Effects of ownership structure on the mergers and acquisitions decisions in Brazilian firms

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Abstract

Purpose – The purpose of this study is to examine the effects of ownership structure on merger and acquisition (M&A) decisions of Brazilian listed companies.

Design/methodology/approach – This paper is an applied and explanatory research based on secondary data. The sample is comprises non-financial companies listed on the BM&FBovespa between 1998 and 2007. Considering that the dependent variable is binary, the authors estimate panel data logistic regression models. Considering the existence of conflicts of interest among those who have the decision-making power and the supplier of capital for M&A transactions, they draw upon the Agency Theory to develop the theoretical hypotheses.

Findings – The results show that, for a sample of Brazilian non-financial companies listed on the BM&FBovespa (B3), from 1998 to 2007, Brazilian firms present, on average, a highly concentrated ownership structure and the major controlling shareholders are families or the State. These characteristics are negatively related to the likelihood of M&A transactions, as most of these controlling shareholders are reluctant to adopt mechanisms that reduce their control.

Research limitations/implications – With regard to the limitations, this study considered only the M&A definitions as stated by the Bureau van Dijk database. In this sense, future studies may analyze the effects of ownership structure based on other M&A definitions and typologies. In addition, the study is limited to the period from 1998 to 2007, which is prior to the international financial crisis. Future studies may extend the analysis period to include the post-crisis period (2008) to check if there are differences in M&A strategies before and after the crisis.

Practical implications – From a managerial perspective, the results show that minority shareholders have little or no influence over an M&A decision, so they cannot decide on the use of resources for fast growth and access to new markets through M&A. Thus, the investment decision must take into account the nature and the quality of the controlling shareholder.

The authors contributed equally to conceptualization, formal analysis, methodology, project administration, validation, visualization and writing the original draft. Nasaré Vieira Nogueira reviewed and edited the final draft, and supported on software, while Luiz Ricardo Kabbach de Castro lead on software and supervision.

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Social implications – This study shows a significant and negative effect of ownership concentration on the likelihood of M&A transactions. In part, this result demonstrates the importance of understanding the behavior of controlling shareholders before inferring on other key aspects that the M&A literature tends to make fundamental in explaining M&A decisions in publicly traded companies, particularly, in an environment of low minority shareholder protection.

Originality/value – Previous studies have partly found that the M&A decision is motivated by individual advantages obtained from increasing the size of the firm, or from managerial hubris. The results show that these hypotheses do not hold in the Brazilian context. Moreover, the results indicate that M&A decisions are associated with the characteristics of the controlling shareholder, their level of ownership concentration and their typology, contributing to the agency debate on whether the incentive or the entrenchment effect prevails in the context of the agency problem between controlling and minority shareholders, particularly, in an institutional environment of low shareholder protection.

Keywords Ownership structure, Mergers and acquisitions, Agency theory, Emerging economy

Paper type Research paper

1. Introduction

Decisions involving mergers and acquisitions (M&As) present a high degree of uncertainty as to the generation of economic results obtained from these transactions. In spite of that, these transactions frequently occur, either domestically or internationally (Jemison & Sitkin, 1986), as a result of their high income-generating potential, mainly because they develop or maintain competitive advantages through financial, operational or managerial synergies (Ross, Westerfield, & Jaffe, 2002).

According to the data obtained from the World Investment Report (UNCTAD, 2015), the M&As were considered the main factor behind the global economic recovery and increased world market integration, adding up to US$721bn in investments, of which approximately 12 per cent involved firms from emerging countries.

Despite the ability to generate value, especially from a macroeconomic approach, the reasons for these transactions and their economic consequences are still controversial, considering the complexity of these transactions when taking into account organizational, economic and corporate governance factors (Villalonga & McGahan, 2005).

In this context, this paper specifically aims to analyze the influence of ownership structure on M&A decisions, both in relation to the level of concentration of voting rights and to the typology of the main shareholder. For this, we resorted to the agency theory because its main assumption is related to the existence of conflicts of interest among those who have the decision-making power and the suppliers of finance to the firm. In addition to that, it integrates the ownership structure elements and the firm positioning regarding the M&A strategy.

Analyses were based on a sample of non-financial Brazilian firms listed in B3 (formerly BM&FBovespa) between 1998 and 2007. According to them, Brazilian firms are highly concentrated and mostly familiar, which has a negative impact on the probability of an M&A. In part, this is due to the fact that controlling families tend to avoid making decisions that may reduce their control power. Additionally, there is a negative effect of the concentration of voting rights on the propensity of an M&A. Therefore, these results show how important it is to understand the behavior of controlling shareholders before inferring on other key factors, especially the economic ones, which are usually taken as fundamental by the M&A literature when explaining M&A decisions in publicly traded firms.

The relevance of this work is reflected in the Brazilian reality. According to Caixe and Krauter (2013), the Brazilian corporate governance model is characterized by a high ownership concentration, generally culminating in the overlap of ownership and management of the firms.

The study herein presents contributions to both governance and strategy literature and to business management in the Brazilian context. From a theoretical approach, a common hypothesis used to explain M&A decisions is the so-called *managerial hubris*, in which overconfident managers tend to acquire new firms mistakenly based on their unrealistic ability of managing the acquired firm more efficiently than the current managers do.

Nevertheless, according to our results, that hypothesis seems to be discarded for the Brazilian case because the high degree of ownership concentration and the controlling shareholder typology appear to be the central point in the M&A decision, after controlling for potential M&A determinants, such as size, investment, growth opportunities and other corporate governance variables.

Thus, it is possible to state that the central agency problem in the Brazilian context occurs between the controlling and the minority shareholders. Therefore, it is crucial to contextualize the agency theory as developed by Jensen and Meckling (1976) within an emerging country context, considering, in that case, low institutional protection and high concentration of ownership, such as it occurs in Brazil.

From a practical approach, the results provide future investors with a warning about the weakness that characterizes Brazilian firms in what regards the growth strategy position through an M&A. This is due to the strong influence held by the majority shareholder over the deliberations of the assemblies and of the board, thus affecting the propensity for an M&A according to their profile, whether they are family-, state- or foreign-driven.

The next section presents the literature review and hypothesis development. Then, the relationship between ownership structure and the propensity of an M&A in Brazilian firms is empirically analyzed. Finally, the results are discussed, and the conclusion is drawn, describing the theoretical and practical implications.

2. Literature review and hypothesis development

Firms have long used M&As as an alternative to achieving their integration and diversification goals, so that in recent decades, as the world economy has expanded and the competition has increased, these activities presented an unprecedented volume of transactions (Gaughan, 2015), especially among the emerging economies (Deng & Yang, 2015).

According to Ross et al. (2002), there are four basic types of synergy sources driving firms to conduct an M&A process: increased revenue, cost reduction, tax gains and cost of capital reductions. Barney and Hesterly (2007) and Ghaugan (2015) add two other noteworthy motivations. One of them is the agency problem, in which an M&A benefits managers regardless of any economic value they may or may not create for the shareholders of the acquiring firm, whether by investing more in their human capital or by increasing their remuneration because of the greater complexity and size of the firm. The other motivation is the *managerial hubris*, which refers to the unrealistic belief held by the managers of purchasing firms that they can manage the assets of the target firm more effectively than current management, leading them to believe that with the growth of the firm, they will enjoy higher economic benefits.

Specifically in what regards the agency problems, corporate scandals around the world have reinforced the perception that the actions of managers and controlling shareholders generate great concern about the limits of their responsibilities and the way they operate, given that they have much more insight and inside information about available resources than the outside shareholders (Tirole, 2006).

In this sense, the corporate governance literature has analyzed the relationship of ownership structure and its influence on corporate investments and transactions, considering that variations in share control (dispersed or concentrated) and the typology of the majority shareholder may affect the relationship between shareholders and managers, thus influencing corporate decisions.

On the one hand, if we consider the ownership concentration, the existence or absence of separation between ownership and control defines the relationships among shareholders and managers (Jensen & Meckling, 1976). In a situation of dispersed ownership, managers can follow their personal interests by pursuing acceptable levels of profit and wealth through opportunistic actions, such as bold investments, entrenchment and self-dealing (Tirole, 2006) at the expense of the shareholders' wealth. On the other hand, variations in the majority shareholder's typology combined with its controlling power may change managers' perception and projection about the future of the business (Claessens & Fan, 2002). Thus, the concentration and the identity of owners become two distinct units of analysis despite their dimensions' dependence on ownership structure – the shareholder's identity determines their preferences and goals, while the concentration defines its power and incentive to meet their goals (Pedersen & Thomsen, 2003).

Exceptionally in an M&A, questions about the influence of ownership structure and corporate governance have been widely discussed, given that in the case of firms listed in the stock exchange, the degree of concentration and the identity of the owner are key factors to explain the firm's position as acquirer or acquired (Caprio, Croci, & Del Giudice, 2011).

2.1 Degree of ownership concentration and merger and acquisition

The level of ownership concentration of a firm varies between dispersed and concentrated. A firm has diffuse ownership when the number of shareholders with voting rights is big and none of these shareholders – individually – holds a significant share of the capital to be able to influence management decisions. In contrast, in a concentrated ownership structure, a single group of shareholders holds the power to control the firm's strategic decisions (Bebchuck, 1999).

This dichotomy leads to two possible agency problems: firstly, in firms where ownership is dispersed, managers hold the control of the firm and of the strategic decisions, which may not be ultimately oriented toward maximizing the firm's value. Thus, the separation between ownership and control leads to a possible conflict of interest between shareholders and managers (Jensen & Meckling, 1976). On the other side, a controlling shareholder will have economic incentive to monitor managers' behavior in such a way that their decisions are oriented to maximize the firm's value, reducing the agency problem between managers and shareholders. Nevertheless, if there is collusion between managers and controlling shareholders, strategic and investment decisions may not be directly focused at maximizing the value of the firms, but at the personal interests of the controlling shareholders. Therefore, in a concentrated ownership structure, the nature of agency conflict is between the majority and the minority shareholders (Shleifer & Vishny, 1997).

According to La Porta, Lopez-De-Silanes, Shleifer, and Vishny (1998), a weak institutional system that offers to the minority shareholders less protection is crucial to make the ownership structure of a firm more concentrated because there is a lack of strict standards that may limit manager's conduct. It was found that when shareholder rights are properly enforced by law, investors are willing to pay more for the assets because they feel safer because profits will be returned in the form of dividends rather than expropriated by managers.

But, what is the implication of concentrated ownership for strategic business decisions? And, more specifically, for the M&A decisions?

To answer these questions, the governance literature proposes two potential effects of controlling shareholders' decisions in the strategy and performance of firms: the incentive and entrenchment effect (Morck, Shleifer, & Vishny, 1988).

Because controlling shareholders possess most of the firm's shares, the incentive effect suggests that they will have a greater incentive to invest in projects that offer better economic results to the firm and, so, to minority shareholders too. In theory, the incentive effect would be the most direct route by which shareholders would claim their controlling rights. That can be explained by the fact that controlling shareholders hold a significant share of the firm's votes and capital, so they have a greater incentive to obtain information and monitor their executives, ensuring that their decisions are always in line with their own goals of maximizing the firm's value.

Thus, controlling shareholders dominance over decision-making eases managers' willingness to innovate and take risks because they tend to concentrate their income on fewer firms, being less inclined to invest in riskier and more costly projects (Claessens, Djankov, Fan, & Lang, 2002) that may endanger the firm's control, such as it is the case of an M&A. Therefore, it is expected that:

H1a. (Incentive effect). The higher the voting rights of the majority shareholder, the lower the likelihood of an M&A.

On the other hand, the entrenchment effect would imply an increase in the agency problem between the majority and the minority shareholders, in which the majority shareholders could expropriate part of the firm's income for their private benefits because of their control position. Simply put, there is a possibility that controlling shareholders may want to maximize their personal interests by making excessive investments and diversifying activities without distributing cash flows (Aldrighi & Postali, 2011).

This opportunistic behavior on the part of the controlling shareholder can be especially aggravated when using corporate mechanisms, such as the issuance of various classes of share, cross-shareholdings or pyramidal structures, resulting in an uneven relationship between voting rights and cash flow rights, allowing controllers to maintain hegemony while holding only a small share of the firm's capital (Claessens & Fan, 2002).

In this case, the financial risk of an M&A passes almost entirely to the minority shareholders. Thus, the main objective of the controlling shareholder is kept, that is, the majority shareholder maintains its controlling position without the economic risk of a possible M&A failure. Thus, it is proposed:

H1b. (Entrenchment effect). The relationship between the concentration of voting rights of the majority shareholder and the M&A likelihood is moderated by the presence of control-enhancing mechanisms so that the presence of control-enhancing mechanisms positively affects the relationship between the voting rights of the majority shareholder and the likelihood of an M&A.

H1a and *H1b* previously mentioned implicitly assume that the controlling shareholder's M&A decision is indifferent to this shareholder typology. However, it is known that shareholders' objectives vary according to their risk sensitivity, short- or long-term orientation, industry knowledge, among other specific characteristics. Hence, when considering the identity of the owner, it should be noted that governance practices and strategy formulation are both reflections of the time horizon, incentives and the connections that each type of controlling shareholder presents (Thomsen & Pedersen, 2000).

2.1.1 Family control. Family-owned firms play a key role in driving global economic growth and are the most popular type of ownership structure in most of the world's economies (La Porta, Lopez-De-Silanes, & Shleifer, 1999).

Formed by individuals who share the same blood and who jointly perform the roles of managers and shareholders (Villalonga & Amit, 2006), family firms tend to follow a decision model in which affective relationships are crucial. This emotional factor also affects their growth and consolidation decisions because the founder's inheritance of business to his descendants is at stake (Lima, 2003).

Based on that, while family firms may be as rational as the non-family ones, when it comes to risky business decisions, maximizing socio-emotional wealth may eventually overlap with maximizing economic performance, even if that means accepting a greater risk to business (Gomez-Mejia, Haynes, Núñez-Nickel, Jacobson, & Moyano-Fuentes, 2007). Therefore, family firms tend to act more conservatively, avoiding decisions that may bring even more negative consequences (Singla, Veliyath, & George, 2014).

Miller, Breton-Miller and Lester (2010) argue family owners tend to focus their investment on just one firm because they want to keep control of their businesses for the long term. Therefore, the more concentrated family wealth is in a single business, the more their fate is at stake, so families will be less likely to engage in an M&A. However, when they decide to do so, they often find this option outside the main industry, avoiding concentration of wealth in a single business.

According to the authors, most family firms avoid adopting mechanisms that reduce their control or grant transfer power to third parties because of fear of losing their authority over the firm's strategic decisions. Thus, decisions involving high-risk transactions or that can dilute family capital within the firm tend to be avoided. For example, in Brazil, Moura and Beuren (2017) note that family-controlled firms have fewer M&A than non-family firms.

Thus, it is understood that family control should present a negative relationship with propensity for an M&A:

H2a. (Family control). Firms whose majority shareholder is a family are less likely to perform M&A transactions.

2.1.2 State control. Firms in emerging economies are known to have significant state control besides the family control (Claessens, Djankov et al., 2002). Considering the trend toward broad economic liberalization and reforms in these economies, many efforts have been launched to privatize infrastructure industries, offering investment opportunities for multinational corporations that were traditionally available only to state-owned firms (Jiang, Peng, Yang, & Mutlu, 2015).

At first, state-owned firms may have a more comparative advantage than the private sector, given the state's ability to facilitate or create entry barriers and to obtain a lower cost of capital because of their access to tax revenues. Populist governments may be favored because they have firms that are not economically viable to prevent an increase in unemployment rates or to maintain the production of basic need services and staples (Pedersen & Thomsen, 2003).

According to Lazzarini (2011), in Brazil, when a firm is under state control, the government is able to articulate strategies directly and indirectly with other firms through equity participation or public funding, extending part of its control rights to the private sector too. Typically, these firms are grouped together into economic groups composed of business units that have the same controlling partners and that often have mutually coordinated operating strategies.

Known for having close ties with politicians, they are much more likely to have access to inside information and can easily identify potential investment opportunities, bank funding and future synergies estimation in M&A activities (Brockman, Rui, & Zou, 2013). Moreover, these social and political ties can lead to a negative action, exacerbating agency problems and leading to acquisitions with high power of wealth destruction (Dittmann, Maug, & Schneider, 2008), including even expropriation of outside investors.

Thus, considering the state's power of action and the low institutional capability to control the opportunistic behavior of governments as shareholders of listed firms in Brazil (recent governance scandals of Petrobras, Eletrobras and public banks), it is proposed:

H2b. (State control). Firms whose majority shareholder is the state are more likely to experience M&A transactions.

2.1.3 Foreign control. Represented by pension funds, universities and endowment funds, institutional investors thrive the most in developed economies (Andriosopoulos & Yang, 2015) and have become the predominant actors in the financial markets during the second half of the twentieth century.

Being considered one of the most important participants in the capital market, in general, the benefits that these investors bring to firms are more closely related to their internal and external monitoring capability. That is due to their proximity to managers and boards, really decreasing the incentives for possible opportunistic behavior in the face of the possibility of collecting and disseminating information in the stock market (Choe, Kho, & Stulz, 2005).

These investors are responsible for moving significant volumes within the economy and have great advantages in terms of financial support, besides being excellent at spotting favorable business opportunities (Chen, Johnson, Lin, & Liu, 2009). In addition, they are always working with diversified worldwide portfolios and preferences that include direct foreign investment decisions in underexploited riskier regions that allow high economic returns in their portfolios (Lien & Filatotchev, 2015). For Safarian (2003), as the environment becomes more complex, the possibility of acquisition increases, considering that the constitution of a new ownership structure can safeguard the viability and integrity of transactions in the acquisition.

In particular, the long-term view of these investors is justified by two crucial points:

(1) their investment in firms is so high that it reduces the business exit flexibility; and
(2) a highly diversified securities portfolio allows them to spread risks (Datta, Musteen, & Herrmann, 2009).

In this sense, considering the growth opportunities of foreign investors in Brazil, and that the institutional environment of low protection for investors demands the internalization of transaction costs through an M&A, it is suggested that:

H2c. (Foreign control). Firms whose majority shareholder is a foreigner institutions or companies are more likely to experience M&A transactions.

3. Methodology

3.1 Sample

To test the proposed hypothesis, all firms listed in B3 between 1998 and 2007 were used as an initial sample. Financial firms were excluded for being subjected to specific regulation and also were those without complete information on all variables (dependent, explanatory and control). The final sample comprises 2,428 firm/year observations based on 429 firms in total.

The choice of reviewing the period between 1998 and 2007 was due to the fact that empirical studies have shown that controlling shareholders – families, in particular – exhibit a different investment behavior between periods of growth and crisis (Lins, Volpin, & Wagner, 2013). Therefore, considering periods after 2007 would imply studying a crisis period, which would possibly affect our findings. In this paper, we intend to analyze the M&A decisions before the international financial crisis, although a future analysis of the differences between periods with and without crisis is also suggested.

M&A data were collected from the Zephyr database, as it provides a comprehensive and well-known source of M&A transactions information (Bollaert & Delanghe, 2015). Pieces of accounting and financial information come from Economatica, already considering inflationary effects.

3.2 Variables

3.2.1 Dependent variable. The dependent variable for the M&A occurrence is measured by a binary variable that takes a value of 1 when a given firm has performed some M&A transaction in the year *t*, regardless of the number of transactions performed, and 0 (zero) when the firm has performed no transactions.

For this analysis, the M&A included regarded any possible transactions provided that the Bureau van Dijk's criteria were met for the following definition: *acquisition* – any agreement where the acquirer has a final interest equal or superior to 50 per cent; *merger* – a transaction made by the exchange of shares between firms (Bollaert & Delanghe, 2015).

3.2.2 Independent variable. The concept of ownership structure was measured by the variables: concentration of voting rights of the majority shareholder and typology identification when the majority shareholder is also the controller.

To test both *H1a* and *H1b*, the concentration of voting rights (Top 1 – voting rights) measured in percentage varying from 0 to 100 was used. Therefore, the closer to 100, the more concentrated the ownership is on the hands of the majority shareholder, here represented by the holder of the majority of voting rights shares, directly or indirectly, through a pyramidal structure or multiple classes of shares. In addition, specifically for *H1b*, the excess control rights (ECR) variable, which is equal to 1 when the majority shareholder holds more voting rights than cash flow rights, is also included.

As for the construction of the majority shareholder typologies to test *H2a*, *H2b* and *H2c*, the following variables were used:

- family control when the majority shareholder is controller and part of a family;
- state control when the majority shareholder is the controller and a representative of the state or any state-owned firm; and
- foreign control when the majority shareholder is the controller and a foreign.

Controlling shareholders are here considered as so when they hold at least 50 per cent of the firm's voting rights, directly or indirectly (Aldrighi, 2014).

3.2.3 Control variables. The following control variables were considered: board, presence of blockholders, presence of the largest ultimate shareholder on the board, presence of pyramidal structure, preferred shares, size of the firm, return on assets, debt, investment in capital, cash flow availability, Tobin's Q and levels of corporate governance.

Table I shows the description of the variables used and their source of data.

#	Variables	Description	Type	Source
(1)	M&A (0/1)	M&A. Binary variable equals 1 when a firm enters in an M&A transaction in year *t*, and 0 otherwise	Dependent	Zephyr, Bureau van Dijk
(2)	Top 1 – voting rights	Voting rights of the largest shareholder, measured as a percentage (0 to 100%)	Independent	Aldrighi (2014) (CVM)
(3)	ECR	Excess control rights. Binary variable equals 1 when the firm largest shareholder control rights are higher than the cash flow rights, and zero otherwise	Moderating	Aldrighi (2014) (CVM)
(4)	Blockholders	Voting rights of the fourth largest shareholders, excluding the largest shareholder, measured in percentage (0 to 100%)	Control	Aldrighi (2014) (CVM)
(5)	Family control	Binary variable that takes 1 when the largest controlling shareholder is a family, and zero otherwise	Independent	Aldrighi (2014) (CVM)
(6)	State control	Binary variable that takes 1 when the largest controlling shareholder is the state, and zero otherwise	Independent	Aldrighi (2014) (CVM)
(7)	Foreign control	Binary variable that takes 1 when the largest controlling shareholder is a foreign shareholder, and zero otherwise	Independent	Aldrighi (2014) (CVM)
(8)	Presence in the board	Binary variable that takes 1 when the largest controlling shareholder is represented in the board of directors, and zero otherwise	Independent	Aldrighi (2014) (CVM)
(9)	Pyramidal structure	Binary variable that takes 1 when the largest controlling shareholder uses a pyramidal structure, and zero otherwise	Control	Aldrighi (2014) (CVM)
(10)	Dual-class shares	Binary variable that takes 1 when the largest controlling shareholder uses dual-class shares, and zero otherwise	Control	Aldrighi (2014) (CVM)
(11)	Size	Size of the company measured as the natural logarithm of the total assets at year *t*	Control	Economatica
(12)	ROA	Operational profits scaled by the total assets at year *t*	Control	Economatica
(13)	Leverage	Total debt scaled by the total assets in time *t*	Control	Economatica
(14)	Investment	Investment in capital expenses scaled by total assets in time *t*	Control	Economatica
(15)	Cash holdings	Cash holdings scaled by total assets in time *t*	Control	Economatica
(16)	Tobin's Q	Proxy for Tobin's Q, measured as the ration between the enterprise value and total assets in time *t*	Control	Economatica
(17)	B3 – traditional segment	Traditional segment listing at B3	Control	BM&F Bovespa
(18)	B3 – Level 1	Level 1 segment listing at B3	Control	BM&F Bovespa
(19)	B3 – Level 2	Level 2 segment listing at B3	Control	BM&F Bovespa
(20)	"Novo Mercado"	"Novo Mercado" segment listing at B3	Control	BM&F Bovespa

Table I.
Variables description and sources

4. Descriptive analysis

Table II shows the behavior of an M&A by controller type. During the analyzed period, the institutional controller did not perform M&A transactions, so this type of shareholder was not considered in the estimated models. In addition, it is interesting to note that out of the 75 transactions observed for these controllers, almost half of them were carried out by family firms.

Table III presents the descriptive statistics and the correlation matrix. Out of the 2,428 firm/year observations, only 6 per cent of all firms performed an M&A during the observed period. However, although the average is quite low, the variance shown is high, confirming the presence of heterogeneity between firms.

As for the typology, the majority shareholder holds 60.83 per cent of the voting rights on average, which is very close to the figures (67 per cent) found by Claessens, Djankov and Lang (2002) when analyzing firms in East Asia. According to La Porta et al. (1999), the ownership concentration is linked to the possible monitoring of managers being carried out by the majority shareholder.

The descriptive analysis shows that 42 per cent of Brazilian firms are family-owned, 17 per cent foreign-owned and 6 per cent state-owned, confirming the study of Claessens, Djankov et al. (2002), which indicates that firms in emerging economies have a high level of ownership concentration and family control. The remaining 35 per cent is represented by other institutional investors, such as pension funds, shareholders agreement, private equity funds, venture capital, etc. In the sample of this study, 65 per cent of firms have pyramidal structures and 78 per cent preferred shares, which means that Brazilian firms use mechanisms to raise power control. That partially explains why 87 per cent of the firms show excessive voting control.

As for the participation of blockholders, it was found that in 40 per cent of the firms, there is participation of these shareholder types, which possibly indicates the presence of a more effective monitoring in the behavior of managers, as observed by Konijn, Kräussl and Lucas (2011).

Regarding the presence of the majority shareholder on the board, 52 per cent of the firms have the same individual with accumulation of functions, occupying both positions of executive chairman and of the chairman of the board. In contrast to this reality, Bris, Brisley and Cabolis (2008) suggest that the board should adopt independent leadership structures. In relation to governance levels, 89 per cent of firms are in the traditional segment, 5 per cent in the new market, 4 per cent in Level 1 and 2 per cent in Level 2.

As for the correlations, there is a negative correlation between the variables M&A and TOP 1 (voting rights), which is in agreement with *H1*. With regard to the correlation between the dependent variable and the controlling shareholder typologies, there is variation, partly indicating that different controllers tend to behave differently when it comes to the M&A decision. On the other hand, the strong correlation between the variables

Table II.
M&A behavior by controller type

Controlling shareholder type	M&A 0	M&A 1	Total
Family	983	36	1019
State	137	13	150
Foreign	391	26	417
Institutional shareholder	53	0	53
Total	1,564	75	1,639

Table III. Descriptive statistics and correlations table

#	Variables	Me an	SD	Min	Max	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	M&A (0/1)	0.06	0.24	0	1	1							
(2)	Top 1 – voting rights	60.83	25.93	10.76	100	−0.05	1						
(3)	ECR	0.87	0.33	0	1	−0.1	0.17	1					
(4)	Blockholders	23.29	20.11	0	74.65	−0.04	−0.75	−0.03	1				
(5)	Family control	0.42	0.49	0	1	−0.09	0.1	0.17	0.05	1			
(6)	State control	0.06	0.24	0	1	0.03	0.09	0.02	−0.08	−0.22	1		
(7)	Foreign control	0.17	0.38	0	1	0	0.15	−0.06	−0.09	−0.39	−0.12	1	
(8)	Presence in the Board	0.52	0.5	0	1	−0.04	−0.16	0.07	0.09	0.58	−0.27	−0.46	1
(9)	Pyramidal structure	0.65	0.48	0	1	0.06	0.12	0.18	−0.08	0.12	−0.15	−0.11	0.12
(10)	Dual-class shares	0.78	0.41	0	1	−0.1	0.13	0.51	0.04	0.14	0.04	−0.04	0
(11)	Size	14.1	1.91	4.67	19.82	0.24	−0.04	−0.07	−0.05	−0.29	0.25	0.13	−0.27
(12)	ROA	0	0.18	−0.8	0.29	0.11	−0.07	−0.1	0.01	−0.11	0.04	0.07	−0.08
(13)	Leverage	0.29	0.3	0	1.88	0	−0.02	0.04	0.04	0.05	−0.1	−0.06	0.04
(14)	Investment	0.07	0.08	−0.11	0.53	0.19	0	−0.08	−0.07	−0.04	−0.05	0.06	−0.02
(15)	Cash holdings	0.09	0.12	0	0.67	0.09	−0.09	−0.1	−0.03	−0.05	−0.07	−0.05	0.06
(16)	Tobin's Q	1.34	1.06	0.42	6.52	0.1	0.01	−0.14	−0.06	−0.04	−0.1	−0.01	0.02
(17)	B3 – traditional segment	0.89	0.31	0	1	−0.25	0.17	0.21	−0.03	0.01	−0.07	0.1	−0.08
(18)	B3 – Leve l 1	0.04	0.2	0	1	0.14	−0.03	0.08	−0.01	0.05	0.09	−0.09	0.04
(19)	B3 – Leve l 2	0.02	0.13	0	1	0.06	−0.03	0.04	0.07	0.01	0.04	−0.01	0.03
(20)	"Novo Mercado"	0.05	0.22	0	1	0.2	−0.2	−0.39	0.01	−0.07	−0.01	−0.06	0.05

(*continued*)

#	Variables	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
(1)	M&A (0/1)											
(2)	Top 1 – voting rights											
(3)	ECR											
(4)	Blockholders											
(5)	Family control											
(6)	State control											
(7)	Foreign control											
(8)	Presence in the Board											
(9)	Pyramidal structure	1										
(10)	Dual-class shares	−0.03	1									
(11)	Size	0.05	0.01	1								
(12)	ROA	0.03	−0.08	0.41	1							
(13)	Leverage	0.05	0.05	−0.05	−0.5	1						
(14)	Investment	0.04	−0.06	0.22	0.16	−0.03	1					
(15)	Cash holdings	0.05	−0.15	0.1	0.25	−0.1	0.06	1				
(16)	Tobin’s Q	0.08	−0.2	−0.28	−0.45	0.4	0.03	0.07	1			
(17)	B3 – traditional segment	−0.05	0.2	−0.23	−0.15	0.01	−0.17	−0.22	−0.16	1		
(18)	B3 – Leve l 1	0.03	0.11	0.22	0.1	0.02	0.05	0.01	−0.02	−0.58	1	
(19)	B3 – Leve l 2	0.04	0.03	0.07	0.05	−0.02	0.04	0.12	0.09	−0.38	−0.03	1
(20)	“Novo Mercado”	0.02	−0.39	0.08	0.09	−0.02	0.16	0.23	0.19	−0.67	−0.05	−0.03

Table III.

blockholders and voting rights of the majority shareholder suggest the existence of a multicollinearity problem, which would lead to omitting one of these variables if this problem was confirmed. Nonetheless, after performing the variance inflation factor (VIF) test, it was found a value of 1.96, meaning that there is no multicollinearity between the variables and, so the problem regards the level of the variables and not their nature. As a rule, to confirm multicollinearity, the value of the VIF must be > 5 (Corrar, Paulo, & Dias Filho, 2014).

4.1 Estimation strategy

Considering that the dependent variable is binary in nature, taking value 1 when a firm has performed an M&A transaction in year *t*, otherwise 0 (zero), the method chosen for the estimate was that of logistic regression using panel data.

The estimated logistic regression model is given by the function $\Pr(y = 1 \mid x) = F(\alpha + \beta.x)$, where x represents the explanatory variables (concentration and typology of the majority shareholder) and control variables (governance and financial variables), and $y = 1$ represents the occurrence of an M&A in a given period for a given sample firm as a function of the explanatory variables (x).

5. Results

Table IV presents the estimates results by the random effects estimator on panel data. Previous to that, the Breusch-Pagan/Cook-Weisberg test for heteroskedasticity was carried out and its result presents a χ^2 value of 2,336.03 and a p-value of 0.0 result, which is significant at a 95 per cent significance level. Thus, the shown results consider the heteroscedasticity correction by bootstrap estimators, more efficient and consistent estimators than the commonly used robust standard error estimator, Halbert White (Hausman & Palmer, 2012).

H1a predicts that the greater the control of the voting rights of the majority shareholder, the lower the propensity for an M&A. A negative and statistically significant effect (p-value < 0.05) of the voting rights concentration of the majority shareholder on the probability of an M&A occurrence is observed in Table IV, Columns 1 and 2. From the results presented in Column 1 of Table IV, it can be concluded that a 1 per cent increase in the concentration of voting rights of the majority shareholder reduces by 1.5 per cent ($1 - \exp(-0.015)$) the chances of an M&A. This result supports the incentive effect hypothesis in what regards the majority shareholder.

In Column 2 of Table IV, *H1b* – the entrenchment effect – was tested, assuming that the control position of the majority shareholder may have been obtained through mechanisms that allow excess control (greater voting rights in comparison to voting rights), such as pyramidal ownership structures or issuance of preferred shares. To do so, the ECR variable was included as a moderating variable of voting rights.

Column 2 shows the negative and significant effect related to the voting rights variable. In this case, the economic effect of the voting power concentration is even more intense: for every 1 per cent increase in voting rights concentration of the largest ultimate shareholder (LUS) the propensity for an M&A is reduced by 3 per cent ($1 - \exp(-0.030)$). These results put in evidence that the voting rights of the majority shareholder affect the M&A decision, confirming once again *H1a*, that of the largest shareholder incentive effect. On the other hand, the moderating effect of the ECR variable is not significant, showing that even when using excess control mechanisms, the majority shareholder does not increase its propensity for an M&A, thus rejecting *H1b*, that of the entrenchment effect.

Table IV. Empirical estimations

Dependent variable: M&A	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Top 1 – voting rights	−0.015**** (0.008)	−0.030* (0.014)					−0.012**** (0.006)
ECR		−0.77 (0.848)					
Top 1 – voting rights # ECR		0.019 (0.015)					
Family control			−0.547* (0.215)			−0.569** (0.213)	−0.416 (0.391)
State control				−0.675**** (0.383)		−0.706 (0.452)	−0.602 (0.737)
Foreign control					0.282 (0.272)	0.093 (0.289)	0.189 (0.441)
Blockholders	−0.018**** (0.010)	−0.017**** (0.009)	−0.006 (0.010)	−0.006 (0.010)	−0.005 (0.010)	−0.006 (0.010)	−0.017**** (0.010)
ECR	0.093 (0.597)	0 (0.000)	0.009 (0.303)	−0.002 (0.312)	−0.031 (0.297)	0.02 (0.292)	0.095 (0.618)
Presence in the board	0.117 (0.373)	0.133 (0.359)	0.393 (0.342)	0.134 (0.326)	0.259 (0.333)	0.379 (0.399)	0.3 (0.481)
Pyramidal structure	0.357 (0.396)	0.395 (0.415)	0.304 (0.196)	0.218 (0.182)	0.277 (0.198)	0.254 (0.191)	0.33 (0.373)
Dual-class shares	0.01 (0.270)	−0.015 (0.259)	0.016 (0.368)	−0.056 (0.373)	−0.04 (0.376)	0.044 (0.366)	0.097 (0.308)
Size	0.896*** (0.121)	0.909*** (0.128)	0.887*** (0.112)	0.938*** (0.105)	0.913*** (0.106)	0.914*** (0.116)	0.904*** (0.137)
ROA	0.328 (1.141)	0.339 (1.146)	0.258 (0.610)	0.257 (0.545)	0.293 (0.582)	0.173 (0.598)	0.194 (1.109)
Leverage	−0.262 (0.480)	−0.269 (0.485)	−0.321 (0.843)	−0.436 (0.910)	−0.297 (0.862)	−0.403 (0.929)	−0.308 (0.574)
Investment	6.390*** (0.920)	6.293*** (0.955)	6.559*** (0.771)	6.286*** (0.731)	6.355*** (0.762)	6.445*** (0.736)	6.404*** (0.975)
Cash holdings	1.249 (0.958)	1.165 (0.944)	1.398 (1.517)	1.413 (1.486)	1.552 (1.489)	1.325 (1.508)	1.178 (0.903)
Tobin's Q	0.294* (0.125)	0.288* (0.129)	0.287* (0.115)	0.319** (0.116)	0.311** (0.118)	0.291* (0.117)	0.281* (0.133)
B3 – Level 1	−0.454 (0.743)	−0.43 (0.749)	−0.265 (0.636)	−0.336 (0.663)	−0.353 (0.624)	−0.213 (0.711)	−0.309 (0.714)
B3 – Level 2	0.577 (0.658)	0.591 (0.684)	0.566 (0.503)	0.516 (0.496)	0.478 (0.509)	0.593 (0.483)	0.635 (0.730)
"Novo Mercado"	0.79 (0.598)	0.75 (0.593)	0.954**** (0.511)	0.928**** (0.502)	0.934**** (0.498)	0.980**** (0.514)	0.873 (0.604)
Year fixed-effects	Sim	Sim	Sim	Sim	Sim	Sim	Sim
Constant	−16.248*** (1.732)	−15.847*** (1.692)	−17.126*** (1.537)	−17.776*** (1.426)	−17.636*** (1.414)	−17.435*** (1.560)	−16.503*** (1.828)
lnsig2u	0.674 (0.417)	0.661**** (0.379)	0.672*** (0.143)	0.677*** (0.189)	0.663*** (0.137)	0.678*** (0.154)	0.685 (0.453)
AIC	718.309	716.683	711.073	712.149	712.725	709.751	715.972
BIC	782.052	780.426	751.637	752.713	753.289	750.315	779.715
Nú mero de Observações	2,428	2,428	2,428	2,428	2,428	2,428	2,428

Notes: ****$p < 0.10$, *$p < 0.05$, **$p < 0.01$, *** $p < 0.001$ (standard errors in parentheses)

H2 predicts that there are differences between firms with different types of controlling shareholders, namely, family controller (*H2a*), state controller (*H2b*) or foreign controller (*H2c*) as to the propensity for an M&A. Column 6 in Table IV shows that the presence of a family controller drastically reduces (p-value < 0.01) the probability of an M&A transaction occurring, confirming *H2a*. In economic terms, if a firm shifts to a family controller, its chances of performing an M&A is multiplied by 0.56 (exp (−0.569)). That is, having a family-owned firm reduces by 43.4 per cent (1 – exp (−0.569)) the chances of an M&A transaction occurring.

Furthermore, the presence of a state controller would also reduce the chances of M&A by 50 per cent (1 – exp (−0.706)) because of the coefficient related to the state controller presence is not statistically significant. In this case, *H2b*, which proposes that the state controller would have a positive effect on M&A propensity, cannot be accepted.

Finally, the existence of a foreign controller would increase by 9 per cent the chances of an M&A (exp (0.093) − 1). For that matter, just as in the case of the state controller, the coefficient is not statistically significant, which also leads to the rejection of *H2c*.

To a certain degree, these results show the difference in behavior between the different types of controlling shareholders in terms of sign and magnitude. The χ^2 test was performed to test whether these differences are really significant. The result was a χ^2 value of 5.2 with two degrees of freedom and the value of $p = 0.007$ (F&A $\chi^2 = 5.22$, df = 2, $p < 0.01$), indicating that the estimated parameters of the various controller types are statistically different.

Regarding the control variables and their effect on the M&A decision as measured by Tobin's Q, it was found that the size of the firm (p-value < 0.001), investment (p-value < 0.001) and investment opportunities (p-value < 0.05) are significant and positively affect the likelihood of firms doing an M&A.

Finally, in Column 7 of Table IV, previous results were confirmed. Specially, the negative and significant effect of ownership concentration on the likelihood of M&A transactions occurring (*H1a*) and maintaining the differences between the coefficients when considering various types of controlling shareholders (*H2*).

6. Conclusion

The purpose of this paper was to examine the effect of ownership structure on the concentration and typology of the majority shareholder in M&A decisions. To do so, a sample of 429 Brazilian firms was analyzed between 1998 and 2007.

The results pointed out that firms are mostly family-owned and voting rights are mostly concentrated in the hands of the largest ultimate shareholder (LUS), producing evidence consistent with theories of ownership structure and with the owner's influence on strategic decisions. Moreover, a significant relationship was found between M&A and firm size, investment and market value, indicating that large firms in terms of assets and with investment opportunity tend to invest more in an M&A.

Regarding the type of controller, the results partially confirm the hypotheses of this study. Family-controlled firms tend to carry out fewer M&A transactions, reinforcing the logic by which families tend to be more resistant to making decisions that may reduce their control (Miller et al., 2010) or that may threat business inheritance to future generations. In addition, other factors that may increase risks for business families in an M&A may explain this behavior, such as the lack of managerial talent and choices more based on emotions and on maintaining family socio-emotional wealth (Singla et al., 2014).

As for the state control there was no significant effect on the probability of an M&A. With high discretionary power derived from its monopoly function of economic policymaking, the state tends to have different objectives from those of private firms, being able to carry out an M&A aimed at serving the public interest, which does not necessarily imply in maximizing the firm's value (La Porta et al., 2000). Moreover, when the government extends part of its control rights to the private sector or when it branches out directly or indirectly, even if minority, with other firms via corporate ownership (Lazzarini, 2011), it retains its controlling power in investment banks or pension funds (Gaughan, 2015). Thus, its neutral effect of M&A propensity partly derives from the case-by-case series of each firm and sector and how it intends to implement its policies through these firms.

Regarding the institutional control no M&A transaction for domestic institutional investors was found in the sample. This corroborates with Andriosopoulos and Yang's (2015) thesis that institutional investors are more opposed to an M&A because these transactions may misrepresent their participation in governance when big investor groups are involved, as it occurs in Brazil, where firms tend to cluster into pyramidal economic groups. Finally, a positive (yet not significant) effect of the foreign controller on the propensity for an M&A was also found.

In face of these results, it can be concluded that the concentration of voting rights and the typology of the majority shareholder are relevant corporate mechanisms in M&A decisions. In addition, it is also possible to observe that different types of shareholders carry out different corporate strategies when it comes to a context where there is low protection to external investors, such as it occurs in Brazil.

From a theoretical approach, previous studies have partly justified that the M&A decision is motivated by individual advantages obtained from increasing the size of the firm, or from *managerial hubris* (Aggarwal & Samwick, 2003). In this study, the presented evidence showed that these motivations are not justified. More than that, the results indicate that M&A decisions are associated with the characteristics of the controlling shareholder, their concentration and their typology.

Therefore, this study contributes to the agency theory by allowing us to understand which effect – incentive or entrenchment – prevails in the context of the agency problem between controlling and minority shareholders in an institutional environment of low foreign investor protection, such as it is the case of Brazil. The results indicate a dominance of the incentive effect in the Brazilian context, which can be partially explained by the supremacy of families as the largest controlling shareholders of publicly traded firms in Brazil.

From a managerial approach, the contribution is related to showing that minority shareholders have little or no influence over an M&A decision, so they cannot decide on the use of resources for fast growth and access to new markets through M&A. Thus, the investment decision must take into account the nature and the quality of the controlling shareholder.

With regard to the limitations, this study considered only the M&A definitions as stated by the Bureau van Dijk database. In this sense, future studies may analyze the effects of ownership structure based on other M&A definitions and typologies. In addition, the study is limited to the period from 1998 to 2007, which is prior to the international financial crisis. Future studies may extend the analysis period to include the post-crisis period (2008) to check if there are differences in M&A strategies before and after the crisis. Recent studies indicate that periods of crisis tend to reduce asset values, increasing the occurrence of M&A in some countries (Reddy, Nangia, & Agrawal, 2013).

Finally, there may be the case that several shareholders with large amounts of shares come together through shareholder agreements to control a specific firm. In this case, there would be a "hybrid" ownership structure, where more than one type of shareholder would be configured as a controlling shareholder. The discussion about this kind of structures may be subject of future studies.

References

Aggarwal, R. K., & Samwick, A. A. (2003). Why do managers diversify their firms? Agency reconsidered. *The Journal of Finance*, *58*, 71–118.

Aldrighi, D. M. (2014). Concentration of ownership and control of Brazilian firms. (Unpublished Thesis). FEA/USP, Universidade de São Paulo, São Paulo, Brazil.

Aldrighi, D. M., & Postali, F. A. S. (2011). Pyramidal ownership in Brazilian firms. *Revista Economia*, *12*, 27–48.

Andriosopoulos, D., & Yang, S. (2015). The impact of institutional investors on mergers and acquisitions in the United Kingdom. *Journal of Banking and Finance*, *50*, 547–561.

Barney, J. B., & Hesterly, W. S. (2007). *Strategic Management and Competitive Advantage*, Harlow, UK: Pearson Prentice Hall.

Bebchuck, L. A. (1999). *A rent-protection theory of corporate ownership and control*. NBER Working Paper No. 7203.

Bollaert, H., & Delanghe, M. (2015). Security and Zephyr, data sources for F&A research. *Journal of Corporate Finance*, *33*, 85–100.

Bris, A., Brisley, N., & Cabolis, C. (2008). Adopting better corporate governance: Evidence from cross-border mergers. *Journal of Corporate Finance*, *14*, 224–240.

Brockman, P., Rui, O. M., & Zou, H. (2013). Institutions and the performance of politically connected F&As. *Journal of International Business Studies*, *44*, 833–852.

Caixe, D. F., & Krauter, E. (2013). The influence of the ownership and control structure on corporate market value in Brazil. *Revista Contabilidade e Finanças*, *24*, 142–153.

Caprio, L., Croci, E., & Del Giudice, A. (2011). Ownership structure, family control, and acquisition decisions. *Journal of Corporate Finance*, *17*, 1636–1657.

Chen, L.-W., Johnson, S. A., Lin, J.-C., & Liu, Y.-J. (2009). Information, sophistication, and foreign versus domestic investors' performance. *Journal of Banking and Finance*, *33*, 1636–1651.

Choe, H., Kho, B.-C., & Stulz, R. M. (2005). Do domestic investors have an edge? The trading experience of foreign investor in Korea. *The Review of Financial Studies*, *18*, 795–829.

Claessens, S., & Fan, J. (2002). Corporate governance in Asia: A survey. *International Review of Finance*, *3*, 71–103.

Claessens, S., Djankov, S., & Lang, L. H. P. (2002). The separation of ownership and control in East Asian corporations. *Journal of Financial Economics*, *58*, 81–112.

Claessens, S., Djankov, S., Fan, J. P. H., & Lang, L. H. P. (2002). Disentangling the incentive and entrenchment effects of large shareholdings. *The Journal of Finance*, *57*, 2741–2771.

Corrar, L. J., Paulo, E., & Dias Filho, J. M. (2014). *Multivariate Data Analysis for Business Administration, Accounting and Economics*, São Paulo, SP: Editora Atlas.

Datta, D. K., Musteen, M., & Herrmann, P. (2009). Board characteristics, managerial incentives, and the choice between foreign acquisitions and international joint ventures. *Journal of Management*, *35*, 928–953.

Deng, P., & Yang, M. (2015). Cross-border mergers and acquisitions by emerging market firms: A comparative investigation. *International Business Review*, *24*, 157–172.

Dittmann, I., Maug, E., & Schneider, C. (2008). How Preussag became TUI: A clinical study of institutional blockholders and restructuring in Europe. *Financial Management*, *37*, 571–598.

Gaughan, P. A. (2015). *Mergers, acquisitions, and corporate restructurings*, Hoboken, NJ: Wiley.

Ghaugan, P.A. (2015). *Merger, Acquisitions, and Corporate Restructuring*, New York: Wiley.

Gomez-Mejia, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, *52*, 106–137.

Hausman, J., & Palmer, C. (2012). Heteroskedasticity-robust inference in finite samples. *Economics Letters*, *116*, 232–235.

Jemison, D. B., & Sitkin, S. B. (1986). Corporate acquisitions: A process perspective. *Academy of Management Review*, *11*, 145–163.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*, 305–360.

Jiang, Y., Peng, M. W., Yang, X., & Mutlu, C. C. (2015). Privatization, governance, and survival: MNE investments in private participation projects in emerging economies. *Journal of World Business*, *50*, 294–330.

Konijn, S. J. J., Kräussl, R., & Lucas, A. (2011). Blockholder dispersion and firm value. *Journal of Corporate Finance*, *17*, 1330–1339.

La Porta, R., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R. (1998). Law and finance. *Journal of Political Economy*, *106*, 1113–1155.

La Porta, R., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, *58*, 3–27.

La Porta, R., Lopez-De-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *Journal of Finance*, *54*, 471–517.

Lazzarini, S. G. (2011). *Crony capitalism. Brazil's Owners and Their Connections*, Rio de Janeiro: Editora Elsevier.

Lien, Y.-C., & Filatotchev, I. (2015). Ownership characteristics as determinants of FDI location decisions in emerging economies. *Journal of World Business*, *50*, 637–650.

Lima, M.A.P. (2003). Tese de Doutorado do Instituto Superior de Ciências do Trabalho e da Empresa de Lisboa. [Big Families, Big Firms: An anthropology essay on a Lisbon elite]. Recuperado de https://books.openedition.org/etnograficapress/2829.

Lins, K., Volpin, P., & Wagner, H. (2013). Does family control matter? International evidence from the 2008-2009 financial crisis. *Review of Financial Studies*, *26*, 2583–2619.

Miller, D., Breton-Miller, I. L., & Lester, R. H. (2010). Family ownership and acquisition behaviour in publicly-traded firms. *Strategic Management Journal*, *31*, 201–223.

Moura, G. D., & Beuren, I. M. (2017). Influence of ownership structure and family management on positioning in mergers and acquisitions. *Revista de la Facultad de Ciencias Económicas: Investigación y Reflexión*, *25*, 129–149.

Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, *20*, 293–315.

Pedersen, T., & Thomsen, S. (2003). Ownership structure and value of the largest European firms: The importance of owner identity. *Journal of Management and Governance*, *7*, 27–55.

Reddy, K. S., Nangia, V. K., & Agrawal, R. (2013). Corporate mergers and financial performance: A new assessment of India cases. *Nankai Business Review International*, *4*, 107–129.

Ross, S., Westerfield, R., & Jaffe, J. (2002). *Corporate finance*, Boston, MA: McGraw Hill Education.

Safarian, E. (2003). Internalization and the MNE: A note on the spread of ideas. *Journal of International Business Studies*, *34*, 116.

Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, *52*, 737–783.

Singla, C., Veliyath, R., & George, R. (2014). Family firms and internationalization- governance relationships: Evidence of secondary agency issues. *Strategic Management Journal*, *35*, 606–616.

Thomsen, S., & Pedersen, T. (2000). Ownership structure and economic performance in the largest European companies. *Strategic Management Journal*, *21*, 689–705.

Tirole, J. (2006). *The theory of corporate finance*, Princeton, NJ: Princeton University Press.

Villalonga, B., & McGahan, A. M. (2005). The choice among acquisitions, alliances, and divestitures. *Strategic Management Journal*, *6*, 1183–1208.

Villalonga, B., & Amit, R. (2006). How do family ownership, control and management affect firm value? *Journal of Financial Economics*, *80*, 385–417.

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