Strategic actions and value creation: The case of firms facing crisis

Conference Paper · January 2005

CITATIONS
0

READS
888

4 authors, including:

J. L. Morrow, Jr.
Birmingham-Southern College
15 PUBLICATIONS **1,366** CITATIONS

SEE PROFILE

David G. Sirmon
University of Washington Seattle
58 PUBLICATIONS **17,133** CITATIONS

SEE PROFILE

Tim R. Holcomb
Miami University
41 PUBLICATIONS **2,771** CITATIONS

SEE PROFILE

Strategic Management Journal
Strat. Mgmt. J., **28**: 271–283 (2007)
Published online in Wiley InterScience (www.interscience.wiley.com) DOI: 10.1002/smj.579
Received 8 July 1999; *Final revision received 17 July 2006*

CREATING VALUE IN THE FACE OF DECLINING PERFORMANCE: FIRM STRATEGIES AND ORGANIZATIONAL RECOVERY

J. L. MORROW, JR.[1]* DAVID G. SIRMON,[2] MICHAEL A. HITT[2] and TIM R. HOLCOMB[2]
[1] *Division of Business and Graduate Programs, Birmingham-Southern College, Birmingham, Alabama, U.S.A.*
[2] *Mays Business School, Texas A&M University, College Station, Texas, U.S.A.*

Firms that have failed to meet the performance expectations of investors must seek new ways of creating value or face the loss of financial support. Using resource-based arguments, we find that valuable and difficult-to-imitate strategies that recombine the firm's existing stock of resources to create new products, processes, or technologies have a positive effect on organizational recovery as measured by investors' expectations. Similarly, acquiring new resources through mergers or acquisitions also has positive effects on investors' expectations. In contrast, valuable and difficult-to-imitate strategies that provide the firm with access to new resources through alliances or joint ventures do not affect investors' expectations of performance. We also find that taking actions that are not valuable and difficult-to-imitate either have no effect on performance or may lead to further performance declines. Lastly, our results show that valuable and difficult-to-imitate strategic actions that use existing resources in new ways contribute the most to organizational recovery. Copyright © 2007 John Wiley & Sons, Ltd.

Significant negative outcomes (e.g., loss of investor confidence, change in corporate ownership) threaten firms that perform below market expectations. These threats motivate managers, especially when their firms experience declining performance, to consider bold strategic actions intended to meet or outperform market expectations, thereby creating value for shareholders. Because value creation is largely determined by a firm's ability to satisfy consumers by acquiring, bundling, and leveraging resources (Priem, 2007), strategic actions that provide the firm with 'new resources, or new ways of using existing resources' (Galunic and Rodan, 1998: 1193) represent critical paths to create value. However, firms with declining performance face increased market scrutiny. Encountering this scrutiny, many of these firms undertake increasingly risky actions (Bowman, 1982; Wiseman and Gomez-Mejia, 1998), despite these actions having a lower probability of achieving positive outcomes. However, some of these risky actions, indeed, deliver value to consumers with the potential to meet or exceed market expectations. As a result, as suggested by the pioneering work of Bowman (1980, 1982), firms facing declining performance are motivated to undertake such actions in order to effect an organizational recovery.

This study examines the outcomes of strategic actions taken by firms that are failing to meet market expectations. We focus on the market-based performance outcomes of actions that are valuable and difficult to imitate and other strategic actions less likely to satisfy these criteria. Specifically, we compare market reactions to different types of valuable and difficult-to-imitate actions

Keywords: value creation; resource-based view; growth strategies; investor expectations; organizational recovery
*Correspondence to: J. L. Morrow, Jr., Division of Business and Graduate Programs, Birmingham-Southern College, 900 Arkadelphia Rd., Box 549023, Birmingham, AL 35254, U.S.A. E-mail: bmorrow@bsc.edu

such as new product introductions, mergers and acquisitions, and strategic alliances, while controlling for the total number of these same actions taken regardless of their value and probability of imitation. Beyond any shared general characteristics (e.g., being valuable and difficult to imitate), actions taken by firms may differ in the cost of the resources used, ability to use the available resources effectively, their control over the available resources, the time required to deliver value to consumers, and the transparency of the action to market observers. Thus, we compare the strength of the effects of these actions on investor expectations.

In addition to advancing knowledge of managerial practice, this research extends our knowledge of the resource-based view of the firm (RBV). In support of the RBV, this research suggests that the market recognizes and differentially rewards actions that are valuable and difficult to imitate from those that do not satisfy these criteria. However, this research also provides a more fine-grained analysis of RBV logic, demonstrating that the market applies additional criteria to differentiate among the types of valuable actions taken, especially for firms experiencing declining market-based performance. Specifically, using existing resources in new ways to create organic growth is valued most highly by the market. While slightly less than organic growth, the market also appears to positively value growth by acquiring resources externally, because gaining control of these resources allows the firm to create synergies in a timely manner. Furthermore, our analysis shows that the absence of value in such actions can lead to value destruction. Thus, our research suggests boundary conditions for and contributes greater theoretical elaboration of the RBV (Priem and Butler, 2001). This research also provides a more fine-grained application of prospect theory to firms with declining performance. While such firms often take hasty (and risky) actions in the hope of creating a turnaround that often exacerbates their poor performance (Fiegenbaum and Thomas, 1988), some are able to produce organizational recoveries with risky strategic actions selected with care (Bowman, 1982). In summary, this research extends our knowledge of how firms can best respond to declining performance. Importantly, while we find evidence that engaging in risky actions can lead to further performance declines, we also find that when these actions are valuable and difficult to imitate, the firm can experience returns that exceed investors' performance expectations.

THEORETICAL FRAMEWORK

RBV logic suggests that variance in competitive outcomes stems from differences in the characteristics among rivals' resources and capabilities (Barney, 1991). Specifically, resources or capabilities that are valuable and rare convey a potential for competitive advantage. However, possession alone is insufficient to gain a competitive advantage and create value; firms must effectively manage their resources to gain an advantage and to realize value creation (Sirmon, Hitt, and Ireland, 2007). Value creation occurs as firms exceed their competitors' ability to provide solutions to customers' needs (e.g., competitive advantage), while simultaneously maintaining or improving their long-term profit margins, thereby creating wealth for owners (Hoopes, Madsen, and Walker, 2003; Sirmon *et al*., 2007). A measure of value creation is a firm's ability to meet or exceed investors' performance expectations.

Recombining existing resources

Sirmon *et al*. (2007) suggest that resource management involves the set of processes that firms use to structure their resource portfolios (e.g., making changes to the resources available to the firm), bundle resources into capabilities, and leverage those capabilities to create value. As such, value creation can occur by recombining existing resources and capabilities, or by acquiring or accessing new resources externally that are then bundled with existing resources into new capabilities. However, resource management processes convey significant risk; therefore, managers must be sufficiently motivated to change existing resource portfolios and alter the firm's capabilities.

Managers' motivation to take action increases when their firm fails to attain performance targets (Fiegenbaum and Thomas, 1988; Wiseman and Gomez-Mejia, 1998). Recent empirical work (e.g., March and Shapira, 1987, Greve, 1998; Miller and Chen, 2004) using behavioral decision theory finds that firms are more likely to take risks when they are suffering losses or are performing below expectations. This conclusion

DOI: 10.1002/smj

supports Bowman's (1982: 33) concept of 'risk-seeking by troubled firms,' whereby poorer performing firms often accept greater risks. Indeed, research indicates that firms in decline are more likely than their higher-performing rivals to recombine their resource portfolio and capabilities, leading to alterations in strategies such as product or service offerings (Ketchen and Palmer, 1999). However, to produce desired outcomes, the recombination process must yield new or substantially altered but valuable and difficult-to-imitate market offerings. In other words, action alone is insufficient. To reverse declining market performance, the actions must be valuable and difficult to imitate.

There are reasons, though, to expect firms with declining performance to produce valuable and difficult-to-imitate product offerings by recombining existing resources. First, these firms are sufficiently motivated to undertake strategic initiatives, instead of merely engaging in tactical changes (e.g., reducing costs) (Barker and Duhaime, 1997; Robbins and Pearce, 1992). Additionally, because managers possess superior knowledge about existing resources and resources are heterogeneously distributed across rivals, valuable and difficult-to-imitate new combinations are possible (Denrell, Fang, and Winter, 2003). Recombining existing resources into new capabilities can be especially helpful in the internal development of new products. In turn, the new product offerings should substantially contribute to value creation because using existing resources in new ways is likely to be unexpected by investors, thus helping the firm to exceed investors' expectations (Denrell *et al*., 2003). Moreover, any new revenues generated by the new offering derived from the recombined resources should have a positive effect on profits because the firm can avoid the costs of acquiring new resources in the factor markets.

Alchian and Demsetz provide an effective summary of these arguments: 'opportunities for profitable team production by inputs already within the firm may be ascertained more economically and accurately than for resources outside the firm. Superior combinations of inputs can be more economically identified and formed from resources already used in the organization than by obtaining new resources (and knowledge of them) from the outside' (Alchian and Demsetz, 1972: 793). These arguments lead to the following hypothesis:

Hypothesis 1: In firms currently failing to meet investors' expectations, valuable and difficult-to-imitate strategic actions that recombine existing resources, such as the development of new products, positively affect investors' expectations in the short run.

Acquiring new resources

However, while recombining existing resources in valuable and difficult-to-imitate ways can facilitate the development of profitable new market offerings, especially in the short term, a firm's reliance on existing resources limits the amount of change that is possible. Significantly increasing the scope of a firm's capabilities often requires new resources. Thus, recombining the firm's existing resources, which may also involve the minor acquisition of additional resources (e.g., computer equipment, staff members), may not be sufficient to improve the firm's performance. In other words, existing resources may be insufficient to produce the recovery needed. Thus, to make major changes, firms often find it necessary to obtain significant levels of new resources from external sources. Strategic actions providing for the acquisition of significant amounts of new resources enable firms to alter substantially their existing capabilities and to pioneer new capabilities (Sirmon *et al*., 2007).

A common means of obtaining substantial new resources is through acquisition (Hitt *et al*., 1996; Karim and Mitchell, 2000). In addition to facilitating the development of new capabilities, acquisitions also contribute to value creation by increasing a firm's economies of scale and/or scope, and by increasing its bargaining power with buyers and/or suppliers. However, many acquisitions negatively rather than positively affect firm performance because of poor target selection (ineffective due diligence), integration (unable to build synergy), or cost overruns (can be risky) (Hitt, Harrison, and Ireland, 2001).

Research suggests that only valuable acquisitions, those in which the firms' leaders work cooperatively to integrate their newly acquired complementary resources (Hitt *et al*., 1998), are likely to enhance performance. This is especially true for firms with declining performance that must contend with increasing investor scrutiny. These firms rarely have the significant time often necessary to develop difficult-to-create synergies,

DOI: 10.1002/smj

especially when acquired firms were selected without effective due diligence to ensure they had appropriate resources. Instead, these firms positively affect investor expectations by completing valuable and difficult-to-imitate acquisitions, thereby providing more immediate resource platforms to effect positive changes in performance. These arguments suggest the following hypothesis:

Hypothesis 2: In firms currently failing to meet investors' expectations, valuable and difficult-to-imitate strategic actions that acquire new resources to integrate with current resources and create synergy, such as in mergers and acquisitions, positively affect investors' expectations in the short run.

Gaining access to new resources

Beyond mergers and acquisitions, engaging in strategic alliances provides firms with access to, but not control of, additional resources from their partners that can help improve performance (Das, Sen, and Sengupta, 1998; Hitt *et al*., 2000). Additional performance enhancements may also accrue by minimizing transactions costs (Dyer and Singh, 1998), sharing investments, and increasing organizational learning (Lane and Lubatkin, 1998). Although all bases are important to facilitate the recovery of underperforming firms, accessing new resources may be the most salient for improvement because it allows the firm to better leverage existing resources. Moreover, Das *et al*. (1998) found that poorer-performing partners capture a disproportionate amount of gain generated by an alliance suggesting that alliances can be used to enhance value creation for firms with declining performance. However, similar to new products and acquisitions, undertaking strategic alliances is insufficient to create value. For an alliance to help a declining firm exceed market expectations and create value, the combination of both partners' resources must be valuable and difficult to imitate, at least in the short term. Thus, when declining firms ally with partners and the combined resources are valuable and difficult to imitate, value can be created, leading to the following hypothesis:

Hypothesis 3: In firms currently failing to meet investors' expectations, valuable and difficult-to-imitate strategic actions that provide access to new resources, such as strategic alliances, positively affect investors' expectations in the short run.

Hierarchical value of strategies in a decline context

While we have argued that each of three different strategies, when valuable and difficult-to-imitate, will have a positive effect on investors' expectations, theory also suggests that the contribution to recovery by these strategies will likely differ. Specifically, other characteristics of these actions, in addition to being valuable and difficult to imitate (e.g., degree of control/ownership, premium paid, need for trust, integration, knowledge of the resources available), can affect market reactions.

Valuable and difficult-to-imitate actions that focus on recombining existing resources to create organic growth (Hitt, Ireland, and Tuggle, 2006) should have a stronger positive effect on investor expectations than valuable and difficult-to-imitate actions that either acquire or access external resources. This is because the latter two actions carry additional burdens for success beyond being valuable and difficult to imitate. For example, recombining existing resources to create new capabilities that produce new product offerings often surprises the market more than other actions, especially for firms with declining performance. Because creating new capabilities by recombining existing resources is not transparent to external parties, such actions produce stronger reactions by investors when announced (Barney, 1988).

Additionally, because these firms are experiencing performance declines, they often negotiate with potential target firms or alliance partners from a position of weakness (lower bargaining power). As a result, they are more likely to pay a premium to acquire or to gain access to external resources. Paying such premiums reduces the returns earned by the strategic action. Additionally, because managers in the firms experiencing decline have greater knowledge of their current resources than those they could obtain from the external market, they are able to recombine those resources into new capabilities more effectively and more rapidly than they could using external resources. Finally, despite being valuable and difficult to imitate, the

DOI: 10.1002/smj

threat of termination by alliance partners and the integration costs of acquisitions are likely to diminish their potential performance benefits relative to recombining existing resources, which do not carry these additional burdens. These arguments suggest the following hypothesis:

> *Hypothesis 4a: In firms currently failing to meet investors' expectations, valuable and difficult-to-imitate strategic actions that recombine existing resources to produce new products have a stronger positive effect on investors' expectations than valuable and difficult-to-imitate strategic actions that either acquire new resources or provide access to new resources from external sources.*

Due to fundamental differences between the characteristics of valuable and difficult-to-imitate acquisition and alliance strategies, the market's reaction to these strategies is likely to differ. Acquisitions convey control over new resources but strategic alliances do not. Thus, in comparison to acquisitions, firms face the additional burden of gaining access to valuable resources that are controlled by their alliance partners. Moreover, alliance partners face the challenge of fairly appropriating any resulting benefits derived from the alliance (Hamel, 1991). Finally, resources obtained through acquisition are more transparent to the focal firm (acquirer) than are the resources available to the focal firm from an alliance partner. As a result, managers can often more effectively create value using acquired resources than managers who gain access to partners' resources in alliances because control allows managers to more quickly utilize these resources. Thus, when investors evaluate the establishment of alliances, they must consider the additional risks that are not associated with acquisition actions; as a result, investors may discount their response to valuable and difficult-to-imitate alliance actions more than a comparable valuable and difficult-to-imitate acquisition action. These arguments lead to the following hypothesis:

> *Hypothesis 4b: In firms currently failing to meet investors' expectations, valuable and difficult-to-imitate strategic actions that acquire new resources have a stronger positive effect on investors' expectations than valuable and difficult-to-imitate strategic actions that only provide access to new resources.*

METHODS

Sample

All single-product manufacturing firms from 1982 to 1994 in the COMPUSTAT database (980) provided the population of our sample. A company was considered a single-product company if at least 95 percent of its sales came from one segment (Rumelt, 1974). Using single-product manufacturing firms limits extraneous variance and increases the accuracy of the measures and results. To be included in the sample, a firm had to experience declining market-based performance, operationalized as 2 years of at least meeting market expectations followed by at least 1 year of below investor expectations (investor expectations are described below). Two hundred firms met this criterion, but because of missing data the final sample contains 178 firms.

Dependent variable

We utilize a market-based measure, Jensen's alpha, for the dependent variable because it captures the value of future cash flows that investors expect from the firm's strategic actions (Lubatkin and Rogers, 1989). Jensen's alpha (Jensen, 1968, 1969) has been used to assess a firm's performance relative to its rivals in the market (e.g., Hoskisson, Johnson, and Moesel, 1994). Specifically, it represents a firm's average variance in return from that predicted by the capital asset pricing model (CAPM), given the firm's beta and average market return. Thus, alpha is a continuous measure indicating the extent to which a firm has failed to meet, met, or exceeded investor expectations (Lubatkin and Rodgers, 1989). Additionally, Jensen's alpha controls for industry effects. Specifically:

> By construction, alpha is expected to capture the net impact of such events [changes in a firm's strategy]; it measures the extent to which a firm has surprised the market positively or negatively for an extended period of time. Further, by estimating alpha for a long period of time, the troublesome influence of an industry effect can be reduced. Fundamental to this assertion is the idea that industries are less likely than individual firms

DOI: 10.1002/smj

> to surprise the capital markets. To demonstrate a positive or negative alpha over a long time, therefore, a firm will have to act in an unexpected manner for its industry group. Finally, unlike beta, Jensen's alpha is by construction market adjusted, and therefore no additional control is necessary. (Lubatkin and Rogers, 1989: 459)

Jensen's alpha was calculated using the formula $R_i - RFR = a_i + b_i \quad (R_m - RFR)$ (Hoskisson *et al*., 1994), where R_i equals firm returns, R_m is market returns (CRSP value – weighted index with distributions), *RFR* is the average risk-free rate, b_i is the estimated beta (firm stock price variance relative to market variance for all stocks listed on the same exchange as a firm's stock), and a_i represents Jensen's alpha, which is the intercept from the regression model. Weekly firm returns and weekly market index returns were obtained from The Center for Research in Security Prices (CRSP) tapes, while weekly Treasury Bill rates (used as the risk-free rate) were obtained from the corresponding week's Thursday edition of the *Wall Street Journal.*

Due to the efficiency of equity markets, Jensen's alpha is a fine-grained measure with most scores hovering near zero. Thus, to ensure that the firms not meeting expectations were clearly differentiated from those meeting or exceeding expectations, we used cluster analysis to separate the sample into three groups. Consistent with *a priori* theory, for each year the clustering procedure identified one large cluster of firms (those meeting market expectations) and two smaller clusters (one representing firms that had exceeded market expectations and the other one representing those that failed to meet market expectations). Thus, an alpha of *approximately* zero represents a firm that has met investor expectations, while a large positive alpha represents a firm that has exceeded investor expectations and a large negative alpha indicates a firm that failed to meet investor expectations.

No empirical studies were found that address the time between the occurrence of lower than expected performance and the implementation of strategic actions to improve that performance. However, some have suggested that the period is relatively short (less than 1 year) (Hoskisson *et al*., 1994; Jain, 1985). Thus, for the purposes of this research, the 1-year period following the decline was considered the turnaround year and the results were measured the following year.

Independent variables

The *Wall Street Journal* index and Lexis/Nexis database were used to identify announcements of intended change by firms during their turnaround year. In our final sample of 178 firms, 96 made at least one such announcement. These announcements were broadly categorized into the following areas: new product introductions, mergers and acquisitions, and strategic alliances. A summary of these announcements and a description of the firm and its competitive environment were provided to an expert panel for coding. The use of a panel to rate the quality of managerial behavior is appropriate because evaluations of managers' behavior 'normally involve subjective assessments about executive behaviors,' particularly by market analysts and investors (Gomez-Mejia and Wiseman, 1997: 321).

The expert panel consisted of two market analysts, each with over 8 years of experience in major international financial service firms. Both individuals earned masters degrees in finance and completed executive education courses in which they gained knowledge of how to evaluate the market effects of strategic actions taken by publicly traded firms. The panel members were instructed to make their evaluations independently and not consult outside sources. They were instructed only to use their professional judgment, education, and experience (along with the information provided to them) to code the announcements. They were asked to make two decisions. First, they were to decide if they perceived the announced strategic action as being valuable. Second, if they determined the strategic action was valuable, they were to evaluate whether it would be difficult to imitate by competitors (within 1 year). There was strong initial agreement between the panelists (78% for new products, 80% acquisitions, and 89% for strategic alliances). Where the analysts disagreed, they were asked to discuss their differences and reach a consensus.

We also asked an independent panel of six academics with training and research in strategic management to rate the same announcements and tested for inter-rater reliability between the groups. The Φ coefficients between the group of analysts and group of academics were 0.809 for new products, 0.872 for acquisitions, and 0.866

DOI: 10.1002/smj

for alliances, which offers strong evidence of reliability for the coding approach and the evaluations made. Additionally, given that these were two different panels trained in different ways, it offers evidence of the validity of these evaluations. For the 96 firms that took identifiable actions, we used dummy variables to indicate whether those actions were valuable and difficult to imitate or not.

Control variables

We controlled for several factors that could affect the results. To control for differences in a firm's financial resources, which could affect its ability and motivation to act, along with expectations of investors, we calculated *slack* and *financial capacity* variables. *Slack*, representing the firm's short-term ability to meet needs, was operationalized as working capital over assets. *Financial capacity*, representing the firm's long-term ability to obtain capital, was operationalized as a firm's debt-to-equity ratio. We controlled for *firm size* using the natural log of the firm's total assets.

Additionally, we controlled for other strategic actions taken including: divestment, internationalization, total number of new products introduced, mergers and acquisitions completed, and strategic alliances negotiated. *Divestment*, or asset retrenchment, is a common action taken by firms experiencing poor performance that is assumed to improve performance, but may cause some harm (Morrow, Johnson, and Busenitz, 2004). Divestment was operationalized as the percentage reduction in total assets in the turnaround year. Increasing sales in international locations is another strategic option that firms may use to improve performance. *Internationalization* was operationalized as the percentage increase of international sales in the turnaround year. Lastly, we controlled for the total number of strategic actions (new products, mergers and acquisitions, and strategic alliances) taken by the firms, regardless of their value or difficulty of imitation. In effect, these controls also operate as a validity check on the evaluation of a valuable and difficult-to-imitate action. Their inclusion enhanced the robustness of the model because both the number and variety of actions taken by firms experiencing declining market-based performance may potentially affect investors' evaluations of these actions.

Analysis

Because we model the strategic actions made by firms, and it is unlikely that the firms in our sample made these choices randomly, we used a common econometric procedure pioneered by Heckman (1979) to control for potential bias due to endogenous decisions to engage a strategic action and the self-selection that results. Put simply, if the same non-random, unobserved factors influence both taking actions and investors' expectation of performance, endogeneity is present. If ordinary least squares regression is used to estimate models where endogeneity is present, the effort will be inefficient and yield biased coefficients (Leiblein, Reuer, and Dalsace, 2002).

To remedy model misspecification due to unobserved factors, we employed the two-stage Heckman procedure. This procedure allows us to calculate a control variable, commonly referred to as the inverse Mills ratio, from the results of a first-stage probit model predicting the outcome, *any focal action*, which is a dummy variable indicating whether the firm undertook any action of interest (i.e., new product introductions, mergers and acquisitions, or strategic alliances). As stated earlier, 96 firms took an identifiable action of interest. Entering the inverse Mills ratio into the second-stage regression model removes any bias in the regression coefficients by accounting for endogeneity and sample selection (Shaver, 1998). However, proper identification of the inverse Mills ratio requires that a variable be correlated with the first-stage probit model's outcome (i.e., *any focal action*), but not with the second-stage performance model's outcome (i.e., *Jensen's alpha*) (Leiblein *et al*., 2002; Shaver, 1998). In this study, the *prior performance* variable (return on sales in the turnaround year) demonstrates these relationships (see Table 1). Thus, *prior performance* is the instrumental variable entered in the first-stage probit model, but not in the second-stage performance model (Greene, 1993). Stata's Heckman procedure was used to analyze the data.

RESULTS

The descriptive statistics and correlations are shown in Table 1, while the results of the test of the hypotheses via the Heckman procedure are shown in Table 2.

DOI: 10.1002/smj

Table 1. Descriptive statistics and correlation matrix

		Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Jensen's alpha	0.00	0.01													
2	Any focal action	0.54	0.50	−0.14^{+}												
3	Prior performance	−4.01	18.96	0.10	−0.13i^{+}											
4	Financial capacity	1.39	9.40	0.07	−0.12i	0.04										
5	Slack	0.31	0.30	−0.07	0.11i	−0.11	−0.04									
6	Log size	2.92	1.68	−0.02	0.41i***	0.02	0.05	0.07								
7	Divestment	−0.11	0.15	0.17*	0.14i	0.10	−0.06	0.16*	0.18*							
8	Internationalization	0.04	0.20	0.05	0.15i	0.04	−0.02	0.11	0.16*	0.15^{+}						
9	All new products	0.22	0.54	−0.04	0.37i***	−0.19**	−0.08	0.23**	0.31***	0.08	0.03					
10	All M&As	0.13	0.44	−0.06	0.20i**	0.05	0.03	0.01	0.27***	0.15^{+}	−0.04	0.07				
11	All alliances	0.54	1.44	−0.07	0.30i***	0.04	−0.05	0.12	0.37***	0.13^{+}	0.35***	0.47***	0.19*			
12	VI New products	0.17	0.37	0.17^{+}	0.05a	−0.13	−0.27**	0.25*	−0.15	0.11	−0.12	0.39***	−0.17	−0.09		
13	VI M&As	0.05	0.22	0.12	0.02a	0.05	0.05	−0.08	−0.03	0.06	−0.06	−0.14	0.33***	−0.12	−0.10	
14	VI Alliances	0.20	0.40	−0.02	0.05a	0.10	−0.25*	−0.08	0.04	−0.12	0.23*	0.09	−0.19+	0.35***	0.13	−0.12

[a] Due to homogeneous range restriction (Chen and Popovich, 2002) (i.e., Any focal action being a constant (=1) with each corresponding VI variable score) a zero score was added, enabling the correlation calculations.

$n = 178$, except for correlations involving VI New Product, VI M&A, or VI Alliance, where $n = 96$.

$^{+}$ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 2. Results from probit and regression models

	Model 1	Model 2	
	1st stage probit estimate of taking a focal action	2nd stage regression estimate of performance	Standardized Coefficients for Model 2
	Any focal action	Jensen's alpha	
Constant	−1.102** (0.256)	−0.022** (0.006)	
Prior performance (return on sales)	−0.030+ (0.018)		
Financial capacity (debt to equity)	−0.048+ (0.026)	0.001** (0.000)	0.241**
Slack	0.244 (0.340)	−0.007+ (0.003)	−0.191+
Log size (assets)	0.391** (0.071)	0.003** (0.001)	0.519**
Divestment		0.019** (0.006)	0.236**
Internationalization		0.005+ (0.003)	0.128+
All new products		0.000 (0.002)	0.012
All M&As		−0.005** (0.002)	−0.267**
All Alliances		−0.000 (0.001)	−0.024
VI New products		0.010** (0.003)	0.347**
VI M&As		0.009*** (0.002)	0.191***
VI Alliances		−0.001 (0.003)	−0.053
Lambda (inverse Mills ratio)		0.012* (0.005)	0.407*
n	178	96	
X or *F*	34.04 (4)***	6.46 (12, 83)***	

Values in Models 1 and 2 are unstandardized coefficients with robust standard errors in parentheses. The right-most column displays the standardized coefficients for Model 2.
+ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Hypothesis 1 suggested that strategic actions that involve recombining existing resources in valuable and difficult-to-imitate ways positively affect investors' expectations. Hypothesis 2 suggested that valuable and difficult-to-imitate strategic actions that involve the acquisition of new resources have a positive effect on investors' expectations. Hypothesis 3 suggested that valuable and difficult-to-imitate strategic actions providing access to new resources positively affect investors' expectations. Hypotheses 4a suggested a strategy that recombines existing resources outperforms the other two and Hypothesis 4b suggested that an acquisition strategy (gaining control of external resources) outperforms a strategic alliance strategy (gaining access to external resources).

Model 1 shows the results of the first-stage probit, while Model 2 shows the results for the second-stage regression analysis. Lambda in Model 2 represents the inverse Mills ratio control variable. The coefficient for valuable and difficult-to-imitate new product actions (VI New products) is positive and statistically significant, providing support for Hypothesis 1. The coefficient for valuable and difficult-to-imitate acquisitions (VI M&As) is also positive and statistically significant, thereby providing support for Hypothesis 2. The coefficient for valuable and difficult-to-imitate alliances (VI Alliances) is not statistically significant. These results do not support Hypothesis 3.

In order to test Hypotheses 4a and 4b, we compared their respective coefficients. There is a statistically significant difference between the coefficient for valuable and difficult-to-imitate new products and the coefficient of valuable and difficult-to-imitate strategic alliances ($F = 5.75$; $p < 0.05$), while the difference between this coefficient and the valuable and difficult-to-imitate acquisition's coefficient is not statistically significant ($F = 0.04$; n.s.). These results partially support Hypothesis 4a. To supplement these results and provide a more fine-grained view for interpretation, we examined the differences in R^2 provided by the three different strategies. The hierarchical models indicate that of the three valuable and difficult-to-imitate actions, valuable and difficult-to-imitate new product actions have the strongest positive relationship with investor expectations. Specifically, the change in R^2 from a restricted model (i.e., without VI New products) to the full model is highly statistically significant

DOI: 10.1002/smj

($\Delta R^2 = 0.075$, $F = 8.910$; $p = 0.004$), while the change in R^2 from a restricted model (i.e., without VI M&A) to the full model is marginally statistically significant ($\Delta R^2 = 0.031$, $F = 3.70$; $p = 0.057$). And lastly, the change in R^2 from a restricted model (i.e., without VI Alliances) to the full model is not statistically significant ($\Delta R^2 = 0.002$, $F = 0.227$; $p = 0.635$). Next, as expected, the difference between the coefficient of valuable and difficult-to-imitate acquisitions and the coefficient of valuable and difficult-to-imitate strategic alliances is statistically significantly ($F = 8.24$; $p < 0.01$), supporting Hypothesis 4b.

We also note some interesting outcomes with the control variables. For example, divestment and internationalization both had positive effects on market value. However, the results also show that simply taking a strategic action regardless of its value and imitability either has no effect or, in the case of mergers and acquisitions, a negative effect on market value.

DISCUSSION

Firms that fail to meet financial market expectations eventually face a loss of support from investors. To continue attracting investors and capital resources, managers must identify strategic actions that either recombine existing resources or acquire new resources that can be subsequently combined with existing resources to produce results that exceed expectations, or at least meet them (Makadok, 2001). We also know from research based on the behavioral theory of the firm and the related prospect theory that firms meeting or exceeding investors' expectations tend to be risk averse because they frame the decision based on avoiding losses (March and Shapira, 1987). However, those firms experiencing declining performance frame the decisions as seeking gains (regaining lost performance) and thus are willing to take risky actions to reverse declining performance (Kahneman and Tversky, 1979; Fiegenbaum and Thomas, 1988).

Anecdotal evidence suggests that investors and boards of directors have not been patient with CEOs whose firms are unable to meet investors' performance expectations (Colvin, 2005; Smith and Hearn, 2005). Thus, executives of firms in decline situations may feel pressure to turn around performance quickly. As a result, some of them may take actions without sufficient analysis and evaluation. These actions are less likely to be valuable or difficult-to-imitate by competitors and thus have a low probability of improving firm performance. Approximately 60 percent of the firms in our sample took at least one strategic action in the year following declining market performance, suggesting that managers in declining firms are indeed motivated to take action. The much smaller number of strategic actions that were both valuable and difficult-to-imitate, however, demonstrates the difficulty (and indeed rarity) of designing and implementing actions that are well received by the market.

Our results suggest that for firms to reverse declining market-based performance, their actions to recombine existing resources or to acquire new resources must be valuable and difficult-to-imitate. Undertaking the same type of actions that are not valuable or difficult-to-imitate does not lead to recovery but instead can further erode performance. Our results show that actions involving either the general introduction of new products or the formation of strategic alliances that were judged not to be valuable and inimitable had no effect on performance measured by investors' expectations. However, pursuing acquisitions regardless of their value and imitability had a negative effect on performance measured by investors' expectations. In other words, these actions are more likely to harm rather than help the firm's efforts to improve market-based performance.

Importantly, we found evidence that certain valuable and difficult-to-imitate actions had a positive effect on investors' expectations. Moreover, our results suggest that the degree to which firms have control over their resources may add to our understanding of the differential effects of strategic actions on value creation. For example, new strategic alliances that were judged to be valuable and difficult-to-imitate had no effect on investors' expectations. These alliances provide a firm with access to, but not control over, new resources. On the other hand, actions involving the introduction of new products or acquisitions that bundled and leveraged resources, *controlled* by the firm, in valuable and difficult-to-imitate ways had a positive and significant effect on investors' expectations.

These findings inform an existing debate in strategic management. Some scholars suggest that

DOI: 10.1002/smj

new combinations of a firm's existing resources are more likely to enhance performance than the acquisition of new resources (Alchian and Demsetz, 1972). However, other scholars have argued that both types of action can produce such results (Makadok, 2001). Our findings suggest that, indeed, both developing new combinations of existing resources to introduce new products or acquiring new resources through acquisitions can enable firms with declining performance to exceed market expectations, as long as the action is valuable and difficult-to-imitate. However, between these two strategic actions, our results also suggest that recombining resources to produce new products may produce the greatest gain. Some have argued that organic growth (introducing new products developed internally) creates more value for firms than do acquisitions (Hitt *et al*., 2006). The difference in the effects may be because the integration of newly acquired resources is difficult and thus entails additional costs (Alchian and Demsetz, 1972; Hitt *et al*., 1996, 2000). Nonetheless, our findings show that acquisitions can create value, which supports Hitt *et al*.'s (2001) arguments that only carefully selected and managed acquisitions create value. In valuable and difficult-to-imitate acquisitions, the acquiring firm internalizes and integrates complementary resources to achieve synergy.

In this research, we open and begin to explore the 'black box' related to the resource-based view of the firm (Priem and Butler, 2001). The findings of this study add to our knowledge of how to achieve organizational recovery. While we found that one typical response by firms needing a turnaround, divestment of assets, did have performance-enhancing effects, we also found strategic actions that more effectively bundle and leverage existing resources, or new resources obtained by an acquisition, also result in outcomes that exceed investors' expectations of performance. However, experiencing a recovery may not be enough; firms that are able to turn around declining performance must seek continued improvement. Thus, while firms experiencing a recovery move from 'bad to good' performance, they often desire to move from 'good to great' performance (Collins, 2001). These firms will try to design strategic actions to build up the firm and lead to breakthroughs (Collins, 2001), while also enhancing the mix of resources controlled by the firm (Karim and Mitchell, 2000).

Indeed, the market may respond favorably to firms that seek a series of temporary competitive advantages rather than a single sustainable advantage (Eisenhardt, 1999; Wiggins and Ruefli, 2005). To move beyond recovery, build momentum, and achieve breakthrough requires further actions. According to Collins (2001: 165), moving from 'good to great comes about by a cumulative process—step by step, decision by decision—that adds up to sustained and spectacular results.' Our findings suggest that sustainable transformations, at least for firms seeking to create a turnaround, must involve valuable and difficult-to-imitate actions that meet or exceed market expectations. Continuously improving, innovating, and otherwise bundling resources and leveraging the resultant capabilities in valuable and difficult-to-imitate ways may be the means by which firms create defensible positions that not only enable declining firms to experience a recovery, but also eventually allow firms to achieve breakthrough results.

In addition, our results provide a more fine-grained view in the application of prospect theory to declining firm performance. Certain risky strategic actions that deliver value to consumers can produce organizational recoveries and hold the potential to meet or exceed market expectations. With better management of their resources by recombining existing resources or acquiring and integrating new resources into the firm, firms can turn around their performance even if taking higher risks, thereby supporting the arguments presented by Sirmon *et al*. (2007).

The lack of support for Hypothesis 3 could be important. Firms with declining performance experience pressure from shareholders to achieve expected performance levels. Thus, they are likely to be the initiators of alliances, but due to declining performance they negotiate from a weak position. Given their weaker position, the declining firm may encounter the 'hold-up problem' whereby their partners can costlessly end the relationship because the initiator of the alliance (here, the firm with declining performance) made the initial investment to establish it (Hart and Moore, 1990). As such, it is more difficult for them to appropriate the benefits generated by the alliances. Furthermore, alliances afford less control over new resources than acquisitions. Acquiring firms control the resources they buy but alliances only

DOI: 10.1002/smj

provide potential access to new resources. Moreover, the weak positions of firms under pressure to turn around their performance may further reduce their access to their partners' resources. Because of these contingencies, it may be highly difficult for firms that have experienced a decline in market performance to realize value from an alliance strategy.

Chattopadhyay, Glick, and Huber (2001) found that firms are motivated to respond to threats but are less likely to respond to opportunities. Our research provides evidence of how firms respond to threats and the types of response that are most likely to be successful. Based on her study of the effects of strategic change on firm performance, Haveman posed the question, 'how much does the degree to which new activities build on current routines and competencies matter to organizational performance?' (Haveman, 1992: 73). The results of this research suggest that it matters a great deal. In fact, our results suggest that boundary conditions exist in the relationship between valuable strategic actions and positive outcomes. Specifically, the types and characteristics of strategic actions taken by declining firms affect investors' performance expectations. Therefore, when designing actions to have a positive effect on investors' expectations in recovery situations, managers should strive to formulate strategies that make better use of the firm's existing resources to create new products or pursue valuable and difficult-to-imitate strategies that acquire new resources.

REFERENCES

Alchian AA, Demsetz H. 1972. Production, information costs, and economic organization. *American Economic Review* **62**(5): 777–795.

Barker VL, Duhaime IM. 1997. Strategic change in the turnaround process: theory and empirical evidence. *Strategic Management Journal* **18**(1): 13–38.

Barney JB. 1988. Returns to bidding firms in mergers and acquisitions: reconsidering the relatedness hypothesis. *Strategic Management Journal*, Summer Special Issue **9**: 71–78.

Barney JB. 1991. Firm resources and sustained competitive advantage. *Journal of Management* **17**(1): 99–120.

Bowman EH. 1980. A risk/return paradox for strategic management. *Sloan Management Review* **21**(3): 17–31.

Bowman EH. 1982. Risk seeking by troubled firms. *Sloan Management Review* **23**(4): 33–42.

Chattopadhyay P, Glick WH, Huber GP. 2001. Organizational actions in response to threats and opportunities. *Academy of Management Journal* **44**(5): 937–955.

Chen PY, Popovich PM. 2002. *Correlations: Parametric and Nonparametric Measures.* Sage: Thousand Oaks, CA.

Collins J. 2001. *Good to Great: Why Some Companies Make the Leap and Others Don't*. HarperCollins: New York.

Colvin G. 2005. CEO knockdown. *Fortune* 4 April: 19–20.

Das S, Sen PK, Sengupta S. 1998. Impact of strategic alliances on firm valuation. *Academy of Management Journal* **41**(1): 27–41.

Denrell J, Fang C, Winter SG. 2003. The economics of strategic opportunity. *Strategic Management Journal* **24**(10): 977–990.

Dyer JH, Singh H. 1998. The relational view: cooperative strategy and sources of interorganizational competitive advantage. *Academy of Management Review* **23**(4): 660–679.

Eisenhardt KM. 1999. Strategy as strategic decision making. *Sloan Management Review* **40**(3): 65–72.

Fiegenbaum A, Thomas H. 1988. Attitudes toward risk and the risk–return paradox: prospect theory explanations. *Academy of Management Journal* **31**(1): 85–106.

Galunic DC, Rodan S. 1998. Resource recombinations in the firm: knowledge structures and the potential for Schumpeterian innovation. *Strategic Management Journal* **19**(12): 1193–1201.

Gomez-Mejia L, Wiseman RM. 1997. Reframing executive compensations: an assessment and outlook. *Journal of Management* **23**(3): 291–374.

Greene WH. 1993. *Econometric Analysis* (2nd edn). Macmillan: New York.

Greve HR. 1998. Performance, aspirations, and risky organizational change. *Administrative Science Quarterly* **43**(1): 58–86.

Hamel G. 1991. Competition for competence and inter-partner learning within international strategic alliances. *Strategic Management Journal*, Summer Special Issue **12**: 83–103.

Hart O, Moore J. 1990. Property rights and the nature of the firm. *Journal of Political Economy* **98**(6): 1119–1158.

Haveman HA. 1992. Between a rock and a hard place: organizational change and performance under conditions of fundamental environmental transformation. *Administrative Science Quarterly* **37**(1): 48–75.

Heckman JJ. 1979. Sample selection bias as a specification error. *Econometrica* **47**(1): 153–161.

Hitt MA, Hoskisson RE, Johnson RA, Moesel DD. 1996. The market for corporate control and firm innovation. *Academy of Management Journal* **39**(5): 1084–1119.

Hitt MA, Harrison JS, Ireland RD, Best A. 1998. Attributes of successful and unsuccessful acquisitions of U.S. firms. *British Journal of Management* **9**(2): 91–114.

Hitt MA, Dacin MT, Levitas E, Arregle J-L, Borza A. 2000. Partner selection in emerging and developed market contexts: resource-based and organizational

DOI: 10.1002/smj

learning perspectives. *Academy of Management Journal* **43**(3): 449–467.

Hitt MA, Harrison JS, Ireland RD. 2001. *Mergers and Acquisitions: Creating Value for Stakeholders*. Oxford University Press: New York.

Hitt MA, Ireland RD, Tuggle C. 2006. The make or buy growth decision: strategic entrepreneurship versus acquisitions. In *The Search for Organic Growth*, Hess E, Kazanjian R (eds). Cambridge University Press: Cambridge, U.K. 124–146.

Hoopes DG, Madsen TL, Walker G. 2003. Guest editors' introduction to the special issue: why is there a resource-based view? Toward a theory of competitive heterogeneity. *Strategic Management Journal*, Special Issue **24**(10): 889–902.

Hoskisson RE, Johnson RA, Moesel DD. 1994. Corporate divestiture intensity in restructuring firms: effects of governance, strategy, and performance. *Academy of Management Journal* **37**(5): 1207–1251.

Jain PC. 1985. The effect of voluntary sell off announcements on shareholder wealth. *Journal of Finance* **40**(1): 209–224.

Jensen MC. 1968. Problems in selection of security portfolios: performance of mutual funds in period 1945–1964. *Journal of Finance* **23**(2): 389–416.

Jensen MC. 1969. Risk, pricing of capital assets, and evaluation of investment portfolios. *Journal of Business* **42**(2): 167–247.

Kahneman D, Tversky A. 1979. Prospect theory: analysis of decision under risk. *Econometrica* **47**(2): 263–291.

Karim S, Mitchell W. 2000. Path-dependent and path-breaking change: reconfiguring business resources following acquisitions in the U.S. medical sector, 1978–1995. *Strategic Management Journal*, Special Issue **21**(10–11): 1061–1081.

Ketchen DJ, Palmer TB. 1999. Strategic responses to poor organizational performance: a test of competing perspectives. *Journal of Management* **25**(5): 683–706.

Lane PJ, Lubatkin MH. 1998. Relative absorptive capacity and interorganizational learning. *Strategic Management Journal* **19**(5): 461–477.

Leiblein MJ, Reuer JJ, Dalsace F. 2002. Do make or buy decisions matter? The influence of organizational governance on technological performance. *Strategic Management Journal* **23**(9): 817–833.

Lubatkin M, Rogers RC. 1989. Diversification, systematic risk, and shareholder return: a capital market extension of Rumelt's 1974 study. *Academy of Management Journal* **32**(2): 454–465.

Makadok R. 2001. Towards a synthesis of the resource-based and dynamic-capabilities views of rent creation. *Strategic Management Journal* **22**(5): 387–401.

March JG, Shapira Z. 1987. Managerial perspectives on risk and risk-taking. *Management Science* **33**(11): 1404–1418.

Miller KD, Chen WR. 2004. Variable organizational risk preferences: tests of the March–Shapira model. *Academy of Management Journal* **47**(1): 105–115.

Morrow JL Jr, Johnson RA, Busenitz L. 2004. The effects of cost and asset retrenchment on firm performance: the overlooked role of a firm's competitive environment. *Journal of Management* **30**(2): 189–208.

Priem RL. 2007. A consumer perspective on value creation. *Academy of Management Review* (in press).

Priem RL, Butler JE. 2001. Is the resource-based 'view' a useful perspective for strategic management research? *Academy of Management Journal* **26**(1): 22–40.

Robbins DK, Pearce JA. 1992. Turnaround: retrenchment and recovery. *Strategic Management Journal* **13**(4): 287–309.

Rumelt RP. 1974. *Strategy, Structure and Economic Performance*. Harvard University Press: Cambridge, MA.

Shaver JM. 1998. Accounting for endogeneity when assessing strategic performance: does entry mode choice affect FDI survival? *Management Science* **44**(4): 571–585.

Sirmon DG, Hitt MA, Ireland RD. 2007. Managing firm resources in dynamic environments to create value: looking inside the black box. *Academy of Management Review* (in press).

Smith G, Hearn L. 2005. Prudential ousts chief executive after u-turn. *Fortune* 24 March (www.ft.com).

Wiggins RR, Ruefli TW. 2005. Schumpeter's ghost: is hypercompetition making the best of times shorter? *Strategic Management Journal* **26**(10): 887–911.

Wiseman RM, Gomez-Mejia LR. 1998. A behavioral agency model of managerial risk taking. *Academy of Management Review* **23**(1): 133–153.

DOI: 10.1002/smj