# Organizational slack, experience, and acquisition behavior across varying economic environments

Acquisition behavior

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## Abstract

**Purpose** – The purpose of this paper is to examine the effects of the organizational slack and acquisition experience on acquisition behavior across varying environmental conditions. Drawing from behavioral theory and the threat-rigidity hypothesis, the paper explores firm acquisition behavior, in terms of type of acquisitions, before and during the recent economic downturn.

**Design/methodology/approach** – Using data on 385 acquisitions in Italy in the period 2007-2010, the paper tests hypotheses on how organizational slack and acquisition experience influence the likelihood of cross-border and diversifying acquisitions relative to domestic, non-diversifying acquisitions prior to and during the economic downturn.

**Findings** – Results suggest that the availability of financial resources and acquisition experience both have an important influence on acquisition behavior. Firms with greater slack and acquisition experience were more likely to make diversifying and/or cross-border acquisitions, compared to domestic non-diversifying acquisitions, particularly during an economic downturn, than firms with lower levels of slack and acquisition experience.

**Originality/value** – The paper extends behavioral theory and threat-rigidity hypothesis, highlighting their applicability to acquisition behavior across varying economic conditions. Slack resources and acquisition experience appear to be particularly salient during challenging economic times.

**Keywords** Mergers and acquisitions, Organizational slack, Acquisition experience,

Behavioural theory, Economic downturn, Threat-rigidity hypothesis

Paper type Research paper

# 1. Introduction

Economic downturns deeply affect corporate decisions. As firms are confronted with new environmental conditions, such as lower levels of munificence (Wan and Yiu, 2009), they must reevaluate their strategies and make difficult decisions about strategic changes (Chattopadhyay *et al.*, 2001; Ghezzi, 2013). Behavioral theory (e.g. Cyert and March, 1963) helps to explain how the organizational context and environmental factors influence firms' strategic decisions, including innovation (Greve, 2003; Chen and Miller, 2007; Zona, 2012), acquisitions and divestitures (Sanders, 2001). However, with few exceptions, these studies are centered on the organizational factors driving the decisions without explicitly focusing on the environmental conditions surrounding the decisions. In addition, the threat-rigidity hypothesis (Chattopadhyay *et al.*, 2001; Ocasio, 1995; Staw *et al.*, 1981) examines how managers may react to changes in external conditions.

In this paper we explore how two key firm-specific factors influence the type of acquisitions that firms pursue across different economic environments. Specifically, we investigate the effects of organizational slack and acquisition experience on firm



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acquisition behavior before and during an economic downturn. From the behavioral theory perspective (e.g. Cyert and March, 1963; Greve, 2003; Wiseman and Bromiley, 1996), organizational slack may offer a buffer against the impact of the economic downturn, possibly protecting the firm, but also changing the nature of the firm's response to the threat (Chattopadhyay *et al.*, 2001; Cheng and Kessner, 1997). In addition, changes in the level of organizational slack may impact the firm's ability to experiment in new areas (Nohria and Gulati, 1996). During economic downturns, slack may take on a more critical role in terms of acquisition behavior (Wan and Yiu. 2009).

In terms of acquisition experience, we complement behavioral theory with arguments from the threat-rigidity hypothesis (e.g. Chattopadhyay *et al.*, 2001; Ocasio, 1995; Staw *et al.*, 1981). The threat-rigidity hypothesis suggests that, when faced with threats that will likely lead to substantial losses, the organization may become rigid. The focus of the firm narrows, with a tendency to look inwards, relying on well-known actions or responses. Acquisitions are complex strategic actions. Firms with greater acquisition experience are likely to be more comfortable making acquisitions than lesser-experienced firms during challenging times since these transactions may be more familiar to them, as they are part of the firm's strategy routines. As a result of this tendency toward familiarity, acquisition experience may be more critical to acquisition behavior during an economic downturn, as compared to prior to the downturn.

These arguments from behavioral theory and the threat-rigidity hypothesis suggest that the level of organizational slack and acquisition experience may have varying influences on acquisition behavior across different economic conditions. The empirical analysis is carried out on a sample of 385 acquisitions in Italy in the period 2007-2010. We compare the likelihood of making diversifying and cross-border acquisitions, relative to domestic acquisitions in their core business, before and during the recent economic downturn. While the overall likelihood of acquisitions is lower during the downturn (Wan and Yiu, 2009), we argue that slack and acquisition experience will have a greater impact on the likelihood of making a certain type of acquisition during a downturn, as compared to more positive economic conditions. This research explores the boundary conditions of behavioral theory and the threat-rigidity hypothesis, demonstrating their increased relevance to acquisition decisions in the context of varying economic conditions. In addition, we extend the work of Wan and Yiu (2009), responding to their call for additional research on the role of the external environmental context on acquisitions. This paper highlights the changing effects of organizational slack and acquisition experience as environmental conditions change.

The paper is organized as follows. In the next section, the theoretical framework is presented and the hypotheses are developed. In the third section the methodology of the empirical analysis is described. In the fourth the results are presented and discussed. Finally, we offer conclusions from this research.

# 2. Literature review and hypotheses

Behavioral theory and the threat-rigidity hypothesis both provide explanations for firms' decisions in response to changing organizational and environmental conditions. Behavioral theory tenets emphasize the importance of organizational search processes and performance relative to targets. For this research we focus on behavioral theory arguments related to the role of organizational slack. Threat-rigidity hypothesis is concerned with managerial responses to negative changes, or perceived threats, in internal and external environments. We rely on the threat-rigidity perspective

to motivate our hypotheses on the role of acquisition experience. In this section we develop hypotheses that extend these theoretical arguments to acquisition behavior before and during an economic downturn. Understanding such changes in acquisition behavior is important because changing environmental conditions, such as an economic downturn, can dramatically alter the firm's strategic environment and may result in changes to the firm's strategy (Lee and Makhija, 2009; Ritala, 2013).

# 2.1 The effect of organizational slack on acquisition behavior

A key firm-specific factor that may impact acquisition behavior is the level of slack possessed by the firm (Wan and Yiu, 2009; Zona, 2012). Organizational slack represents the excess resources a firm possesses above what it needs for current operations (Cheng and Kessner, 1997; Cyert and March, 1963; Greve, 2007; Levinthal and March, 1981). While different types of excess organizational resources may exist within an organization (e.g. managerial, financial, etc.) (Mousa *et al.*, 2013), we focus on excess financial resources since "pursuing acquisitions requires substantial financial resources" (Wan and Yiu, 2009, p. 794). Specifically, we are concerned with the firm's liquidity (current ratio) and potential or unabsorbed slack (debt-equity ratio), which are common measures for organizational slack (Bromiley, 1991; Chen and Miller, 2007). During times of economic growth, even marginal levels of growth, financial resources are more available to the firm from external sources, particularly the capital markets. However, during economic downturns, such external funding becomes more difficult to obtain, highlighting the key role of slack financial resources.

From the behavioral theory perspective, organizational slack allows the firm to conduct slack search (as opposed to problemistic search) (Cyert and March, 1963). Slack search involves using excess firm resources to experiment with new actions or explore new markets since the firm can absorb losses from such activities. For example, slack search has been explored in terms of innovation (Chen and Miller, 2007; Greve, 2003, 2007), airline competition (Martinez and Artz, 2006) and FDI location decisions (Alcantara and Mitsuhashi, 2012). With excess resources, firms may relax controls in the monitoring of performance, allowing for investments in opportunities with high potential but greater uncertainty (Mousa *et al.*, 2013; Nohria and Gulati, 1996). Slack also provides the firm flexibility to implement required actions, particularly during a downturn. These arguments highlight the buffering role of slack.

In relatively favorable economic environments, firms may leverage the opportunity to conduct slack search, such as pursuing new markets. New markets represent opportunities associated with greater risk since the firm is less familiar with such markets. For example, diversifying outside the core business may involve different operating activities, and possibly new competitors, which do not necessarily fit the managerial dominant logic (Prahalad and Bettis, 1986). There is a greater likelihood of suffering a loss in these conditions, particularly in the short term since it is likely that managers do not understand these markets as well as their core markets. In addition, the firm's resources may not be applicable in these new markets (Levinthal and Wu, 2010; Wang and Barney, 2006). Similarly, a cross-border acquisition involves markets that are likely to be different from the firm's domestic market, in terms of customers, business practices, and institutional environments (e.g. Doukas and Travlos, 1988; Ellstrand et al., 2002). These differences in the foreign markets increase the potential for losses, again particularly in the short term. The buffer provided by organizational slack can protect the firm from downside risks (Baird and Thomas, 1985; Cheng and Kessner, 1997). Given this buffer, firms with greater slack may be less likely to MD 52.5

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constrain their focus on core businesses or domestic markets. This suggests that slack would influence firms toward diversifying and/or cross-border acquisitions in favorable economic conditions.

We contend that the impact of slack becomes stronger when economic conditions are unfavorable. During an economic downturn, firms are likely to be threatened with a less munificent environment. An economic downturn typically results in decreased consumer and industrial spending, resulting in a decline in revenues for firms. This decreased munificence plays a major role in the performance decline experienced by the firms. Thus, internal sources of funds, i.e. earnings, are lower during an economic downturn. In addition, as noted above, external funding resources drop. For example, the credit crunch and lack of available capital is one of the strongest effects of a downturn, as the 2008 global recession has demonstrated. During this recent economic downturn the availability of financial resources to the industrial system dramatically decreased.

Thus, we can expect that in economic downturns the firm's financial resources will likely play an even more crucial role compared to more munificent times in affecting the pursuit of acquisitions (Wan and Yiu, 2009). An economic downturn may result in risk aversion on the part of managers, as they may become more cautious and reduce risky investments (Zona, 2012). Yet, firms with greater slack are somewhat protected from these negative effects in the sense that slack acts as a buffer from the negative environmental forces (Cheng and Kessner, 1997; Cyert and March, 1963; Wan and Yiu, 2009). A firm with greater slack is more likely to be able to absorb losses and continue current operations than a firm with less slack (Bourgeois, 1981).

It is also important to note that economic downturns may also offer unexpected growth opportunities. In such periods, a greater number of firms experience difficulties and may therefore become potential targets for acquiring firms. More "shopping" opportunities, in terms of possible takeovers, may arise from the recession and drive large multinational firms, in particular, to seize business opportunities at regional or global level. Larger firms with greater excess resources may be able to act quickly and take the opportunity presented by the economic downturn to acquire weaker competitors (Wan and Yiu, 2009).

Thus, greater slack during a downturn allows firms to continue to pursue new markets (industrial or geographic) at a greater rate than firms without such excess resources, since the firms with greater slack can absorb the potential losses from the downturn better (Cheng and Kessner, 1997). They have the means to continue more risky actions, such as diversifying or cross-border acquisitions. As Wan and Yiu (2009) suggest, slack allows firms to act more aggressively during a downturn. It is important to note that we are not indicating that the likelihood of acquisitions will increase during the downturn. Nor are we arguing that diversifying or cross-border acquisitions are more likely during the downturn. Rather, the impact of slack will be greater during an economic downturn, where firms with greater slack will be more likely to pursue diversifying or cross-border acquisitions in economic downturns relative to firms with less slack. Zona (2012) found a similar result when analyzing investments in innovation, where slack had a positive impact on such investments during the recent economic downturn.

In sum, these arguments suggest the following:

H1. Organizational slack (financial resources) will have a more positive relationship with the likelihood of diversifying acquisitions during an economic downturn, relative to prior to the downturn.

*H2.* Organizational slack (financial resources) will have a more positive relationship with the likelihood of cross-border acquisitions during an economic downturn, relative to prior to the downturn.

# 2.2 The effect of acquisition experience on acquisition behavior

While acquisitions may be considered risky strategic actions in general, for numerous firms acquisitions are a regular activity. Management scholars have recognized that acquisition experience can influence acquisition behavior and acquisition performance (Ellis *et al.*, 2011; Haleblian *et al.*, 2006; Hayward, 2002), particularly from an organizational learning perspective (Barkema and Schijven, 2008; Barkema and Vermeulen, 1998; Finkelstein and Haleblian, 2002; Haleblian and Finkelstein, 1999; Verya and Schweigerb, 2001; Zollo and Singh, 2004). For this study, we are not concerned with the performance effect of the learning dynamics that arise from acquisition experience. Instead, we focus on how acquisition experience can influence the nature of subsequent acquisitions.

Behavioral theory does not directly address the role of experience. However, Cyert and March (1963) argue that firms tend to rely on past routines or "standard operating procedures," i.e. "[...] procedures for solutions to problems which the firm in the past has managed to solve" (Augier, 2004, p. 1265). Firms have strategic routines or patterns of behavior that they tend to pursue when the firm is satisfactorily meeting its goals (Cyert and March, 1963). For a firm that makes repeated acquisitions, as acquisition experience increases, the acquisition becomes part of its strategic repertoire, readily available for the firm to use (Ocasio, 1995).

Experience generates learning, and learning, in turn, is at the basis of routines' formation, intended as repetitive patterns or sequences of interdependent, coordinated actions (Feldman and Pentland, 2003; Howard-Grenville, 2005). Accumulation of experience in a given routine increases the likelihood of that routine to be re-used (Amburgey and Miner, 1992; March, 1981). Acquisition experience is therefore positively related to subsequent acquisition likelihood thanks to a transfer effect, i.e. a process by which a certain experience influences subsequent activities (Collins *et al.*, 2009; Ellis *et al.*, 2011; Finkelstein and Haleblian, 2002; Haleblian *et al.*, 2006). As firms become more experienced at making acquisitions, the risk of the action is reduced to some extent. Managers become more familiar with the processes involved and can become better at target selection, due diligence, and integration. These arguments suggest that the firm's acquisition experience may influence the firm's future acquisition behavior.

For the purposes of this research, we focus on diversifying and cross-border acquisitions, relative to domestic core acquisitions. The threat of potential loss, or risk, from a diversifying acquisition comes from two sources: the acquisition process itself (Colombo *et al.*, 2007; Haspeslaugh and Jemison, 1991; Jemison and Sitkin, 1986; Zaheer *et al.*, 2010) and the expansion outside of the firm's current operations or dominant logic (Prahalad and Bettis, 1986), as noted above. In terms of the latter, when a firm diversifies outside its core markets, it is leveraging its existing resources into less familiar markets. These resources may not be applicable in the new markets (Wang and Barney, 2006; Levinthal and Wu, 2010). In addition, increased levels of diversification can increase complexity for top management, increasing the firm's risk (Hutzschenreuter and Horstkotte, 2013). These arguments highlight the risk associated with a diversifying acquisition. Similarly, a cross-border acquisition involves threat of losses from the acquisition process (Muehlfeld *et al.*, 2012; Norburn and Schoenberg, 1994) and from expansion outside of domestic markets (Doukas and Travlos, 1988; Ellstrand *et al.*, 2002). Similar to diversifying acquisitions, the firm's resources may not

be applicable, and therefore less valuable in the less familiar foreign markets. In addition, managing across diverse cultural and institutional environments represents a more complex and risky environment for managers to navigate (Carpenter and Sanders, 2004).

In terms of the second potential source of risk, the acquisition process, the firm's acquisition experience serves to make the acquisition process itself more familiar to the managers, reducing the potential for loss due to the process. Learning outcomes derived from past acquisitions may turn into a competence that can be exploited beyond the firm's industry or home country. In fact, acquisition competences related to activities such as target firm's selection, due diligence, negotiation capabilities, and post-acquisition integration are not necessarily industry or country specific. Moreover, it might be a matter of "confidence," rather than "competence." Zollo (2009) argues that experience accumulation might produce overconfidence in the managers' competence. This would suggest continued use of diversifying and/or cross-border acquisitions from more experienced firms.

These arguments suggest that in favorable economic conditions, a firm with higher acquisition experience is likely to continue to make acquisitions, i.e. continue using the tools in its strategic repertoire. In other words, acquisition experience influences acquisition behavior. Firms that have made diversifying and/or cross-border acquisitions will continue to do so. However, when the firm is faced with a threat, such as an economic downturn, we contend that the role of acquisition experience on acquisition behavior will become stronger.

The threat-rigidity hypothesis (Staw *et al.*, 1981) offers useful insights for understanding how experience affects the relationship between threats in the economic environment and acquisition behavior. In the face of a threat, such as an economic downturn, the firm relies on well-known responses, creating routines for such conditions (Barker and Mone, 1998; Staw *et al.*, 1981). For firms with lower acquisition experience, diversifying and cross-border acquisitions may not be a part of their repertoire. Thus, when faced with a threat from the economic downturn, firms with lower experience are likely to respond by sticking to their strategic routines, which do not involve acquisitions.

In contrast, firms with greater acquisition experience are more likely to have diversifying and cross-border acquisitions in their strategic repertoire. Thus, in the face of a threat from the economic downturn, the firm will stick to this repertoire of diversifying and cross-border acquisitions. Thus, a firm with greater acquisition experience is more likely to make diversifying and cross-border acquisitions. The reduced risk of loss from the acquisition process noted above becomes more critical during an economic downturn as well.

It is important to note here that we are not arguing that the influence of the threat-rigidity hypothesis toward risk aversion in the face of economic adversity (Cameron *et al.*, 1987; Chattopadhyay *et al.*, 2001) disappears. We are not suggesting that firms are more likely to make acquisitions during an economic downturn relative to more positive economic environments. Instead, we argue that firms with greater acquisition experience will reduce their diversifying and/or cross-border acquisitions to a lesser extent than firms with less acquisition experience, since acquisitions are part of the strategic repertoire of more experienced firms (Ocasio, 1995).

Thus, we hypothesize the following:

H3. Acquisition experience will have a more positive relationship with the likelihood of diversifying acquisitions during an economic downturn, relative to prior to the downturn.

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#### 3. Methods

#### 3.1 Sample and data collection

The empirical analysis is performed on 385 acquisitions made in Italy in the period 2007-2010. We focus on the acquisitions falling under the control of the *Autorità Garante della Concorrenza e del Mercato* (the Italian Antitrust), which monitors acquisitions that involve at least one Italian company and that may significantly reduce competition within an industry, resulting in excessive concentration (law no. 287, October 10, 1990). Specifically, acquisitions resulting in the creation of a corporation with total revenues greater than a specific threshold (from November 2011 the limit is 468 million Euros) are subject to authorization by the *Autorità Garante della Concorrenza e del Mercato*. Due to this reporting threshold, our focus is therefore on larger deals. We computed a list of the acquisitions falling under such control from the weekly bulletins published by the Italian Antitrust.

Our analysis covers the acquisitions involving industrial (either manufacturing or service) companies. Acquisitions made by financial investors, such as banks and venture capital funds were therefore excluded. In addition, in order to have a homogeneous sample, we focus on acquisitions in which the acquiring firm took the full control of the acquired business, thus excluding joint ventures and acquisitions of company branches.

Following these criteria, we had an initial list of 410 acquisitions. Data on acquiring and acquired firms, including size, industry (NAICS 4-digit codes), and financial information, were then collected from ORBIS, the database produced by Bureau van Dijk Electronic Publishing. Since financial data were missing for 25 acquisitions, the final dataset consists of 385 acquisitions.

The period 2007-2010 is appropriate to investigate the relationship between firmlevel factors and acquisition behavior prior to and during an economic downturn. In fact, the four years 2007-2010 can be split into two equal 24 months periods: 2007-2008 and 2009-2010. The latter can be considered as a period of "economic downturn," corresponding to the global recession that recently affected the economies of a number of countries, including Italy. Hence, 2007-2008 corresponds to the "predownturn" period. The choice of the end of 2008 as cut-off between the two periods is consistent with the analysis of the Banca d'Italia, according to which the first half of 2008 the macroeconomic scenario started to show weakness signals, but the effects on real economy were still modest (Caivano et al., 2010). Other sources also indicate the last quarter of 2008 as time when the dramatic effects of the downturn started in Europe (European Social Watch Report, 2010). In addition, it is worth noting that implementing an acquisition strategy takes time. It is therefore reasonable to assume that the acquisitions authorized by the Antitrust in the later 2008 were planned when the economic downturn had not yet affected real economy substantially. However, we also used different cutoffs to assess the sensitivity of the results (discussed below).

#### 3.2 Variables and measures

Dependent variable. The type of acquisition is the dependent variable of the study. We classify acquisitions into three categories: domestic non-diversifying; domestic diversifying; and cross-border. It is worth noting that the numbers assigned are not

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relevant, since there is no order among the three types of acquisitions. What is relevant is that they represent mutually exclusive categories.

In cross-border acquisitions either the acquirer or the acquired business is not Italian. Industrial classification codes are commonly used to capture diversification (Christensen and Montgomery, 1981; Palepu, 1985; Wang and Zajac, 2007). In line with this tradition, we use the NAICS codes of acquiring and acquired firms to assess the diversifying versus non-diversifying nature of the acquisitions: an acquisition is categorized as "diversifying" if acquiring and acquired firms are in different industries, defined at the two-digit NAICS code level. The sample is distributed as follows: 110 domestic non-diversifying acquisitions, 150 domestic diversifying acquisitions, and 125 cross-border acquisitions. 94 out of 125 cross-border acquisitions are made at regional level, i.e. within the European Union (EU), and only 31 deals involve companies outside the EU[1].

Focal variables. Firm acquisition experience and organizational slack are the two explanatory factors around which our hypotheses are developed. Acquisition experience is the sum of recent acquisitions undertaken by the firm (Ellis *et al.*, 2011; Hayward, 2002; Porrini, 2004), namely in the three years before the year of the deal. Therefore, we also collected retrospective data on 2004, 2005, and 2006, in order to measure acquisition experience.

Similar to prior research (Bromiley, 1991; Chen and Miller, 2007), we use multiple measures of slack. The first measure is available slack, calculated as current assets divided by current liabilities (acquirer current ratio). The second measure is to potential slack or unabsorbed slack, calculated as the reverse of the debt-to-equity ratio (acquirer debt/equity – reverse).

The effect of the economic downturn is captured through a dummy variable (economic downturn), which assumes value 1 if the acquisition is made in the period January 2009-December 2010, 0 if the acquisition is made in the period January 2007-December 2008 (pre-downturn period). As a result of this cutoff, 203 acquisitions fall in the period January 2007-December 2008 (prior to economic downturn); 182 in the period January 2009-December 2010 (economic downturn).

Control variables. We control for firm size (both acquiring and acquired firms), acquirer diversification, and acquirer performance. Firm size is measured for both the acquiring and the acquired firm by the logarithm of firm sales in the year in which the acquisition took place (acquirer size and target size). Since a firm may tend to replicate strategies previously pursued (Amburgey and Miner, 1992), we control for the diversification profile of the acquirer (Park, 2002), i.e. whether the acquirer is product diversified or not. The acquirer diversification is a dummy variable, which takes value 1 if the acquirer has registered more than one NAICS code (diversified acquirer), or value 0 if the acquirer has registered only one NAICS code (single-business acquirer). In addition, we control for the acquirer performance, measured by return on equity, to control for possible performance-related effects, as suggested by Park (2002).

Finally, we control for industry effects. On the basis of NAICS data on sectors, acquirers were split into two groups depending on whether they operate in service industries or not. We therefore control for the difference of service industries compared to the others through a dummy variable – service – which takes value 1 if the acquirer is in service industries, 0 otherwise.

#### 3.3 Econometric analysis

To test our hypotheses, we used a multinomial logit method because our dependent variable takes discrete values that are not ordered, but represent mutually exclusive



Table I provides the descriptive statistics and the correlations for the variables in our model.

Table II reports the multinomial logit estimates. Two models were estimated. Model 1 included the main effects (focal and control variables), and Model 2 added the three interaction terms Economic downturn  $\times$  acquisition experience, economic downturn  $\times$  acquirer current ratio, and economic downturn  $\times$  acquirer debt/equity.

## 4. Results and discussion

#### 4.1 Results

H1 predicts that slack will have a more positive relationship with the likelihood of diversifying acquisitions during an economic downturn, relative to prior to the downturn. This suggests a positive interaction effect between our organizational slack measures and the indicator variable for economic downturns. In column 2a of Table II, the interaction effect with current ratio is positive but not significant. The interaction effect with the debt/equity ratio is positive and marginally significant (p < 0.10). Thus, H1 is partially supported.

In terms of our second hypothesis, H2 predicts that slack will have a more positive relationship with the likelihood of cross-border acquisitions during an economic downturn, relative to prior to the downturn, again suggesting a positive interaction effect. In column 2b of Table II, the estimated coefficient for the interaction between economic downturn and current ratio is positive and significant (p < 0.05). The interaction coefficient for debt/equity is also significant and positive (p < 0.05). Thus, H2 is supported.

Similarly, acquisition experience was hypothesized to have a more positive relationship with the likelihood of diversifying (H3) and cross-border acquisitions (H4) during an economic downturn, relative to more positive economic conditions – suggesting positive interaction effects. In column 2a of Table II, the interaction between economic downturn and acquisition experience is positive and significant (p < 0.01), supporting H3. In column 2b, the interaction effect of acquisition experience and economic

Variables	Mean	SD	1	2	3	4	5	6	7	8	9
4 m 4 1 1 1 1	0.04	. =0									
1. Type of acquisition	2.04	0.78									
2. Acquisition experience	1.10	2.25	0.01								
3. Acquirer current ratio	1.21	0.51	0.13*	-0.02							
4. Acquirer debt/equity (reverse)	96.73	3.26	0.04	0.04	0.08						
5. Acquirer size	21.59	1.99	0.24*	0.11*	-0.03	0.06					
6. Target size	15.07	4.56	0.01	0.01	-0.004	0.002	-0.23*				
7. Acquirer diversification	0.41	0.49	0.28*	0.21*	0.02	0.07	0.32*	0.02			
8. Acquirer performance	9.60	15.75	0.27*	0.14*	0.02	-0.03	0.09	0.01	0.33*		
9. Service	0.54	0.49	0.03	0.01	-0.08	-0.05	-0.30*	-0.01	-0.002	-0.11*	:
10. Economic downturn	0.47	0.50	-0.13*	0.10*	-0.12*	-0.05	0.04	-0.10	0.05	-0.19*	0.10

Table I.

Descriptive statistics and correlation matrix

**Notes:** n = 385; \*p < 0.05



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Table II.
Coefficient estimates
for the multinomial
logit model

	Model 1	Dependent variable:	Dependent variable: type of acquisition	Model 9
	Diversifying acquisitions (1a)	Cross-border acquisitions (1b)	Diversifying acquisitions (2a)	Cross-border acquisitions (2b)
Acquisition experience	0.15 (0.06)**	-0.13 (0.09)	-0.15 (0.12)	-0.31 (0.13)**
Acquirer current ratio	-0.57 (0.33)*	0.75 (0.26)***	$-0.51\ (0.42)$	$0.76\ (0.31)**$
Acquirer debt/equity (reverse)	0.003 (0.04)	0.03 (0.04)	-0.14(0.10)	-0.15(0.10)
Acquirer size	-0.07 (0.08)	0.43 (0.09)***	-0.04(0.09)	0.44 (0.10)**
Target size	-0.06 (0.03)**	0.07 (0.04)*	-0.06 (0.03)*	0.07 (0.04)*
Acquirer diversification	0.57 (0.34)*	0.77 (0.34)**	0.50 (0.35)	0.85 (0.35)**
Acquirer performance	-0.01 (0.01)	0.06 (0.01)***	-0.01(0.01)	0.05 (0.01)**
Service	1.81 (030)***	0.95 (0.33)***	1.97 (0.32)***	1.06 (0.34)**
Economic downturn	-0.49 (0.29)*	-0.53 (0.32)*	-21.62 (11.88)*	-51.16(14.99)**
Economic downturn × acquisition experience			0.50 (0.16)***	0.36 (0.19)*
Economic downturn × acquirer current ratio			0.63 (0.73)	1.44 (0.73)**
Economic downturn $\times$ acquirer debt/equity (rev.)			0.21 (0.12)*	0.50 (0.15)**
Constant	2.13 (4.40)	-15.29 (4.88)***	-15.09 (9.60)	2.16 (9.74)
n	385		ಣ	385
22	190.21***	*	219.6	219.99***
Pseudo $R^2$	0.23		0	0.26

Notes: Baseline category: domestic non-diversifying acquisition. Standard errors are in parentheses. Significance levels: \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01

downturn is positive and significant (p < 0.10), providing marginal support for H4. Note that for all of these interaction effects we plotted the relationships to visually confirm our interpretations. However, we did not include these figures for space limitations, but they are available upon request.

We performed additional analysis to assess the robustness of our findings. We examined alternative cutoff dates for the start of the economic downturn. The use of June 2008 and September 2008 as alternative cutoffs to define pre-economic downturn and the downturn periods does not alter the focal relationships. In spite of the different levels of statistical significance of a few variables, the patterns of findings were similar to those presented here, thus supporting the robustness of our analysis to varying cutoff points.

#### 4.2 Discussion

Behavioral theory suggests that organizational slack would facilitate diversifying and cross-border acquisitions as a result of slack search during favorable economic conditions. We argue this role of slack is even more critical during downturns due to the financial demands of acquisitions and the financial constraints that exist during a downturn. Our arguments were supported for cross-border acquisitions for both measures of slack, and for only the debt/equity measure of slack for diversifying acquisitions. These findings suggest that the availability of financial resources has an important influence on acquisition behavior. Firms with greater slack were more likely to make diversifying and/or cross-border acquisitions compared to domestic non-diversifying acquisitions during the economic downturn, than firms with lower levels of slack. Furthermore, it appears these excess resources were more critical during the downturn than during more favorable economic conditions. Slack may encourage taking on riskier acquisitions (Wan and Yiu, 2009).

In terms of acquisition experience, it appears the firms with greater acquisition experience were more likely to make diversifying and/or cross-border acquisitions compared to domestic non-diversifying acquisitions than firms with less experience during an economic downturn. This suggests that acquisition experience is particularly salient during challenging economic times, where firms appear to utilize actions in their strategic repertoire to a greater extent (Ocasio, 1995).

# 4.3 Implications for research and limitations

As Zona (2012) noted, behavioral theory has focussed on periods of economic stability. For example, Sanders (2001) explores a behavioral perspective on acquisition behavior during economically stable times. We provide an extension of behavioral theory into another research domain – acquisition behavior across varying economic conditions. Our results complement the findings of Zona (2012), who found support for a positive link between slack and innovation investment during crisis times. Acquisitions and innovation represent two different types of investments. Zona (2012) focussed on the annual change in corporate innovation investments in general, which are likely to represent a smaller scale individual investment. Meanwhile, acquisition transactions, particularly in the ones in our sample, represent substantial investments that immediately change the boundary of the firm's activities. Such large transactions require a great deal of financial resources (Wan and Yiu, 2009). Thus our findings extend behavioral theory (Cyert and March, 1963) tenets to acquisition behavior, highlighting the crucial role of organizational slack, particularly during challenging economic times. In addition, we extend the findings of Wan and Yiu (2009). Wan and Yiu (2009) examine the performance

of acquisitions during an environmental jolt, including the role of slack. Rather than look at performance, we are exploring the type of acquisition pursued by firms across varying economic conditions, providing a more complete understanding of the role of slack and acquisition behavior in different environmental contexts.

Our findings also provide support for the threat-rigidity hypothesis (e.g. Ocasio, 1995; Staw *et al.*, 1981), extending the domain of the threat-rigidity hypothesis to include acquisition experience. Our research suggests that acquisition experience can serve to incorporate acquisitions into the firm's strategic repertoire (Ocasio, 1995), and this repertoire is utilized during both favorable and challenging economic conditions. When faced with the combined factors of an extremely challenging economic environment, and the increased risk of diversifying and/or cross-border acquisitions, firms may reduce their use of certain elements of their strategic repertoire that are more risky in nature. However, experienced firms were more likely to tap into their strategic repertoire and continue pursuing such diversifying and cross-border acquisitions during the economic downturn, to a greater extent than less experienced firms.

This research project is not without limitations. First, data limitations on Italian firms constrained our ability to use finer grained measures of diversification and cross-border acquisitions. For example, we were not able to obtain sufficient detailed information to calculate the change in diversification levels and change in geographic scope. Furthermore, our ability to include additional control variables, such as other forms of slack or the financing of the transaction, was limited by data constraints. Future research could use alternative measurement approaches, such as primary data collection, to corroborate our findings. Third, due to the nature of our data source, our sample was focussed on large transactions in Italy. We were unable to examine smaller acquisition transactions. Furthermore, we were unable to compare the effects on acquisition behavior inside the EU relative to outside the EU. Future research can examine the generalizability of our findings to other geographic regions and/or smaller acquisitions.

#### 5. Conclusions

The primary goal of the present study was to explore how organizational slack and acquisition experience impacted acquisition behavior across varying economic conditions. We focus on the nature of acquisitions, i.e. the likelihood of firms making diversifying and/or cross-border transactions. We found that both organizational slack and acquisition experience play a critical role in influencing the type of acquisitions, particularly during an economic downturn. For managers involved in acquisitions, our research indicates that experience enhances managers' confidence in their capabilities of making riskier acquisitions, such as cross-border and diversifying acquisitions, compared to domestic non-diversifying ones, thus demonstrating the importance of the learning processes associated with acquisitions. In addition, a greater availability of financial resources may facilitate the pursuit of somewhat riskier acquisitions.

This study extends the applicability of behavioral theory and the threat-rigidity hypothesis to varying economic conditions. We are able to test the boundary conditions of these theories in the context of two key organizational factors. In addition, we respond to Cartwright and Schoenberg (2006) who note: "[...] the M&A literature continues to be dominated by financial and market studies, with a high concentration of interest in the USA and UK" (p. 1). We provide evidence on Italian firms, a context that has received much less attention. In conclusion, this study furthers our

Acquisition behavior

## Note

1. Due to the limited number of observations outside of the EU, we could not control for the differences (if any) associated with the global vs regional nature of the acquisitions.

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