOL. 49, 49-74 (1978).

39. See *id.* at 52-53.

40. See *id.* at 56.

of imperfect information, the true cause of a firm's failure is usually not clear even to the unbiased observer. There is likely to be a wide range of factors and a great deal of ambiguity about the extent to which each factor is responsible for the failure of the firm. As a result, under the learned helplessness theory, the explanatory style of the particular manager in question will determine the extent to which the corporate failure will be generalized by the manager across time and circumstances.⁴¹

External explanations for corporate failure are less likely to be stable and global than internal explanations (unless they are based on a generalization that life is unjust). To the extent that a manager explains the failure of the firm in terms of deficiencies in her ability, she is attributing the outcome to a stable, internal cause that may be generalized to managerial tasks in the future. In this way, corporate failure in period one causes reduced managerial effort in period two. If the explanation also has a global dimension—for example, the manager attributes corporate failure to her inability to inspire confidence in her leadership—the helplessness may impair her ability to secure a new position and may well spill over into other aspects of their economic or personal lives. This spread of motivational deficit finds its roots in the increased risk of corporate failure created by the leveraging of the manager's firm.

Several scholars suggest that the phenomenon of learned helplessness may describe the passivity and even depression of workers who are laid off or fired. Even though conditions responsible for their unemployment may subsequently change, these individuals sometimes lose the motivation to initiate responses that may exert some control over their circumstances.⁴² By virtue of their decision making authority in corporations, managers may differ from workers in the explanations

41. The relevance of explanatory style depends on the causal ambiguity of the uncontrollable events. It is irrelevant when events have causes that are either easily verifiable or have been sanctioned by the community. It is relevant either when the event is too singular to allow causal relationships to be abstracted or when potential causes are numerous and confounded with each other. See PETERSON ET AL., *supra* note 36, at 151.

42. See, e.g., Seligman & Maier, *supra* note 34, at 1-9; Arthur H. Goldsmith & William Darity, Jr., *Social Psychology: Unemployment Exposure and Equilibrium Unemployment*, 13 J. ECON. PSYCHOL. 449, 453-56 (1992).

they assign to corporate failure and their displacement. It is difficult, however, to make a categorical prediction as to whether managers are more or less susceptible to learned helplessness than their subordinates. On the one hand, the managers may be less likely to have external explanations for corporate failure than workers that are laid off. On the other hand, individuals are often selected as managers because they are more self-assured. Therefore, they are less likely than their workers to find the cause of corporate failure in an internal trait that is generalizable over time and circumstances.

Various social and cognitive psychologists offer alternative explanations for the passivity and poor performance that tend to follow an individual's exposure to uncontrollable adverse outcomes. These explanations are based on the premises that society tends to equate ability to achieve with human value, and that self-esteem typically reflects the esteem in which the individual is held by others. Therefore, individuals attempt at all costs to project a positive image of ability and competence. They may set easy goals so that they run no risk of failure, or they may strive for unattainable goals that assure the actor of failure with honor. If an individual has experienced failure, she is concerned about the attributions that others may make, and this concern shapes her approach to future tasks. Rather than being due to a generalization of the helplessness deficit, passivity following failure may be the product of a deliberate tactic to avoid goals and reduce effort in order to protect self-esteem.⁴³ Individuals who have experienced failure sometimes avoid performance demands and obligations by understating their abilities. It has been suggested that depressives, in particular, may risk short-term loss in esteem in order to avoid demands to perform and the perceived risk of embarrassment from negative performance outcomes in the future.⁴⁴ Individuals may also deliberately choose to perform future tasks under adverse conditions so that they may explain failure by external causes.⁴⁵

43. This is sometimes referred to as the egotism explanation. See, e.g., Arthur Frankel & Melvin L. Snyder, *Poor Performance Following Unsolvable Problems: Learned Helplessness or Egotism?*, 36 J. PERSONALITY & SOC. PSYCHOL. 1415, 1415-17 (1978).

44. See, e.g., M.G. Hill et al., *Depression: A Self-Presentation Formulation*, in PUBLIC SELF AND PRIVATE SELF 213 (R.F. Baumeister ed., 1986).

45. This is known as the phenomenon of self-handicapping. See ROBERT A. BARON

Finally, individuals who have made an effort to achieve a goal and have failed are likely to be concerned that their failure reflects a lack of ability. This concern leads them to regard subsequent challenges as potential failures that will inflict further blows to self-esteem. When failure is not readily attributable to external causes, an individual's next best explanation is lack of effort. This explanation protects the notion of self esteem that is defined by society in terms of one's ability or competence rather than commitment or effort. Therefore, when faced with a subsequent task, the actor may choose not to try in order to protect what is left of her self-esteem.⁴⁶

The conditions under which managers are likely to experience motivational deficits following corporate failure depend not only on the causes to which they attribute the failure, but also to the theory that is preferred. For instance, if passivity following failure is the result of a deliberate tactic to protect self-esteem, we would not expect that initial failure should have an adverse impact on the performance of subsequent tasks that are generally regarded as very difficult. In contrast, the learned helplessness theory would predict that the perceived difficulty of the subsequent task would in fact strengthen the expectation that the individual's responses will have no impact on outcomes, and would therefore lead to reduced motivation.

V. CONCLUSION

While distinguished scholars have asserted that debt financing may serve as an incentive device to address managerial agency problems, the motivational properties of debt have not

AND DONN BYRNE, *SOCIAL PSYCHOLOGY: UNDERSTANDING HUMAN INTERACTION* 81-83 (1991).

46. Students face the following dilemma in school:

In effect, effort can become a double-edged sword for many students. The net result is that they must thread their way between the threatening extremes of high effort and no effort at all. On the one hand, they must exert some effort to avoid teacher punishment, but not so much as to risk public shame should they try hard and fail A popular tactic is to try hard, but to provide oneself with excuses to explain why trying did not help, thereby avoiding inferences to low ability by redirecting the causes of failure to external factors.

Martin V. Covington & Carol L. Omelich, *Effort: The Double-Edged Sword in School Achievement*, 71 *J. EDUC. PSYCHOL.* 169, 170 (1979).

been well considered. In particular, it is not clear under what circumstances the issuance of debt is a more cost-effective mechanism for motivating managers than alternative mechanisms. Arguably, debt serves as a motivator by providing challenging, specific, and proximal goals for corporate management; the firm must produce the cash flow necessary to meet periodic fixed repayment obligations and must maintain asset value sufficient to ensure solvency in the balance sheet sense. In this lecture, however, I suggest that these goals may have positive or negative motivational effects on managers. I outline several scenarios in which the setting of challenging, specific, and proximal goals may in fact impair effort and performance. Beyond a certain point, corporate leveraging may reduce managerial commitment to the implicit goals of cash flow or asset value by reducing the probability the goal will be met. An important determinant of the subjective probability of goal achievement is the concept of self-efficacy. If the external consequences of performance hinge on an all-or-nothing, success-or-failure dichotomy, managers may be discouraged from exerting effort to come as close as possible to their assigned goal. This effect is compounded by the potential disruption of strategy development caused by the impending pressure of challenging goals. Part IV identifies additional concerns that are raised by the ex post motivational effects of corporate failure. The motivational deficits that sometimes follow failure have been described in various ways. The crucial mediator in all theories is the cause to which an individual attributes her failure. The phenomenon of learned helplessness, for example, predicts that, to the extent that individuals explain their failures by internal, stable and global causes, they may generalize their sense of helplessness to other circumstances in which their actions may have effect.

Proponents of the motivational value of debt may respond that these motivational difficulties are less likely to materialize when actors have a high degree of self-efficacy and that the training of managers ensures that they are more self-assured than the population at large. However, this may prove too much. It may well be true that a self-selection process ensures that managers have a strong sense of self-efficacy. However, social cognitive theory predicts that individuals with high self-efficacy are self-motivated to set high goals for themselves in order to achieve self-satisfaction. Therefore, managers with high

self-efficacy do not need the externally imposed goals of debt to motivate them. Debt financing may therefore be the means to *direct* their effort rather than to increase its intensity or persistence. Similarly, it is true that managers may undergo training to raise their self-efficacy and that therapeutic techniques have been developed to restore self-esteem and correct learned helplessness following failure. These measures may reduce the motivational cost of failure. However, psychologists and management consultants have also been active in designing mechanisms to motivate corporate employees at all levels. Given the ambiguity over the motivational properties of debt, the comparative advantage of debt over any of these mechanisms has yet to be shown. Until it is demonstrated, it cannot be assigned a meaningful role in the capital structure debate.

