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FINANCIAL CRISIS AND CORPORATE DIVERSIFICATION:

EVIDENCE FROM ACQUISITIONS IN ITALY 2007-2010

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Abstract

The recent financial crisis has led to a great level of environmental uncertainty and dramatically affected managers' expectations and firms' corporate strategies, including their acquisition moves. Building on a sample of 385 acquisitions in Italy in the period 2007-2010, the paper addresses the question whether and to what extent the financial crisis has influenced firms' acquisition behaviors. In particular, the study aims at exploring the relationship between financial crisis and the firm's decision to diversify through acquisitions. Empirical evidence shows that in crisis times acquisitions characterized by null or related corporate diversification prevail: firms are more likely to focus on their core business or related ones. In addition, other factors like firm acquisition experience and internationalization moderate the effect of financial crisis on diversifying acquisitions: During financial crisis firms rely more on their previous acquisition experience in order to explore new, unrelated businesses through acquisitions. In addition, in times of financial crisis internationalization and diversification tend to be complements, rather than substitutes: compared to domestic ones, cross-border acquisitions are more likely to be associated with diversification goal.

Keywords: acquisitions; diversification; financial crisis

JEL Classification: M1; G34; L25

1. Introduction

Acquisitions represent an important vehicle for implementing corporate strategies, such as diversification, vertical integration, internationalization, and have been studied from different perspectives (financial, strategic, organizational, economic). Literature has also largely focused on mergers and acquisitions (M&As) performance, showing mixed results (Datta *et al.*, 1992; Cartwright and Schoenberg, 2006). Only a few studies, however, focus on the role of the environmental context and explore the link between environmental characteristics and M&As (Mitchell and Mulherin, 1996; Harford, 2005; Wan and Yiu, 2009). The relationship between environmental factors and strategic outcomes is a crucial area of investigation for strategic management scholars. Among environmental characteristics, economic and industry shocks or environmental jolts play an important role in affecting firms' strategic choices. Since the second half of 2008, the global financial crisis has deeply affected corporate strategies, including firms' patterns of growth and acquisition behaviors: for example, the number and the value of deals realized during the financial crisis have decreased vis-à-vis those of the previous period (KPMG, 2009). A financial crisis can be considered as an example of environmental jolt.

The recent financial crisis has led to a great level of uncertainty. This, in association with the credit crunch, has dramatically changed the expectations of managers and their confidence in the future. It is therefore interesting to analyze the relationship between the financial crisis and the pursuit of specific corporate strategies. This paper aims at contributing to the literature on the relationship between environmental jolts and firm strategies, by analyzing the implications of financial crisis on firm strategic choices, in terms of propensity to diversify *versus* focus on the core business. We address the following questions: Does financial crisis affect acquisition behaviors and in particular, the decision to diversify through acquisitions? Do drivers of acquisitions, such as firm acquisition experience and financial resources, affect firm acquisition behavior in a different way in crisis times?

2. Theoretical Background and Hypotheses

Diversification is a corporate strategy aimed to risk reduction by the investment in a variety of markets, products, technologies (Hitt *et al.*, 2001). Studies on diversification show that profitability tends to be higher when a related diversification is realized, as opposed to unrelated diversification (Rumelt, 1974; Christensen and Montgomery, 1981; Montgomery and Wernerfelt, 1988; Ramanujam and Varadarajan, 1989). On the contrary, risk tends to be lower in diversified firms compared to undiversified firms (Pandya and Rao, 1998).

Diversification benefits are difficult to obtain because of the uncertainty related to firm growth in totally or partially unknown environments (new geographical markets, technological environment, industries, etc.).

Diversification has been associated to the idea of exploration. An organization's long-term success depends on its ability to exploit its current capabilities while simultaneously exploring new competences (Levinthal and March, 1993; March, 1991). From this perspective, exploitation behavior turns into acquisitions within the same (or related) business while exploration behavior leads to acquisitions for diversification.

2.1 The effect of financial crisis on acquisitions for diversification

An economic crisis (or environmental jolt) in a firm's market can cause unpredictable, fundamental downward shifts in the level of demand and in the relative costs of inputs, thus pushing firms to adjust or even to radically reconfigure their value chains in response to new environmental threats. The likelihood of such a threat occurring is mostly unknown to the firm, making it difficult to understand in advance how to configure its current investments in order to respond to that threat. Researchers have noted that successfully competing in markets characterized by such instability requires resources, capabilities, and strategies that are inherently different from those that are likely to lead to success in more stable markets (Bowman and Hurry, 1993; Kogut and Kulatilaka, 2001). In particular, a firm having the flexibility to respond advantageously to unanticipated adverse changes in its environment will be better off than a firm locked into a single course of action (March, 1991).

An environmental jolt dramatically alters the level of environmental munificence (Wan and Yiu, 2009), i.e. the level of resources available in an environment. Existing firm strategies may result ineffective due to the shocks in the environment (Meyer *et al.*, 1990).

From the resource-based view (Penrose, 1959; Wernerfelt, 1984) and dynamic capabilities (Teece *et al.*, 1997) perspective, corporate acquisitions during an environmental jolt can be viewed as a way to alter firms' resources and capabilities in order to better adapt to the changing environment. Karim and Mitchell (2000) argue that corporate acquisitions offer firms opportunities to reconfigure their businesses by deepening their existing resource bases and obtaining different resources and capabilities. They show that firms that pursue acquisitions are more likely to change and survive than those that do not.

When the environmental conditions change, firms have to change, too, in order to pursue the fit between organization and external environment (Chattopadhyay *et al.*, 2001). Hill and Hansen (1991) show that in periods of economic adversity firms diversify to unrelated areas in order to reduce business risk. However, in case of high perceived ambiguity of environmental changes as it happens in financial crisis times, firms are likely to perceive them as threatening and consequently tend to be conservative and hesitate to modify their strategy (Amburgey and Miner, 1992). Focusing on the core business could be a more affordable strategy as existing knowledge (on products, markets, and technologies) can be more easily exploited and used to compete.

In crisis periods exploitation therefore has a tendency to drive out exploration because people resist risky experimentation (Levinthal and March, 1993; Benner and Tushman, 2003). Firms prefer to exploit experience in their core businesses. As a result, acquisitions of firms in the same industry prevail and propensity to diversify into new, unrelated businesses through acquisitions is lower.

Hypothesis 1. In times of financial crisis, the likelihood of acquisitions for unrelated diversification is lower than in times of no financial crisis.

2.2 Financial crisis, firm acquisition experience and acquisition for diversification

Previous experience affects the use of acquisitions for diversification. Firm initially requires relatively homogeneous experience (within the same industry) to foster learning. The increasing expertise then serves as a springboard, enabling the firm to learn from a wider variety of acquisitions, and thus, to develop a more widely applicable acquisition capability (Barkema and Schijven, 2008). In related diversification, the acquirer can exploit more appropriate experience from one target to another as firms in the same industries share a number of similarities in terms of expertise, culture, business practices. Relatedness plays an important role in such cases, as it allows firms to share resources and capabilities.

Firms with less acquisition experience are more likely to avoid uncertainty arising from new arenas and diversify only when they gain greater experience and knowledge of the acquisition process. If the acquisition takes place in another industry, firms must rely on their ability to infer past experiences into new scenarios. Evidence suggests that firms typically acquire organizations from other industrial environments to explore new opportunities (Haleblian and Finkelstein, 1999). Acquisition experience contributes to explore unrelated businesses. Therefore, the greater the acquisition experience, the greater the likelihood of making acquisitions for diversification into less related businesses.

From a resource-based perspective (Wernerfelt, 1984), the main argument behind this hypothesis is that acquisition competences are not industry-specific. Learning outcomes derived from past acquisitions turn into a meta-competence that can be exploited beyond a specific industry.

In crisis times, the impact of firm acquisition experience is reasonably even higher: given the greater level of environmental uncertainty, firms rely more on their acquisition experience to enter new businesses through acquisitions. We can argue that acquisition experience mitigates the negative relationship between financial crisis and diversifying acquisitions: firms with higher acquisition experience perceive greater confidence in their capability of implementing successfully a diversification strategy through acquisitions. The following hypotheses can therefore be formulated:

Hypothesis 2. Acquisition experience moderates the relationship between financial crisis and diversifying acquisitions: for higher levels of firm acquisition experience the negative relationship between financial crisis and acquisitions for unrelated diversification is weaker.

2.3 Financial crisis, international acquisitions and acquisitions for diversification

Internationalization and diversification are two main growth options for firms (Geringer *et al*., 1989; Sambharya, 1995). They are generally considered as substitutes (Wolf, 1977; Rondi *et al*., 2004; Iversen and Larsson, 2011). Grant *et al*. (1988) reveal a negative relationship between product diversity and geographic diversity in a sample of British enterprises. In their very recent study on business groups from emerging markets, Kumar *et al.* (2012) show that there is a trade-off between strategies of product diversification and international expansion.

However, crisis times may offer greater unexpected growth opportunities in the international market. In period of economic and financial adversity, a greater number of firms may experience difficulties. Financial crisis generally leads to the under-evaluation of some firms, which may therefore become potential targets for acquiring firms. More 'shopping' opportunities, in terms of possible takeover of firms, may arise from financial crisis and drive large multinational firms, in particular, to seize business opportunities at regional or global level. We can therefore argue that international acquisitions are more likely than domestic acquisitions to be associated with the strategic objective of capturing business opportunities in new, unrelated businesses.

Hypothesis 3. International expansion moderates the relationship between financial crisis and diversifying acquisitions: the negative relationship between financial crisis and acquisitions for unrelated diversification is weaker for international acquisitions than for domestic acquisitions.

2.4 Financial crisis, firm financial resources and acquisitions for diversification

Abundant financial resources are considered as a key factor affecting acquisition behavior (McNamara *et al.*, 2008; Wan and Yiu, 2009). Financial resources are the most flexible of all firm resources as they can be used to buy any type of asset or resource (Chatterjee and Wernerfelt, 1991). Greater availability of financial resources is associated to higher level of unrelated diversification (Park, 2002). The credit crunch has been one of the most remarkable effects of recent financial crisis. As a result, the availability of financial resources to the industrial system has dramatically decreased. We can expect that in crisis times firms' financial resources play an even more crucial role compared to times of no financial crisis in affecting the pursuit of unrelated diversification strategies. The following hypothesis can be therefore formulated:

Hypothesis 4. Financial resources moderate the relationship between financial crisis and diversifying acquisitions: the negative relationship between financial crisis and acquisitions for unrelated diversification is weaker for firms with larger financial resources.

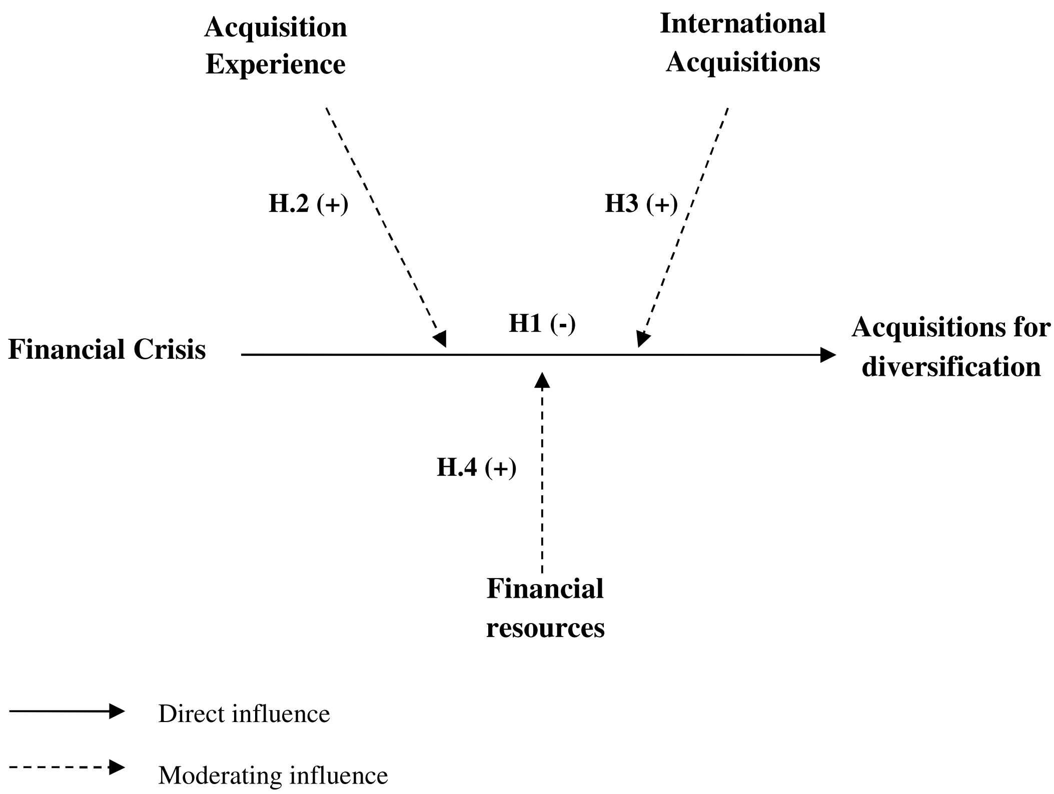
The hypotheses are shown in figure 1.

3. Methods

3.1 Research Setting, Sample, and Data Collection

The empirical analysis was carried out on 385 acquisitions in Italy in the period 2007-2010, with at least one Italian firm involved, as either acquiring or acquired firm. The starting point of our data collection was the database of the acquisitions falling under the control of the *Autorità Garante della Concorrenza e del Mercato* (the Italian *Antitrust).* Italian regulation on industrial concentration (law n. 287, 10th October 1990) states that all the acquisitions that may significantly reduce competition within an industry, resulting in excessive concentration, are to be communicated and authorized by the *Autorità Garante della Concorrenza e del Mercato*. Particularly, the 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) fall under this control. As we focus on acquisitions involving industrial (either manufacturing or service) companies, we excluded acquisitions made by financial investors, such as banks and venture capital funds.

Figure 1 Financial Crisis and Acquisition for Diversification: The Model



In addition, we focused on acquisitions resulting in the acquirers' exclusive control over the acquired businesses. This criterion was necessary in order to have a homogeneous sample of operations. Accordingly, joint ventures and acquisitions of company branches were excluded.

Shortly, we impose the following criteria for selecting the acquisitions:

- Acquisitions made by industrial companies in the period 2007-2010;
- Acquisitions in which at least one Italian company is involved (either acquiring or acquired firm);
- Acquisitions in which the acquirer takes the full control of the acquired business.

The number of acquisitions matching our criteria is 413, distributed as follows: 98 in 2007; 117 in 2008; 103 in 2009; 95 in 2010.

Additional data on acquiring and acquired firms, including size, industry (NAICS 4-digit codes) and financial information, were collected from ORBIS, the database produced by *Bureau van Dijk Electronic Publishing*, including financial data on over 50 million corporations on a worldwide basis. We also collected a number of retrospective data on 2005 and 2006. Financial data were missing for 28 acquisitions. The final dataset consists of 385 acquisitions.

In order to test the effects of financial crisis, we need a sample of acquisitions covering two periods: pre-crisis and crisis. Specifically, the four years 2007-2010 can be split into two equal 24-months periods: 2007 and 2008 can be considered as the pre-crisis time, while 2009 and 2010 fall into the crisis time. The choice of the end of 2008 as cut-off between the two periods has been made taking into account when the financial crisis started to produce significant effects on real economy and, consequently, on firms' strategic behaviors, which are at the core of our study. This view is supported by the analysis of the *Banca d'Italia*, which reports that in the first half of 2008 the macroeconomic scenario started to show weakness signals. However, the effects on real economy were still modest (Caivano *et al.*, 2010). In addition, we need to take into account that implementing an acquisition strategy takes time and the acquisitions realized until the second half of 2008 were most probably planned previously, when financial crisis had not yet affected real economy substantially. We can reasonably suppose that the acquisitions authorized by the Antitrust in the later 2008 resulted from firm strategies that were formulated in the pre-crisis times: 203 acquisitions fall in the period January 2007 – December 2008 (pre-crisis); 182 in the period January 2009 – December 2010 (crisis).

3.2 Variables and Measures

Dependent variable. The degree of diversification associated with the acquisition is the dependent variable of the study. We operationalize diversification on the basis of NAICS codes of acquiring and acquired firms, consistently with previous research on diversification (e.g., Hitt *et al.*, 1997; Kim *et al.*, 1989; Palepu, 1985), which used the Standard Industrial Classification (SIC) codes to distinguish related from unrelated product diversification. The variable DIVERS can assume values 0, 1 or 2 on the basis of the differences/similarities in their 4-digit NAICS codes (Table 1). This variable can be interpreted as extent of unrelated diversification, ranging from '0' (no diversification) to '2' (highest degree of unrelated diversification).

Table 1 Variables and Measures

Variable	*Label*	*Measure*
		Dependent variable
Degree of diversification	DIVERS	= 0 if acquiring and acquired firms are in the same industry, defined at the three-digit NAICS code level = 1 if acquiring and acquired firms are in the same macro-industry, defined at the one-digit NAICS code level; = 2 otherwise
		Independent variable
Crisis	CRISIS	Dummy = 1 if the acquisition is made in the period January 2009- December 2010 (crisis times) = 0 if the acquisition is made in the period January 2007-December 2008 (pre-crisis times)
		Control variables
Firm acquisition experience	EXPERIENCE	Number of acquisitions made by the firm in the three previous years
Crossborder acquisition	CROSSBORDER	Dummy = 1 in case of international acquisitions (either the acquiring or acquired company are foreign firms) = 0 otherwise (domestic acquisition)
Financial resources	FIN_RES	Cash flow / turnover (last annual report of the acquirer)
Acquired firm size	ACQUIRED_SIZE	Revenues of the acquired firm (log-transformed)
Acquired firm size	ACQUIRING_SIZE	Revenues of the acquiring firm (log-transformed)
Industry dummies		
Energy & Construction	ENER	Dummy = 1 if the acquirer is in the energy or construction industry (NAICS 1-digit = 2) = 0 otherwise
Trade & Transportation	TRADE	Dummy = 1 if the acquirer is in trade or transportation industry (NAICS 1-digit = 4) = 0 otherwise
Service	SERVICE	Dummy = 1 if the acquirer is in the service industry (financial, real estate, media, professional services) (NAICS 1-digit = 5) = 0 otherwise
Other sectors	OTHERS	Dummy = 1 if the acquirer is in the industries NAICS 1-digit = 1, 6, 7, 8 = 0 otherwise

This set of dummies (ENER, TRADE, SERVICE, OTHERS) captures the differences compared to manufacturing industry)

Specifically, DIVERS is:

- 0 if acquiring and acquired firms are in the same industry, defined at the three-digit NAICS code level;

- 1 if acquiring and acquired firms are in the same macro-industry, defined at the one-digit NAICS code level;

- 2 in the remaining cases, i.e. acquiring and acquired firms are in different macro-industry, defined at the one-digit NAICS code level.

Independent variable. The effect of financial crisis is captured through a dummy variable, which assumes value 1 if the acquisition is made in the period January 2009 – December 2010 (crisis period), 0 if the acquisition is made in the period January 2007 – December 2008 (pre-crisis period) (CRISIS). As a robustness check, we also run the analysis using June 2008 instead of December 2008, as cut-off point to indicate the beginning of crisis times.

Control variables. In the empirical analysis, we test the moderating effect of firm acquisition experience, international acquisitions, and financial resources on the relationship between crisis and acquisitions for unrelated diversification. We therefore control also for the main effect of these three variables.

Firm acquisition experience is the sum of recent acquisitions undertaken by the firm (Hayward, 2002), namely in the three years before the year of the deal (EXPERIENCE). For example, if the firm acquires a business in 2007, its acquisition experience is measured as sum of the acquisitions made in 2004, 2005, and 2006. Therefore, we also collected retrospective data on 2004, 2005 and 2006, in order to measure acquisition experience.

To control for the difference between domestic and international acquisitions (either the acquirer or the acquired business is not Italian), we use a dummy variable - CROSSBORDER – where 1 is the case of international acquisitions, 0 is the case of domestic acquisitions.

The acquirer's amount of financial resources (FINRES) is measured by the ratio between cash flow and turnover, consistently with other studies (Davis and Stout, 1992; Wan and Yiu, 2009).

We also control for firm size, which is measured for both acquiring and acquired firm by the logarithm of firm sales in the year in which the acquisition took place (ACQUIRING_SIZE and ACQUIRED_SIZE).

Finally, we control for industry effects. On the basis of NAICS data on sectors, acquirers were clustered in five groups: manufacturing, energy and construction, trade and transportation, service (financial, real estate, media, professional services) and others. Four dummies were therefore introduced – ENER, TRADE, SERVICE, OTHERS – in order to analyze the differences compared to the manufacturing industry, which is used as baseline.

4. Results and Discussion

Table 2 provides an overview of the differences in acquisitions between pre-crisis and crisis times. We compare 'pre-crisis' and 'crisis' times using the t-tests for the differences between the means of the main variables included in the study in the two periods.

Table 2 'Pre-Crisis' and 'Crisis' Times: A Comparison

	'Pre-crisis' (1) ***(mean)***	**'Crisis' (2)** ***(mean)***	***Difference*** ***Mean (1) – Mean (2)***
DIVERS	1.17	.86	.31**
CROSSBORDER	.41	.26	.15**
EXPERIENCE	.89	1.35	-.46*
FINANCIAL RESOURCES	11.21	4.24	6.97**
ACQUIRING_SIZE (Sales – million Euros)	10,500	14,700	-4,200†
ACQUIRED_SIZE (Sales - million Euros)	86.5	50.2	36.3

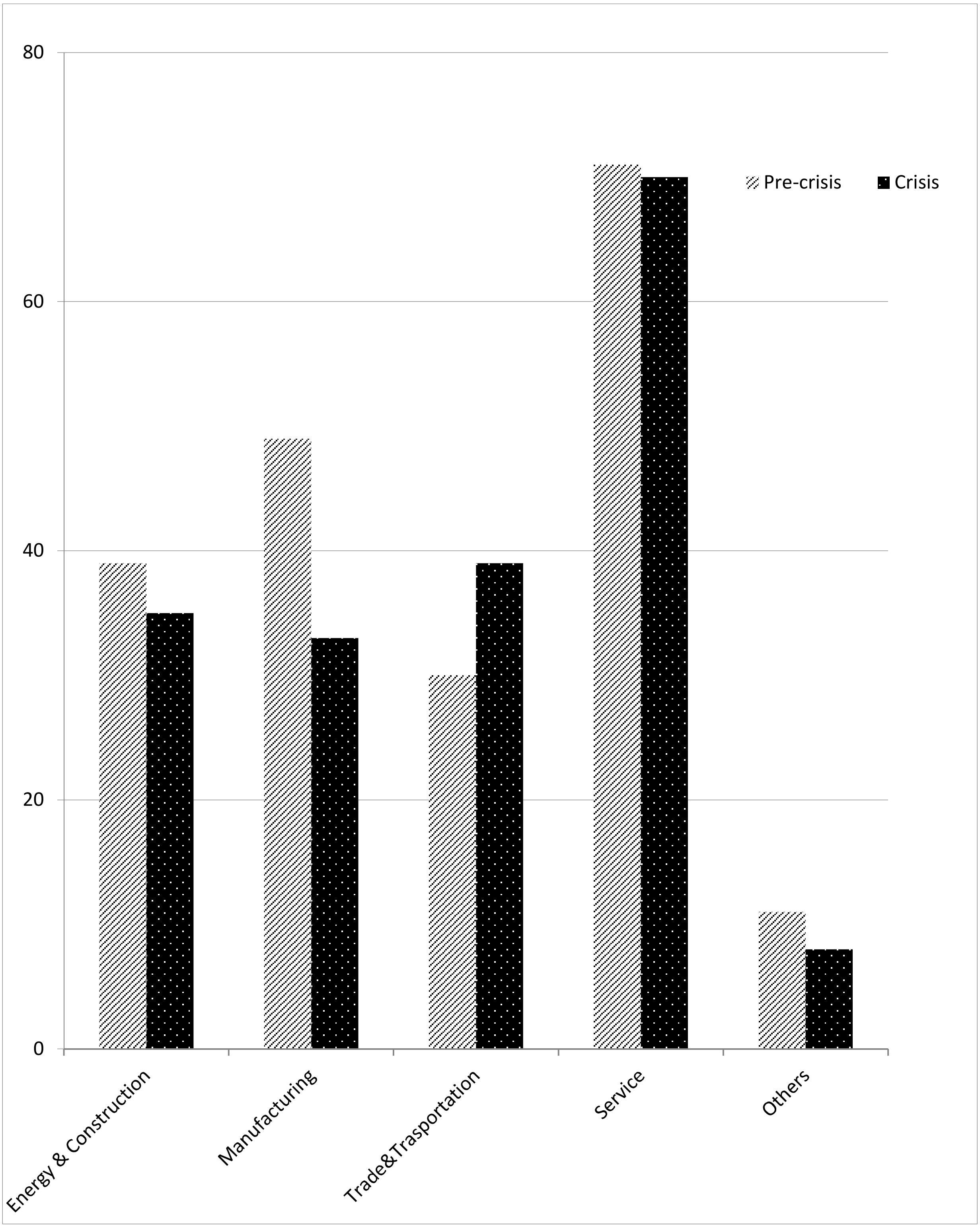
†p < .1; *p < .05; **p < .01

In times of financial crisis the number of acquisitions for unrelated diversification significantly decreases: the mean level of the variable DIVERS goes from 1.17 to .86 ($p < .01$). Similarly, the number of international acquisitions decreases ($p < .01$).

Firm acquisition experience differs in the two periods, increasing in crisis time (from .89 to 1.35, $p < .05$). This signals that in periods of crisis, on average more experienced firms engage in acquisitions.

As regards the size of the acquiring and acquired companies, we notice that in crisis times the average size of the acquirer is bigger ($p < .1$), while the average size of the acquired businesses is smaller even though the difference in the average size of the acquired companies is not statistically significant. Such differences highlight an interesting pattern: in crisis times only larger companies engage in acquisitions, but the value of the deals decreases. Smaller companies tend to become more attractive targets. Figure 2 shows the distribution of the acquisitions in terms of acquirer's industry. The highest number of acquirers is in service industry (70 and 71 acquisitions in pre-crisis and crisis times, respectively). The number of acquisitions by manufacturing firms is lower in crisis times compared to the previous period (from 49 to 33), while the most relevant increase in the number of acquisitions in crisis times comes from trade industry (from 30 to 39).

Figure 2 Sectoral Distribution of Acquisitions



For a preliminary study of the relationships between variables in the model to be estimated, descriptive statistics and the correlation matrix are provided (Table 3).

Table 3 Descriptive Statistics and Correlations

	Variables	Mean	S.D.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1.	DIVERS	1.02	.87	1									
2.	CRISIS[a]	.47	.50	-0.17†	1								
3.	EXPERIENCE	1.10	2.25	0.03	0.10†	1							
4.	CROSSBORDER[a]	.34	.47	0.11	-0.16†	-0.07	1						
5.	FIN_RES	7.92	9.89	0.05	-0.35†	-0.03	0.19†	1					
6.	ACQUIRER_SIZE	12,500[b]	23,500[b]	-0.04	0.04	0.11†	0.33†	-0.09†	1				
7.	ACQUIRED_SIZE[c]	70.2[b]	280[b]	-0.04	-0.16†	-0.09†	0.06	0.14†	-0.27†	1			
8.	ENERG[a]	0.19	0.39	-0.23†	0.0002	0.18†	0.06	0.05	0.34†	-0.17†	1		
9.	TRADE[a]	0.18	0.38	0.01	0.09†	0.17†	-0.05	-0.01	-0.30†	0.04	-0.23†	1	
10.	SERVICE[a]	0.36	0.48	0.25†	0.03	-0.13†	-0.16†	-0.02	-0.08	-0.02	-0.37†	-0.35†	1
11.	OTHERS[a]	0.05	0.22	-0.13†	-0.10†	-0.10†	0.01	0.03	-0.09†	0.03	-0.11†	-0.11†	-0.17†

Notes:

[a] *dummy variable*

† $p < .10$

[b] (million Euros)

[c] Due to missing values, ACQUIRED_SIZE is defined for 353 observations

Regression analyses were run to test the four hypotheses. The dependent variable of the study – type of diversification – is a categorical ordered variable. In accordance with the nature of the dependent variables, ordered probit regressions were used.

Table 4 reports the ordered probit regression coefficients.[1] Continuous independent variables were centred around the mean. Colum 1 shows results when only control variables are included. Column 2 includes the independent variable (CRISIS) and in column 3 we present the full model with the three interaction terms: CRISIS*EXPERIENCE, CRISIS*CROSSBORDER, CRISIS*FINRES. As CRISIS and CROSSBORDER are dummy variables and EXPERIENCE is a count variable with a number of zeros (mean = 1.1), the simultaneous inclusion of both the three interaction terms - CRISIS*EXPERIENCE, CRISIS*CROSSBORDER, CRISIS*FINRES – and the three variables EXPERIENCE, CROSSBORDER and FINRES in the same model is not econometrically appropriate due to the high collinearity between them. The main effects are therefore shown in columns 1 and 2, while the interaction effects are reported in column 3.

Results support hypothesis 1: the negative coefficient on CRISIS confirms our expectation that in times of financial crisis acquisitions for unrelated diversification are less likely: firms focus more on their core business or related ones in their acquisition behavior ($p < .01$).

As far as the relationship between experience and diversifying acquisitions is concerned, our results confirm that firm acquisitions experience favors unrelated diversification (EXPERIENCE, Table 4, Models 1 and 2, $p < .1$ and .05 respectively). These results support the argument that experience provides the firm with acquisition competences, which are not industry-specific. In fact those competences are related to activities such as target firm's selection, due diligence, negotiation capabilities. These can be considered as a meta-competence, which can be exploited beyond industry boundaries. Firms with greater acquisition experience have greater confidence in their capability of seizing business opportunities outside their traditional business and successfully implementing an unrelated diversification strategy. The positive coefficient on the interaction term EXPERIENCE*CRISIS in column 3 confirms hypothesis 2 about the moderating effect of experience on the crisis-diversification relationship: the positive, significant coefficient of EXPERIENCE*CRISIS in column 3 is greater than coefficient of EXPERIENCE (main effect)

[1] Because of 32 missing values on the size of the acquired firms, in the regression results (table 4) we decided to show the models with the higher number of observations. Therefore we do not report the regression results for the variable *Acquired_Size*. However, the *Beta* coefficient of this variable was not statistically significant.

in model 2 (.07 *versus* .06). Acquisition experience mitigates the negative relationship between financial crisis and acquisitions for unrelated diversification.

Table 4 Ordered Probit Estimates: Dependent Variable = Degree of Diversification

Independent variables	*(1)*	*(2)*	*(3)*	*(4)*	*(5)*
Step 1: Control variables					
EXPERIENCE	.05† (1.89)	.06* (2.19)		.05† (1.89)	
CROSSBORDER	.45** (3.12)	.41** (2.83)		.41** (2.85)	
FINRES	.004 (0.68)	-.004 (-0.61)		-.002 (.77)	
ACQUIRING_SIZE	-.02 (-.53)	-.01 (-0.29)	-.001 (.00)	-.01 (-.23)	-.001 (.00)
ENERGY	-0.59**(-2.98)	-.59** (-2.93)	-.57** (-2.91)	-.63** (-3.13)	-.62** (-3.13)
TRADE	.05 (.25)	.13 (.63)	.19 (0.93)	.09 (.45)	.11 (.56)
SERVICE	.51** (3.11)	.57** (3.41)	0.59** (3.55)	.50** (3.03)	.50** (2.98)
OTHERS	-0.67* (-2.10)	-.72* (-2.27)	-0.70* (-2.21)	-.77* (2.42)	-.77* (-2.41)
Step 2: independent variable					
CRISIS		-.50** (-3.77)	-.74** (-4.87)	-.46** (-3.38)	-.67** (-4.23)
Step 3: interaction variables					
CRISIS*EXPERIENCE			.07* (2.25)		.06* (2.01)
CRISIS*CROSSBORDER			.64** (2.98)		.42* (2.31)
CRISIS*FINRES			.01 (.46)		-.002 (-.22)
Number of observations	385	385	385	385	385
LR χ^2	54.49**	68.84**	70.04***	66.00***	63.80***
Log-likelihood	-387.41	-380.24	-296.07	-381.66	-382.76
Pseudo R^2	.066	.083	.085	.080	.08

Notes:

- z-statistics in brackets: †p < .1; *p < .05; **p < .01

- Models (2) and (4) differ for the definition of crisis times: in model (2) crisis times cover the period January 2009-Decembre 2010; in model (4) the period July 2008 – December 2010. The same difference exists between model (3) and model (5).

There is a positive and statistically significant relationship between the likelihood of acquisitions for unrelated diversification and the international nature of acquisitions (CROSSBORDER, Table 4, models 1 and 2, $p < .01$). This result contrasts with the view that internationalization and diversification may be substitutes (Grant *et al*., 1988; Rondi *et al.*, 2004; Kumar *et al*., 2012). International acquisitions are more likely to be associated with the strategic objective of capturing new business opportunities in unrelated fields, rather than of growing in the core business. Hypothesis 3 about the moderating affect of international expansion on the financial crisis-diversification relationship is confirmed. The interaction terms CRISIS*CROSSBORDER is statistically significant (Table 4, Model 3, $p < .01$) and the *Beta* coefficient is higher than the coefficient of CROSSBORDER, which measures the direct relationship between international acquisitions and diversification in Model 2 (.64 versus .41). This finding may be interpreted as signal of the fact that financial crisis not only raises risks, but also generates greater business opportunities, in terms of 'shopping' opportunities, in the international arena. Multinational companies are more likely to seize those opportunities beyond their industrial boundaries and take over other companies, which increasingly become attractive targets in times of financial crisis.

No statistically significant relationship is found between availability of financial resources and likelihood of unrelated diversification. Both the variable FINRES (main effect) and the interaction term (CRISIS*FINRES) are not significant. No support is therefore found for Hypothesis 4 about the moderating effect of financial resources on the crisis-diversification relationship.

The size of the acquirer is not significantly related to the type of diversification associated with acquisitions. Finally, as far as industry differences are concerned, firms in service industry are more likely to pursue unrelated diversification strategies, compared to manufacturing firms, whereas energy companies focus more on acquisitions within their industry rather than on exploring business opportunities outside the energy industry. The importance of economies of scale in energy industry could explain this finding.

A number of analyses were performed to check for the robustness of the results. First, as far as the dependent variable is concerned, we used a binary variable to capture the basic distinction between diversifying acquisitions and acquisitions within the core business, rather than using the three-level measure of the extent of diversification. The results are consistent with those shown in

Table 4[2]. In order to assess the sensitivity of results to the cut-off point used to distinguish between pre-crisis and crisis times, we also run the analysis using July 2008, instead of December 2008, as cut-off point between the two periods. The regression results are reported in Table 4, column 4 and 5. All statistically significant *Beta* coefficients in models 2 and 3 are still significant in models 4 and 5, thus proving the robustness of our findings.

5. Conclusions

Through the analysis of the acquisitions wave in Italy in the period 2007-2010, our study shows that financial crisis negatively affects the likelihood of unrelated diversification. In times of financial crisis firms tend to focus on their core business and are more reluctant to explore new business fields. As a result, acquisitions for unrelated diversification are infrequent if compared to acquisitions within the same business or related ones. However, firms' choices in terms of greater or lower propensity to pursue unrelated diversification through acquisitions are affected by other factors, which moderate the negative relationship between crisis and diversification. In particular, the greater the acquiring firms' acquisition experience, the higher the likelihood of acquisitions for diversification. More experienced firms show greater confidence in their capability of seizing business opportunities outside their core businesses. Acquisition experience therefore mitigates the negative impact of crisis on acquisitions for unrelated diversification, in the sense that as acquisition experience increases, the negative effect of crisis on the likelihood of unrelated diversification decreases.

The results on the relationship between acquisition experience and propensity to unrelated diversification suggest different interpretations. From a resource-based perspective, experience is a firm-specific capability at the basis of the firm's strategy. Acquisition experience enables the firm to acquire skills and capabilities of managing acquisitions processes successfully. On the other hand, we could argue that acquisition behavior may result in an organizational routine, which drives a firm's strategic behavior, regardless of the strictly economic assessment of the business opportunity associated with an acquisition. From this perspective, acquisition choices could result from organizational routines consolidated over time and therefore do not necessarily

[2] Estimates of the parameters are available from the authors.

lead to greater performance. There might be a number of 'serial acquirers' who follow a pattern of multiple acquisitions over time as they tend to replicate their previous acquisition decisions.

In addition, empirical evidence shows a positive relationship between international acquisitions and acquisitions for diversification, suggesting that international diversification and product diversification are complements, rather than substitutes. International expansion also 'weakens' the negative crisis-diversification relationship in the sense that the in times of financial crisis unrelated diversification is more frequent for international acquisitions than domestic ones. This suggests that financial crisis creates greater 'shopping' opportunities in foreign markets, thus resulting in a possible source of business opportunities for multinational corporations. Our study also reveals that in crisis times especially larger companies are interested in acquisitions, but smaller companies tend to become more attractive targets.

These findings have implications for managers of firms both as (potential) acquirers and (potential) acquired ones. Experience does make a difference as a driver of acquisitions especially in times of financial crisis. Firms with greater acquisition experience are therefore primarily to be monitored by both potential acquiring firms who are interested in anticipating competitors and potential target firms who might be interested in predicting competitors' behaviors.

This study has some limitations. First, a greater understanding of the logic behind acquisitions would require an analysis of the acquisition performance, which is not included in our analysis. Future research could investigate the effect of financial crisis on acquisition performance. Secondly, our analysis of the extent of diversification is based on similarities/differences in the NAICS codes of acquiring and acquired firms. Even though previous studies extensively used similar metrics such as the SIC codes, it may not fully capture the type of diversification strategies. Future research could examine the effect of crisis on diversification, using other approaches, such as the resource-based view, in measuring relatedness, as Markides and Williamson (1996), and Robins and Wiersema (1995) suggest. Thirdly, other firm-specific variables, such as firm diversification and innovation, should be examined in order to improve the predictability of the model.

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