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# **PUZZLE OF CORPORATE DIVERSIFICATION EFFICIENCY IN BRIC COUNTRIES**

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## **PUZZLE OF CORPORATE DIVERSIFICATION EFFICIENCY IN BRIC COUNTRIES**

Researchers have long tried to define the impact of corporate diversification on firm value. Academic papers mainly concentrate on the effects of corporate diversification in mature markets while its consequences in emerging capital markets are less explored. This article presents the results of an empirical analysis of corporate diversification strategies of a sample of companies from BRIC countries that expanded via acquisitions during 2000–2013. We contribute to the existing literature by examining the effects of corporate diversification on firm value during the pre- and post-crisis periods. In line with other studies, we distinguish between related and unrelated diversification and in contrast to them we single out and separately analyze horizontal, conglomerate and vertical acquisitions. Based on a sample of 319 deals initiated by companies from BRIC countries, we found positive (3.32% and 9.01%) and statistically significant cumulative abnormal returns for conglomerate acquisitions during the pre- and post-crisis periods, correspondingly. We also found that the market reacts positively and statistically significant to the announcements of horizontal and vertical integration only during the pre-crisis period.

JEL: G14, G34, L25

Keywords: corporate diversification, firm value, conglomerate acquisitions, vertical integration, emerging capital markets.

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## 1. Introduction

Each company moving across its life cycle is faced with the choice of expansion strategy. A company may invest in the same industry (related diversification) or enter new markets (unrelated diversification). The latter option may be a very attractive way for a company to develop and improve its prospects. A diversification strategy may allow firms to generate synergies, increase market power, reduce investment risk, increase debt capacity and efficiently allocate capital through an internal capital market. At the same time, corporate diversification significantly increases the costs of coordination and control, exacerbates managerial agency problems, leads to inefficient allocation of capital and requires special skills and knowledge to operate diversified firms. Thus, the decision about expansion, the direction of this expansion and the level of corporate diversification are the most important decisions that are taken by management and boards.

According to the principles of corporate finance the efficiency of diversification strategy is always assessed by its impact on shareholder value. Is corporate diversification beneficial in developed and emerging capital markets? While there is a great body of literature that examine the effects of corporate diversification in mature markets, its consequences in emerging capital markets are less explored. We contribute to the existing literature by analyzing the corporate diversification phenomenon using a sample of companies from BRIC countries that expanded via acquisitions. In line with other studies, we distinguished between related and unrelated diversification, and in contrast to them we singled out and separately analyzed the market reaction to horizontal, vertical and conglomerate deals. To reveal diversified firms in related and unrelated industries, researchers always employ SIC code, Herfindahl-Hirschman Index or entropy measure. But these methods do not allow distinguishing between vertically integrated firms and conglomerates and always mix them in one group that is called unrelated diversification. But these are two different strategies that have their own sources of value. Vertical integration allows firms to benefit mainly from operating synergy, and technical and coordination efficiency (Suradsanam, 2003), while conglomerate acquisitions allows companies to gain from financial synergy, increasing debt capacity and effective resource allocation through an internal capital market. According to institution-based theory, conglomerates may become more efficient in emerging capital markets – providing a superior ability to raise capital, allocating this capital among divisions more efficiently than the external market does, diversifying investors' portfolios, guaranteeing the fulfillment of contracts, and preparing and training promising management (Khanna, Palepu, 1997; 2000). Thus these underline the importance

of distinguishing between vertical and conglomerate deals when analyzing the efficiency of diversification, especially in emerging economies.

We also contribute to the existing literature by concentrating on the pre- and post-crisis periods, providing the opportunity to compare the market reaction to the announcements of diversified acquisitions and understanding whether the value of corporate diversification has changed. The global economic crisis of 2008-2009 led to more severe financial constraints in emerging markets, suggesting that the affiliation with big diversified companies is more attractive.

The remainder of this paper is organized as follows: Section 2 reviews the recent developments in the literature on corporate diversification concentrating on research in emerging markets. Section 3 defines the methodology. Section 4 describes the sample selection procedure. Section 5 provides the discussion of the results. Section 6 concludes this study.

## **2. Literature review**

Phenomenon of corporate diversification has been actively discussed in financial academic literature. For a long time, such a business strategy was viewed as a rational and effective model, but many countries have taken the “return to focus” as wholesome and compelling corporate doctrine (Sudarsanam, 2003). According to the empirical results in developed countries, the prevailing wisdom among financial researchers is that diversified firms are sold at a discount and the level of corporate diversification is trending downward (Berger, Ofek, 1995; Lang, Stulz, 1994; Lins, Servaes, 1999; Fukui, Ushijima, 2007). Value-decreasing investments and the inefficient allocation of funds among divisions of diversified firms via the internal capital market are viewed as the main sources of value destruction (Rajan et al., 2000; Scharfstein, Stein, 2000). Even if capital allocation among divisions within a diversified company leads to economic benefits, it also creates the conditions for an increase in agency costs (Gautier, Heider, 2009; Inderst, Laux, 2005; Brusco, Panunzi, 2005; Erdorf et al., 2013).

However, recent research questions both mentioned results. A number of studies suggest that the observed discount is attributable to factors others than diversification, or may be a result of improper measurement techniques. There is a substantial body of empirical evidence that proves that the diversification discount is not due to the diversification strategy *per se* but may be connected to the target’s characteristics or the endogeneity of the diversification decision (Graham et al., 2002; Campa, Kedia, 2002; Pal, Bohl, 2006; Beckmann et al., 2006; Dastidar, 2009; Glegg et al., 2010). In some cases, the corporate diversification discount was related to the premium. According to

Villalonga (2000), there is no diversification discount. Using the BITS (Business Information Tracking Series) database instead of COMPUSTAT, which has been used by most authors, she shows that diversified firms trade at a significant premium. In contrast to a linear relationship between diversification and firm value, some of the latest empirical studies reveal significant curvilinear effects, suggesting that diversification in developed countries creates value at low and moderate levels (when companies move from single-segment to related diversification) and destroys value at moderate and high levels of diversification (Palich et al., 2000). This dependence forms a so-called inverted-U model (Dess et al., 1995; Palich et al., 2000; Galvan et al., 2007; Kistruck et al., 2011; Andres et al., 2014).

Whereas the majority of empirical research shows the negative impact of corporate diversification on firm value for companies based in developed countries, this strategy may be more valuable for companies that operate in emerging capital markets (Khanna, Palepu, 1997; Benito-Osorio et al., 2012; Caudillo et al., 2015). These markets are characterized as a rule by a dominance of diversified companies. The specific features of emerging markets, to some extent, can affect the effectiveness of integration strategy. In developed countries, well-developed structures in capital markets, competitive product markets and labor markets – as well as strong contract enforcement – guarantee similar rules of play for both diversified and focused firms. In these conditions the benefits of integration may be reduced. On the contrary, in an imperfect institutional environment like emerging markets and with weak enforcement of contracts, diversified firms may be of value. They can mimic the beneficial functions of various institutions that are present in developed markets and thereby create a potential source of value growth for integrated firms (Khanna, Palepu, 1997). On the other hand, severe market imperfections, which increase the potential agency costs resulting from higher information asymmetry, can lead to value destruction in firms that undertake such strategies.

Fauver et al. (2003) suggest that the value of diversification is negatively related to the level of capital market development. For companies that operate in developed and internationally integrated capital markets the authors find a statistically significant diversification discount, which is consistent with the findings of Berger and Ofek (1995) and Lang and Stulz (1994). But for companies that operate in emerging and segmented capital markets, a diversification premium is found. Furthermore, authors suggest that the financial, legal and regulatory environment have an important influence on the firm's value in case of diversification, and the optimal organizational structure depend on where the company operates. These results are consistent with Khanna and Palepu's evidence that the evolution of the institutional environment alters the value-creating

potential of business groups (Khanna, Palepu, 2000). Comparing diversified companies in Hong Kong, Malaysia, Indonesia, Singapore, Korea, Thailand, Taiwan, and the Philippines with diversified companies in US and Japan, Claessens, et al. (2001) suggest that diversification diminishes corporate value for US firms, but it does not have the same effect for most East Asian firms. In their later study, using a sample of 2000 Asian companies they found that a group affiliation was more positive for mature, slow-growing firms than for young and high-growth companies (Claessens et al., 2006). Similar results were obtained by Bae et al. (2002) and Khanna and Palepu (2000) using evidence from Korean business groups and evidence from Indian business groups, respectively. Khanna and Palepu (2000) found that diversified Indian business groups often outperform their stand-alone counterparts and there is no diversification discount in the value of diversified business groups. The efficiency of affiliation with business groups in India is also confirmed by George and Kabir (2012). The role of Russian financial-industrial groups (FIG) and their impact on capital allocation among the group's firms was examined by Perotti and Gelfer (2000). The authors suggest that FIG allocate capital comparatively better than stand-alone firms. Wong et al., (2009) identify value increase for acquiring firms and value decrease for target firms in diversification deals, based on a sample of companies from different developed and emerging countries for the period of 2000–2007. A recent study presented by McKinsey (Caudillo et al., 2015) also demonstrates the efficiency of diversified firms. Employing the data of more than 4500 firms from developed and emerging countries from 2002–2012, the authors find that the highly diversified firms in emerging capital markets generate higher excess returns (3.6%) than focused firms (0%) and pure players (-2.8%). In developed economies there is almost no difference in excess TRS for diversified and pure players. The authors explain the positive linkage between diversification and performance by the ability of diversified firms to reinvest retained earnings in new businesses, to easily interact with governmental and regulatory officials, to attract talent and to attract capital.

The opposite results were obtained by Lins and Servaes (2002) on the efficiency of corporate diversification. Comparing the value of diversified and focused firms within and across seven emerging markets at the end of 1995, the authors find that diversified companies trade at a discount of approximately eight per cent compared to focused firms. According to the authors, the discount may be partially explained by less profitability of diversified firms than single-segment firms, affiliation with industrial groups and ownership concentration. Lu, Yao (2006) and Bertrand et al. (2002) confirm the discounts in China and India correspondingly. Lee et al. (2008) extend the institution-based theory by examining the instability of diversification premium in South Korea

from 1984-1996. The authors argue that with the development of the institutional environment, a diversification premium in emerging capital markets turns into a diversification discount.

In spite of how much the phenomenon of corporate diversification has been discussed in financial academic literature, the evidence is still controversial. The observed divergence in the results can be explained by different samples, databases, empirical methods and home country environment. A significant role is also played by the examined time period (Benito-Osorio et al., 2012). Analyzing the linkage between corporate diversification and firm value during the global financial crisis of 2007–2009, Kuppuswamy et al., (2010) reveal that diversification strategy becomes attractive for US companies under external financial constraints. The authors argue that the debt coinsurance effect allows diversified companies to gain the competition for scarce financial resources of the compared stand-alone firms and allocate them more efficiently through an internal capital market. Rudolph and Schwetzler (2013) also demonstrate the reduction in diversification discount during the financial crisis for companies that operate in countries with a perfect institutional environment (developed Asia Pacific, British Isles and North America). But for firms from countries with the least developed capital markets and the lowest legal investor protection (Continental Europe), the authors do not find significant results, suggesting that in these countries the effect of the crisis on the efficiency of diversified companies would not be strong since raising funds in an imperfect institutional environment is difficult for firms even during non-crisis periods. The results of these papers also indirectly confirm that corporate diversification is a more attractive strategy in emerging countries than in developed ones, and may create additional sources of value for shareholders.

In this paper we shed additional light on the impact of diversification on firm value in emerging economies. Following the institution-based theory (Khanna, Palepu, 1997; Peng, Delios, 2006) we expect that the institutional environment of emerging capital markets positively influences the value creation process in diversified firms. But in contrast to existing studies we (1) distinguish between different types of acquisition deals (horizontal, vertical, conglomerate), and (2) examine the efficiency of diversification deals during the pre- and post-crisis periods. We believe that the value of diversification would change as a result of the crisis. Going along with Kuppuswamy et al., (2010) we expect that under more severe external financial constraints following the crisis, the unrelated diversification strategy (pure conglomerates) would be more attractive for shareholders since this strategy allows firms to benefit from financial synergy, providing risk reduction, increased debt capacity as a result of the “coinsurance effect” and efficient resource allocation through an internal capital market.

### 3. Methodology

#### *Announcement-period abnormal stock return*

To study the link between corporate diversification and firm value on the sample of companies from BRIC countries, we applied the standard event study method.

We examined only the acquirer's returns due to the fact that most target firms in our sample are non-public. The normal (predicted) returns were generated using the market model:

$$R_{jt} = \alpha_j + \beta_j R_{mt} + \varepsilon_{jt} \quad (1)$$

where  $R_{mt}$  is return on a market index on day  $t$ ;  $\beta_j$  measures the sensitivity of firm  $j$  to the market;  $\alpha_j$  measures the mean return over the period not explained by the market;  $t \in (t_1; t_n)$  is the estimation period,  $\varepsilon_{jt}$  - statistical error;  $E(\varepsilon_{jt}) = 0$ ,  $\text{var}(\varepsilon_{jt}) = \sigma^2$

The abnormal return here is  $AR_{j\tau} = R_{j\tau} - \hat{\alpha}_j + \hat{\beta}_j R_{m\tau}$ , where,  $R_{j\tau}$  is the actual return,  $\tau \in (T_1; T_m)$  is the event window.

For the sample of Russian companies we used the RTSI index; for Brazilian companies the Bovespa; for Indian companies the Sensex; and for Chinese companies the Shanghai Composite.

We employed a 41-day event window, comprised of 20 pre-event days, the event day, and 20 post-event days and also varied it, decreasing the number of days. So the choice of the window did not affect its explanatory character. We took 80 trading days prior to the event window as the estimation period to calculate predicted return to each firm. We cumulated the average residuals for each day over the event window and got a cumulative abnormal return (CAR). The market reaction to an event is positive if CAR is higher than zero ( $CAR \geq 0$ ). The statistical significance of the results is the integral part of the analysis. The general test used for all hypotheses is the following (Weston et al., 2002; Kothari, Warner, 2007):

$$H_0 : CAR = 0 \quad (2)$$

Test statistics are defined as follows:

$$t = \frac{CAR(T_1; T_m)}{\sqrt{m\sigma^2(t_1; t_n)}}, \text{ where } \sigma^2(t_1; t_n) = \sum_{t=t_1}^{t_n} \sigma^2(AR_t) \quad (3)$$

where  $m$  is the length of the event window.

#### *Construction of vertical measures*



To reveal the deals that lead to vertical integration we followed the methodology suggested by Fan and Lang (2000). This methodology allows constructing vertical measures at industry and firm level.

$$\text{At industry level: } V_{ij} = \frac{1}{2}(v_{ij} + v_{ji}) \quad (4)$$

where  $V_{ij}$  is the proxy for the opportunity for vertical integration between industries  $i$  and  $j$ ;  $v_{ij}$  – the dollar value of industry  $i$ 's output required to produce 1 dollar's worth of industry  $j$ 's output;  $v_{ji}$  – the dollar value of industry  $j$ 's output required to produce 1 dollar's worth of industry  $i$ 's output.

$$\text{At firm level: } V = \sum_j (w_j \times V_{ij}) \quad (5)$$

where  $V$  is a firm-level vertical relatedness measure;  $w_j$  represents sales weight equal to the ratio of the  $j$  secondary segment sales to the total sales of all secondary segments.

#### 4. Sample characteristics

We used the Zephyr Mergers and Acquisitions database from Bureau Van Dijk to identify an initial pre-crisis sample of 3172 publicly traded deals that fit into the categories of complete, announced or pending transaction during the period of 2000–mid-2008. Using the same database we obtained a sample of 3026 deals for the post-crisis period of mid-2009–2013. We further required that (1) only acquirers are publicly traded firms, (2) the acquiring firm controls less than 50% of the shares of the target firm before the announcement, (3) the relative transaction size is higher than five percent. (4) the acquirer's closed prices are available for us, (5) there is a lack of significant corporate events in the estimation period, such as shares buyback, other mergers and acquisitions and joint ventures.

Our requirements yielded a sample of 198 transactions for the pre-crisis period and 121 deals for the post-crisis period. We grouped the firms according to their diversification type – related and unrelated, using the SIC-code system. This classification approach is consistent with the approach used by Berger, Ofek (1995) and Denis et al. (1997). If the acquirer and the target have no commonality in first three digits of four-digit SIC codes, the acquisition is classified as unrelated. Other deals are classified as related diversification. For our sample, 90 of the acquisitions are related, 108 are unrelated deals during the pre-crisis period, while during the post-crisis period there are 85 related and 36 unrelated deals in the sample. In Table 1, we present a time-series of diversification deals for the aggregate sample as well as for related and unrelated diversification subsamples. The number of diversification announcements appears to pick up in 2004. The number of related deals

decreased, while the number of unrelated M&As increased over the pre-crisis period. But after 2009 the number of related deals showed stable growth.

**Table 1. Distribution of diversification deals by year**

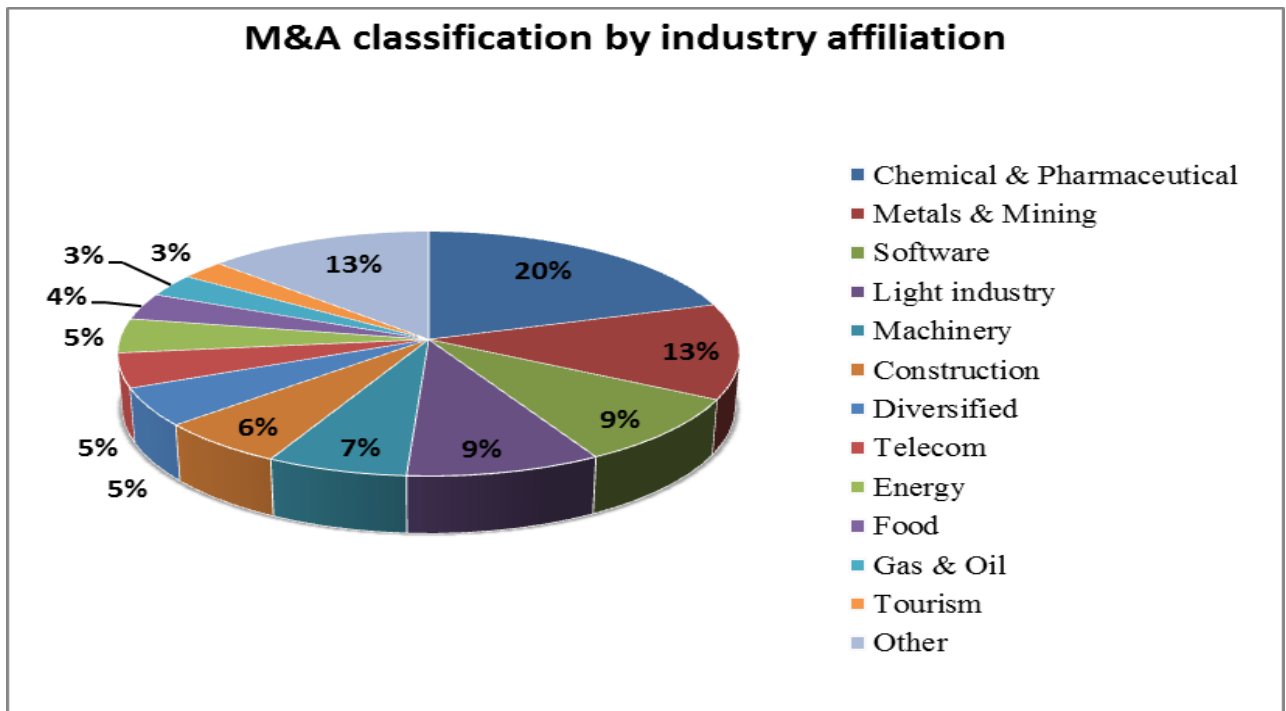
Announcement year	No. of announcements	Related diversification	Unrelated diversification
2000	2	1	1
2001	4	3	1
2002	5	3	2
2003	20	12	8
2004	46	26	20
2005	27	7	20
2006	34	16	18
2007	39	15	24
mid-2008	21	7	14
mid-2009	3	0	3
2010	22	16	6
2011	28	21	7
2012	32	22	10
2013	36	26	10
Total	319	175	144

Unfortunately, the SIC code system does not allow singling out vertically integrated firms and often refers them to unrelated diversification. Thereby this approach as a rule mixes conglomerate and vertically integrated firms in one group, which is called unrelated diversification. Based on SIC data, it is impossible to find and analyze separately pure conglomerate and vertically integrated companies. To identify such firms we followed the methodology of Fan and Lang (2000), which provided us with the detailed information about the construction of vertical measures at both industry and firm levels (4), (5). We use the input-output tables at the US Bureau of Economic Analysis to create a matrix of relatedness at the industry level (Fan, Lang, 2000; Claessen et al., 2001). Researchers often use the input-output tables for the US economy, examining the effects of vertical integrations on firm value in emerging capital markets, based on the assumption that the specificity of industries does not depend on national particularities (Claessen et al., 2001). Industries are considered vertically related if they receive at least five percent of their inputs from another industry or supply more than five percent of their own outputs to one other industry (Scholar, 2002). As a result 42 acquisitions are considered as vertical; 69 as conglomerate; and 87 as horizontal M&A during the pre-crisis period. After 2009 almost half of the sample (57 deals) is considered as vertical acquisitions; 18 deals as conglomerate deals; and 46 as horizontal M&A (Table 2).

**Table 2. Types of mergers and acquisitions in BRIC countries**

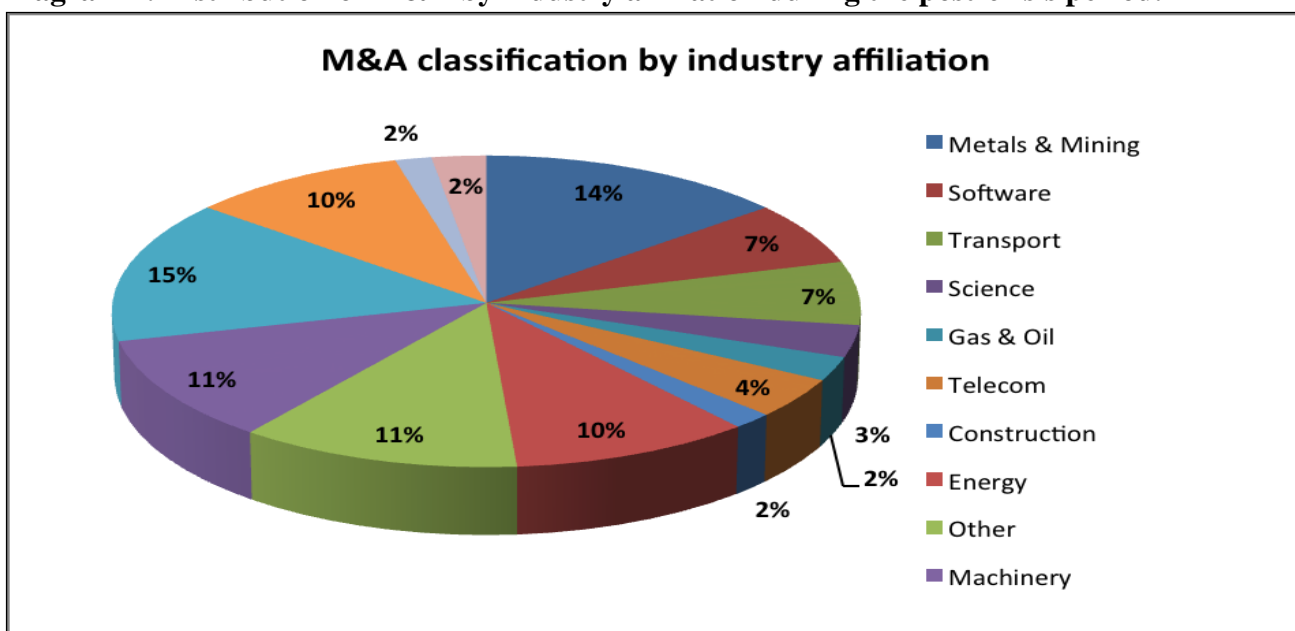
M&A type	Pre-crisis period	Post-crisis period
Horizontal	87	46
Vertical	42	57
Conglomerate	69	18
Total	198	121

On Diagram 1 deals are classified by the acquirer's industry affiliation for the pre-crisis sample. The most common industry is chemical & pharmaceutical (20.2%) followed by metals & mining (12.6%), software (9.1%) and light industry (9.1%).

**Diagram 1. Distribution of M&A by industry affiliation during the pre-crisis period.**

The industry affiliation structure is rather consistent during the post crisis-period (Diagram 2) with chemical & pharmaceutical (15%) and metals & mining (14%) as the most common industries which are followed by light industry (12%) and machinery (10%). The number of acquirers from the software industry dropped to the seven per cent.

**Diagram 2. Distribution of M&A by industry affiliation during the post-crisis period.**



## 5. Empirical findings and results

By analyzing the results for each country separately we get similar tendencies in market reaction to the announcements of corporate diversification. So, we present results for the entire sample. The aggregation BRIC countries data seems to be the most interesting because it allows testing our hypotheses on a large sample and to get typical results for emerging markets within the BRIC group. The results for the entire sample of diversification deals and for different subsamples during the pre-crisis period are shown in Table 3.

**Table 3. CAARs for diversification deals on different event windows and for different subsamples during pre-crisis period**

Event window							
	[-20;+20]	[-15;+15]	[-10;+10]	[-5;+5]	[-3;+3]	[-2;+2]	[-1;+1]
BRIC – whole sample							
CAR	5.98%***	5.34%***	4.94%***	3.55%***	2.62%***	1.8%***	1.53%**
Number of observations	198						
BRIC – horizontal M&A							
CAR	6.68%***	6.10%***	5.79%***	3.93%***	2.84%***	2.13%**	1.00%†
Number of observations	87						
BRIC – vertical M&A							
CAR	8.92%***	7.59%***	6.18%***	3.25%**	2.43%**	1.44%†	1.92%**
Number of observations	42						
BRIC – conglomerate M&A							
CAR	3.32%*	3.03%*	3.12%**	3.18%**	2.45%**	1.61%*	1.95%**
Number of observations	69						
BRIC – related diversification							
CAR	6.72%***	6.14%***	5.73%***	3.90%***	2.79%***	2.12%**	1.00%†
Number of observations	90						
BRIC – unrelated diversification							
CAR	5.36%***	4.68%***	4.28%***	3.26%***	2.48%***	1.54%**	1.98%**
Number of observations	108						

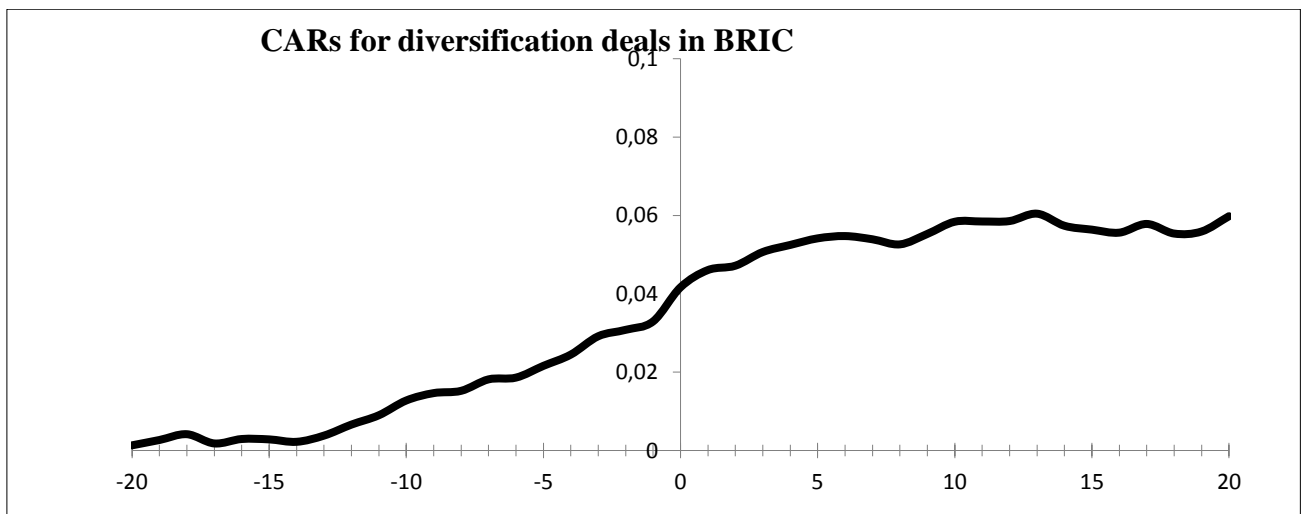
\*\*\*Significant at the 1% level

\*\*Significant at the 5% level

\*Significant at the 10% level

†Significant at the 15% level

For the whole sample, the mean 41-, 31-, 21-, 11-, 7- and 5-day announcement period abnormal returns are positive and statistically significant at one per cent level and 3-day abnormal returns are also positive and statistically significant at five per cent level. These results indicate that shareholders of the sample firms experience significant wealth gains from diversification deals. The CARs for 41-day event window are graphed in Figure 1.



**Figure 1. Plot of CARs for all diversification deals for 41-day event window during the pre-crisis period**

The plot shows that the market learns about the deals a few days before the announcement, which may indicate to some extent the insider nature of the examined markets. Table 3 also reports that corporate diversification does not destroy the value of acquirers from BRIC countries irrespective of diversification type. The lack of high significant returns in the shorter announcement periods indicates that the market does not capitalize on the information contained with the M&A announcement at the time of the announcement. This situation is typical for developing markets due to their lower efficiency. The market needs additional time to capitalize on the information therefore using a longer announcement period may be more justified. The highest CARs are associated with vertical and horizontal integration. The announcements of conglomerate acquisitions cause also positive and statistically significant (at 10% level) returns for acquirers. But the CARs for these deals are two and a half times less than for vertical acquisitions, indicating that vertically integrated firms may create a sustainable competitive advantage, achieve technical and coordination efficiency, and create new resources and capabilities. Our findings are consistent with outcomes of Claessens et al. (2001, 2006), Khanna and Palepu (2000), and Fauver (2003). But in contrast to Claessens et al. who argue that vertical integration leads to the reduction of shareholder's value in countries with weak financial systems, we obtained positive and statistically significant CARs for acquirers in BRIC countries indicating that vertical relatedness increases firm value.

Considering the post-crisis period, the results for the total sample and different subsamples are shown in Table 4.

**Table 4. CARs for diversification deals on different event windows and for different subsamples during post-crisis period**

Event window							
	[-20;+20]	[-15;+15]	[-10;+10]	[-5;+5]	[-3;+3]	[-2;+2]	[-1;+1]
BRIC – whole sample							
CAR	2.22%	1.25%	0.80%	0.61%	-0.08%	-0.13%	0.37%
Number of observations	121						
BRIC – horizontal M&A							
CAR	3.02%*	1.62%	0.96%	0.44%	-0.28%	-0.42%	-0.46%
Number of observations	46						
BRIC – vertical M&A							
CAR	-0.57%	-1.04%	-0.43%	0.40%	-0.23%	-0.08%	0.41%
Number of observations	57						
BRIC – conglomerate M&A							
CAR	9.01%**	7.51%*	4.28%	1.71%	0.90%	0.43%	2.33%
Number of observations	18						
BRIC – related diversification							
CAR	0.41%	-0.67%	-0.62%	0.07%	-0.36%	-0.33%	-0.03%
Number of observations	85						
BRIC – unrelated diversification							
CAR	6.51%**	5.76%*	4.16%	1.89%	0.57%	0.33%	1.30%
Number of observations	36						

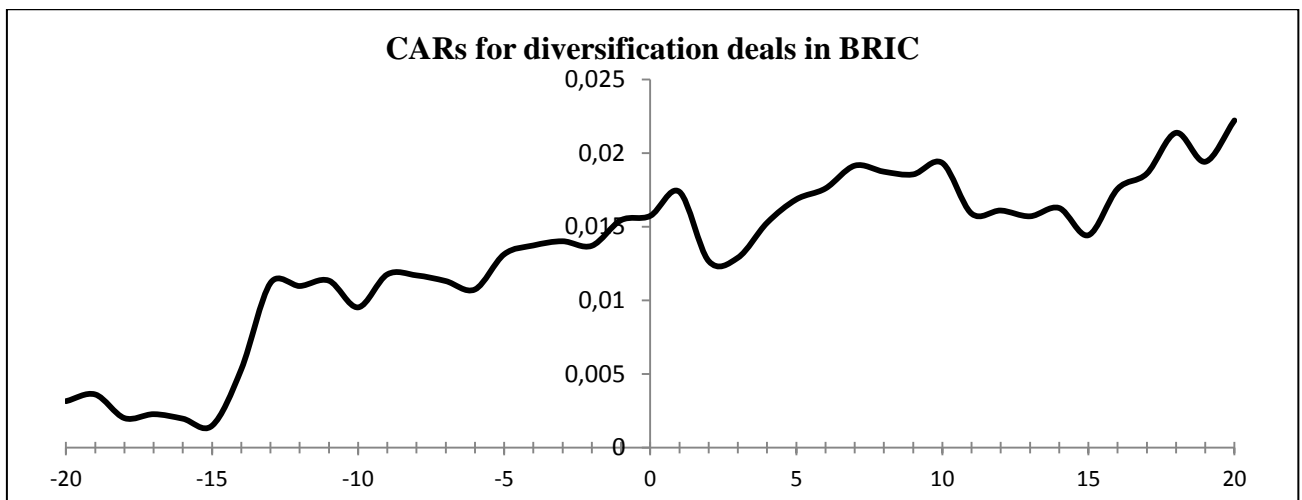
\*\*\*Significant at the 1% level

\*Significant at the 10% level

\*\*Significant at the 5% level

†Significant at the 15% level

For the whole sample, the cumulative average abnormal returns for all event windows are statistically insignificant. These results indicate that after the financial crisis shareholders of acquirers from the sample cannot extract substantial wealth gains from diversification deals. The CARs for the 41-day event window are graphed in Figure 2.



**Figure 2. Plot of CARs for all diversification deals for 41-day event window during the post-crisis period.**

The CAR trend is rather close to the plot for the pre-crisis period. Using insider information, a market still learns about the deals about 10–15 days before the announcement. Table 4 also shows that corporate diversification is no more irrelevant to the diversification type. Thus, the CARs for related deals are statistically insignificant while for unrelated acquisitions are positive and statistically significant at 5 and 10 per cent level for 41- and 31-day event windows (6.51% and 5.76%, correspondingly). The level of market efficiency is still low as the results obtained for shorter event windows are insignificant which means that a market needs the same amount of time to capitalize on information as before the crisis. Market reaction to horizontal deals is positive and statistically significant only for 41-day event window. While for vertical acquisitions, the stock market reaction turns negative and statistically insignificant. The highest CARs are associated with conglomerate deals. Their announcements cause significant (at 5% and 10% level) abnormal returns equal to 9.01% for 41-day event window and 7.51% for 31-day window. The results indicate that a market reacts more favorably for conglomerate acquisitions following the crisis (9.01% compared with 3.32% before the crisis), confirming our expectation that under the more severe external financial constraints the conglomerate acquisitions become more efficient since they allow firms to reduce risk, increase debt capacity as a result of “coinsurance effect” and allocate scarce financial resources through an internal capital market.

## 6. Conclusion

According to Khanna and Palepu (1997), diversified companies in emerging markets have the potential to add value. This evidence is supported by number of empirical studies (Fauver et al.,



2002; Khanna, Palepu, 2000; Claessens et al., 2001, 2006). Our empirical examination contributes to the growing literature analyzing the link between different types of corporate diversification and firm value using event study analysis on a sample of companies from BRIC countries. Our results indicate the predominance of positive effects of corporate diversification in emerging markets supporting the institution-based theory. For the pre-crisis period we found positive and statistically significant returns for acquirer's shareholders for different event windows. We got the highest returns for vertical deals and the lowest for conglomerate ones. By analyzing diversification effects on firm value after the crisis, we revealed that more severe external financial constraints make conglomerates more efficient for shareholders. But the results are statistically significant only for two event windows. Cumulative abnormal returns for vertical acquisitions show no statistically significant difference from zero. We also found, that shareholders saw the lower returns in horizontal acquisitions after the crisis than before it, suggesting that it may be difficult for companies to obtain benefits from operating synergy. But the results for horizontal acquisitions are not robust for different event windows, indicating that we cannot make a final conclusion.

The existence of opportunities to create value does not mean that diversified companies automatically become efficient and can create value. It depends to a large extent on how the company is managed and what potential it has. Having the correct management model is one of the main factors of successful diversification. A skillful management system that allows for a complete understanding of which businesses in the company's portfolio are value-creators or value-destructors, what investments are efficient, how to coordinate and control the activities of business-units and how to make the company more transparent to investors can lead the success of diversified companies in any market.

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