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William Donohar
Missouri State University

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THE INS AND OUTS OF CORPORATE BANKRUPTCY: CHOOSING BETWEEN INTERNAL DEVELOPMENT AND EXTERNAL DEMANDS

William Donoher, Missouri State University

This study examined the effects of resource development, resource dependence, and organizational legitimacy on the incidence of bankruptcy using a matched-pair sample of distressed organizations. Consistent with theoretical expectations, both related diversification and the level of discretionary assets at the firm's disposal negatively related to bankruptcy. Legitimacy, measured by market valuation, mediated the latter relationship, but not the former, suggesting that proper use of internal competencies can offset pressure or lack of support from external constituents.

INTRODUCTION

Is corporate bankruptcy a function of inadequate resource development, the failure to maintain relationships with external constituencies, especially the providers of capital to the firm (such as investors and creditors), or some combination of the two? Combining perspectives from the resource-based view of the firm (Barney, 1991; Wernerfelt, 1984), resource dependence theory (Pfeffer & Salancik, 1978), and institutional theory (DiMaggio & Powell, 1983; Scott, 1995), this article adds to existing research by examining the influence of firm resources and organizational legitimacy on the incidence of bankruptcy among distressed firms. Chapter 11 bankruptcies are the focus of this study, because, unlike liquidations under Chapter 7 of the Bankruptcy Code, Chapter 11 reorganizations assume that some value remains and that the organization can be saved. Thus, there is more variance in circumstances and conditions, and more to study with respect to resources and relationships than would be true of liquidating organizations, which in most cases involve the weakest of the distressed firm population.

The model developed and tested herein theorizes that legitimacy mediates the relationships between resource development and resource dependence and the likelihood of bankruptcy. The framework adopted in this study thus facilitates inquiry into the relative contribution of internal development and external relationships to the firm and its management of distress, an issue not fully explored in previous research, while also providing a de facto comparison of the foregoing theoretical lenses. The article begins by sketching the theory underlying the study, after which results are presented and discussed.

Theory and Hypotheses

The existing body of research investigating organizational distress and bankruptcy has, for the most part, focused on the identification of bankruptcy antecedents. For example, studies inquiring into the governance characteristics of bankrupt firms (e.g., Daily, 1995, 1996; Daily & Dalton, 1994a, 1994b, 1995; Gales & Kesner, 1994), including the incidence of officer and director replacement (Gilson, 1989, 1990; Gilson & Vetsuypens, 1993; Hotchkiss, 1995), have been prevalent in the literature. Research also has begun to investigate many of these

relationships in the post-bankruptcy context (e.g., Dawley, Hoffman & Lamont, 2002; Brockmann et al., 2004, 2006).

Perhaps surprisingly, though, studies examining the resource dimensions of bankruptcy have been relatively rare. Some (e.g. Daily & Dalton, 1994b) have partially relied upon resource dependence (Pfeffer & Salancik, 1978) as an explanatory framework for constituent-firm resource flows. Others, such as Hambrick and D'Aveni's (1988, 1992; D'Aveni, 1989) "downward spiral" research, have investigated the premise that distressed firms face a condition of "decreasing internal resource munificence over time" (D'Aveni, 1989: 578). This body of work emphasized the effects of declining financial (e.g., D'Aveni, 1989; Hambrick & D'Aveni, 1988) and managerial resources (D'Aveni, 1989; Hambrick & D'Aveni, 1992).

These studies thus support the intuitive notion that resource sufficiency, or munificence (D'Aveni, 1989), is related to firm survival. What has not been fully developed, however, is the systemic interrelationship among potential and actual resource development, the evaluation and legitimation of such development activities by external constituents of the firm, and the likelihood of bankruptcy among distressed firms. Moreover, the role of organizational legitimacy, particularly as applied to corporate bankruptcy, is largely undeveloped. In developing this theme, the discussion to follow begins with the effects of firm resources on the incidence of bankruptcy, including the role of both resource development and resource dependence, followed by consideration of the nature and effects of organizational legitimacy.

Resources: Development and Dependence

The resource-based view of the firm ("RBV") is concerned with the internal accumulation of assets (Peteraf, 1993) and the extent to which such individual resource endowments are "tied semipermanently to the firm" (Wernerfelt, 1984: p. 172; see also Peteraf, 1993). Thus, sustainable competitive advantage is seen as a function of the firm's resource endowments, to the extent that such endowments consist of assets that are valuable, rare, imperfectly imitable, and immune to the creation, development or acquisition of substitute factors that are themselves valuable, rare and imperfectly imitable (Barney, 1986, 1991, 1994; Oliver, 1997; Penrose, 1959). This restriction is imposed because under any other circumstances,

the firm's competitors can be expected to replicate its capabilities and thereby negate any interim advantage created as a result of those capabilities (Barney, 1991; Oliver, 1997; Peteraf, 1993). Recognition of the role of internal accumulation and development necessarily implicates identification of the activities and processes that firms can utilize to enhance their asset positions. Consequently, firms that are able to continuously develop assets or to invest in processes of this nature will be successful; those that cannot may well eventually become bankruptcy candidates.

One resource development activity that has been recognized in the literature, and which also is relevant to the context of organizational distress, is the firm's diversification strategy. The question can be posed as follows: Is a distressed organization better off diversifying away from its primary market in conformity with portfolio theory (Lubatkin & Chatterjee, 1994), or should it instead undertake related diversification to maximize its existing competencies? For distressed firms, convincing arguments for each of these alternatives can be advanced, but the answer has not been clearly demonstrated in this context. In studies framed outside the domain of organizational distress, both Lubatkin and Chatterjee (1994) and Markides and Williamson (1994) showed that related diversification produces superior results to those achieved by unrelated diversifiers. Broadly speaking, both studies theorized that related diversification facilitates the synergistic transfer of competencies and the development of new strategic assets.

Bergh (1995) relied upon similar reasoning to argue that the resource stock of the firm could be employed in order to obtain two different kinds of economic benefits: 1) cooperative and strategic, and 2) competitive and financial. The former is based upon the opportunity to share specialized resources, while the latter arises from internal capital market efficiencies, or the ability to reallocate capital more efficiently than through external investments. Bergh (1995) then posited that related diversification facilitated the sharing of specialized resources, and therefore the development of inimitable competencies, while unrelated diversification, even if realizing significant financial economies, would not lead to the creation of such resources (Bergh, 1995, 1998). In the case of the latter, any firm engaging in unrelated diversification could achieve similar results; financial economies are simply not sufficiently specialized to confer competitive advantage. It is important to note that there is no structural reason either to prefer or avoid either form of diversification. The business units that emerge from such decisions can be melded within the existing organizational structure or established as legally separate entities. Thus, the fundamental decision is one of economic value rather than structure or legal entitlement.

The logic of the foregoing research can be applied to the case of distressed organizations. As between bankrupt firms and non-bankrupt firms, the extent of related or unrelated diversification each undertakes should be a distinguishing characteristic because of the implications for resource development and competitive advantage that these strategies confer. Related diversification offers the firm the opportunity to develop competitively valuable internal resource bases,

while unrelated diversification does not. Therefore, bankrupt firms should exhibit low levels of related diversification and high levels of unrelated diversification, while the converse should be true of non-bankrupt firms.

Hypothesis 1a: Resource development by means of related diversification will be negatively related to the incidence of bankruptcy.

Hypothesis 1b: Resource development by means of unrelated diversification will be positively related to the incidence of bankruptcy.

A separate issue relevant to the fate of distressed organizations is the relative dependence upon external resource providers. For distressed organizations, achieving and maintaining a stock of "excess" or discretionary assets for subsequent development, may be problematic. Resource dependence theory (Pfeffer & Salancik, 1978) speaks directly to this issue. The theory is concerned with the degree to which a focal organization is dependent upon, and therefore subject to the control of, external constituencies. Some previous work in the area of organizational distress and bankruptcy incorporated resource dependence as a proxy for resource flows or crisis mitigation (see, e.g., Daily (1996), arguing that directors with ties to the firm's external environment would facilitate the firm's reorganization efforts). In this sense, then, some dependence upon external agents may be beneficial to the organization. Note, however, that this interpretation may be limited to the post-crisis time frame. Prior to the onset of crisis, Pfeffer and Salancik argued, "to the extent that the focal organization is subject to successful external influence attempts, it places itself in a situation in which its long-term survival may be threatened" (1978: 95).

Thus, survival or failure may depend upon the extent to which the organization has discretion to act and assets that are available to support that action. Where external constituents account for, or have claims upon, a significant proportion of the firm's capital utilization potential, the firm's dependence increases and its discretion decreases. On the other hand, if the firm is able to maintain or generate assets over and above the level provided by or committed to external constituencies, the opposite would hold true. For distressed organizations, the ability to avoid control or to submit to external demands depends first upon the balance of debt and equity in the firm's capital structure, for these carry significantly different consequences for the firm (Allen & Cote, 2005), with debt assuming greater importance and control as the level of distress increases (Li & Simerly, 2002).

But while indebtedness implies a loss of discretion by the focal organization, gross measures of indebtedness alone do not suffice as adequate indicators of control, at least not in a sense consistent with resource dependence theory. Troubled firms often bear excess levels of debt, and thus any systematic distinctions among them must be a function of the specific debt contracts or arrangements found in their respective capital structures. This is because, as a practical and legal matter, creditors differ in their relative power and legal entitlements (Gilson, 1989, 1991; Weiss, 1990). In terms of bankruptcy law,

collateralization and priority of claims serve to differentiate the rights of each creditor or group of creditors (Felsenfeld, 1996). Thus, secured debt can be expected to exert stronger claims on the firm than unsecured debt due to the existence of rights against specific assets; managerial discretion with respect to the use, possession or sale of such assets is limited.

Short-term creditors also exert significant influence on the decisions of the firm. While debt generally is posited to lead to incentive intensity (Jensen, 1986), short-term debt has a significant effect in this regard because of the proximity of repayment and the likelihood of default (Diamond, 1993). Holders of short-term claims thus can be expected to extract concessions from management as a condition of renewal or extension of the credit (White, 1989).

Thus, from a resource dependence perspective, the relevant indicators of external control in the context of organizational distress are the levels of secured and short-term debt found in the focal firm's capital structure. Dependence exists if the firm's discretionary resources do not exceed those committed to or under the control of creditors, such as short-term or secured creditors, who are able to constrain the firm's activities. As and to the extent such discretionary resources exceed committed resources, the firm's dependence can be expected to diminish. Thus, high levels of either form of indebtedness, in relation to the assets available to the organization that are not so committed, will lead to conditions of high external control and influence over the firm's decisions. In such cases, lower levels of discretionary assets and higher levels of dependence, as indicated by the proportion of secured and short-term debt owed by the firm, will increase the likelihood of bankruptcy, while higher levels of discretionary assets will reduce dependence and increase discretionary investment and the likelihood of survival.

Hypothesis 2: Discretionary assets at the firm's disposal, specifically those uncommitted to secured or short-term creditors, will be negatively related to the incidence of bankruptcy.

Legitimacy

The notion of legitimacy is central to institutional theory's (DiMaggio & Powell, 1983; Scott, 1995) explanation of isomorphism, the tendency of organizations to adopt similar structures, strategies and practices. Many definitions of the construct exist, but fundamentally legitimacy involves or refers to the extent of congruence "between the practices...of the organization and those that are contained within, approved of, and enforced by the social system in which the organization exists" (Zimmerman & Zeitz, 2002: 416), which will result in "cultural support" for the organization (Meyer & Scott, 1983). Although some firms may be in a position to withstand normative pressures emanating from their social systems (Oliver, 1991), and although some degree of divergence between the norm and the firm's strategic posture may be necessary to create competitive advantage and enhance performance (Deephouse, 1999), a pattern of general conformity with accepted, and enforceable, standard practice is

a precursor of legitimacy. In return, firms that are viewed as legitimate are able to acquire higher quality resources on more favorable terms than firms whose legitimacy is suspect (Deephouse, 1999).

The implication of such observations is that legitimacy is critical to firm survival (Greening & Gray, 1994; Oliver, 1997; Zimmerman & Zeitz, 2002), especially among organizations reliant upon capital from external sources. The same logic applies to the case of distressed and declining organizations. Although established firms in general may be able to derive legitimacy from past performance, distressed firms are likely to lose legitimacy as a consequence of declining resource bases (e.g., Hambrick & D'Aveni, 1988, 1992), questionable or unclear strategies and/or a loss of managerial credibility (Deephouse, 1999; Zimmerman & Zeitz, 2002). The loss of legitimacy, in turn, is likely to imperil organizational survival in the absence of an independent ability to generate internal capital to offset that lost as a consequence of diminished legitimacy.

In the context of this study, the linkage between legitimacy and survival can be expected to play out in the arena of market valuation. As the firm loses the confidence of investors, either because of apparent decline or an inability to convincingly explain its strategy, its market valuation is likely to decrease, and with it the firm's ability to raise equity capital at an acceptable cost. The example of Kmart Corp. is instructive in this regard. Kmart's competitive travails were apparent for some time, and eventually the capital markets responded by sending the company's stock into a free fall. This outcome had the effect of increasing Kmart's reliance on trade creditors and banks for working capital, which eventually also withdrew support when it became clear that the company could not reverse its decline (Muller, 2002a, 2002b). Thus, capital market support is dependent upon the firm's ability to develop and articulate a credible strategic rationale, absent which the firm will become increasingly reliant on debt and more likely to fail. Given this relationship between organizational legitimacy and survival, legitimacy, in terms of the firm's market valuation, will mediate the relationship between the firm's resource posture and its survival prospects. Accordingly,

Hypothesis 3: Legitimacy will mediate the relationship between the firm's resources (both resource development and discretionary resources) and the incidence of bankruptcy.

METHODS

Sample

The sample for the present study is comprised of firms experiencing financial distress between 1990 and 1996, inclusive, years prior to the significant late-90s expansion and during which bankruptcy activity was significant enough to make examination feasible. Post-2000 bankruptcies, many of which involved internet startups, were excluded because the business models and internal dynamics of such firms likely raise different issues than those applicable to established, but

declining, firms. The bankrupt firm sample was drawn from the Bankruptcy Yearbook and Almanac (e.g., Daily, 1996), an annual publication of New Generation Research that provides a compendium of major bankruptcy developments and filings, specifically those in which firm assets exceed \$100 million. Finally, companies included in the sample were limited to those with publicly traded equity, as opposed to those with only publicly traded debt or those otherwise subject to public reporting obligations.

Consistent with the purposes of this study, matched survivors were identified on the basis of total indebtedness. Using Compact Disclosure and CompuStat as data sources, firms were matched against each bankrupt firm's primary four-digit SIC code and debt-to-asset ratio in the filing year. This approach permits comparison between bankrupt and non-bankrupt companies on the basis of industry, as was true of the previous research (Daily, 1995, 1996; Daily & Dalton, 1994a, 1994b, 1995). However, by incorporating the debt-to-asset ratio as a measure of financial distress (Flagg, Giroux, & Wiggins, 1991), this study limits the comparison to those firms similarly situated to the bankrupt firms with respect to leverage. Size was incorporated as an additional guide to the match, but not employed as a direct matching criterion. A post-identification validity check revealed that no statistically significant difference in size or the matching criteria existed between the two sets of firms.

In several instances, no valid matches on these measures existed, and accordingly the bankrupt firm was excluded from the sample. Matches that could be identified were also cross-checked against the Bankruptcy Almanac's lists of bankruptcies in both preceding and subsequent years to ensure that the match was not itself either a reorganized firm currently operating outside of bankruptcy or an eventual bankrupt. Where such was the case, the prospective match was excluded and a new match was sought. This procedure resulted in a total sample of 220 firms, comprised of 110 bankrupt firms and 110 survivors.

Variables

Data were collected for the year preceding the filing year in order to facilitate isolation of the resource factors contributing to the bankruptcy occurring in the subsequent year (Daily, 1995). All data, other than the dependent measure, were obtained from firm 10K reports, proxy statements, and the CompuStat and Compact Disclosure databases. The dependent variable, of course, is the incidence of bankruptcy, a dichotomous measure coded as 0 for the non-bankrupt firms and 1 for the bankrupt firms (Daily, 1995, 1996; Daily & Dalton, 1994a, 1994b, 1995; Hambrick & D'Aveni, 1988).

Previous studies (Daily, 1995; Daily & Dalton, 1994a, 1994b) employed measures of firm size, principally the natural log of total assets (Singh, 1986), as a control, and this variable was utilized in the present study as well. Liquidity, here defined as the ratio of current assets to fixed assets, also was introduced as a control (Daily, 1995; Daily & Dalton, 1994a, 1994b; Flagg, et al., 1991). According to this view, either over- or under-investment in liquid or fixed assets may result in a mismatch between the organization and the demands of its

environment. Finally, each firm's level of solvency was included as a control in order to provide a de facto test of the intuitive explanation of bankruptcy. Based upon the concept of equitable insolvency, which is defined as the ability to pay debts as they mature (Warren & Westbrook, 1986), this variable was calculated as the difference between the firm's operating cash flow (EBIT + depreciation - taxes) and interest expense in order to capture the notion of debt coverage and the ability to satisfy current obligations (Ross, Westerfield, & Jordan, 1993). The result was then divided by total assets in order to normalize for firm size. This measure also avoids any direct overlap with firm leverage, which was utilized as a matching variable, or with the asset-based measures of resources comprising the independent variables.

With respect to the resource-based hypotheses, diversification was calculated by means of the entropy measure (Palepu, 1985), which facilitates decomposition of the firm's sales per market segment into indices of related and unrelated diversification. The measure's construct validity has been established by empirical research (Hoskisson, et al., 1993).

The resource dependence hypothesis requires the isolation of discretionary assets in relation to those committed to secured or short-term creditors. Following the general pattern provided by Hambrick and D'Aveni's (1988) measure of unabsorbed slack, two measures based upon each firm's current and fixed asset availability were created. In order to establish the relationship between resource availability and the specific providers of capital most able to restrict the activities of the firm (Diamond, 1993; Mann, 1997a, 1997b; White, 1989), consistent with the resource dependence premise of the hypothesis, the sum of the firm's short-term and secured debt was subtracted from its current and fixed assets, respectively. After dividing the difference by total assets to normalize for firm size, the two measures were combined using principle components analysis (Stevens, 1996), which has the effect of transforming correlated variables into an uncorrelated measure, thereby also reducing any correlations with the liquidity control. Additionally, the approach facilitates development of a parsimonious variable structure based upon multiple measures of the construct at issue. The resultant factor scores were saved and entered into the regression equation as the discretionary asset measure.

Legitimacy, as outlined above, reflects external judgments of the firm's activities and capabilities. Consistent with this discussion, a measure of the firm's market valuation was used, again lagged one year, in order to capture the notion of an external capital provider's acceptance of the organization's practices and capabilities. Market valuation in turn affects the firm's cost of capital and its ability to raise capital through the equity markets (Ross, Westerfield & Jordan, 1993). The specific calculation used here is the market-to-book value ratio, which adjusts for firm size and provides an indicator of the market's estimation of the value added by management. The measure is a variant of Tobin's q ratio (Griffith, Fogelberg & Weeks, 2002), which has been utilized as a measure of managerial quality and growth prospects (Morck, Shleifer & Vishny, 1989).

Analytical Method

Given the dichotomous dependent variable, logistic regression represented the most effective methodology for testing the hypothesized effects. This technique has been utilized in previous bankruptcy studies (e.g., Daily & Dalton, 1994a, 1994b; Hambrick & D'Aveni, 1988), and presents the benefit of avoiding violation of standard multiple regression assumptions, particularly those pertaining to heteroscedasticity and the existence of linear relationships. A hierarchical procedure was followed, whereby the controls were entered separately and a regression equation estimated and compared to that obtained by entering the independent variables in conjunction with the controls.

The test of Hypothesis 3, proposing a mediated relationship, proceeded in accordance with the methodology suggested by Baron & Kenny (1986), according to which mediation is established when the effect of the independent variables on the dependent variable is weaker when the mediator is added to the

regression equation. Partial mediation exists when the relationship is weaker but still statistically significant, while full mediation exists when this relationship is not statistically significant in the presence of the mediator.

Results

Table 1 presents the pattern of correlations and descriptive statistics for the variables included in the study. At the outset, note that bankrupt companies are associated with lower levels of related diversification, discretionary assets, and market valuations than their non-bankrupt counterparts. None of these outcomes is surprising or unanticipated given the discussion above. Note also that the solvency measure does not correlate at a statistically significant level with the incidence of bankruptcy, although its sign is negative as one would suspect. The lack of statistical significance, however, supports the notion that the sample firms were in fact equally distressed.

Table 1: Correlations and Descriptive Statistics

1 File*	.500	.500	1.000								
2 Assets(ln)	6.000	1.250	-.038	1.000							
3 Current assets/fixed	.486	.256	.042	-.072	1.000						
4 Solvency	-.088	1.043	-.092	.055	.080	1.000					
5 Related diversification	.078	.193	-.185	.227	-.090	.024	1.000				
6 Unrelated diversification	.127	.244	-.003	.037	.040	-.026	.167	1.000			
7 Discretionary assets	.000	1.000	-.233	.078	.078	.348	-.001	-.066	1.000		
8 Mkt. value	.365	.538	-.310	-.118	.019	.028	-.043	-.020	.277	1.000	

N = 220. Bold values indicate significance at .05 level and below (values of .225 and above significant at .001 level, and

values of .185 and above significant at .01 level). *Coded as 0 = no filing, 1 = filing.

Table 2: Results of Hierarchical Logistic Regression Analyses

Step One (Controls)			
Assets (ln)	-.035	.101	.010
Current assets/fixed	.208	.330	.283
Solvency	-1.419	-.937	-1.075
Step Two (Main Effects)			
Related divers.		-2.599	-2.682
Unrelated divers.		.054	-.016
Discretionary assets		-.550	-.229
Step Three (Mediator)			
Market value			-2.332
Nagelkerke R ²	.034	.143	.273
R ² change		.109	.130
F statistic		7.861	5.298
-2 log likelihood	299.272	273.577	242.889
-2LL change		25.695	30.688
Classification pct.	.627	.605	.695

Table 2 provides the results of the hypothesis tests. Both the main effects and mediated models (models 2 and 3, respectively) significantly increment the initial control model, supporting interpretation of the test models. Hypotheses 1a and 1b predicted, respectively, a negative relationship between related diversification and bankruptcy and a positive relationship between unrelated diversification and bankruptcy. Related diversification is significantly and negatively related to the incidence of bankruptcy ($b = -2.599$, $p < .01$), supporting hypothesis 1a. However, hypothesis 1b is not supported, given the statistically insignificant value of the unrelated

diversification coefficient. The positive sign of the coefficient is consistent with the expected relationship, but no statistical inference can be drawn from this result.

Hypothesis 2 predicted a negative relationship between the level of discretionary resources and the incidence of bankruptcy. This hypothesis is supported. The discretionary asset coefficient is negative and significant ($b = -.550$, $p < .001$), indicating that firms whose resources are not committed to powerful creditors are more likely to survive than those whose resources must be substantially reserved for payment of specific claims.

The mediated relationships are reported in Model 3 of table 2 above. As set forth above, the test involved inclusion of the market valuation variable in a separate model with the independent variables after estimation of the main effects of the latter (Baron & Kenny, 1986). As can be inferred from Table 2, partial support exists for hypothesis 3. The market valuation coefficient is negative and highly significant ($b = -2.332$, $p < .001$). In this model, however, the discretionary asset coefficient is not statistically significant, indicating full, rather than partial, mediation of this relationship. Moreover, the statistical significance of the related diversification coefficient is unchanged, although its absolute value is moderately higher in this equation. These findings suggest that market valuation does not mediate the relationship between related diversification and bankruptcy. Thus, legitimacy, in terms of market valuation, fully mediates the relationship between a firm's discretionary assets and the incidence of bankruptcy, but does not mediate the relationship between related diversification and the incidence of bankruptcy.

Dependent variable = filing (1 = filing, 0 = no filing). $N = 220$. Bolded values are significant at .01 level. Coefficients are unstandardized. Model comparisons for F values and -2LL change are between control model (model 1) and main effects model (model 2), and between main effects model (model 2) and mediated model (model 3).

Discussion and Conclusion

This research attempted to provide an integrated framework for consideration of the effects of a firm's resource posture on the incidence of bankruptcy. The resource-based view of the firm (e.g., Barney, 1991) provided the theoretical foundation for the expected relationship between the firm's diversification strategy, and thereby its resource development potential, and the incidence of bankruptcy. Resource dependence theory (Pfeffer & Salancik, 1978), on the other hand, was the premise for analysis of the firm's relationship to pressure-intense creditors (Diamond, 1993; Mann, 1997a, 1997b). Finally, evaluation of the mediating role of legitimacy was supported by institutional theory (e.g., DiMaggio & Powell, 1983; Scott, 1995), based on the notion that distressed organizations experience decreasing resource munificence (D'Aveni, 1989) and increasing legitimacy challenges (Deephouse, 1999; Zimmerman & Zeitz, 2002) that impair access to external capital.

Results associated with the hypothesized main effects generally were consistent with the theoretical framework. As expected, related diversification was negatively and significantly related to the incidence of bankruptcy. This finding is consistent with the theory and findings of studies by Bergh (1995) and Markides and Williamson (1994), both of which applied the resource-based view (Barney, 1991) to diversification strategy and argued that related diversification provides firms opportunities to share knowledge and resources in such a way as to facilitate the development of competitively valuable, nonreplicable resources. If this is indeed the outcome of related diversification, then it follows that firms diversifying into related industries and markets eventually will develop

more strategic resources and be more likely to survive as a consequence than firms diversifying into unrelated industries.

The resource dependence (Pfeffer & Salancik, 1978) results established that firms whose assets were committed to specific, pressure-intense creditors (Diamond, 1993; Mann, 1997a, 1997b) were more likely to file for bankruptcy protection. Such commitments leave the firm unable to pursue other investments that might enhance its survival prospects and increase the power of those holding such claims against the firm. Thus, consistent with the premises of resource dependence theory, the existence of an identifiable, external locus of power and influence that minimizes firm discretion over assets and subsequent imperils the firm.

This observation also distinguishes the present research from previous studies applying resource dependence theory to the context of corporate bankruptcy (e.g. Daily & Dalton, 1994b), which modeled board composition as a link between the firm and external constituents and thus adopted a positive framework for dependence effects. One of the primary contributions of this study thus is its highlighting of the negative implications of dependence, including confirmation of the identity of pressure-intense creditors whose claims are associated with bankruptcy. Future research should seek to deepen understanding of the dynamics of this relationship, including analysis of the precise order of causality (i.e., whether distress increases creditor power or whether creditor power increases the level of distress).

The study also contributes by examining the mediating influence of organizational legitimacy, especially to the extent different results are observed with respect to resource-based and resource dependence outcomes. Specifically, legitimacy, as measured by market valuation, appears to fully mediate the relationship between resource dependence and bankruptcy, but no mediating effects are observed with respect to the resource-based orientation of related diversification. These findings imply that resource-based development activities directly and independently contribute to survival, and indeed that the firm may be able to withstand at least a temporary loss of legitimacy if its resource investments facilitate the creation of competitively valuable resources (Barney, 1991). In such a case, legitimacy might be expected to follow, although the question of how long this process takes and whether external monitors can fully appreciate or value the firm's internal development practices must remain for future research.

The results have additional implications for theory and practice by facilitating a comparison between the two underlying theories. Dependence on pressure-intense creditors sends a signal to the markets that, in turn, increases the likelihood of bankruptcy, unless offset by resource development activities. This message provides managers with a clear prioritization that, at base, is consistent with the resource-based view's imperatives (Barney, 1991; Wernerfelt, 1984). The distinction also may lie, at a theoretical level, in the difference between resource sufficiency and resource quality. Resource dependence arguably implicates the former, while the resource-based view raises the question of the latter, and the difference between the two, in terms of future access to capital, carries survival connotations. In short, development of

strategically valuable resources appears to be a stronger independent contributor to success and survival than creation and maintenance of merely a "sufficient" level of resources. Additional research into the relationship between these two theories and their attendant developmental processes would be critical to both theory and practice in these areas.

As with any empirical research, this study has certain limitations. First, the focus on diversification omits various other resource allocation decisions that might be worthy of additional inquiry. For that matter, changes in diversification posture are not considered here, and may provide deeper understanding of the dynamics associated with such strategies. This relates to a second potential limitation of the study, which is its cross-sectional, rather than longitudinal, design. The purpose of this work was to establish the existence of relationships among the variables of interest, but patterns of these variables over time, both in absolute terms and relative to year-on-year changes, would be of significant interest and importance to the development of this line of inquiry. In short, much work remains to be done, but this study provides a basis for future investigation and elaboration of an important set of relationships.

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William Donoher is an assistant professor of management at Missouri State University. He received his Ph.D. in strategic management from the University of Missouri-Columbia, and a J.D. from Washington University in St. Louis. His current research interests include bankruptcy and reorganization, corporate governance, executive compensation, and other issues at the intersection of law and business. He has published in the *Journal of Management*, the *Journal of Managerial Issues*, the *Journal of Business and Leadership*, and others.