

**HOW EMERGING MULTINATIONAL COMPANIES AFFECT TARGET FIRMS IN  
ADVANCED COUNTRIES?**

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### *Abstract*

This paper studies the relationship between Mergers and Acquisitions (M&As) from emerging to advanced countries and the performances of target firms. An extension of the Resources Based View and Dynamic Capabilities approach is adopted to state that the performance of target firm depends not only on its own resources but also on those of the acquiring company. Furthermore, the role of intra-firm network resources and experience, which arise from previous investments undertaken by the acquiring company, is also considered. An empirical analysis is employed to investigate the impact of the resources and intra-firm network resources and experience of Emerging Multinational Companies (EMNCs) from Brazil, Russia, India and China (BRIC) on the performance of firms that have been acquired in Europe, North America and Japan between 2000 and 2007. The results of the GMM analysis show that EMNC's resources have a positive effect on target firms' profitability and labor productivity, while the impact on its sales and employment are not significant and negative, respectively. Conversely, EMNCs' intra-firm network resources and experiences, especially when accumulated through previous M&As in advanced economies and in the BRIC home country, positively affect all the performance measures but employment, which still reports a negative sign.

*Key words: Mergers and Acquisitions from emerging to advanced countries, Emerging Multinational Companies, Performances of Target Firms, Resources, Intra-firm network Resources and Experience.*

## **1. INTRODUCTION**

In the late 1990s, a large number of Emerging Multinational Companies (EMNCs) from developing economies started to invest in advanced countries. To do so, they often adopt a Mergers and Acquisitions (M&As) entry strategy, which allows them not only to access new markets, but also to exploit the firm-specific resources and capabilities of target firms (UNCTAD, 2006). Previous studies that examine outward FDIs from emerging economies focus on its characteristics (Sachwald 2001; Sauvant 2005; Goldstein 2007; Gammeltoft, 2008) and determinants (Mathews 2006; Li, 2007; Lee and Slater, 2007; Buckley *et al.*, 2007; Rugman, 2007; Kalotay, 2008), and assess the extent to which traditional theoretical frameworks can explain the recent growth of such investment. Yet, little research has attempted to analyze the performance implications of OFDIs from EMNCs (UNCTAD, 2006; Garg and Delios, 2007) and, more specifically, how acquisitions from EMNCs impact the performance of target firms in advanced countries. Importantly, this research gap limits not only academic conceptualizations as how inter-firm differences in performance arise, but also the effectiveness of the strategic plans of EMNCs and the governmental policies of advanced countries. To address this gap, the current study develops a conceptual framework and implements an econometric analysis pertaining to the factors influencing the performance of firms acquired by EMNCs. The theoretical framework is discussed in paragraph two. Paragraph three presents the sample, the methodology and some descriptive statistics. Paragraph four reports the econometric results. Finally, last paragraph provides some conclusions and some proposals for future research.

## **2. THEORETICAL FRAMEWORK**

### **2.1 The role of resources in explaining performance outcomes**

According to the Resource-Based View (Barney, 1991) and the Dynamic Capabilities (Teece, Pisano and Shuen, 1997) approaches, firms achieve different competitive advantages and, hence, different performances both because they have idiosyncratic resources and because they have different and evolving abilities in combining their valuable, rare, inimitable and non-substitutable resources. The inimitability and non-substitutability imply that firms' resources are immobile and that the competitive advantage is confined within the firm's boundaries (Lavie, 2006). Furthermore, firms need to own (or at least control) resources in order to be able to protect their competitive advantages from imitation and substitution and therefore secure the rent deriving from such advantage (Rumelt, 1984; Wernerfelt, 1984; Barney, 1991; Amit and Schoemaker, 1993). Conversely, external resources that are not controlled by the firm can affect the performance only through a relationship that is competitive in nature, by ruling out any possible cooperative interaction (Lavie, 2006).

If only internal and proprietary resources can create value, dynamic capabilities become subject to two constraints. The first one arises from the amount of resources that are available inside a firm, which make it possible to create only a limited number of combinations, synergies and complementarities. The second constraint derives from the routines that firms develop by cumulating experience in combining the same resources. This tends to generate bounded rationality and lock-in effects, reducing a firm's ability to create new combinations, identify new resources, and promote organizational learning (Cyert and March, 1963; Hannan and Freeman, 1977, Nelson and Winter, 1982, Teece, 1986; Levitt and March, 1988; Cohen and Levinthal, 1990 and 1994; Capron, 1999).

One can overcome these limitations by extending the RBV in a way that applies to interconnected companies, i.e. firms that are linked with each other through joint-ventures, mergers and acquisitions and so on. Lavie (2006) points out that when firms are strongly connected, it becomes possible to imitate and substitute each other resources. Indeed,

according to Lavie (2006), there is a cooperative (rather than a competitive) relationship between the resources of two interconnected firms. Capron (1999) and Capron *et al.* (1998) also argue that a process of resource redeployment between the acquiring and target firm arise when acquisitions occur. Such redeployment may take place either through a physical transfer, as it may happen with capital resources, or through a reciprocal use of each other's resources such as the exploitation of supply chains, brand names and distributors. Hence, two firms may transfer and use each other resources, and thereby create new synergies and complementarities without controlling these resources. Furthermore new routines are likely to be created or old routines to be upgraded, enabling both firms to achieve positional advantages and higher levels of performance. Consequently, in order to evaluate the impact of acquisitions on the performance of target firms, our conceptual framework incorporates not only the resources of the target firm but also those of the acquiring company, i.e. the EMNCs. In particular, these firms can rely on (i) low-cost and labor-intensive productive resources, which originate from their home countries (Liu et al., 2005; BCG, 2006; Hong and Sun, 2006; Kumar, 2007; Morck, Yeung, and Zhao, 2008); (ii) moderate financial resources, which derive from the large cash flows cumulated through their strong position in the home market and from the noticeable support of their home governments (BCG, 2006; Buckley *et al.*, 2007; UNCTAD, 2007; Goldstein, 2007; Morck, Yeung and Zhao, 2008; Kalotay, 2008; Ramamurti, 2008); (iii) weak intangible resources (UNCTAD, 2006; Ramamurti, 2008).

## 2.2 Towards a broader concept of resources

We extend the RBV framework proposed by Capron et al. (1998), Capron (1999) and Lavie (2006) by stating that the performance of interconnected firms is affected also by those resources that arise from previous acquisitions of the acquiring company. Indeed, on the one hand, previous acquisitions make it possible to create an intra-firm network of subsidiaries that enlarge the range of synergies and complementarities available to the target firm. On the

other hand, previous acquisitions are also a source of experience that can be employed to manage the present deal.

*Previous investments as a source of intra-firm network resources*

The cooperative relationship proposed by Lavie (2006) may arise not only between the resources of a subsidiary and its parent company, but also among the resources of the subsidiaries belonging to the same parent company. In other words, complementarities and synergies may arise also when the firms are not strongly connected and are not directly involved in a deal, i.e. when two firms have both the status of subsidiaries. Of course, relationships among subsidiaries are likely to be mediated and controlled by the parent firms, but still they allow generating synergies and complementarities that may affect the performances of the subsidiaries. Indeed, a target firm can benefit from subsidiaries that have been previously established by the acquiring company because they allow to reach new geographic or industrial areas and to exploit locationally-fixed resources such as raw materials, skilled labor and scientific knowledge (Kafouros, 2008). This prompts the need to take into account the resources that can be leveraged within the network of subsidiaries of the parent company. We refer to them as intra-firm network resources, in order to distinguish them from the broader concept of network resources. Indeed, network resources “inhere not so much within the firm but in the interfirm networks in which the firms are located”, and “are distinct from the resources that reside securely within its boundaries and are source of valuable information for firms” (Gulati, 1999). Conversely, intra-firm network resources reflect a concept that lie between the network resources proposed by Gulati (1999) and the extension of RBV proposed by Capron et al. (1998), Capron (1999) and Lavie (2006). Indeed, on the one hand, intra-firm network resources reside within the boundaries of a firm, unlike Gulati’s network resources. On the other hand, they are spread across a diversified network of business units and, hence, they imply a multiple relationship among different business units

rather than a simple bi-univocal relationship between two strongly related companies, such as the target and the acquiring firm, as proposed by Capron (1999) and Lavie (2006). In other words, when a company is acquired by a single-plant company, only the process of resources redeployment described by Capron et al. (1998) and Capron (1999) take place. Conversely, when a firm is acquired by multinational companies with a geographically and industrially diversified intra-firm network, the range of possible synergies and complementarities increases dramatically since the target company can simultaneously take advantage of the multiple resources provided by the different subsidiaries belonging to the parent company. After an acquisition, a target company can, for instance, take advantage of the cheap labor and wage of the subsidiaries previously established in emerging countries, or of the raw-materials of subsidiaries that have been settled in resource-abundant countries. Similarly, subsidiaries in advanced countries may enable an acquired firm to reach skilled labor and scientific knowledge. Synergies and complementarities may arise also between subsidiaries belonging to different industries, e.g. when they turn out to be vertically integrated. As a consequence, intra-firm network resources are expected to have a strong impact on the performance of target firms.

#### *Previous investments as a source of experience*

Previous investments enable a firm not only to create a network and offer intra-firm network resources to its subsidiaries, but also to accumulate experience. Indeed, firms learn from repeated practices how to develop and manage resources in order to obtain new competitive advantages (Penrose, 1959; Barkema et al., 1996; Barkema and Vermeulen, 1998; Eisenhardt and Martin, 2000; Uhlenbruck, 2004). Furthermore, previous investments allow a firm to increase its managerial and marketing capability as well as its coordination and supervision capacity, which are all considered strategic intangible resources of the firm (Barney, 1986; Teece, 1986).

This is likely to be true also when a firm engage in M&As. Previous M&As experience can be employed to manage the present acquisition and avoid mistakes that might typically be made by an investor with no prior experience. Such mistakes include the inability to identify a target company that possesses resources that are really needed by the acquiring firm, the over-evaluation of the target company, and the incapacity to manage the post-acquisition process that can give birth to frictions between the management of the two companies (Buckley and Ghauri, 2002). Therefore, the experience that the acquiring company accumulates through previous investments may minimize these mistakes, thanks to the improvement of managerial, coordination and supervision abilities. As a consequence, the performance of the target firm is likely to report a positive impact due to the minimization of these mistakes and to the superior managerial capacities of the acquiring company.

Nevertheless, when experience is not diversified it might lead to path-dependence and lock-in effects, where firms are not able to move away from their routines. They thus become unable to evolve their absorptive capacity, identify new resources and opportunities and, in turn, create new competitive advantages (Leonard-Barton, 1992; Levinthal and March, 1993; Abrahamson and Fombrun, 1994; Miller and Chen, 1996; Barkema and Vermeulen, 1998). In order to avoid the routine trap, firms often become more geographically and industrially diversified. This allows the firm to reach new knowledge, enhancing their absorptive capacity, and achieving positional advantages (Miller, 1993, 1994; Walsh, 1995; Miller and Chen, 1996; Barkema and Vermeulen, 1998). Also the target firm is likely to benefit from the diversification of experience of the acquiring company. The higher the diversification the higher the probability that the acquiring firm has already undertaken M&As in the specific type of country or industry where the target firm operates, and, hence, the higher the probability both to develop managerial abilities that are appropriate for that target company and to reduce pre- and post-acquisition mistakes.



### **3. DATA, DESCRIPTIVE STATISTICS AND METHODOLOGY**

The empirical analysis relies on 95 M&As undertaken by EMNCs from BRIC towards Europe, USA and Japan between 2000 and 2007<sup>ii</sup>. M&As data, which come from Thomson OneBanker (Thomson Financial) database, have been combined with a panel of balance sheet data concerning the firms involved in each deal from 1999 to 2008, in order to be able to observe the target and acquiring companies at least one year before and one year after the deal.

As regards the temporal distribution, most of investments (78.4%) have occurred after the year 2003, with a peak in 2005 and another in 2007. One of the main reasons of this boom of M&As from BRIC towards advanced countries during the last years is the strong support provided by governments, which have recently designed specific policies to promote the internationalization of their national companies. This is true especially for China, India and Russia: indeed, these three countries are responsible for 25, 49 and 21 M&As, respectively, while only 3 deals originate from Brazil, whose investment pattern is much more oriented towards South America (Gammeltoft, 2008, Sauvant, 2005, UNCTAD, 2005). Most of investments of the sample are directed towards Western Europe (61 deals), followed by North America (22), Eastern Europe (9) and Japan (3). The predominance of Western Europe is due to the high number of M&As undertaken by India in UK (20), which is obviously due to the historic events occurred between these two countries. As regards the industries of the target and acquiring firms, the M&As considered have occurred in primary, secondary and tertiary industries, ranging from the SIC code 0131 (Cotton) to SIC code 8742 (Management Consulting) as regards the EMNCs, and from SIC code 1021 (Copper Ores) to SIC code 8748 (Business Consulting Services) as regards the target company.

To assess the impact of EMNCs' resources, intra-firm network resources and experience on the performances of target firms, four different measures of performance have been taken into

account: (i) profitability; (ii) sales; (iii) employment; (iv) labor productivity. These dimensions allow us to better identify the sources of change in profitability. Indeed, profitability may increase because of increase of sales, increase of labor productivity or decrease of employment (and, hence, of wage costs). Furthermore, labor productivity strictly depends on sales and on employment.

Profitability (*Tar\_Prof*) has been measured as Net Income before Taxes (Net Income from here onwards), sales (*Tar\_Sales*) as total revenues, employment as the total employees of the target firms (*Tar\_Empl*), and labor productivity (*Tar\_Lab\_Prod*) as the ratio between the proxies used for sales and employment<sup>iii</sup>. All data refer to the period 1999 – 2008 and have been collected from both Thomson OneBanker (Thomson Financial) and Orbis (Bureau van Dijk)<sup>iv</sup>.

The equation that has been employed to account for the relationship between the performance of target firm and the resources and intra-firm network resources and experience of target and acquiring companies is the following (1):

$$\log Y_{i,d}^t = \alpha_i + \beta_1 \log Y_{i,d}^{t-n} + \beta_2 \log R_{i,d}^{t-n} + \beta_3 DA_d^{t-n} * \log R_{e,d}^{t-n} + \beta_4 DA_d^{t-n} * \log NE_d^{t-n} + \beta_5 DA_d^{t-n} * \log NE\_Div_{e,d}^{t-n} + T + \varepsilon_{i,d}^t$$

where  $i$  and  $e$  are the target and acquiring firms, respectively, involved in each deal  $d$ , with  $d=1, 2, \dots, 95$ ;  $t$  is the year, and  $t-n$  account for the lagged value of the variables<sup>v</sup>, with  $n=1,2$ ;

$Y_{i,d}^t$  represents each the four performance measures of the target firm, i.e. net income, sales, employees and labour productivity;  $Y_{i,d}^{t-n}$  is the lagged value of each performance measures, which need to be taken into account to control for the possible autoregressive behaviour of the dependent variables;  $R_{i,d}^{t-n}$  is the lagged value of resources of the target firms;  $DA_d^{t-n}$  is the lagged value of the a dummy named Dummy Acquisition, which takes value, for each deal, of 0 until the year of investment and 1 from the year of acquisition onwards<sup>vi</sup>;  $R_{e,d}^{t-n}$  is the lagged value of resources of the EMNCs;  $NE_{e,d}^{t-n}$  is the lagged value of intra-firm network

resources and experience of the EMNCs;  $NE\_Div_{e,d}^{t-n}$  is the diversification of the intra-firm network resources and experience of EMNCs;  $T$  is a time dummy, which controls for time fixed effects and for the economic cycle;  $\varepsilon_{i,d}^t$  is the error term. All variables, except dummy variables, are expressed in logarithms<sup>vii</sup>.

The proxy that has been used to account for acquiring firm's resources ( $Acq\_Res$ ) are the total assets of the EMNCs, which account for the tangible, intangible and financial assets of the acquiring company. Data have been collected from Thomson One Banker and Orbis<sup>viii</sup>. Intra-firm network resources and experience of the acquiring firm ( $Acq\_NE$ ) have been gauged in terms of the previous M&As undertaken by EMNCs until the year of investment<sup>ix</sup>. Data have been collected from Thomson OneBanker and refer to all deals that have been undertaken by each EMNC since its foundation and whose target companies are still subsidiaries of the EMNC in the year of acquisition of each target firm considered in our sample. Geographic diversification of intra-firm network resources and experience has been measured in two different ways. On the one hand, it has been considered the number of different countries where each EMNC has undertaken its M&As ( $Acq\_NE\_Div\_Geo$ ). On the other hand, it has been classified the type of country where the EMNC have invested, in order to distinguish among different types, and, hence, different effects of intra-firm network resources and experience that are cumulated by EMNCs. Specifically, three groups of countries have been identified: OECD, Domestic and Rest of the World. The first group accounts for advanced countries belonging to OECD ( $Acq\_NE\_Div\_Oecd$ ), with the exception of Czech Republic, Hungary, Poland, Slovakia, Turkey, South Korea and Mexico<sup>x</sup>. The Domestic group identifies the M&As occurred in the home country of each EMNC, i.e. in one of the BRIC ( $Acq\_NE\_Div\_Dom$ ). Finally, all the other countries have been considered as Rest of the World ( $Acq\_NE\_Div\_Row$ ). As regards the industrial diversification of intra-firm network resources and experience of EMNC, the total number of 3-digit

industries where each EMNC operates has been used as proxy (*Acq\_NE\_Div\_Ind*). Finally, the total assets<sup>xi</sup> of the target firms have been included in the analysis as control variable, in order to account for the resources of target firm (*Tar\_Res*) which are the main source of its performance.

The econometric methodology that has been employed to estimate equation (1) is the robust one-step GMM-Dif technique, proposed by Arellano and Bond (1991), which allow to control for all the potential sources of noise that may arise from the estimation of equation, such as the heteroskedasticity of the sample arising from the heterogeneous home and host countries and industries that are taken into account in the analysis, the endogeneity deriving from the lagged values of the dependent variables, and the endogeneity that may arise from the causality relationship between the dependent and the explicative variables<sup>xii</sup>.

Therefore, after the transformation in differences required by the use of the GMM-Dif technique, the equation that has been estimated is the following (2):

$$\Delta_{t-1}^t \log Y_{i,d} = \alpha_1 + \beta_1 \Delta_{t-n-1}^{t-n} \log Y_{i,d} + \beta_2 \Delta_{t-n-1}^{t-n} \log R_{i,d} + \beta_3 \Delta_{t-n-1}^{t-n} DA_d * \log R_{e,d} + \beta_4 \Delta_{t-n-1}^{t-n} DA_d * \log NE_d + \beta_5 \Delta_{t-n-1}^{t-n} DA_d * \log NE\_Div_{e,d} + T + \varepsilon_{i,d}^t$$

where  $\Delta_{t-1}^t$  is the difference of the dependent variables, while  $\Delta_{t-n-1}^{t-n}$  is the lagged value of the difference of the explicative variables, with  $n=1,2$ . The difference of logarithms allows to account for the growth rates of the variables involved in equation (2).

Table 1 provides some descriptive statistics and the correlation matrix of the proxies used to estimate equation (2). The correlation matrix shows that EMNC's resources are highly correlated with intra-firm network resources and experience (and with their geographical and industrial diversification), because of course the higher the previous investments the higher the assets cumulated by EMNCs and the diversification of such investments. Another interesting evidence that arise from this table is that all the performance measures but employment are positively correlated with the EMNC's resources and intra-firm network resources and experience, also when they are geographically and industrially diversified.

- Table 1 goes about here -

#### 4. RESULTS

The results of the econometric analysis are displayed in tables 2, 3, 4 and 5, which reflect the impact of M&As from EMNCs on target firm profitability, sales, employment and labor productivity, respectively. Each table is composed of 14 columns, given that regressions have been run with a lag of both 1 (first 7 columns) and 2 (last 7 columns) years. The 7 regressions are due to the high correlation among the explicative variables displayed in the correlation matrix<sup>xiii</sup>.

Table 2 shows the GMM results<sup>xiv</sup> for profitability. EMNC's resources positively affect the profitability of target firms both with one and with two years lags. Therefore it seems that productive and financial assets of the EMNCs make it possible to decrease target firms' costs and, hence, increase their profitability. EMNC's intra-firm network resources and experience also have a positive impact on target firm profit. The mechanism through which this positive effect occurs can be better depicted by looking at the coefficients concerning geographic and industrial diversifications, which are all positive. Specifically, geographic diversification has a positive impact with both one and two years lag, especially when previous investments are located in OECD or domestic countries. Indeed, in the former case a target firm can take advantage of those resources (such as capital, technology and skilled labor) that can be found in advanced countries to increase its productivity and, hence, its profitability. At the same time, previous investments undertaken in OECD countries allow the EMNCs to accumulate experience, especially in terms of managerial abilities, to compete in developed economies. This experience will be applied also to manage the target firm, with a positive impact on its performance. Conversely, experience that arises from previous investments undertaken by EMNCs in domestic countries is less suitable for the target firm operating in advanced economies. Nevertheless, M&As previously undertaken in the home country allow the EMNCs to accumulate intra-firm network resources, which can be employed to decrease

target firm's costs and, hence, to increase profitability. This explains the positive coefficient of geographic diversification of EMNC's intra-firm network resources and experience in the home country. Similar considerations arise for previous investments undertaken in the rest of the world, which, however, require more time to manifest their effect given that the coefficient is significant only with two years lag. A possible reason is that EMNC's home countries are similar to several nations belonging to the category "rest of the world", and, hence, it is easier for the EMNCs to leverage intra-firm network resources that originate from their home economy, where they are economically and politically rooted, than from other foreign countries, where they face the typical liabilities of foreignness. Also industrial diversification is significant only with two years lag, probably because of the difficulties in adapting intra-firm network resources and experience originating from different industries to the sector of the target firm. A final interesting consideration arises from the sign of the lagged dependent variables, which is negative. This result seems to reveal that the M&As from EMNCs are likely to benefit more those target companies with a negative performance in the year(s) before the acquisition.

- Table 2 goes about here -

As regards sales, whose results are displayed in table 3, it turns out that neither resources nor intra-firm network resources and experience accumulated by EMNCs in previous investments are sufficient to increase target firms' sales. Nevertheless, intra-firm network resources and experience become valuable for a target firm's sales when they are geographically diversified. Indeed, geographic diversification has a positive impact on sales (while the same does not occur with industrial diversification). This is likely to be due to the fact that target firms are likely to increase their sales because they gain access to the markets of the EMNC. Indeed, previous investments that more affect target firm's sales are those directed towards domestic countries, i.e. the BRIC, whose large and growing markets can be reached by target firms

thanks to the distribution intra-firm network resources of the EMNC. Also previous investments in OECD countries provide the target firm with new and rich markets, as shown by the positive and significant coefficient of geographic diversification of intra-firm network resources and experience in OECD countries with one year lag. Another reason explaining the positive impact of previous investments undertaken by EMNCs in OECD and home countries is the accumulation of specific marketing experience, which can be employed to increase target firm's sales in these two categories of countries.

- Table 3 goes about here -

As regards the impact of EMNC's M&As on the employment of target firms, whose results are displayed in table 4, it seems that after acquisition a restructuring process takes place, where target firm's employment tend to be substituted by EMNC's resources and intra-firm network resource in order to avoid duplications and reinforce synergies and complementarities. This is true especially when intra-firm network resources are geographically and industrially diversified, especially when previous investments are directed towards OECD and home country. Therefore EMNC's intra-firm network resources, when geographically diversified, may substitute not only for low skilled labor, which is typically abundant in their home countries, but also for high skilled employment, which can be found in OECD economies. The experience cumulated by EMNCs through previous M&As further reinforce the restructuring process, given that the ability to combine resources and, hence, avoiding duplications increase thanks to the repeated practices. EMNC's resources and industrially diversified intra-firm network resources seem to require more time to manifest their substitution effect, given that they are significant only with a two years lag. However, these results must be interpreted also in the light of the strong autoregressive nature displayed by target firm employment's proxy. Indeed, the value of employment in  $t$  is positively correlated with the value of employment in  $t-1$  (with 1 year lag) and  $t-2$  (with two year lag). This means

that if employment has increased (decreased) in  $t-1$  and  $t-2$ , there will be an increase (decrease) also in  $t$ . Given that table 1 shows that the average value of employment growth is negative, the positive correlation between employment in  $t$  and employment in  $t-1$  and  $t-2$  seems to reveal that EMNCs tend to acquire firms that were already facing a restructuring process and a strong decrease of labor before being acquired, and that they keep on pursuing this restructuring process and reducing employment by using their resources and the intra-firm network resources and experience cumulated through previous investments.

- Table 4 goes about here -

Finally, table 5 shows that labor productivity is positively affected by EMNC's resources (with two years lag) and intra-firm network resources and experience, especially when they are geographically and industrially (the latter with two years lag) diversified. The main reason of such a positive results is the combined effect of increase of sales and decrease of employment.

- Table 5 goes about here -

## **5. CONCLUSIONS**

The current study makes a number of theoretical and empirical contributions to the literatures on international business and performance. Firstly, drawing on the RBV, it develops a conceptual framework that explains how the performance of target firms is affected not only by their own resources but also by those of the acquiring firms. Secondly, this paper provides a new conceptualization of the role of previous acquisitions both as a source of experience and as a source of intra-firm network resources that the target firm can access. A special attention is devoted to the geographic and industrial diversification of previous investments, which makes it possible to differentiate the types of intra-firm network resources available to the target firm and the type of knowledge and learning cumulated by the EMNCs. Thirdly, this theoretical framework is applied to a specific category of multinational firms, i.e. the



EMNCs, which display idiosyncratic characteristics with respect to traditional advanced MNCs as regards the resources and intra-firm network resources and experience that may affect the performance of target firms. Finally, the theoretical framework described above is tested through an empirical analysis, which shows that EMNCs' resources and intra-firm network resources and experience positively affect profitability, sales and labor productivity, while they have a negative impact on the employment, at least in the short run.

Nevertheless, it is not yet possible to use our empirical results to draw clear-cut conclusions and provide definite implications for policy makers of the host countries, because of the limits that affect the present paper and that can become the starting point of future analyses. First of all, not only the short but also the medium and long run should be considered, in order to understand whether these results are still persistent after several years or change at some point. A second *caveat* that must be kept in mind is that a restructuring process is typical of most of M&As processes, regardless of the nationality of the acquiring firm. Therefore, a counterfactual analysis should be implemented to better understand the difference between target firms acquired by EMNCs and target firms taken over by other types of MNCs. Thirdly, an extension of the range of countries and of the performance measures is also desirable, by including other developing economies that are pursuing a massive internationalization strategies, such as Mexico and South Africa, and by taking into account other significant indicators of performance, such as innovation, total factor productivity and financial performances. Finally, an analysis of the impact of M&As from EMNCs on the performances of not only the target firms but also the rest of the host economy should be taken into account, in order to provide policy makers of the host economies with a broader picture to design their strategies concerning the investments that originate from emerging countries.

## ENDNOTES

<sup>i</sup> The term “Emerging” does not necessarily refer to the economic status or to the age of the Multinational Company, but to its country of origin. Several EMNCs are global firms that can compete with multinational companies from advanced economies. However, since they originate from emerging countries they are identified as EMNCs.

<sup>ii</sup> The sample include some multiple acquisitions, given that the EMNCs undertaking these 95 deals are 83.

<sup>iii</sup> Net income and sales are expressed in millions of dollars. The values have been deflated through the Consumer Price Indexes provided by OECD database, which make use of 2005 as baseline year.

<sup>iv</sup> Only Net Income is available for all the target firms involved in the 95 deals. The other three performance measures are missing for some firms, therefore the number of observations will decrease when sales, employment and labor productivity are used as performance measure.

<sup>v</sup> The explicative variables have been lagged of 1 and 2 years, given that resources, intra-firm network resources and experience requires a certain amount of period before manifesting their effect on target firm performances.

<sup>vi</sup> All the variables that refer to the EMNCs have been interacted with the Dummy Acquisition because before the M&As the target and the acquiring firms had no economic relationship and, hence, the correlation between the performance of the target firm and the resources (or intra-firm network resources and experience) of the EMNC would be spurious in the years before the acquisition. By interacting the variables concerning the EMNC with the Dummy Acquisition, the performances of the target firm will depend on the resources of EMNCs only either one or two years after the acquisition (according to the lag of the explicative variables). Conversely, until the year of acquisition the performances of the target firms will depend only on their own resources, given that the resources (and intra-firm network resources and experience) of the EMNCs will be equal to zero.

<sup>vii</sup> Variables that may assume negative values, such as net income, have been rescaled between 0 and 100 in order to be able to use the logarithms, according to the following formula:  $x' = \frac{x_i - x_{\min}}{x_{\max} - x_{\min}} * 100$ .

<sup>viii</sup> Total assets are expressed in millions of dollars and have been deflated through the Consumer Price Indexes provided by OECD database.

<sup>ix</sup> It is worth noting that also ‘greenfield’ investments allow to accumulate intra-firm network resources and experience. Nevertheless, Thomson OneBanker does not provide information about the subsidiaries of the recorded companies, while it provides information about their previous M&As. Therefore only ‘brownfield’ investments have been taken into account.

<sup>x</sup> These countries have not been included in the OECD group because they share (or at least they shared at the beginning of the period considered) characteristics that fit more transition than advanced economies. Therefore, intra-firm network resources and experience that arise from these countries would not be homogeneous with respect to those of the rest of OECD advanced economies.

<sup>xi</sup> Also total assets of the target firms have been downloaded in U.S. dollar and have been deflated through the Consumer Price Index.

<sup>xii</sup> According to the model displayed in equation (1), the performances of target firm are affected by the resources of target firms and by the resources and intra-firm network resources and experience of the EMNCs. Nevertheless, the opposite may also be true, because of two reasons. Indeed, on the one hand, net income, sales employment and labor productivity attained at time  $t$  may be used, at time  $t+1$ , to increase those target and acquiring firm’s resources that will affect the performance of target firms at time  $t+2$ . On the other hand, after the acquisition the target firms become one of the subsidiaries of the EMNC and, hence, one source of those EMNC’s intra-firm network resources and experience that affect the performance of target firms. As a consequence, the resources of the target and acquiring firms and the intra-firm network resources and experience of the EMNCs have been considered predetermined, given that they are lagged of one or two years but they are still correlated with the previous error terms. Therefore, following Arellano and Bond (1991), these variables (as well as the lagged value of the dependent variable) have been instrumented both through their lagged values and through time and industry dummies, which act as internal and external exogenous variables, respectively. The industry dummies that have been used as external exogenous variables are those of the EMNCs, which are likely to be more correlated with the endogenous variables related to EMNCs than target firm’s industry dummies.

<sup>xiii</sup> Given the high correlations, the following variables have been used as alternative in the 7 columns: EMNC’s resources (1 and 8), EMNC’s intra-firm network resources and experience (2 and 9), geographic diversification of EMNC’s intra-firm network resources and experience (3 and 10), diversification of EMNC’s intra-firm network resources and experience in OECD countries (4 and 11), diversification of EMNC’s intra-firm network resources and experience in domestic country (5 and 12), diversification of EMNC’s intra-firm network resources and experience in the rest of the world (6 and 13), and industrial diversification of EMNC’s intra-firm network resources and experience (7 and 14).

<sup>xiv</sup> The robustness of the GMM analysis is confirmed by the Hansen test, which cannot reject the null hypothesis of overidentification restrictions for any equation.

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## TABLES

**Table 1:** *Descriptive statistics and correlation matrix of the variables employed to estimate equation (2)*

	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)
Observations	658	604	585	555	716	933	950	950	950	950	950	950
Mean	4.1337	4.0446	5.5177	-1.4930	4.0010	2.7281	0.3003	0.2271	0.0947	0.2053	0.2232	0.4705
Std. Dev.	0.0394	1.8767	1.7608	1.5158	1.9871	3.7063	0.6270	0.4551	0.2930	0.4041	0.4166	0.6276
Min	3.9202	-5.9310	0	-7.8732	-4.2263	-1.0668	0	0	0	0	0	0
Max	4.6052	8.4445	9.3679	5.6062	9.4120	12.2989	2.9444	1.9459	1	1	1	1.9459
1) Tar_Prof	1											
2) Tar_Sales	0.1542	1										
3) Tar_Empl	0.0342	0.266	1									
4) Tar_Lab_Prod.	0.1357	0.8563	-0.2701	1								
5) Tar_Res	-0.0901	-0.106	0.0236	-0.1185	1							
6) Acq_Res	0.1041	0.0574	-0.0146	0.0652	-0.1348	1						
7) Acq_NE	0.1072	0.0471	-0.0922	0.0965	-0.1706	0.755	1					
8) Acq_NE_Div_Geo	0.0954	0.0306	-0.077	0.0718	-0.1758	0.7755	0.9742	1				
9) Acq_NE_Div_Oecd	0.155	0.1651	-0.0883	0.2122	-0.2253	0.4634	0.7543	0.6839	1			
10) Acq_NE_Div_Dom	0.099	0.0947	-0.0399	0.116	-0.1526	0.7323	0.8855	0.8732	0.5561	1		
11) Acq_NE_Div_Row	0.0869	0.0263	-0.0355	0.0453	-0.173	0.7953	0.9164	0.9587	0.5813	0.8896	1	
12) Acq_NE_Div_Ind	0.0916	0.0275	-0.0088	0.0322	-0.1144	0.9325	0.7364	0.7567	0.4453	0.7505	0.789	1

**Table 2: Results of the GMM-Dif estimation of equation (2) on profitability**

	1 year lag							2 year lag						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Delta_log_Tar_Profit	-0.171** (-2.02)	-0.181** (-2.16)	-0.181** (-2.13)	-0.190** (-2.41)	-0.180** (-2.12)	-0.180** (-2.10)	-0.176** (-2.06)	0.124 (1.06)	0.136 (1.14)	0.136 (1.17)	0.116 (0.98)	0.135 (1.16)	0.134 (1.14)	0.117 (0.76)
Delta_log_Tar_Res	-0.005** (-2.09)	-0.005** (-2.17)	-0.005** (-2.19)	-0.004* (-1.76)	-0.005** (-2.19)	-0.005** (-2.20)	-0.005** (-2.07)	-0.004 (-1.26)	-0.004 (-1.24)	-0.004 (-1.11)	-0.004 (-1.16)	-0.004 (-1.06)	-0.004 (-1.11)	-0.006 (-1.64)
Delta_log_Acq_Res	0.001* (1.65)							0.001* (1.79)						
Delta_log_NE		0.011* (1.69)							0.011* (1.84)					
Delta_log_NE_Div_Geo			0.014* (1.70)							0.017** (2.17)				
Delta_log_NE_Div_Oecd				0.040* (1.95)							0.027* (1.88)			
Delta_log_NE_Div_Dom					0.017* (1.87)							0.017** (2.10)		
Delta_log_NE_Div_Row						0.012 (1.57)							0.014* (1.90)	
Delta_log_NE_Div_Ind							0.006 (1.46)							0.010* (1.92)
N. of firms	yes 95	yes 95	yes 95	yes 95	yes 95	yes 95	yes 95	yes 85	yes 85	yes 85	yes 85	yes 85	yes 85	yes 85
N. of observations	460	463	463	463	463	463	463	366	367	367	367	367	367	367
ar1	-2.322	-2.374	-2.356	-2.505	-2.397	-2.337	-2.297	-1.563	-1.569	-1.565	-1.560	-1.555	-1.560	-1.494
ar1 p-value	0.020	0.018	0.018	0.012	0.017	0.019	0.022	0.118	0.117	0.118	0.119	0.120	0.119	0.135
ar2	-0.191	-0.289	-0.266	-0.428	-0.264	-0.241	-0.165	0.042	-0.087	-0.119	0.307	-0.164	-0.186	0.230
ar2 p-value	0.848	0.773	0.790	0.669	0.792	0.809	0.869	0.966	0.931	0.906	0.759	0.870	0.852	0.818
hansen	90.661	83.453	83.185	84.090	85.776	83.119	77.800	79.871	77.443	74.783	77.366	79.647	76.128	78.184
hansen p-value	0.607	0.674	0.681	0.246	0.606	0.683	0.913	0.968	0.946	0.967	0.761	0.923	0.958	0.992
chi2	30.232	28.165	28.611	30.417	28.943	29.454	31.948	33.488	31.553	35.021	24.341	37.189	35.106	23.693
	0.001	0.003	0.003	0.001	0.002	0.002	0.001	0.000	0.000	0.000	0.007	0.000	0.000	0.008

Notes: \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. Resources of the target firms and resources, intra-firm network resources and experience, and geographic and industrial diversification of intra-firm network resources and experience of EMNC's have been considered as predetermined. Lagged values of predetermined variables, times dummies and EMNC's industrial dummies have been used as instruments.



**Table 3: Results of the GMM-Dif estimation of equation (2) on Sales**

	1 year lag							2 year lag						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Delta_log_Tar_Sales	0.173 (0.51)	0.096 (0.33)	0.125 (0.40)	0.089 (0.28)	0.314 (0.60)	0.196 (0.59)	0.174 (0.56)	0.448 (0.91)	0.102 (0.60)	0.357 (0.79)	0.028 (0.20)	0.190 (0.59)	0.128 (0.60)	0.574 (1.02)
Delta_log_Tar_Res	0.139 (0.61)	0.205 (1.14)	0.175 (0.87)	0.225 (0.94)	0.032 (0.08)	0.126 (0.56)	0.107 (0.48)	-0.333 (-0.86)	0.063 (0.67)	-0.163 (-0.54)	0.123 (1.52)	-0.038 (-0.17)	-0.086 (-0.39)	-0.398 (-0.93)
Delta_log_Acq_Res	0.065 (0.95)							0.005 (0.15)						
Delta_log_NE		0.780 (1.20)							0.009 (0.05)					
Delta_log_NE_Div_Geo			1.234 (1.32)							0.383* (1.73)				
Delta_log_NE_Div_Oecd				4.027** (2.34)							0.256 (0.81)			
Delta_log_NE_Div_Dom					4.128*** (2.58)							2.015** (2.21)		
Delta_log_NE_Div_Row						1.333 (1.28)							0.161 (0.44)	
Delta_log_NE_Div_Ind							0.467 (1.18)							-0.068 (-0.34)
	yes	yes	yes	yes	yes	yes	yes							
N. of firms	88	89	89	89	89	89	89	76	77	77	77	77	77	77
N. of observations	411	414	414	414	414	414	414	325	326	326	326	326	326	326
ar1	-1.464	-1.535	-1.499	-1.599	-1.542	-1.515	-1.457	-0.454	-0.318	-0.424	-0.353	-0.551	-0.365	-0.465
ar1 p-value	0.143	0.125	0.134	0.110	0.123	0.130	0.145	0.650	0.751	0.672	0.724	0.582	0.715	0.642
ar2	1.118	1.063	1.091	0.821	0.029	1.085	1.050	-0.826	-0.872	-0.799	-0.721	0.008	-0.134	-1.019
ar2 p-value	0.264	0.288	0.275	0.411	0.977	0.278	0.294	0.409	0.383	0.424	0.471	0.993	0.893	0.308
Hansen	78.150	66.007	67.005	77.731	57.174	75.462	79.939	69.867	50.289	65.745	44.967	70.291	67.821	70.232
hansen p-value	0.348	0.735	0.705	0.423	0.394	0.431	0.327	0.965	0.383	0.714	0.389	0.434	0.649	0.722
chi2	73.923	57.062	51.725	43.961	42.626	53.171	63.789	63.061	70.118	57.684	73.499	43.496	53.283	64.562
p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Notes: \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. Resources of the target firms and resources, intra-firm network resources and experience and geographic and industrial diversification of intra-firm network resources and experience of EMNC's have been considered as predetermined. Lagged values of predetermined variables, times dummies and EMNC's industrial dummies have been used as instruments.

**Table 4: Results of the GMM-Dif estimation of equation (2) on Employment**

	1 year lag							2 year lag						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Delta_log_Tar_Employees	0.164*** (3.16)	0.155*** (2.75)	0.148*** (2.63)	0.127** (2.28)	0.156*** (2.77)	0.150*** (2.76)	0.161*** (2.90)	0.197** (2.42)	0.197*** (2.62)	0.196*** (2.61)	0.146* (1.75)	0.193** (2.53)	0.191** (2.50)	0.173** (2.20)
Delta_log_Tar_Res	0.097 (1.20)	0.102 (1.17)	0.093 (1.16)	0.091 (1.10)	0.089 (1.18)	0.104 (1.24)	0.110 (1.29)	-0.024 (-0.51)	-0.016 (-0.36)	-0.018 (-0.41)	0.007 (0.12)	-0.016 (-0.39)	-0.015 (-0.35)	-0.003 (-0.07)
Delta_log_Acq_Res	-0.018 (-1.10)							-0.049* (-1.84)						
Delta_log_NE		-0.192 (-1.63)							-0.190 (-1.42)					
Delta_log_NE_Div_Geo			-0.272* (-1.78)							-0.282 (-1.51)				
Delta_log_NE_Div_Oecd				-0.434* (-1.65)							-0.241 (-1.46)			
Delta_log_NE_Div_Dom					-0.244* (-1.67)							-0.299 (-1.55)		
Delta_log_NE_Div_Row						-0.178 (-1.30)							-0.270 (-1.54)	
Delta_log_NE_Div_Ind							-0.083 (-0.93)							-0.269* (-1.85)
Time Dummies	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N. of firms	82	83	83	83	83	83	83	73	74	74	74	74	74	74
N. of observations	399	402	402	402	402	402	402	318	319	319	319	319	319	319
ar1	-2.572	-2.555	-2.647	-2.568	-2.628	-2.565	-2.610	0.470	0.513	0.504	0.371	0.481	0.468	0.366
ar1 p-value	0.010	0.011	0.008	0.010	0.009	0.010	0.009	0.638	0.608	0.614	0.711	0.630	0.640	0.714
ar2	1.021	1.005	0.960	1.003	0.976	1.042	1.062	-2.297	-1.883	-1.913	-1.132	-1.932	-1.924	-2.026
ar2 p-value	0.307	0.315	0.337	0.316	0.329	0.298	0.288	0.022	0.060	0.056	0.258	0.053	0.054	0.043
Hansen	74.150	76.610	76.007	77.303	76.689	77.512	76.876	59.561	65.552	68.471	64.930	66.168	65.828	64.326
hansen p-value	0.854	0.555	0.975	0.596	0.992	0.526	0.817	0.918	0.748	0.660	0.649	0.730	0.740	0.828
chi2	53.066	49.275	49.704	56.571	53.976	49.377	50.506	44.199	47.598	48.239	41.559	46.547	45.778	46.660
p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Notes: \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. Resources of the target firms and resources, intra-firm network resources and experience and geographic and industrial diversification of intra-firm network resources and experience of EMNC's have been considered as predetermined. Lagged values of predetermined variables, times dummies and EMNC's industrial dummies have been used as instruments.

**Table 5: Results of the GMM-Dif estimation of equation (2) on Labor Productivity**

	1 year lag							2 year lag						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Delta_log_Tar_Lab_Prod	0.322 (0.93)	0.317 (1.00)	0.284 (0.82)	0.322 (0.96)	0.324 (0.89)	0.290 (0.81)	0.349 (1.01)	-0.064 (-0.63)	-0.124 (-1.56)	-0.107 (-1.16)	-0.150** (-2.52)	-0.107 (-1.16)	-0.110 (-1.18)	-0.026 (-0.17)
Delta_log_Tar_Res	-0.081 (-0.47)	-0.126 (-0.81)	-0.077 (-0.52)	-0.093 (-0.61)	-0.068 (-0.39)	-0.044 (-0.28)	-0.122 (-0.70)	-0.054 (-0.45)	-0.010 (-0.09)	-0.019 (-0.18)	0.005 (0.05)	-0.040 (-0.36)	-0.029 (-0.26)	-0.078 (-0.54)
Delta_log_Acq_Res	0.055 (0.85)							0.072*** (3.38)						
Delta_log_NE		0.653 (1.36)							0.423** (2.05)					
Delta_log_NE_Div_Geo			1.078* (1.73)							0.592** (2.23)				
Delta_log_NE_Div_Oecd				0.945* (1.70)							0.783* (1.71)			
Delta_log_NE_Div_Dom					1.017** (2.00)							0.465** (2.45)		
Delta_log_NE_Div_Row						1.421* (1.80)							0.460** (2.53)	
Delta_log_NE_Div_Ind							0.472 (1.19)							0.319*** (2.90)
Time Dummies	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N. of firms	78	79	79	79	79	79	79	68	69	69	69	69	69	69
N. of observations	372	375	375	375	375	375	375	295	296	296	296	296	296	296
ar1	-1.542	-1.609	-1.465	-1.554	-1.477	-1.493	-1.506	-0.880	-0.879	-0.866	-0.886	-0.863	-0.859	-0.841
ar1 p-value	0.123	0.108	0.143	0.120	0.140	0.135	0.132	0.379	0.379	0.387	0.376	0.388	0.390	0.401
ar2	1.072	0.892	0.823	1.022	1.001	0.862	1.061	0.708	0.922	0.857	1.044	0.859	0.840	0.485
ar2 p-value	0.284	0.372	0.411	0.307	0.317	0.389	0.289	0.479	0.357	0.392	0.297	0.390	0.401	0.628
hansen	67.965	61.980	70.522	67.262	65.591	66.585	64.153	58.903	59.022	59.032	56.586	59.032	59.855	59.021
hansen p-value	0.849	0.617	0.527	0.604	0.797	0.771	0.887	0.963	0.799	0.798	0.670	0.798	0.776	0.962
chi2	150.414	113.936	79.913	98.521	105.077	70.628	124.031	79.713	70.829	65.812	71.897	67.106	66.552	80.103
p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Notes: \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. Resources of the target firms and resources, intra-firm network resources and experience and geographic and industrial diversification of intra-firm network resources and experience of EMNC's have been considered as predetermined. Lagged values of predetermined variables, times dummies and EMNC's industrial dummies have been used as instruments.