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The Impact of Slack Reduction on Performance Turnaround during the Great Recession: The Case of Japanese Electronics Companies

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Abstract. This study investigates the relationship between slack reduction and performance turnaround for Japanese firms that substantially decreased profit performance due to the Great Recession. This study finds that Japanese firms that decreased their slack resources (i.e., current ratios) at the onset of the Great Recession were more likely to increase their subsequent performance than their counterparts. However, amount of slack resources firms had at the beginning of the recession had no relationship with firms' subsequent performance during recession. The findings of this study have implications for managers affected by deep recessions.

Keywords: Slack, Recession, Japan

1. Introduction

Organizational slack has been considered instrumental in enhancing the performance of firms that face environmental turbulence, such as economic recessions [12], [13]. A few previous studies have examined the relationship between slack and performance during recessions, and most of these studies have investigated the impact of the "presence" of slack at the onset of recession on a firm's subsequent performance during and after a recession [12]. However, the presence of slack at the onset of recession may not be a viable indicator of a firm's ability to increase performance during a recession.

Slack resources could provide discretionary funding to pursue new projects, improve processes, and develop new products or markets during times of hardship [3]. However, slack may be used (i.e., reduced) to deploy other resources to combat recessions. Very few previous studies have investigated the relationship between slack reduction and performance turnaround during a recession.

However, slack is often not used in times of recession. Managers may hold onto slack resources because these excess resources provide managers with fewer incentives to respond aggressively to initial disruptions caused by recessions [15]. Moreover, during severe recessions, many managers may wish to hold cash and short-term securities to prepare for financial emergencies and to avoid bankruptcies [5].

In a traditional turnaround field, cost and asset retrenchment is considered essential to obtain cash and other resources for turnaround activities. Slack reduction, such as decreasing cash and selling expenses, is similar to the cost and asset retrenchment that is initiated by poor-performing companies to achieve turnarounds. Although there have been numerous turnaround studies in the past, little research has examined firms that are suddenly hit by a severe recession and are in need of turnaround during a recession.

It should be noted that the types of firms investigated in traditional turnaround strategies differ considerably from those examined in studies on slack. Companies in need of traditional turnaround strategies have been performing poorly for several years and thus are likely to have exhausted most of their slack resources. Therefore, their cost and asset retrenchment activities include reductions of resources that are usually considered difficult to convert into cash. In contrast, companies hit suddenly by a recession may maintain substantial slack at the onset of a recession, so they have ready access to slack resources, such as cash and its equivalent.

Managers' actions regarding this slack in the form of liquidity may depend partly on the depth of the recession. Since the Great Depression of the 1930s, most recessions in the United States have lasted only a few years, and the scope of their impact has been limited to specific regions and industries. For example, the

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2001 IT (Information Technology) recession only lasted approximately one year and predominantly affected one industry (i.e., software) [12]. Since the beginning of the Great Recession in the summer of 2008, many firms have gone bankrupt. Therefore, many managers may want to increase their firms' liquidity to a sufficient level to avoid bankruptcies.

The purpose of this study is to investigate the relationship between a firm's reduction of slack at the onset of a recession and its subsequent performance turnaround during a recession. Specifically, this research examines whether poor performing companies whose performance suddenly declined due to the Great Recession were able to accomplish performance turnarounds by reducing slack at the onset of the Great Recession.

2. Previous Research and Theoretical Development

Slack has been defined as "the pool of resources in an organization that is in excess of the minimum necessary to produce a given level of organizational output" [18]. Firms with substantial slack have been considered to have fewer resource allocation problems due to substantial resource availability [8] and to have improved information processing due to reduced interdependencies between subunits [10]. Thus, these firms have more innovation capabilities [11],[18]. However, previous studies on the relationship between slack and performance have identified mixed results. Some studies [2], [6,] [12], [17] have found positive relationships between slack and performance, whereas others [14], [21], [25] have found no relationship or negative relationships. It should be noted that most of these previous studies have examined the "presence" of slack on firms' subsequent performance.

Traditional research on slack has assumed that the presence of slack creates an organizational atmosphere that promotes innovation and organizational performance. The opposite view is supported by agency theory, which posits that managers with excess cash flow (i.e., one of the slack resources) [15] tend to run their organizations ineffectively.

Neither of the above views usually take into account the impact of a reduction of slack on performance. This is because in normal circumstances managers do not consider reducing slack because slack reduction may lead to infighting for resources between departments, thereby failing to support an organizational atmosphere conductive to creativity and coordination. Thus, in normal circumstances, it may not be a prudent practice to reduce organizational slack.

Slack has been considered a buffer for environmental turbulence such as economic recessions [2], [7], [16]. Therefore, in times of recession, firms may reduce slack to maintain or improve their performance. In the turnaround strategy field, it is usually considered essential to reduce costs of poorly performing companies. Some studies [19], [20] have even regarded cost and asset retrenchment as a first step in turnaround activities. Arguments against such slack reduction may include the high risks of reducing liquidity in recessions.

It should also be noted that, by definition, turnaround activities are usually conducted by firms with declining performance. A large percentage of companies are not adversely affected by a recession, and the performance of these firms improves despite recessionary periods [22]. The hypotheses developed in this study do not relate to such firms. Therefore, the following hypothesis can be proposed:

Hypothesis 1a: The higher a firm's reduction of slack at the onset of a recession, the higher the improvement of its performance during the recession.

Arguments against slack reduction during recessions are related to high risks of reducing liquidity during recessions, which may lead to bankruptcies. To obtain safe levels of liquidity, some managers may become risk averse enough to sacrifice their firm's efficiency [5]. Moreover, an aversion to take risks in reducing slack may be attributed to organizational resistance. The reduction of slack resources, such as selling, general and administrative expenses usually means a workforce reduction. It has been well documented that workforce reductions during difficult times lead to increased workloads and thus reduced worker morale among surviving employees [24], especially in firms attempting performance turnarounds. Therefore, the following hypothesis can be proposed:

Hypothesis 1b: The higher a firm's reduction of slack at the onset of a recession, the lower its performance during the recession.

3. Research Methodology

3.1. Sample

Each organization in the sample for this study was a Japanese electronics manufacturer (SIC code: 36). A single industry was chosen to control for industry differences. For this study, 161 companies with closing dates for their annual financial statements in the month of March were selected. Of these 161 firms, 57 companies (35%) were dropped from the sample because their return on assets (ROAs) did not decline more than two percentage points from September 2008 to March 2009. Sample companies were drawn from the

Standard & Poor's Capital IQ (formerly COMPUSTAT) database and are listed in the Japanese stock exchanges. Some of the variables, such as the number of employees, were taken from the Nikkei's NEEDS database. Companies that changed accounting periods from 2008 to 2011 were excluded from the study.

3.2. Variables

Organizational performance has been measured primarily by ROA in turnaround and slack studies [4], [12] relating to recessions. In addition to ROA performance measure, this study employed sales growth measure.

The Great Recession began in the spring/summer of 2008 and bottomed out around the spring of 2009. The financial performance of most firms in the sample bottomed out in March 2009 and has since gradually improved. Therefore, changes in ROA and sales from March 2009 to March 2011 were calculated and used in this study.

The current ratio is the most widely used measure of available slack [9], and thus used in this study. Changes in the current ratios from March 2008 to March 2009 were calculated and utilized in this study.

I controlled for four different factors that may lead to changes in firm performance during turnaround situations: (1) cost retrenchment, (2) asset retrenchment, (3) firm size, and (4) the severity of performance decline. Firm size has been found to affect the ability of firms to make necessary changes in the face of environmental threats [23]. Firm size was operationalized as the log of employees at the onset of the Great Recession.

Previous research [1] suggests that the severity of performance decline may influence the type of retrenchment strategies selected. Specifically, the more severe the performance decline, the more likely it is that asset retrenchment will be used. For this variable, I used a dummy variable coded "1" if a sample firm had a negative operating income in March, 2009, and "0" if a sample firm had a positive operating income.

Cost retrenchment, calculated as the change in the cost (i.e., SGA plus interest expenses) from 2008 to 2009, was used in this study. Asset retrenchment was calculated as the change in fixed assets from 2008 to 2009.

4. Results

Table 1 shows the details of six regression analysis results related to the dependent variable as changes in ROA and sales. Models 1, 2, 4 and 5 describe the regression analysis results without interaction terms. Regression analysis was performed separately for each interaction term and is presented in Models 3 and 6.

For changes in sales as a dependent variable, reduction in current ratios had significant negative impacts. Presence of slack had no relationship with both profit and sales growth performance. These findings show support for hypothesis 1a. For interaction terms, there were significant impacts on ROA changes.

Cost retrenchment showed very weak relationships with profit performance, while it had very significant positive impacts on sales growth performance. Asset retrenchment had insignificant impacts on profit performance, while it showed significant negative impacts on sales growth performance. The severity of performance decline showed significant positive relationships with profit performance, while it had somewhat negative impacts on sales growth performance.

5. Discussion and Conclusion

A firm's slack reduction at the onset of a recession showed negative impacts on its subsequent performance. It was also interesting to find positive relationships between cost retrenchment and sales growth performance.

The findings in this study confirm the view that when managers are faced with declining ROA at the onset of deep recessions, these managers who adopt aggressive approaches are more likely to be rewarded later with higher performance. They increase cost by reducing slack at the onset of recessions. Also, these managers who do asset retrenchment also see their sales growth performance to be improved.

The findings of complex relationships between cost/asset retrenchment and performance suggest that for firms whose performance decreased suddenly due to initial disruptions by recessions, the traditional turnaround strategy field may not offer prescriptions for combating recessions. Cost and asset retrenchment had almost no impacts on profit performance. On the other hand, cost retrenchment had positive impacts, and asset retrenchment showed negative impacts, on sales growth performance. When faced with severe economic downturn, companies that increase cost, e.g., marketing expenses, by selling off excess assets may achieve higher sales growth performance during recession.

Table 1: Regression Analysis Results

	ROA 2009-2011			SALES 2009-2011		
Model	1	2	3	4	5	6
Cost Retrenchment	-.11	-.13	-.15*	.48***	.44***	-.01
Asset Retrenchment	-.11	-.11	-.12	-.17**	-.17**	.10
Severity of decline	.41***	.41***	.39***	-.11	-.13*	.03
Firm size	.11	.09	.07	-.09	-.16**	.27***
Slack presence		.09	.11		-.03	-.15
Slack reduction		-.16	-.65**		-.32***	.27
Interaction between presence*reduction			.50**			.22
R^2	.20	.20	.22	.26	.36	.16
F-Value	7.86***	5.47***	5.34***	11.31***	11.94***	4.08***

Notes: Level of significance: ***, p<.01; **, p<.05; *, p<.10.

N = 90.

Also, other factors such as the severity of performance decline and firm size that usually have strong relationships with turnaround performance showed mixed results, indicating the irrelevancy of turnaround strategies during recession.

Interaction effects between slack presence and reduction show significant positive impact on profit performance. It means that, when firms with high levels of slack reduce slack substantially, they tend to have higher profit performance. This finding supports the view that managers aggressive enough to substantially reduce slack tend to be rewarded with higher performance.

This study has only examined performance during recessions because only a few years have passed since the beginning of the Great Recession. Future research should be conducted after the end of the Great Recession to investigate the impact of slack on performance during recovery periods. Future research should also examine the impact of slack reduction on firms' performance in other industries. This study focused on one industry, electronics. More research is needed to further understanding of the relationships between slack and performance in recessions.

6. References

[1] D. G. Bibeault, *Corporate Turnaround: How Managers Turn Losers into Winners*. McGraw-Hill, New York, 1982..

[2] J.I. Bourgeois.. On the measurement of organizational slack. *Academy of Management Review*. 1981, 6:29-39.

[3] G.A. Boyne, & K.J. Meier. Environmental change, human resources and organizational turnaround. *Journal of Management Studies*. 2009.46(5): 835-863.

[4] S.W. Bradley, D.A. Shepherd, & J. Wiklund, The importance of slack for new organizations facing 'tough' environments. *Journal of Management Studies*. 2011. 48(5):1071-1097.

[5] M. Campello, E. Giambona,, J.R., Graham, & C.R. Harvey. Liquity management and corporate investment during a finanical crisis. *The Review of Financial Studies.* 2011. 24(6): 1944-1979.

[6] F. Carter. The behavioral theory of the firm and top-level corporate decisions. *Administrative Science Quarterly*. 1971. 16:413-428.

[7] J. Cheng. &I. Kesner. Organizational slack and response to environmental shifts: the impact of resource allocation patterns. *Journal of Management*: 1997. 23:1-18.

[8] R. Cyert. & J. March. *A Behavioral Theory of the Firm*. Englewood Cliffs, N.J.; Prentice-Hall, 1963.

[9] F. Daniel. F.T. Lohrke, C.J. Fornaciari. & J.R.A. Turner. Slack resources and firm performance: a meta-analysis. *Journal of Business Research*. 2004. 57:565-575.

[10] J. Galbraith. *Designing Complex Organizations*. Reading. 1973. MA: Addison Publishing.

[11] D.C. Hambrick. & C. Snow. A conceptual model of strategic decision making. Academy of Management Best Paper Proceedings; 109-112, 1977.

[12] S. Latham. & M.R. Braun. The performance implications of financial slack during economic recession and recovery: Observations from the software industry (2001-2003). *Journal of Managerial Issues.* 2008. 20(1): 30-50.

[13] S. Latham. & M.R. Braun. Assessing the relationship between financial slack and company performance during an economic recession: An empirical study. International Journal of Management, 2009. 26(1): 33-39.

[14] R.J. Litschert. & T.W. Bonham. A conceptual model of strategy formation. *Academy of Management Review*. 1978. 3:211-219.

[15] K. Mellahi. & A. Wilkinson. A study of the association between downsizing and innovation determinants. *International Journal of Innovation Management*. 2009. 12:677-698.

[16] A.D. Meyer. Adapting to environmental jolts. *Administrative Science Quarterly*. 1982. 27:515-537.

[17] L. Mohr. Determinants of innovation in organizations. *American Political Science Review*. 1969. 63:111-126.

[18] N. Nohria. & R. Gulati. Is slack good or bad for innovation? *Academy of Management JournaL.* 1996. 39:1245-1264.

[19] J. A. Pearce II. & D.K. Robbins. Toward improved theory and research on business turnaround. *Journal of Management*. 1993. 19(3): 613-37.

[20] D.K. Robbins. & J.A. Pearce II. Turnaround: Retrenchment and recovery. *Strategic Management Journal*. 1992. 13(4): 287-309.

[21] H. Simon. *Administrative Behavior: A Study of Decision Making Process in Administrative Organizations*, 4th Ed. New York, NY: The Free Press, 1997.

[22] R. Srinivasan. G.L. Lilien. & S. Sridhar. Should firms spend more on research and development and advertising during recessions? 2011. *Journal of Marketing* 75 (May): 49-65.

[23] M. Tushman. & E. Roanelli. Organizational evolution: A metamorphosis model of convergence and reorientation. *Research in Organizational Behavior*. 1985. 7: 171-223.

[24] T.H. Wagan. Exploring the consequences of workforce reduction. *Canadian Journal of Administrative Science*. 1998. 15(4): 300-3009.

[25] M. Yasai-Ardekani. Structural adaptations to environments. *Academy of Management Review*. 1986. 11:9-21.