

UNIVERSIDADE FEDERAL DE UBERLÂNDIA
FACULDADE DE GESTÃO E NEGÓCIOS
PROGRAMA DE PÓS-GRADUAÇÃO EM ADMINISTRAÇÃO
GESTÃO FINANCEIRA E CONTROLADORIA

DANIEL HENRIQUE DE OLIVEIRA SOUZA

**THE TAG ALONG CONCERN FOR THE SHAREHOLDER AND FIRM'S WEALTH
– AN EMPIRICAL BRAZILIAN INVESTIGATION OF TOBIN'S Q RATIO AND
DIVIDENDS**

UBERLÂNDIA

2016

UNIVERSIDADE FEDERAL DE UBERLÂNDIA
FACULDADE DE GESTÃO E NEGÓCIOS

DANIEL HENRIQUE DE OLIVEIRA SOUZA

**THE TAG ALONG CONCERN FOR THE SHAREHOLDER AND FIRM'S WEALTH
– AN EMPIRICAL BRAZILIAN INVESTIGATION OF TOBIN'S Q RATIO AND
DIVIDENDS**

Dissertação apresentada à Faculdade de Gestão e
Negócios da Universidade Federal de Uberlândia,
como requisito para obtenção do título de Mestre
em Administração.

Campo de conhecimento:

Gestão Financeira e Controladoria

Orientador:

Prof. Dr. Antônio Sérgio Torres Penedo

UBERLÂNDIA

2016

Dados Internacionais de Catalogação na Publicação (CIP)
Sistema de Bibliotecas da UFU, MG, Brasil.

S729t
2016 Souza, Daniel Henrique de Oliveira, 1984-
The tag along concern for the shareholder and firm's wealth - an
empirical brazilian investigation of tobin's q ratio and dividends / Daniel
Henrique de Oliveira Souza. - 2016.
74 f. : il.

Orientador: Antônio Sérgio Torres Penedo.
Dissertação (mestrado) - Universidade Federal de Uberlândia,
Programa de Pós-Graduação em Administração.
Inclui bibliografia.

1. Administração - Teses. 2. Governança corporativa - Brasil -
Teses. 3. Dividendos - Teses. 4. Valor (Economia) - Teses. I. Penedo,
Antônio Sérgio Torres. II. Universidade Federal de Uberlândia.
Programa de Pós-Graduação em Administração. III. Título.

CDU: 658

Reitor da Universidade Federal de Uberlândia

Elmiro Santos Resende

Diretora da Faculdade de Gestão e Negócios

Kárem Cristina de Sousa Ribeiro

Coordenador do Programa de Pós-Graduação em Administração

Valdir Machado Valadão Júnior

DANIEL HENRIQUE DE OLIVEIRA SOUZA

**THE TAG ALONG CONCERN FOR THE SHAREHOLDER AND FIRM'S WEALTH
– AN EMPIRICAL BRAZILIAN INVESTIGATION OF TOBIN'S Q RATIO AND
DIVIDENDS**

Dissertação apresentada à Faculdade de Gestão e
Negócios da Universidade Federal de Uberlândia,
como requisito para obtenção do título de Mestre
em Administração de Empresas.

Campo de conhecimento:

Gestão Financeira e Controladoria

Data de aprovação:

____/____/____

Banca examinadora:

Prof. Dr. Antônio Sérgio Torres Penedo
(Orientador – FAGEN/UFU)

Prof. Dr. Cristiano Augusto Borges Forti
(Co-orientador – FAGEN/UFU)

Prof. Dr. Vinícius Silva Pereira
(Professor – FAGEN/UFU)

Prof. Dr. Luiz Ricardo Kabbach de Castro
(Professor – EESC/USP)

*Aos meus colegas Gustavo Moreira e Natan Aguiar,
por possibilitar que esse sonho se tornasse realidade.*

Agradecimentos

Agradeço à Deus, autor da vida e consumidor da minha fé, pela oportunidade e privilégio de realizar o mestrado. Aos meus pais Lúgero e Eleusa por me incentivar constantemente nos estudos, fornecendo todo o suporte para que eu chegasse até aqui.

Agradeço ao meu orientador Dr. Antônio Sérgio Torres Penedo pelo acompanhamento e desprendimento acadêmico no que tange à evolução da ciência e do melhor desenvolvimento desse trabalho. Agradeço ao meu co-orientador Dr. Cristiano Augusto Borges Forti pelo trabalho colaborativo, realizado com objetividade e inteligência. Sou grato pelos seus ensinamentos, pelo tempo dispendido e pela confiança depositada. Suas recomendações foram essenciais para a realização desse trabalho. Seu direcionamento e intervenções foram muito importantes para o desenvolvimento dessa Dissertação. Agradeço ao Dr. Vinícius Silva Pereira pela determinação e profissionalismo nas contribuições apresentadas e ao Dr. Luiz Ricardo Kabbach de Castro por aceitar o convite e participar desse trabalho.

Agradeço em especial à Secretaria de Comunicação Social da Prefeitura de Uberlândia, na pessoa do secretário Gustavo Moreira e à Prodaub, na pessoa dos Diretores Natan Fernandes Aguiar e Júlio Weber Faria de Araújo e do Presidente Placidino Stábile de Oliveira pelo apoio fundamental sem o qual minha participação neste curso não seria possível, e por acreditarem nessa importância para mim. Ao coordenador Lucas Aurélio Oliveira Barbosa, agradecimento pela paciência nas ausências nos períodos de aulas e atividades correlatas ao curso.

RESUMO

Esse estudo investiga se o fato de empresas concederem *tag along* para acionistas minoritários se relaciona com a geração de valor da empresa (medida pelo Q de Tobin - Q) e com a riqueza dos acionistas minoritários (medida pelos dividendos pagos e juros sobre capital próprio - PAY). *Tag along* é a extensão parcial ou total, a todos os demais sócios das empresas, das mesmas condições obtidas pelos controladores quando da venda do controle de uma sociedade. Para tanto foram coletados e analisados dados de companhias brasileiras não-financeiras listadas na BM&F Bovespa, no período de 1995 a 2014, incluindo 613 empresas. Para a análise utilizou-se de regressão com dados em painel. A hipótese levantada para a pesquisa parte da teoria de Governança Corporativa e considera os riscos e o potencial para conflitos que a estrutura de propriedade concentrada das empresas brasileiras evidencia. Os resultados encontrados indicaram uma relação positiva entre concessão de *tag along* e Q de Tobin e uma relação negativa entre a concessão de *tag along* e *payout* - PAY. Assim, a implicação da concessão de *tag along* como instrumento de governança corporativa se relaciona positivamente com os ativos da empresa em relação ao seu valor de mercado e negativamente com a distribuição de retorno ao acionista minoritário sob a forma de dividendos e juros sobre capital próprio (JCP). Para trabalhos futuros, sugere-se a análise em outros países que têm como prática de governança corporativa a concessão de *tag along* aos seus acionistas, bem como a análise dessa relação de distribuição de *tag along* levando em consideração a influência do pertencimento das firmas em cada nível de governança corporativa da BM&F Bovespa.

Palavras-chave: *tag along*, governança corporativa, dividendos, valor.

ABSTRACT

The purpose of this research was to investigate how companies granting tag along rights to minority shareholders, affect the value generation of the company (measured by Tobin's Q - Q) as well as wealth of minority shareholders (measured by payout - PAY). Tag along is the partial or full extension, to all other shareholders of the companies, the same conditions obtained by the controllers on the sale of control of a company. To study this, we collected and analyzed non-financial data of 613 Brazilian companies listed on the BM&F Bovespa during the years 1995-2014. For the analysis we used regression with panel data. The hypothesis for the research of the theory of corporate governance and considers the risks and the potential for conflicts that the ownership structure of Brazilian companies concentrated. The results showed a positive relationship between granting tag along and Q ratio and a negative relationship between the granting of tag along and payout - PAY. Thus, the implication of granting tag along as a corporate governance instrument is positively related to the firm assets in relation to its market value and negatively with the return to minority shareholders in the form of dividends and interest on net equity (JCP). For further studies, we suggest an analysis of other countries that use the corporate governance practice to grant tag along to its shareholders as well as the analysis of this tag along distribution ratio taking into account the influence of participation of companies in each level of corporate governance of BM&F Bovespa stock exchange.

Keywords: tag along, corporate governance, dividends, value.

LIST OF TABLES

Table 1 – Comparison of listing segments related to tag along.....	34
Table 2 – Definitions of study variables.....	43
Table 3 – Descriptive statistics for no tag along and at least 80% tag along	46
Table 4 - Descriptive statistics for no tag along and at least 80% tag along (cont.)	47
Table 5 - Descriptive statistics for 100% of tag along	51
Table 6 – Difference of means of Tobin’s Q between tag along and non-tag along firms	52
Table 7 – Difference of means of PAY between tag along and non-tag along firms.....	52
Table 8 – Results of panel data regressions, showing the constants, coefficients and errors for each regressions.....	54
Table 9 – Results of panel data regressions, showing the constants, coefficients and errors for each regressions.	71
Table 10 - Correlation of variables.....	74

LIST OF PICTURES

Figure 1 – The behavior of Table 3 and Table 4 variables in graph format.....	49
---	----

LIST OF ABBREVIATIONS AND ACRONYMS

BETA – Beta
BM&F Bovespa – The São Paulo Stock Exchange - Brazil
CG – Corporate Governance
CVM – Brazilian Securities Commission
GDP – Gross Domestic Product
GROW – Growth of sales
IPO – Initial Public Offering
IFRS – International Financial Reporting Standards
ISS – Institutional Shareholder Services Inc.
JCP – Interest on Net Equity
LEV – Leverage
LIQ – Liquidity
LSA – Brazilian SA's law
PAY – Payout
OLS – Ordinary Least Squares
ON – Common shares
PN – Preferred shares
Q – Tobin's Q ratio
ROA – Return on Assets
ROE – Return on Equity
SEC – Securities and Exchange Commission
SIZE – Size

CONTENTS

1 Introduction	12
2 Background.....	16
2.1 Corporate Governance and dividends.....	16
2.2 Governance and shareholders 'normalization minority in Brazil – Tag along	24
2.3 Corporate Governance and Value.....	35
3 Sample selection and data.....	39
4 Analysis of results	46
5 Conclusion.....	57
References	61
Appendix 1 – VIF Tests.....	70
Appendix 2 – Robustness check.....	71
Appendix 3 – Correlation of variables	74

1 Introduction

The capital market has great potential for mobilization and allocation of resources, able to assume a strategic role in the sustained growth of an economy and democratization of investment opportunities. Companies in order to finance themselves, may go public in this market, sharing their equity with other shareholders.

On the other hand, investors consider two main questions to allocate capital: risk and return. At first, knowing that economic agents are averse to risk, shareholders seeking to maximize returns (Markowitz, 1952; Sharpe, 1964). Thus, the process of business decision-making should be to base strategies that maximize the risk-adjusted return (value). The complexity of the stock market requires high qualification of the investor, which should seek financial strategies for minimizing risk and maximizing return, managing to get wealth in all market circumstances. For stock investors, creating a healthier business climate, obtained through better distribution practices of profits to minority shareholders, can ensure your invested money.

The literature points out that finance companies adopting best corporate governance practices have higher return and lower risk - which, for investors, may mean higher profitability of its shares on the capital market. Thus, in order to attract shareholders to acquire their shares, reducing the risk and increasing the chances of maximizing returns to minority shareholders, companies in the civil law countries type (La Porta, Lopez-de-Silanes, Shleifer and Vishny, 2000), which Brazil is included, adopt corporate governance policies in order to minimize the conflict between shareholders and controllers (Shleifer & Vishny, 1997). In the country, an instrument that contributes to increased transparency and equality between such agents, assisting in this process is granting tag-along rights for minorities.

The Brazilian legal framework presents a distinctive type of minority shareholders protection, called *tag along right*. It is required by Brazilian law in Article 254-A of the Brazilian Corporate Law Lei n. 6.404 (1976) and states that the sale, directly or indirectly, of control of a company may occur only under the condition that the purchaser is obligated to make a public offer to acquire the remaining common shares, in order to ensure their holders the minimum price of 80% of the amount paid for the shares of the controlling block. Bolsa de Valores, Mercadorias e Futuros de São Paulo [BM&FBOVESPA S.A.] (2015) recognize that some companies voluntarily extend the tag along right also to holders of preferred shares and/or

ensure that the holders of common shares a price higher than the 80%. Thus, the minority shareholders are protected if the firm is sold, ensuring the return on their investments.

In this context, this work aims to answer the following research problem: **Is there a relationship between full granting tag-along rights and the wealth of the firm and its minority shareholders?** In other words, the goal of the study is analyze if the value of the firms listed on the BM&F Bovespa and the wealth of minority shareholders are influenced by granting full tag-along rights. This research verifies the existence of a relationship between granting tag-along rights and the generation of wealth for organizations and minority shareholders in Brazil. Some of these firms are listed in the BM&F Bovespa's high levels of corporate governance, like Novo Mercado and Nível 2, which offer 100% of tag along for shareholders mandatorily.

Additionally, the hypothesis to be tested is to determine whether or not the full tag along grant promotes more value to minority shareholders and the company itself, as opposed to firms that do not grant 100% tag along. The theme is of theoretical, economic, and social importance. The factors that justify this statement, are as follows:

- To help minority shareholders, especially Brazilian, in choosing better shares in an undeveloped stock market and inside an information asymmetry outlook;
- To help firms to know if tag along, as a corporate governance issue, can increase their value;
- Studies relating tag along rights and value are incipient on literature;
- Creation, continuously, adding value for shareholders;
- Promote increasing of transparency and CG of Brazilian firms with the possibility of tag along concession for minority shareholders, could increasing your own value and promoting more shareholders' investments;
- To reaffirm the study and understanding of how Brazilian firms generate and distribute wealth and investments; if Brazilian tag along companies distribute more (or less) wealth for minority shareholders, in terms of payout and/or increasing the value of their assets on capital market through investments.
- To reaffirm the finance literature of corporate governance and valuation;
- Contribution to improving the economic and social quality of life for people, by saving investments through better probability of choice of wealthy firms and assets in the capital market, using the tag along concession criteria in order to

increase the chances of positive returns and in the process of decision-making portfolios.

The theme is justified, as it will investigate the tag along influence on value, giving subsidies to minority shareholders in the selection of portfolio and promoting firms in make investments efficiently. Stock exchanges, according to Neto (2006), play an important role in the economy of a country, as they promote national wealth through participation in the savings of each economic agent. They enable listed companies to capture funds for investments in projects and business expansion, thus contributing to job creation, growth of gross domestic product (GDP) and the real wealth increase of a nation.

Moreover, the research of corporate governance theory, identifying tag along concession as an instrument that could increase the shareholders' wealth and decrease the conflict between majority and minority shareholders, further supports this work. Andrade and Rossetti (2006) complement that good corporate governance practices will allow an even better management, maximizing value creation for shareholders and other stakeholders on the firm's wealth.

According to such theories, it is assumed that granting tag-along rights, as a corporate governance tool, makes certain that the minority shareholders are protected if the company is sold, generating value for them if it happens. With this guarantee placed in status, it is assumed that the firm will have more value, increased by the incentive of investments of the firm. Thus, this research starts with the preparation of the following cases:

H₀: There is no relation with concession of full tag along rights by firms and the value of the firms (measured by Tobin's Q ratio);

H₁: There is a positive relation with concession of full tag along rights by firms and the value of the firms (measured by Tobin's Q ratio).

H₂: There is no relation with concession of full tag along rights by firms and the wealth of minority shareholders (measured by payout);

H₃: There is a positive relation with concession of full tag along rights by firms and the wealth of minority shareholders (measured by payout);

To investigate these four potential outcomes, we conduct an empirical investigation to find out the association between the tag along concession by firms and the formation of value. We then conduct a series of regressions.

Specifically in the Brazilian stock market, there are characteristics that differentiate the development of this research. In addition to the recent expansion of the stock market, either by increasing the amount of public companies or by the growing number of investors, the presence of the minimum mandatory dividend and the diversification of shares into common and preferred, as well as the historical aspects as the inflationary past and the concern with aspects of corporate governance are also particular of Brazilian companies. A part of the national market that should be included in discussions on the remuneration of shareholders in Brazil are: the figure of interest on net equity, which is actually a tax strategy, given the different treatment has to shareholders, domestic companies or companies foreign (Martins & Famá, 2012), which makes evidence on dividends found in studies using the Brazilian context is distinct from research conducted in other countries.

This study is also important in Brazil because this country is marked by strong concentration of ownership and far less protection to investors, which means that rights or powers are poor protected through the enforcement of regulations and laws, like others civil law countries (La Porta, Lopez-de-Silanes & Shleifer and Vishny, 1999b). The theme of tag along is a special characteristic of Brazilian market, that was not much explored in studies and corresponding to one of equal the equal rights of shareholders of a company, and it is important to analyze its characteristics in Brazil.

This scenario, documented empirically by Himmelberg, Hubbard and Love (2000), incentives the agency conflict between minority shareholders and majority shareholders. For minimize this conflict, some CG instruments are used (Shleifer & Vishny, 1997), like giving dividends, accountability and/or, especially in here research, tag along concession.

The work proceeds as follows. It is structured in five chapters. Chapter 1 presents the problem of this research, the objectives and the contributions of this work. Chapter 2 presents and discusses the aspects of corporate governance, the national and international empirical evidences related to the subject matter, the regulation and legal aspects of the theme in Brazil and the state of the art of the subject. Chapter 3 describes the sample selection procedure and data, presenting the methodological aspects of study, addresses the definition of variables, the statistical techniques applied and reporting additional tests. Chapter 4, presents results of the

empirical analyses. Chapter 5 summarizes and concludes the work with a discourse of the obtained results and giving suggestions for future researches involving the tag along concession for minority shareholders in the governance corporate context and the creation of wealth and investments.

2 Background

2.1 Corporate Governance and dividends

Although Corporate Governance (CG) existed for more than 50 years, da Silva (2004) argues that only in recent years the issues relating to it are becoming important. In the evolution of the capital market, the mechanisms of Corporate Governance are relevant (Peixoto & Buccini, 2013). In this sense, the CG deals with the ways in which the resources of suppliers guarantee the return on your investment, as Shleifer and Vishny (1997) postulated in his work.

According to da Silva (2004), with the emergence of the CG, a greater distribution of dividends may be considered a way of establishing a better reputation with minority shareholders, reducing the expropriation of the majority shareholders over the minority shareholders and the conflicts between these agents. One of the practices associated with this issue, among others, is the treatment of shareholders equity (Comissão de Valores Mobiliários [CVM], 2002).

Dividends is money paid by companies to their shareholders, as a way of distributing profits to investors. The dividend policy is the decisions taken by the company's management regarding payment of dividends or not, especially considering the frequency of payments; the need for capital for new investments in the company; the sources of capital available and their cost; the preference shareholders to receive regular or future income and the percentage of profit to be distributed to shareholders (Novis, 2002).

Bruni, Gama, Famá and Firmino (2003) corroborate to suggest that the dividend policy appears more relevant in countries with weak legal protection to shareholders. In this research the legal protection is presented in accordance with taxation on the remuneration of shareholders: the strong protection as the United States, capital gains and dividends are taxed both; already in those where the shareholder protection is weak, as in Brazil, imposes tax only on capital gains and dividends are exempt. Moreover, in the Brazilian scene, even if the

company can make its own dividend policy, according to law, unless the company's by-laws establish other condition, it is established a minimum mandatory dividend to shareholders of 25% of adjusted net income (Lei n. 6.404, 1976).

The theme of dividends and income distribution policies has been studied for at least five decades. Several theories and empirical studies on the possible effects of dividend policy on firm value and stock returns have been prepared. Examples of these theories are the theory of substitution of dividends and the Bird-in-the-hand theory. For the first, one of the most significant studies is Sawicki (2009), in which, emphasizing the context of crisis between the years 1994 and 2003, met evidence with five emerging companies in Southeast Asia that dividends would act as CG substitute for other mechanisms.

Regarding the Bird in the hand theory, we start from the assumption that the risk inherent in the dividend is lower than that linked to the capital market gain, given the association with a future date (Martins & Famá, 2012). Studies of Lintner (1956) and Gordon (1959) are also references and in them it is observed that, with increasing distribution of dividends to shareholders, the return they have is small compared to any capital market gains or appreciation of the shares, precisely because of the uncertainty of shareholders be higher in the future.

It is assumed so that, even if the dividend represents a distribution of lower profits compared to a possible future gain (Bird-in-the-hand), investors will prefer to guarantee it, resulting in possible variations in the company's risk level in which invests. (Zagonel, 2013). Thus, it is remarkable the influence of the Agency Theory and Bird-in-the-hand acting on the fact that well-governed companies align remuneration expectations of its shareholders (increasing dividend payments). Thus, companies with best corporate governance practices pay higher dividends than those with incipient governance practices (Jiraporn, Kim & Kim, 2011).

Nevertheless, there is a study has considered a Bird in the hand theory a fallacy (Bhattacharya, 1979). So, the argument is: cash dividends moves as a signal of expected cash flows of firms in an imperfect-information setting. This impasse if dividends are a cash flow signaling or if it works according to the free cash flow hypothesis was studied by Lang and Litzenberger (1989).

In this way, the supposed market signaling capacity is an important aspect of the dividend policy scenario. The cash flow signaling theory, developed by Bhattacharya (1979) and Bhattacharya (1980), Easterbrook (1984), John and Williams (1985) and Miller and Rock (1985), theorized that the dividend distributions and interest on net equity represent signals to

the market as to the future profitability of the companies, and therefore can be considered as instruments for managers pass information on financial development expectations of their companies, sent intentionally and at some costs by management to the company and its stockholders. Based on theory, dividend changes are explicit signals about the current and/or future cash flows.

Some studies in the US market come to equal conclusions on this premise, corroborating the theory (Fama, Fisher, Jensen & Roll, 1969; Pettit, 1972; Aharony & Swary, 1980). Kwan (1981), Eades (1982), and Woolridge (1982) have found a significant positive association between announcement of dividend changes and the stock return, using the dividend announcement made in isolation of other firm news reports.

Spence (1973) identified an important form of adjustment by markets, where the better informed take costly actions in an attempt to improve on their market outcome by credibly transmitting information to the poorly informed. Based on this, the signaling hypothesis of Ross (1977) suggests that implicit in irrelevance of dividends hypothesis of Modigliani and Miller (1958), is the assumption that investors know for sure the distribution of future operating flows to be generated by the company - when they, in fact, they are random. Assuming that managers and controlling shareholders hold more precise information on the projects to be accepted by the company than the market, if the current shareholders agree to fund a new project (via retained earnings, for example), this can be interpreted by the market as a positive sign: the use of retained earnings by the company reveal that the assumed project is viable, which will cause the increase in the market value of the company. Profitable companies therefore have less incentive to use the capital market to finance.

The preference of shareholders for a certain type of compensation is derived from various elements: tax rate, transaction costs, liquidity and the firm's investment opportunities. Some investors need for immediate funds (liquidity), while others will have the dividend income as main source of their incomes. Some have high levels of wealth, with high tax rates, while others will be in the opposite end of the income scale. These situations lead to the existence of what is defined in the literature as clientele effect (Graham and Kumar, 2006). According to Holanda and Coelho (2012), in Brazil, this effect would be determined by institutional attributes, characteristics of individual shareholders, specific features of the firm's ownership structure or even the national economic environment conditions. There is a propensity to distribute dividends based on shareholders' expectations about their tax

preferences, which would, in Brazil, necessarily choose to distribute dividends, as the country its taxation is zero, at the expense of capital gains, taxed when realized.

Who first has worked with the clientele effect associated with dividends were Elton and Gruber (1970), investigating the price behavior of stocks listed on the New York Stock Exchange. According to the authors, the price change should be equal to the amount received as a dividend, less the amount of taxes. The survey indicated a difference in the share price before and after dividends, concluded the authors that the surveyed companies seeking to attract clientele who owns preference as to dividends consistent with its policy, indicating the presence of the clientele effect at that time and place, as that the act of paying dividends was priced by the market.

Therefore, a specific dividend policy could attract investors according to their need for results, bringing value for the company. To the company manager, one of the most important aspects stems is: attracting an investor, the constitution of the shareholders group is affected, i.e., the ownership structure of the company is changed. Therefore, a financial policy decision may have broad impacts in strategic terms for the future of the company. (Pettit, 1977).

The study of La Porta, Lopez-de-Silanes, Shleifer and Vishny (1999a), developed through a survey of 4,000 companies in 33 countries which analyzed the questions around the decision to distribute dividends. As a result, the authors pointed out that the dividend distribution policy varies according to the laws of each country (common law or civil law) and that a higher dividend distribution was observed in countries with weak legal protection for shareholders. The authors pointed out that, in an alternative agency view, dividends are a substitute for legal protection. Moreover, with good shareholder protection, high growth companies should have significantly lower dividend payouts than low growth companies.

According to La Porta *et al.* (1999a), in most countries, large firms typically have shareholders that own a significant fraction of equity, such as the founding families. The majority shareholders can implement policies that benefit themselves at the expense of minority shareholders. Regardless of the identity of the insiders, the victims of insider control are minority shareholders. It is these minority shareholders that would typically have a necessity for dividends. One of the principal remedies to agency problems is the law (La Porta *et al.*, 1999a). Corporate and other law gives outside investors, including shareholders, certain powers to protect their investment against expropriation by majority shareholders. La Porta, Lopez-de-

Silanes, Shleifer and Vishny (1999b) show that the need for higher cash flow ownership as a commitment to limit expropriation is higher in countries with inferior shareholder protection.

The research of La Porta, Lopez-de-Silanes, Shleifer and Vishny (2000) show the agency problem involving the firm context. The authors describes how well shareholders are protected by law from expropriation by the controlling shareholders of firms. When investors finance firms, they typically obtain certain rights or powers that are generally protected through the enforcement of regulations and laws. Some of these rights include disclosure and accounting rules, which provide investors with the information for decision-making of investments. The result of the study is that common law countries have the strongest protection of shareholders whereas civil law countries have the weakest protection. Brazil is classified in this civil law group of countries and characterized by concentration of ownership.

The concentrated ownership results the conflict of interest between majority and minority shareholders. This conflict is known as agency conflict type II is represented by control rights and cash flow rights (the agency conflict type I is represented by managerial ownership and institutional ownership). Majority shareholders are able to control management in determining important policy for the firm. Thus, the firm controller is majority shareholders, not the management as it is in the dispersed ownership (Faccio & Lang, 2002). Majority shareholders may behave opportunistically by reducing the wealth transferred to minority shareholders when deciding on dividend policy. Conflict occurs because majority shareholders do not require large amount of dividends, while minority shareholders generally desire large amount of dividends (and this is explained by clientele effect). Accounting conservatism can be utilized by insider to minimize the earnings and net assets reporting.

This agency conflict type II is indicated by Claessens, Djankov and Lang (2002) as the main conflict in most countries, with exception of the US. According to Prociandy (1996), Silva (2003) and Bellato, Silveira and Savoia (2006), the presence of major shareholders control of the holders of the organizations and the existence of two classes of shares in Brazil - with and without voting - cited by Martins and Famá (2012), further attribute the said agency conflicts to the relationship between majority and minority investors.

Still in the Brazilian scenario, Sonza and Kloeckner (2014) argue that this is the most common form of agency conflict over property characteristically concentrated in business and the overlap with management. For Silveira (2002), Da Silveira (2006), Dami, Rogers and

Ribeiro (2007) and Saito and Silveira (2008) the main conflict of interest exists between majority and minority shareholders in Brazil.

Agency conflicts tend to widen in countries with weaker laws and poor enforcement, such as Brazil and because of the costs incurred to control them, or at risk of expropriation of minority shareholders by the majority, it is understood that the dividends are most valued by shareholders. Legal protection against agency conflicts consists of both the content of the laws and the quality of their enforcement (La Porta *et al.*, 2000). Accordingly, the dividend policy and interest on net equity (in this work called payout) and granting tag-along rights as an instrument of GC can act as a way to minimize such conflicts.

The agency conflict theory postulates that there is a cost as a result of the conflict between majority and minority shareholder. For Jensen and Meckling (1976), agency costs are as real as any other costs of the firm. This authors, in the same work, said that the level of these costs will depend on the applicable laws and regulations, which varies depending on each country and firm. Jensen and Meckling (1976) would suggest that cash flow ownership by an entrepreneur reduces incentives for expropriation and raises incentives to pay out dividends.

Based on the evidences of expropriation of minority shareholders and agency problems, Alchian (1965) questions why millions of people are willing to invest a significant portion of their wealth to organizations run by managers who have so little interest in the well-being of these individuals. Nevertheless, years later, Jensen and Meckling (1976) said that despite the agency costs inherent in the corporate form, lenders and investors generally have not been disappointed with the results they have obtained.

Some of the strongest evidence for the importance of agency costs comes from the negative returns to acquire stocks after a bid is announced. Considerable evidence shows that these negative returns are correlated with other agency problems, including low managerial ownership (Lewellen, Loderer & Rosenfeld, 1985), high free cash flow (Lang, Stulz & Walkling, 1991), and diversifying transactions (Morck, Shleifer & Vishny, 1990). In addition to negative announcement returns, there is also long run evidence of negative abnormal performance by acquiring firms (Loughran & Vijh, 1997; Rau & Vermaelen, 1998). Taken together, these studies suggest acquisitions as another pathway through which governance affects performance.

Agency conflicts are also intensified by information asymmetry, which is committed to conduct business on the market (Akerlof, 1995). Knowing the difference between the

information that agents have is key to minimize this conflicts. The information asymmetry is inherent in the terms of trade, with the possibility of market inefficiency, allowing the possibility of larger gains for some and less for others (Akerlof, 1995).

The information asymmetry in the financial markets can adopt any of the following ways (Macagnan, 2009): adverse selection and moral hazard. The understanding of adverse selection emerges from the study of Akerlof (1995), on uncertainty and market mechanism. Part of a situation in which recognizes that people who buy used cars do not know whether they are good or bad. So they are willing to pay the average price between the value of good and bad car. Typically the seller has more information thus more knowledge about the quality of the product, allowing better evaluate the product. The seller will be subject to an adverse selection of the buyer to the extent that does not reveal the information to allow a greater appreciation of the average prices of the product to the buyer. Adverse selection appears or you may see where the contractor has the freedom to: hire or not hire, choose the amount and continue or abandon the negotiations (Akerlof, 1995).

Corporate governance means discussing the minimization of existing information asymmetry between the company and the various stakeholders involved, outstandingly the minority shareholders. Taking as its starting point the work of Akerlof (1995), shareholders will be willing to invest if they believe that the controlling group or manager cannot handle the information to their advantage (Vieira, 2005), and will be willing to pay the average price of the share. In Brazil, knowing that there is expropriation, minority shareholders will have the freedom to buy or not buy the stock, based on the market price and the quality of the information that the company gives on to the market.

Although this is a recent theme and researches are still incipient, especially in Brazil, some international and national research has studied this relationship between corporate governance and dividends, with mixed results. In this context, Jiraporn, Kim and Kim (2011), in their research involving the companies reported by Institutional Shareholder Services Inc. (ISS) between 2001 and 2004 - more than 5000 worldwide – analyzed: firm level variables (among which were size, leverage profitability and retained earnings); country level variables (proportion of income tax on total assets) and; governance (index constructed from CG categories such as audit, executive compensation and property). Through Logit regressions, the authors pointed out the result that shareholders of companies with strong CG can force managers to pay them in the form of dividends, reducing the possibility of misuse of free cash flow.

Moreover, Kumar (2006) studied the association between corporate governance and the dividends payout policy for a panel of Indian corporate firms over the period 1994–2000. The research found a positive association of dividends with earnings and dividends trends, but finding different results for others GC variables. Mitton (2004), in a sample of 365 firms from 19 countries, showed that firms with stronger corporate governance have higher dividend payouts, consistent with agency models of dividends. In addition, the author found that the negative relationship between dividend payouts and growth opportunities is stronger among firms with better governance and firms with stronger governance are more profitable, but that greater profitability explains only part of the higher dividend payouts.

In Brazil, the achieved results of Ribeiro, Dias, Carvalho, Almeida and dos Santos (2013) showed that companies that are inserted in one of the levels of Corporate Governance of BM&F Bovespa distribute highest percentages of dividends than those who are not entered in any of the levels, supporting the hypothesis of association between corporate governance practices and dividend policies. In this sense, da Silva (2004) analyzed the effects of control and ownership on the market value, in the capital structure and in the 225 Brazilian companies' dividend policy in 2000, formulating, in two of its eight hypotheses, the relationship between concentration of voting rights and payout. According to their results, the dividend policy can be considered a way of establishing a better reputation before minority shareholders, reducing the expropriation of the majority of these and hence minimizing such conflicts. The results of this research tests show that there is a relationship, often statistically significant between governance structure and dividend policy of the Brazilian companies.

Nevertheless, the results of da Silva, Formentini, Reina, and Sarlo (2016) showed that the abnormal returns have undergone major changes and there is no direct relationship between dividend yields and abnormal stock returns, studying companies listed on the BM&F Bovespa in the period 2010 to 2013. Statistically significant results of the study of Almeida and Santos (2008) show that companies with higher levels of transparency tend to pay higher dividends to its shareholders. However, companies with more compliant boards to the recommendations of good corporate governance practices, more indebted companies and larger are also more averse to distribute profits as dividends.

Otherwise, Chae, Kim and Lee (2009) tested whether strong corporate governance would lead to higher payout to minimize agency problems, or to lower payout to avoid costly external financing. The authors founded that firms with higher external financing constraints tend to decrease payout ratio with an improvement in their corporate governance. Thus, the

relation between payout and corporate governance is reversed in this case. As the same, John and Knyazeva (2006) empirically found that weak governance is associated with a greater emphasis on dividend pre-commitment in total payout composition and according to Harford, Mansi, Maxwell (2012), firms with weaker governance structures choose to repurchase instead of increasing dividends.

With granting tag-along rights comes the scenario of ensuring the minority shareholder that they will benefit if the company is sold, promising return on investment and increasing their wealth, thus narrowing the gap between majority and minority investors. This contractual guarantee is important to reduce the agency conflict, especially those from information asymmetry.

From the collected literature, we sought to determine whether there is a positive relationship between CG (tag along concession) and dividends. We did not find any study that examines the relationship between tag along and distribution of dividends in specific. It is assumed that the CG tries to minimize the effects of risk (based on bird in the hand theory), the information asymmetry and agency conflicts between majority and minority shareholders through dividends' distribution. Thus, the CG and the set of mechanisms understood to work monitoring the management and aligning them with the interests of the owners and shareholders (Almeida & Santos, 2008).

2.2 Governance and shareholders 'normalization minority in Brazil – Tag along

The instruments of CG and protection of minority shareholders were created initially in Brazil at least four decades ago. It is possible to say that it was started with two laws. The "Lei das Sociedade por Ações" (LSA, the Brazilian "Lei das SA") created in 1976 and the Law 6,385/76 (Lei n. 6.385, 1976) which provided for the securities market was prepared as well. The two laws were innovative in their treatment of minority shareholders, addressing their essential rights. Sections accounting for the interests of the minority shareholders can be found in the various chapters of extensive Law 6,404/76 (Lei n. 6.404, 1976), which has 300 articles. From its earliest articles, it is clear that protection is limited by the freedom of action of the directors, which ends up being essential to the functioning and existence of the company.

Pertaining to the development of the protection of minority shareholders some innovations of Law 6,404/76 can be highlighted. They are: a) the system of comprehensive

information to shareholders, to the extent compatible with the preservation of the company's efficiency; b) the requirement of a precise and complete definition of the statutes of the corporate purpose, in the attainment are associated shareholders, in order to limit the discretionary area of management and the majority and facilitate the characterization of the abuse of power; c) the increase of existing rights as the preemptive right to subscribe for new shares, the right of withdrawal, the fixing of minimum redemption value at minimum mandatory dividend institution and defense against the effects of inflation to monetary correction of dividends and the repayment of the amount fixed in currency; d) the capital subscriber accountability in goods for a defined period; e) a description of the duties and responsibilities of management and the controlling shareholder, with the avoidance of abuses by them; f) the express definition of abuse of rights in the proceedings of general meetings, and consequent accountability of the majority; and g) the right to participate in collegiate administration, through cumulative voting, increasing the influence of minorities and their access to information (Lei n. 6.404, 1976).

Thus, the combination of the two aforementioned laws have provided: a) the rules on reimbursement in cases of consolidation, merger and spin-off companies (frequent sources of unpunished abuses against minorities and the work object of study); b) the rules on companies control alienation; the rules to prevent the escape of the company's profits by inter-corporate game costs and profits; c) companies in the finance discipline (by requiring periodic balance sheets and financial statements); and d) the protection of minority in the formation of groups of companies.

In addition, the LSA substantially reduced the possibility of statutory regulations imposing, by law, rules on the operation of corporations, this trend to adopt such rules imposed statutory stipulations that are reputable, reducing the cost of the investment as confirmed to the present.

Law 6,385/76, in turn, was responsible for creating the Brazilian Securities Commission (CVM). This commission established in Brazil was inspired by the Securities and Exchange Commission (SEC) of the United States, with a similar mission: the allocation of regulatory securities trading offered through Exchanges, to prevent dishonest manipulations of control transactions to supervise the compliance with federal legislation and adopt standards for publicly traded companies (Lei n. 6.385, 1976).

Like the SEC, CVM was created as a moralizing organ and system controller, through technical standardization and monitoring of the agents involved, in order, according to Lei n.

6.385 (1976): a) ensure the efficient and orderly functioning of markets purse and desk; b) protect the holders of securities against irregular emissions and illegal acts of directors and controlling shareholders of companies or portfolio of securities administrators; c) avoid or prevent any kind of fraud or manipulation designed to create artificial demand, supply or price of securities traded in the market; d) ensure public access to information on traded securities and companies that have issued; e) ensure that fair trade practices in the securities market; f) stimulate the formation of savings and their investment in securities; and g) promote the expansion and the efficient and smooth functioning of the stock market and stimulate permanent investments in shares of capital stock companies.

Meanwhile, the evolution of the corporation in the country has revealed new challenges not yet solved by legislation, such as increasing division between ownership and control (the risk and power) and various forms of corporate concentration, the concentration chain, reciprocal interests and the action of foreign corporate forms at the national level (off shores). Claessens *et al.* (2002), in his seminal study on ownership concentration and ownership structure, found that countries with the highest concentration of ownership, such as Brazil, have a primary agency conflict between controlling shareholders and minority shareholders.

Due in large part to the promotion of relations with the successive emergence of new forms of practice abuses, it is not surprising that the law gradually limited the bargaining power and increased the contractual nature of corporations. Thus, the laws appear as delimeter mechanisms of the statutes of firms, regulating in detail all the structure and operation of the corporation, providing for judicial intervention in the lives of societies.

After the 1990s, with the entry of foreign capital in the Brazilian capital market, the increased presence of transnational companies, professional training investment and increase of pension funds, mergers and acquisitions and in particular to the state transformations in dealerships, coupled with the privatization process, there was an intense opening of the Brazilian economy, requiring new legal provisions.

With the enactment of Law 8,021/1990 (Lei n. 8.021, 1990) and Law 8,088/1990 (Lei n. 8.088, 1990), bearer bonds and endorsable became extinct, giving more transparency to the system. These innovations hampered the hegemony of hidden controllers of the company. Corroborating this trend, suppression of common shares without voting rights, meant that holders of quotas were to form part of the college deliberative companies (Lei n. 6.404, 1976).

To compensate for the loss of the privileges of drivers, holders of common shares with voting rights, the company increased the issuance of preferred shares - which could be restricted for voting with monetary compensation - in the two-year adjustment period. Despite the creation of all of the above legislation, eighteen articles prescribing the action for damages against the controllers and managers who had acted with abuse and misuse of powers, there are numerous common forms of abuse of the rights of the minority (Lei n. 6.404, 1976).

The minority protection standards are intended, in general, to protect all those who do not follow and are not part of the control group. Minority rights can be grouped under Brazilian law into two major groups: the rights of information and the other, those who can call out property rights. The property rights would be equity guarantees given to shareholders at the time of departure, assuming various forms - such as the right of broad recess, the minimum guarantees in the case of delisting or even the extension of the offer made in the acquisition of control.

Among the most important provisions under Brazilian law shareholding worth mentioning we can cite the provisions regarding:

- a) incorporation, merger and division: presentation by the management, protocol clarifies the conditions of the merger, merger or division with company incorporation (Article 224) and the justification of the operation (Article 225);
- b) transfer of control: convene a general meeting of the buyer to purchase knowledge, by the company, the control of any trading company (Article 256), purchase instrument published in the acquisition of control by public offer (Article 257 and 258);
- c) justification of submission to the general meeting of the incorporated in the merger by the Company as a controlled company (art. 264).

The two main types of shareholder rights, property and information, in fact, are privileged in Brazilian corporate reforms, from 1976 to the Law 10.303/2001 (Lei n. 10.303, 2001), but another kind of minority rights was identified outside the purely informative and property interests such as multiple voting and the legal standing to certain actions. There are also other protections directed to minority, such as:

- a) the imposition of limits between common shares and equity (Lei n. 10.303, 2001);
- b) multiple voting and the vote of preferred shareholder for board composition (Lei n. 6.404, 1976, art.141);

- c) the possibility of use of compulsory arbitrators;
- d) the legal standing against controller (Lei n. 6.404, 1976, art.246) to repair damage for the breach of duties and responsibilities (Lei n. 6.404, 1976, art. 116 and 117).

Thus it is possible to say that there are three categories of rights - political, material and information - rights directed to minority shareholders. In this context, the Brazilian legal framework presents a distinctive type of minority shareholders protection, called tag along right.

It is required by Brazilian law in Article 254-A of the Brazilian Corporate Law Lei n. 6.404 (1976) and states that the sale, directly or indirectly, of control of a company may occur only under the condition that the purchaser shareholder is obligated to make a public offer to acquire the remaining common shares, in order to ensure their holders the minimum price of 80% of the amount paid for the shares of the controlling block. Some companies voluntarily extend the tag along right also to holders of preferred shares and/or ensure the holders of common shares a price higher than 80% percent (BM&FBOVESPA S.A., 2015). Thus, the minority shareholders are protected if the firm is sold, greatly ensuring the return on their investments.

Originally, the term "tag along" was created in the US to designate contracts that gave minority shareholders the right to leave the company in conjunction with the drivers (tag along agreement). Such contracts, according to Coelho (2001), grew between the years 1998 and 1999, and concerned especially those companies dedicated to services and e-commerce via the Internet. In these companies, business success depended more on the investors' capital contribution, applied in marketing and in the assembly and expansion of technological systems, than the creativity of controllers. In these terms, this in particular justified the control premium extended to investors.

The tag along, or right of joint output, is one of the innovations of Brazilian Law 10,303/2001 and aims to specifically protect the investment of minority shareholders in case of disposal of control (Lei n. 10.303, 2001). The tag words can refer to label, sticker or tag, so the literal translation, described by Perin (2004), the tag along would be "close together" or "accession right to sale of control."

The unique design of the Corporations Law, sent by the Ministry of Finance to Congress even included the picture of what is known today as tag along. The conception that justified the

project was that the control premium should belong exclusively to the controlling shareholder, in that it assumed greater burden on the company's driving (Requião, 1986).

In tag along, the controlling shareholder undertakes to only sell their shares to anyone who is willing to also acquire the shares of the minority for the same price or a predetermined percentage of that price, usually between 80 and 90%. This obligation can overcome the legal requirement appearing in the Bylaws or shareholders' agreement - as to contract and, in financial terms, it is in control of the prize distribution between the controller and the shareholders benefit and a way to reduce disparities in value of related actions. Current law is also a source of this obligation and defines the minimum level of 80%, but this warranty does not apply to all shareholders.

The purchaser's obligation controlling stake in a company called tag along - that is, to make a public offer for the purchase of common shares outstanding in the market - was not a pioneering initiative of Lei n. 10.303 (2001). The Lei n. 6.404 (1976), in article 254 already provided this, but this law was repealed by Lei n. 9.457 (1997). The current law, Lei n. 10.303 (2001), introduces the Lei n. 6.404 (1976) as follows:

The transfer, directly or indirectly, the public company control can only be contracted under the condition precedent or subsequent that the purchaser agrees to conduct a public offering of shares entitled to vote of the property other shareholders in order to assure the minimum price equal to 80% (eighty percent) of the amount paid per share with voting rights in the controlling block. (Article 254-A)

Under the legal perspective, the right to join the sale of control is a unilateral promise to purchase that requires the controller in the event of disposal of control; hinders the transfer of control, often vital to the improvement of the company, but is the minority value guarantee in relation to the controller action value.

The Lei n. 6.404 (1976), in turn, authorizes the Company bylaws grant this right also to holders of preferred shares without voting rights, namely:

Irrespective of the right to receive or not the repayment of principal value with or without a premium, preferred shares without voting rights or restrictions on the exercise of this right shall only be admitted to trading in the securities market to they are assigned at least one of the following preferences or advantages: [...] III -the right to be included in the public offer for sale of control, in accordance with art. 254-A, guaranteeing a dividend at least equal to the common shares. (Article 17 § 1)

Under the legislation cited above, therefore, holders of preferred shares without voting rights have no subjective right to tag along, that is, the public offering of its shares, unless the company's status has it in this regard.

In theory, control of the transfer does not involve injury to the minority, and that, economically, the market assigns a value to the control of the company, the power to command their business. This mechanism is defined by Wald (2002), listing the most important innovations introduced by this law as follows:

a) the need for public offering, as a condition for the transfer of control of a public company, to acquire the remaining shares with voting rights of the company, for a minimum price corresponding to 80% of the amount paid per share of the controlling block and; b) the possibility to offer, the purchaser of the controlling interest, Prize for minority shareholders remain in the company. (p. 231)

As exceptions, we point out that the law does not provide for preventive mechanisms of the takeover operation and that in addition to tag along to be a legal possibility, it is important to remember that this agreement only guarantees the shares representing the control of the company, as illustrated Perin (2004):

Furthermore, we must highlight the fact that unfortunately the tag along does not apply to all minority. This right is available only to the minority shareholders holders of common shares, which are not always present in the structure of the Brazilian stock market, and some preferred (those whose shares hold voting rights restrictions on the direction and management of society, but which were supposed to be offset by "privileges" property) referred to in art. 17, § 1, III of Law 6,404/76. (p. 116)

It should be remembered that in different markets, as in the Bovespa's Novo Mercado, which is the study of market, all actions should be common - and thus guaranteed by law - and that the value of the tag along should be equal to 100% the amount paid to the former parent company.

This complicates the change of control of the company, only possible for a financially capable group to purchase the entire society. As described, this is the result of voluntary rules of a particular market that go beyond legal or mandatory guarantees, as already discussed.

The drag along, similarly, is not device protected minority, but a mechanism that makes it possible to control sale to a third party that would not have minority as partners. This institute is the agreement, statutory or shareholders, which allows the sale of shares of the minority in the sale of control, expanding the range of those potentially interested in acquiring the company.

The purchase offer conditional control the sale of the shares of the minority, or tag along in this way, is the obligation of the minority to sell their shares to the bidder price offered to the controller - or a predetermined percentage of this value. The effectiveness of this kind of agreement in Brazilian companies has seen unviable with the requirement of IPO – Initial Public Offering when the alienation of control (Lei n. 10.303, 2001).

Thus, Lei n. 6.404 (1976) explains that is allowed the issuance of common shares (with voting rights) and preferred (non-voting). Preferred shares could comprise up to 2/3 of the capital of companies, and therefore a shareholder could hold control with only 16.7% of the capital total. In the case of a control block sale of event, the law required that the offer was extended to all other shareholders entitled to vote at the same price (right to "tag along", from now on).

During the privatization process in 1997, the Lei n. 6.404 (1976) was modified and did not require the extension of the offer under the same conditions of supply to the control block. The impact on minority shareholders was mitigated by establishing an additional 10% in dividends on preferred shares, as compared to ordinary.

A new change in legislation was made in 2001, restoring the tag along rights with at least 80% of the price paid to the controlling shareholders. It also reduced the maximum proportion of preferred shares of 2/3 for 50% of total capital, and allowed companies to choose between the following compensation preferred: (i) minimum priority dividend of 3% of the book value per share; (ii) dividends 10% higher than the common shares or (iii) tag along rights similar to the controllers. Most companies chose to keep the additional dividend of 10%. Note, however, that the tag along right was never imposed on shareholders without voting rights.

From 2000 year the São Paulo Stock Exchange (Bovespa) launched three special segments of corporate governance, designed to shares of companies committed to additional practices demanded by the Lei n. 6.404 (1976) and the Brazilian Securities Commission (CVM). "Level 1" requires additional disclosure practices. The "Level 2" has requirements for additional governance practices at Level 1, including tag-along rights of 100% for common shares and 80% for preferred shares. And the "Novo Mercado" imposes the Level 2 requirements, with the additional requirement that the company's capital is comprised of common shares only, i.e. enforces the rule "one share, one vote".

2.2.1 Listing Segments

According to Bolsa de Valores, Mercadorias e Futuros de São Paulo [BM&FBOVESPA S.A.] (2014), special listing segments of the Brazilian stock exchange are divided into: Bovespa Mais, Bovespa Mais Nível 2, Novo Mercado, Nível 2 and Nível 1. These segments were created at the time when it was perceived to be necessary to have segments appropriate to the different profiles of companies in order to assist in the development of the Brazilian capital market.

All segments appreciate for corporate governance rules. These rules go beyond the obligations that companies have towards the law of corporations called Lei das S.As. (the Brazilian Corporation Law) and are intended to improve the assessment of the companies that decide to adhere voluntarily to a list of these levels.

The rules for the segments of the list attract investors. Thus, the risk is reduced when companies ensure rights and guarantees to shareholders and the disclosure of complete information for drivers, company managers and market participants (BM&FBOVESPA S.A., 2014).

The BM&F Bovespa created the Bovespa Mais in order to contribute to the development of the Brazilian stock market. Designed for companies wishing to access the market gradually, this segment aims to foster the growth of small and medium-sized companies via the capital market. The gradual access strategy allows a company to prepare properly, providing increased visibility to investors (BM&FBOVESPA S.A., 2014)

The Bovespa Mais enables the performance of smaller funding compared to the Novo Mercado, but sufficient to finance its growth plans. Companies listed on Bovespa Mais tend to attract investors who view a potential for stronger growth in business. The stock offers can be designed to few investors and they usually have medium and long-term return prospects (BM&FBOVESPA S.A., 2014).

As noted, the Bovespa Mais allows the firm to make a list without offer, i.e. the company can be listed on the Exchange and has up to 7 years to carry out the IPO. This possibility is suitable for companies wishing to access the capital market gradually, according to BM&FBOVESPA S.A. (2014). This enables the development of the professional company primarily aimed at the listing and subsequently the public offering of shares held with a longer term. For the company interested in visibility in the capital market, this access tends to be easier and the level of preparation of the highest company.

The only difference between Bovespa Mais and the Bovespa Mais Nível 2 is that the second one allows making a company to listing and admission to trading of preference and ordinary shares, without conducting offer (BM&FBOVESPA S.A., 2014).

Created in 2000, the Novo Mercado established a pattern of highly differentiated corporate governance. From the first listing in 2002, it became the standard of transparency and governance demanded by investors for new IPOs. In the last decade, the Novo Mercado has established itself as a section devoted to trading of shares of companies that adopt voluntarily additional corporate governance practices to those required by Brazilian law. The listing in this special segment implies the adoption of a set of corporate rules that expand the rights of shareholders, and to adopt a more transparent and comprehensive information disclosure policy. The Novo Mercado leads companies to the highest standards of Corporate Governance. Companies listed on Novo Mercado may issue shares entitled to vote, calls common shares (ON) (BM&FBOVESPA S.A., 2014).

From BM&FBOVESPA S.A. (2014), some Novo Mercado rules related to governance structure and shareholder rights are:

- The capital must be composed exclusively of common shares with voting rights;
- In the case of control sale, all shareholders are entitled to sell their shares at the same price (100% tag along);
- In case of delisting or cancellation of the contract with BM&F BOVESPA, a company must launch a tender offer to repurchase the shares of all shareholders at least the economic value;
- The Board of Directors must be composed of at least five members, 20% of independent directors and the maximum term of two years;
- The company also undertakes to maintain at least 25% of the outstanding shares (free float);
- Release of more complete financial data, including quarterly reports on cash flow statement and consolidated reports reviewed by an independent auditor;
- The company must provide annual financial reports in an internationally accepted standard;
- Need to disclose monthly negotiations with securities of the company by directors, officers and controlling shareholders.

Nível 2 segment is similar to the Novo Mercado, but with some exceptions. Listed companies have the right to maintain preferred shares (PN). In the case of a company's sale of control is ensured to holders of common and preferred shares the same treatment granted to the controlling shareholder, anticipating thus the tag along rights of 100% of the price paid for the common shares of the controlling shareholder (BM&FBOVESPA S.A., 2014).

According to BM&FBOVESPA S.A. (2014), the preferred shares also give voting rights to shareholders in critical situations, such as the approval of a company's mergers and acquisitions and contracts between the controlling shareholder and the company, where such decisions are subject to approval in the shareholders' meeting.

Companies listed on Level 1 should adopt practices that promote transparency and access to information by investors. To do so, disclose information to those required by law, such as in an annual calendar of corporate events. The minimum free float of 25% should be maintained in this segment, that is, the company is committed to maintaining at least 25% of the outstanding shares (BM&FBOVESPA S.A., 2014).

Table 1 below summarize the comparison of the most important six segments of BM&F Bovespa listed shares, specifying the characteristics of tag along right¹ for each one:

Table 1 – Comparison of listing segments related to tag along

Note. Source: Adapted from BM&FBOVESPA S.A. (2014)

	BOVESPA MAIS	BOVESPA MAIS NÍVEL 2	NOVO MERCADO	NÍVEL 2	NÍVEL 1	TRADICIONAL
Characteristics of Stock Issued	Allows the existence of common shares	Only allows the existence of common and preferred shares	Allows the existence of common shares	Only allows the existence of common and preferred shares (with additional rights)	Allows the existence of common and preferred shares (as legislation)	
Tag Along granting	100% to common shares	100% to common and preferred shares	100% to common shares	100% to common and preferred shares	80% for common shares (according to law)	

¹ Brazilian firms can change CG level over the time both to higher levels of CG as to levels of less CG (including return to "traditional market", a level without obligatory and insightful requirements for CG).

Public offering of shares by economic value, at least	Obligation in case of delisting or segment output, unless there is migration to Novo Mercado	Obligation in case of delisting or segment output, unless there is migration to Novo Mercado or Nível 2	Obligation in case of delisting or segment output	According legislation
---	--	---	---	-----------------------

The number of companies listed on different levels of CG of BM&F Bovespa grew by 313% between 2004 and 2013, from 46 listed companies in 2004 to 190 in 2013 (BM&FBOVESPA S.A., 2014). This development, along with the stability of the Brazilian economy, provided a large growth of investors in the capital market (Gama, Barbosa, Coutinho, Ferreira & Novikoff, 2013), contributing to the increased need for studies on the Brazilian capital market in order to understand their characteristics and operation.

Based on past theories, the purpose of this research was to investigate whether there is a positive relationship between full granting tag-along rights and the wealth of minority shareholders and the firm's value. The hypothesis assumes that granting full tag-along rights decrease the risk, information asymmetry and agency conflicts between majority and minority shareholders, creating value for shareholders on the stock exchange by higher demand of shareholders, increasing the value of the firm.

Because of the regulation of Brazilian law for the concession of tag along for minority shareholders, firms is opted for concession or not and it could be included in the levels of differentiated CG. Therefore, it is important to verify the evidences about the effects of full tag along rights on firm investments and value on stock market.

2.3 Corporate Governance and Value

A number of papers over the last 20 years have studied firm-level corporate governance mechanisms, but most of these studies have concentrated almost exclusively Organization for Economic Cooperation and Development (OECD) member countries and U.S. firms (Shleifer & Vishny, 1997; Maher & Andersson, 2000). For example, a paper by Gompers, Ishii and Metrick (2001) used differences in takeover defense provisions to create a corporate

governance index of U.S. firms and found that firms with stronger shareholder/antidirector rights have better operating performance, higher market valuation, and are more likely to make acquisitions. However, until recently, there was few empirical evidence on the differences in firm-level governance mechanisms across firms in emerging markets. An example is Black (2001), which found that the governance practices of Russian corporations are strongly related to implied value ratios.

Thereby, Klapper and Love (2004) find that better corporate governance is highly correlated with better operating performance and market valuation and this results, studying emerging market firms. The determinants of firm-level governance were observed and they find that governance is correlated with the extent of the asymmetric information and contracting imperfections that firms face. Its results suggest that firms can partially compensate for ineffective laws and enforcement by establishing good corporate governance and providing credible investor protection.

As the same way, Bhagat and Bolton (2008) find that better governance is significantly positively correlated with better contemporaneous and subsequent operating performance. Dahya, Dimitrov and McConnell (2008) investigate the relation between corporate value and the proportion of the board made up of independent directors in 799 firms with a dominant shareholder across 22 countries, finding positive relation for shareholders, especially in countries with weak legal protection. Nevertheless, Morck *et al.* (1988) studied the relationship between management ownership and market valuation of the firm, measured by Tobin's Q. The authors showed that Tobin's Q first increases, then declines, and finally rises slightly as ownership by the board of directors rises (nonmonotonic relationship).

In the Brazilian scenario, studies involving the relationship between corporate governance and value involve several indicators of business performance and various corporate governance instruments, with several different results. For example, Silveira (2002) find that the variable chief executive officer as chairman has showed the most important results, with strong evidence that, on average, firms with different people in charge of the chief executive officer and chairman positions have higher market value than the others. Otherwise, in the same study, others variables do not show the same comportment. In opposite, do Nascimento Ferreira, dos Santos, Lopes, Fonseca and Nazareth (2013) found that, in three years analyzed, that the market value of companies of corporate governance segments is lower than that of companies in other stock trading segments, analyzing corporate governance, efficiency, productivity and performance.

According to Silveira, Barros and Famá (2006) a change in the quality of corporate governance of the worst to the best level of the sample would result in an increase in the company's market capitalization of nearly 100%. The study of da Silva (2004) is aligned to this results, showing that there is a relationship often statistically significant between governance structure and market value of firms. Moreover, according to de Jesus Lameira and Ness (2007) the improvement of corporate governance practices has promoted impact on the value of the companies (measured by Tobin's Q) listed on the stock exchange whose shares present liquidity and price volatility.

The research in accounting and finance aims to verify how the financial variables influence or impact the return of assets traded and how they affect the decision of users of accounting information (Sloan, 1996 as cited in Lopes & Martins, 2005). Thus, the Tobin's Q ratio is a popular method of estimating the fair value of the stock market and according to Chung and Pruitt (1994) plays an important role in many financial interactions.

Among the various uses of this ratio in value's literature, the study of Smith and Watts (1992) discusses about dividends, financing and compensation policies, Brainard and Tobin (1968) studied investments models, Bharadwaj, Bharadwaj and Konsynski (1999) investigated investments and firm performance in Information Technology and growth opportunities, Klock and Thies (1995) explored agency and signaling problems, among others studies. In Brazil, the use of investment evaluation models that use financial measures based on the market, such as Tobin's Q, are still incipient in the national literature. One more example is Nogueira, Lamounier and Colauto (2007), who studied investment and performance in the Brazilian steel industry using Tobin's Q ratio.

Originally proposed by Brainard and Tobin (1968) and Tobin (1969), Tobin's Q is calculated by dividing the value of the firm (market value plus debt) by the replacement value of its assets. This is the theoretical spent to acquire again the company's operating assets. The market value (share price multiplied by the share base) is easily obtained. But there are heated discussions to determine the amount of debt and its replacement value, since it must use the fair values of both and not accounting. The task is complex, because it does not have a secondary market for active debts. The calculation of replacement value is further complicated because it would also not be an efficient market of alternative capital assets, assets depreciate over time.

Previous studies dealing with the firm's market valuation, such as Kaldor (1966), which shows the ratio between the firm's market value and the accounting value of its assets, are a

more simplified version of the further study of Tobin and Brainard (1968) and Tobin (1969), which have a more complex relationship that market value, using innovation to consider not only the assets of historical cost, but its replacement cost.

Chung and Pruitt (1994), in turn, show a simplified formula using only the accounting report data shows consistent results such as those obtained by Lindenberg and Ross (1981) more complex calculations. For Chung and Pruitt, the numerator is the sum of market value, current liabilities and long-term debt less current assets. But the denominator is the total value of assets. With the exception of market value, the remaining items are taken from the accounting balance of the companies. We used this simplified formula in this research. This is relevant to the Brazilian case, since the inability to access or lack of data could have serious restrictions on research. In addition, the method in question has power similar explanation to other procedures, with the advantage of not eliminating large amount of information.

Researches relating tag along instrument of corporate governance and value are incipient. The only study found that relates these two variables is Bennedsen, Nielsen and Nielsen (2012). The authors, studying private contracting and CG found, focused on the granting of tag along concession event, that announcements of tag-along rights are associated with an average cumulative abnormal return of around 5%. Many studies dealing with tag-along theme are based on legal studies (laws) and not related to corporate finance. Other important study is Saito and Silveira (2010) with the theme of identity of controlling shareholders for the price spreads between common and preferred shares.

The present study investigates the relation between corporate governance and value. Brazil is of particular interest to corporate governance researchers because Brazilian companies experience special minority-majority agency problems, ownership concentration and expropriation of minorities. Shleifer and Vishny (1997) suggest that controlling shareholders is led by the incentive to pursue private benefits at the expense of minority shareholders and the tag along theme was little explored.

At the time of acquisition of control of a company, the acquirer in principle and in general have sufficient reason to believe that under his command not only his but also the interests of other shareholders will be valued at least from the current price. Mulherin and Boone (2000) and Huang and Walkling (1987) show that the theory is proven empirically. This work confirms that this occurs in Brazil when a firm is sold; all the shareholders benefited the same way, as long as the firm had a tag along right contained in their statutes.

From the collected literature, we sought to determine whether there is a positive relationship between CG (tag along concession) and Tobin's Q. It is assumed that the CG tries to minimize the effects of risk, the information asymmetry and transparency between firms and shareholders, improving the investments and value of firms. Thus, the CG and the set of mechanisms understood to work monitoring the management and aligning them with the interests of the owners and shareholders (Almeida & Santos, 2008).

3 Sample selection and data

This work is classified, according to Raupp and Beuren (2003), descriptive and experimental applied, the method of approach is hypothetical-deductive, logical and to be related to the trial and the theoretical approach is empirical and analytical. Documentary analysis and electronic files are performed, using the authors of the Finance area as a theoretical framework.

This work uses two secondary data sources. The first data set is available to the public, provided by Economatica® system for equity analysis. The data consists of annual observations of all non-financial firms in Brazil between 1995² and 2013, including 613 firms. It was collected observing the IFRS - International Financial Reporting Standards – adoption in Brazil since December 31, 2010, using the database parameters to adjust this data characteristic.

A second database, containing public data provided by BM&F Bovespa, was created in 2000 year, comprises annual information of concession of tag along rights by firms. We identify companies that have tag-along rights using data from The São Paulo Stock Exchange (BM&F Bovespa). On their homepage, www.bmfbovespa.com.br, BM&F Bovespa publishes an up-to-date list of firms that voluntarily have extended tag-along rights to minority shareholders. The list provides information on the corporate resolution and the date of the event as well as information on whether the firm has extended full or partial tag-along rights. In Brazil, some companies have decided to extend full tag-along rights for both voting and non-voting shares

²The sample period begins in 1995, when the Brazilian economy was stabilized after the Real Plan and there was still no tag along. It was done that way in order to analyze the evolution of the data. According to Coelho (2001), the tag along terms grew in US between the years 1998 and 1999. In Brazil, there was a governance corporate change in the BM&F Bovespa listed firms, in 2000, introducing listing levels of CG that includes the tag along rights for minority shareholders.

above the minimum required by the BM&F Bovespa's corporate governance level to which it belongs.

This research obtains the listing firms which grant 100% tag along for minority shareholders mandatorily (Bovespa Mais, Bovespa Mais Nível 2, Novo Mercado and Nível 2). The question is: Table 1 shows only the minimum percentage of tag along that each company are obligate to give for shareholders as law. Some firms at "Nível 1" and "Mercado Tradicional" levels give spontaneously more than the 80% minimum (and 100% as well). We considered only the firms which offer 100% of tag along for minority shareholders and the other firms was checked manually if each grants the 100% tag along presence for shares. During the obtained sample period, Brazilian firms changed CG level both to higher levels of the CG to levels of less CG (including return to "traditional market" - Tradicional, a level without obligatory and insightful requirements for CG). Thus, this study verified and considered the historical changes of CG levels over time, obtaining the percentage of tag along each company.

The main purpose of this research was to verify the relation between tag along and wealth of firms and shareholders. The focuses was not study specific listing segments characteristics of BM&F Bovespa. The listing segments was used to assist in obtaining the tag along percentage of firms.

The study of Brazilian data is an opportunity to research the topic of tag along, because from 2000 the companies were able to adopt this instrument from the corporate governance levels of the BM&F Bovespa and voluntarily, even participating in the traditional market. From there, changes of firms in levels of governance demanded changes in the granting of tag along, that were identified in this study, in addition to voluntary changes of tag along concession by companies in the traditional market. Moreover, studies relating tag along and value are incipient on literature.

From this initial sample of firms, 1130 cross-sectional observations were obtained through an unbalanced panel. After this, outlier's data were treated and the winsorization technique were applied.

Whereas the study aims to investigate the relationship between granting tag-along rights and shareholder and companies' wealth, we specify the empirical model to estimate this relationship, based on empirical studies previously developed for similar purposes, of which we highlight: Lintner (1956), Watts (1973), Arrazola, Hevia and Mato (1992), Bagüés and Furnas (1995), and Escuer Cabestre (1995) and Naceur, Goiaed and Btobelaves (2006). Thus,

the econometric proposed models are based on the evidences of Jiraporn *et al.* (2011) and Forti, Peixoto and Alves (2014). The Tobin's Q ratio was included in this research, as well as the dummy variable that controls the full granting of tag along companies. Finally, the models adapted and proposed are:

$$Q_{it} = \beta_0 + \beta_1 (SIZE_{it}) + \beta_2 (LEV_{it}) + \beta_3 (SECT_{it}) + \beta_4 (PAY_{it}) + \beta_5 (LIQ2_{it}) + \beta_6 (ROA_{it}) + \beta_7 (BETA_{it}) + \beta_8 (GROW_{it}) + \beta_9 (ZCASH_{it}) + \beta_{10} (D_TAG_100) + \beta_{11} (ROE_{it}) + \varepsilon_{i,t}$$

(1)

$$PAY_{it} = \beta_0 + \beta_1 (SIZE_{it}) + \beta_2 (LEV_{it}) + \beta_3 (SECT_{it}) + \beta_4 (LIQ2_{it}) + \beta_5 (Q_{it}) + \beta_6 (ROA_{it}) + \beta_7 (BETA_{it}) + \beta_8 (GROW_{it}) + \beta_9 (ZCASH_{it}) + \beta_{10} (D_TAG_100) + \beta_{11} (ROE_{it}) + \varepsilon_{i,t}$$

(2)

The first econometric model (1) tries to explain the value generation when the firm improves its corporate governance (in this case, grant tag along rights). The hypothesis is that with the improvement of corporate governance of the company, the agency conflict decreases, and the risk perceived by shareholders and the information asymmetry too. With this, the company's shares are valued and the firm is encouraged to invest by increasing the value. The main studies which corroborates with H_1 hypothesis are: Silveira (2002), da Silva (2004), Klapper and Love (2004), Barros and Famá (2006), de Jesus Lameira and Ness (2007), Bhagat and Bolton (2008), Dahya *et al.* (2008) and Bennedsen *et al.* (2012). We use the Tobin's Q formula in a separate model for analyze the wealth creation of firms, showing the evolution of company's value, based on investments. The H_0 and H_1 hypothesis are presented:

H_0 : There is no relation with concession of full tag along rights by firms and the value of the firms (measured by Tobin's Q ratio);

H_1 : There is a positive relation with concession of full tag along rights by firms and the value of the firms (measured by Tobin's Q ratio).

The second econometric model (2) tries to explain the wealth and the incentive of giving dividends when firms improves its corporate governance (in this case, grant tag along rights). PAY variable is a proxy for shareholders' wealth. The hypothesis is that with the improvement of corporate governance of the company, the agency conflict decreases, and the risk perceived by shareholders and the information asymmetry. With this, the company is valued and may distribute more profits through dividends. Some previous studies document empirical evidence consistent with this hypothesis. For example, Michaely and Roberts (2006) conclude that strong

governance encourages higher and more consistent payouts using data on private firms in the U.K. Ronneboog and Szilagyi (2015) report that firms with strong shareholders appear to force higher dividend payouts in Dutch firms. Moreover, through Logit regressions, Jiraporn *et al.* (2011) concluded that shareholders of companies with strong GC can force managers to pay them in the form of dividends, reducing the possibility of misuse of free cash flow. Thus, based on these evidences, the H_2 and H_3 hypothesis are presented:

H₂: There is no relation with concession of full tag along rights by firms and the wealth of minority shareholders (measured by payout);

H₃: There is a positive relation with concession of full tag along rights by firms and the wealth of minority shareholders (measured by payout);

Despite the existence of similarity between minority shareholder's wealth (measured by payout - PAY) and the value of the firm (measured by the Q ratio), in this work such variables will be analyzed separately. This detachment is explicated by the existence of expropriation of the minority shareholder for majority shareholder in countries like Brazil (La Porta *et al.*, 2000), which may affect the attainment of value generation of these agents. Besides, because of the possible effects of the expropriation, the Bird in the hand theory and the clientele effect already discussed, the relation of this shareholders which need immediate cash in form of dividends could be better investigated. In order to identify possible peculiarities between measurements of these variables in econometric models, explanations on the grounds of empirical studies conducted in Finance and theories already established will be addressed.

To test the robustness of the models, we used alternative models. The purpose is verify if the BM&F Bovespa levels of GC are affecting the results. The robustness check (Appendix 2) used the same regressors of the original model (1 and 2), only changing the dummy variable analyzing the traditional market (with no tag along concession rights obligations) and we attempted to find again the same results.

The independent variables of past works were relevant for the elaboration of those current models, and the results found by the respective authors as well, represented and summarized in the data presented in Table 2.

Table 2 – Definitions of study variables.

TYPE	VARIABLE	DESCRIPTION	DEFINITION / FORMULA	EXPECTED SIGNAL	REFERENCES
DEPENDENT	Q	Tobin's Q	Fair value of the share on stock market: $Q = \frac{\text{Market Value of the firm} + (\text{Current Liabilities} - \text{Current Assets} + \text{Non-Current Liabilities} + \text{Stocks})}{\text{Total Assets}}$		Chung and Pruitt (1994), Rozeff (1982); Klapper and Love (2004); Bellato <i>et al.</i> (2006).
	PAY	Payout	Represents the proportion of equity distributed for shareholders. $\text{Payout} = \frac{(\text{Dividends} + \text{Interest on Capital})}{\text{Net Profit}}$		Rozeff(1982), Casey and Dickens (2000), La Porta <i>et al</i> (2000), Kania and Bacon (2005); Mayne (1980), Forti, Peixoto and Alves (2014)
TEST	D_TAG_100	Dummy that indicates 100% tag along concession by firm	0 for no presence; 1 for presence	(+)	
EXPLANATORY	SIZE	Size	Logarithm of book value of total assets. Some studies use the natural logarithm of Total Assets, while others use natural logarithm of sales.	(+)	Fatemi and Bildik (2012); Renneboog and Trojanowski (2011); Moh'd, Perry and Rimbey (1995), Mayne (1980).
	ROA	Profitability: Return On Assets	How profitable a company is relative to its total assets. Return On Assets = $\text{EBIT} / \text{Total assets}$	(+)	Lintner (1956); Klapper and Love (2004), Aivazian, Booth and Cleary (2003); Kania and Bacon (2005); John and Knyazeva (2006); Liu, Uchida and Yang (2012).

ROE	Profitability: Return On Equity	How much profit a company generates with the money shareholders have invested. Return on Equity = Net Profit / Shareholder's Equity	(+)	Forti, Peixoto and Alves (2014)
LEV	Leverage	Long-term debt divided by total assets	(+/-)	(+) La Porta <i>et al</i> (2000); Kania and Bacon (2005); (-)Jiraporn <i>et al.</i> (2011); Liu, Uchida e Yang (2012)
LIQ2	Liquidity	Squared liquidity of the firm. Liquidity = Current Assets / Current Liabilities	(+)	Kania and Bacon (2005); Liu, Uchida e Yang (2012); Forti, Peixoto e Alves (2014).
ZCASH	Cash maintenance volume of each company in a standardized way	Importance of cash (amount of cash, banks and investments with immediate liquidity of the company less the industry average cash value in which it operates divided by its standard deviation) in relation to the asset (cash in relation to total assets)	(+)	Forti, Peixoto and Freitas (2011).
SECT	Sector	Classification of company's sectors	Indetermined	Bellato <i>et al.</i> (2006); Forti, Peixoto and Alves (2014); Rozeff (1982).
BETA	Beta	Systematic risk (colated in the Economática database)	(-)	Forti, Peixoto and Alves (2014)
GROW	Profit Growth	(Current Profit – Profit Previous Year) / Profit Previous Year	(+)	Lintner (1956); Forti, Peixoto and Alves (2014).
YEAR	Year	Dummy for the year	Indetermined	

Originally proposed by Brainard and Tobin (1968) and Tobin (1969), the quotient which became known as Tobin's Q was consolidated as a variable of indisputable usefulness in different applications. In here, the index is used to measure company's value and the incentive of investments. Means the fair value of the share on stock market. Companies with high Tobin's Q rate indicate that the agents have high expectations for their future earnings (cash flow and return of the shares), i.e. the market recognizes information that accounting can or cannot show because of the principles and/or the legal provisions. According to Klapper and Love (2004), better corporate governance is highly correlated with better operating performance and valuation and this results. The payout (PAY) is another dependent variable and is calculated by the sum of dividends and interest on net equity divided by net profit. It represents the proportion of equity that was distributed to shareholders. Is a measure of profit amount distributed to shareholders as reported by the Económica database.

Used by Forti, Peixoto and Freitas (2011), zCash variable is the company's cash maintenance (value of cash, banks and investments with immediate liquidity of the company subtracting the industry average cash value in which it operates divided by its standard deviation) in relation to the assets (deposits in relation to total assets). Is a measure of cash importance and management of the firm. The LEV variable is a measure of debt or financial leverage of the firms. The size (SIZE) of the firm is measured by the natural logarithm of the book value of the firm's total assets. The liquidity or cash flows position (LIQ) has been measured by the formula of Kania and Bacon (2005) and represents overall liquidity of the firm. It indicates the company's ability to honor its commitments in the short term and we used the squared-liquidity (LIQ2). The BETA variable of the firm indicates its systematic risk measured by the CAPM theory (Capital Asset Pricing Model) and represents the risk of the firm in relation to the risk of the market portfolio. GROW is a variable used in this study because it gauges the sales growth performance of the firms over the years. The YEAR dummy is a variable to control the comportment of the other variables in the study.

The data have been analyzed from the econometric technique of panel data using the Stata® software.

4 Analysis of results

The results obtained through empirical research are presented in this section. First the descriptive data analysis: correlation of variables, descriptive statistics between full tag along and non-full tag along companies and secondly to the analysis of regression with data panel as the model shown above.

Table 3 and Table 4 presents the descriptive statistics of research variables:

Table 3 – Descriptive statistics for no tag along and at least 80% tag along

DTAG	PAYOUT		ZCASH		GROWTH		ROE	
	NO	YES	NO	YES	NO	YES	NO	YES
2000	0.310	0.000	-0.033	-0.358	-0.059	.	.	.
2001	0.325	0.158	-0.031	0.161	-0.106	-0.710	.	.
2002	0.200	0.299	-0.056	0.214	0.095	-0.148	0.013	-0.048
2003	0.322	0.450	-0.066	0.235	-0.017	-0.252	0.096	0.145
2004	0.344	0.480	-0.133	0.505	0.208	0.468	0.098	0.133
2005	0.408	0.395	-0.148	0.490	-0.065	0.207	0.115	0.120
2006	0.349	0.497	-0.210	0.495	-0.283	-0.314	0.115	0.155
2007	0.375	0.418	-0.235	0.333	-0.179	0.243	0.156	0.124
2008	-0.221	-0.242	-0.230	0.247	0.024	-0.558	0.133	0.010
2009	-0.193	-0.277	-0.225	0.238	-0.128	-0.182	0.172	0.134
2010	-0.311	-0.184	-0.193	0.172	0.049	0.422	0.174	0.123
2011	-0.417	-0.394	-0.230	0.160	0.123	-0.021	0.095	0.117
2012	-0.438	-0.221	-0.216	0.134	-0.066	-0.091	0.100	0.056
2013	-0.165	-0.228	-0.251	0.145	0.026	0.177	0.072	0.034
Total	0.888	1.151	-2.257	3.171	-0.378	-0.759	1.339	1.103

Note. Legend: DTAG: firms which grant tag along rights to minority shareholders (minimum 80%) - BETA: Beta, a measure of risk - SIZE: Size of a firm - ROA: Profitability, return on assets - LEV: Leverage of firms - Q: Tobin's Q - GROW: Rise of profits – ROE: Return on Equity – PAY: Payout, value of dividends and JCP for shareholders – ZCASH: Cash maintenance volume of each company in a standardized way – LIQ2: squared liquidity of the firm

Source: The author (2016)

Table 4 - Descriptive statistics for no tag along and at least 80% tag along (cont.)

DTAG	BETA		SIZE		ROA		LIQUIDITY2		LEV		QTOBIN	
	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES
2000	0.599	.	12.882	9.846	0.035	-0.562	2.134	29.160	.	.	.	.
2001	0.719	0.953	12.921	13.759	0.039	-0.044	2.100	1.099	.	.	.	.
2002	0.545	0.697	12.942	13.920	0.027	0.052	2.171	2.136	0.433	0.307	0.794	0.682
2003	0.583	0.605	12.979	14.128	0.037	0.055	2.131	1.443	0.466	0.336	1.011	0.910
2004	0.512	0.557	13.024	14.225	0.064	0.097	2.183	1.715	0.496	0.394	1.166	1.432
2005	0.629	0.714	13.017	14.270	0.041	0.071	2.214	2.397	0.500	0.383	1.156	1.657
2006	0.597	0.809	12.973	14.263	0.030	0.065	2.182	3.311	0.512	0.298	1.437	1.756
2007	0.596	0.737	13.127	14.321	0.037	0.062	2.571	4.223	0.520	0.276	1.813	1.636
2008	0.748	0.915	13.191	14.457	0.022	0.064	2.317	2.895	0.578	0.303	1.470	0.804
2009	0.733	1.000	13.208	14.533	0.028	0.060	2.796	2.696	0.633	0.294	1.739	1.365
2010	0.644	1.032	13.360	14.765	0.027	0.084	2.211	2.644	0.616	0.306	1.608	1.354
2011	0.437	0.814	13.248	14.861	0.017	0.068	2.926	2.285	0.580	0.310	1.570	1.099
2012	0.342	0.636	13.236	14.918	0.002	0.059	3.074	2.440	0.632	0.318	1.581	1.276
2013	0.468	0.662	13.155	14.955	0.007	0.052	3.193	2.133	0.643	0.309	1.457	1.145
Total	8.152	10.131	183.263	197.221	0.413	0.183	34.203	60.577	6.609	3.834	16.008	12.720

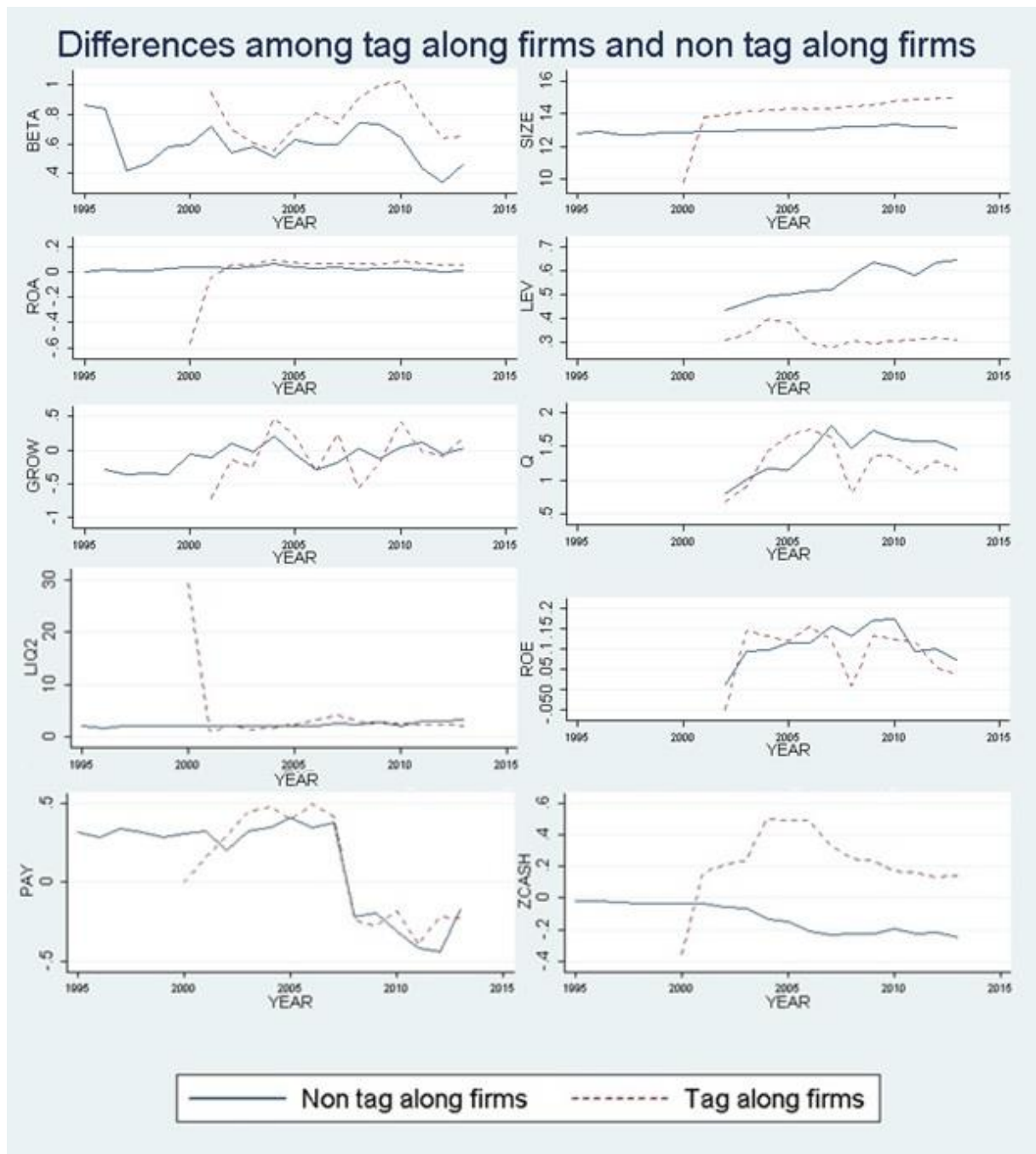
Note. Legend: DTAG: firms which grant at least 80% tag along rights to minority shareholders - BETA: Beta, a measure of risk - SIZE: Size of a firm - ROA: Profitability, return on assets - LEV: Leverage of firms - Q: Tobin's Q - GROW: Rise of profits - ROE: Return on Equity - PAY: Payout, value of dividends and JCP for shareholders - ZCASH: Standardized cash volume - LIQ2: squared liquidity of the firm

Source: The author (2016)

The descriptive statistics review shows that the DTAG YES (dummy for 80% tag along firms – at minimum) for BETA variable is always higher than DTAG NO (dummy for no tag along firms) for BETA variable, in all of period. The total difference is about 24%. As the same, except in 2000 year, the DTAG YES for SIZE variable is always higher than DTAG NO for SIZE variable in all of period. The total difference is approximately 7%. Except in 2000 year, the DTAG YES for ZCASH variable is always higher (and the total sum is positive) than DTAG NO for ZCASH variable, which shows a negative sum total. Nevertheless, LEV which measures the leverage of firms, is always fewer (except 2000 year) for DTAG YES firms in all of sample period, if compared to DTAG NO for LEV variable. The total sum amount is almost twice the other.

We separate this statistics in Table 3 and Table 4 and in the following X-Y line plots for year to show the evolution of data over the time (panel data format). The dotted lines in red (shortdash) are firms with at least 80% of tag along (DTAG presence). Full solid line (in blue) shows the companies that do not grant tag along to shareholders (DTAG no presence). The two graphs are plotted jointly in order to make easier the comparison of data over the sample years. The Figure 1 displays graphically, combined and more visually the behavior of Table 3 and Table 4 and its results.

Figure 1 – The behavior of Table 3 and Table 4 variables in graph format



Legend: BETA: Beta, a measure of risk – SIZE: Size of a firm – ROA: Profitability, return on assets – LEV: Leverage of firms – GROW: Rise of profits – Q: Tobin's Q – LIQ2: squared liquidity of the firm – ROE: Return on Equity – PAY: Payout, value of dividends and JCP for shareholders – ZCASH: Cash maintenance volume of each company in a standardized way. Source: The author (2016)

This graph is interesting because it shows that the Q (Tobin's ratio), ROE and PAY variables for 80% minimum tag along firms and no tag along firms moves down near crisis period such as 2008 year. The most important year of crisis is 2008, when the Bovespa index

is influenced more powerfully by the crisis in the mortgage market US subprime. This financial crisis caused declines in the Brazilian GDP and BM&F Bovespa as well that year. This variation was negative 41.22%. Soon after the outbreak of the global crisis, in 2009, the Brazilian per capita GDP fell by 1.3% (BACEN, 2011; BM&F BOVESPA, 2015). It could be an entry point for buy shares, particularly of tag along firms which suffered greater losses in value, on market because after this the value and return on assets goes up again. This tag along firms are larger than non-tag along firms (SIZE variable) in the 2001-2013 period. The BETA line reveals the higher tag along firms risk compared to non-tag along firms in the period. The beta is the measure of risk that an investor is exposed to invest in an asset compared to the market as a whole. The analysis of the performance of organizations during crisis periods allows clarify aspects of CG that are less evident in normal economic situations. Investors tend to ignore the lack of a good CG during a period of economic growth. However, when a crisis begins and expected returns decrease, these investors began to consider the CG weaknesses. (Liu *et al.*, 2012)

On the other hand, the leverage (LEV) of tag along companies is less and stable than the non-tag along companies in the sample period, which is larger and crescent. The ROE variable drops significantly near the subprime crisis for tag along firms comparing with non-tag along firms. It could be explained because in crisis period, the firms profit normally goes down. Furthermore, the Tobin's Q of tag along firms falls down more than the non-tag along firms in the same period probably for the reason that the firms' investments decreases, affecting the value of assets too.

The ROA and GROW variable for the two types of firms has a similar behavior. It says that the fact of give tag along for minority shareholders do not change significantly the value of the firm. Nevertheless, is it possible that tag along firms are less leveraged and have more size than non-tag along firms. As observed, in the Figure 1, the zCash of tag along firms is larger than zCash of companies that do not grant tag along for minority shareholders in the period. The payout (PAY) and Tobin's Q variable are similar for the two types of firms. To check robustly the relationship between these variables and the tag along concession, regressions will be conducted for each of them.

Table 5 presents the research descriptive statistics variables again. The difference between the Table 3 and Table 4 is that in here we will do the analysis of companies with 100% tag along concession and not 80% tag along concession as in earlier analyzes. These data are

consolidated and the number of observations, mean, standard deviation, the lowest and the highest value of each variable are presented for the variables.

Table 5 - Descriptive statistics for 100% of tag along

Variable	Obs	Mean	Std. Dev.	Min	Max
BETA	2980	.667745	.4223123	-.12	1.69
SIZE	6712	13.32275	1.994909	8.912338	17.1326
ROA	6691	.0347165	.145655	-.5619783	.2833452
LEV	4262	.4584172	.7274282	.0002312	4.222998
Q	3254	1.313706	1.31382	.1446768	6.895154
GROW	6064	-.0862384	3.296547	-11.36478	11.30639
ROE	4253	.1020553	.3996348	-1.335386	1.320582
PAY	4807	.2406193	.5636707	0	2.001668
ZCASH	6714	-.0289897	.8285126	-.7798122	2.978423
LIQUI2	6709	2.336219	5.325692	0	29.16

Note. This table exhibits descriptive statistics of the sample. Legend: BETA: Beta, a measure of risk - SIZE: Size of a firm - ROA: Profitability, return on assets - LEV: Leverage of firms - Q: Tobin's Q - GROW: Rise of profits - ROE: Return on Equity - PAY: Payout, value of dividends and JCP for shareholders - ZCASH: Cash maintenance volume of each company in a standardized way - LIQ2: squared liquidity of the firm.

Source: The author (2016).

The Table 5 shows that the average of PAY variable corresponds to approximately 0.24. That is, on average companies distribute approximately R\$0.24 of net income as dividends for each share to shareholders in the market. For Q variable, the mean is 1.3 (above 1.0). Tobin's Q greater than 1 means that the firm has an incentive to invest because their shares are appreciating, causing the value of invested physical capital exceeds its cost. Tobin's Q less than 1, means the firm will have no incentive to invest, since its shares have suffered depreciation (Lindenberg & Ross, 1981).

The test of differences of means of data are shown in Tables 6 and 7, in which there is the number of observations, means, standard deviations, standard deviation of errors and the confidence intervals.

Table 6 – Difference of means of Tobin's Q between tag along and non-tag along firms

Group	Observations	Mean	Standard deviation of error	Standard deviation	95% confidence interval	
Non full tag along firm	2257	1,286,178	.0297498	1.413348	1.227838	1.344518
Full Tag along firm	997	1,376,024	.0333284	1.052354	1.310622	1.441426
Combined	3254	1.313.706	.0230318	1.31382	1.268548	1.358865
Diff		-.0898462	.0499439		-.1877708	.0080785

Source: The author (2016)

Table 7 – Difference of means of PAY between tag along and non-tag along firms

Group	Observations	Mean	Standard deviation of error	Standard deviation	95% confidence interval	
Non full tag along firm	4352	.2589076	.0084984	.5606393	.2422464	.2755689
Full tag along firm	455	.0656947	.0264041	.5632189	.0138053	.1175842
Combined	4807	.2406193	.00813	.5636707	.2246809	.2565578
Diff		.1932129	.027635		.1390356	.2473902

Source: The author (2016)

The difference between the averages of Q and PAY variable companies that grant full tag along rights to minority shareholders and firms that do not grant is verified. As can be seen, on average, companies that grant tag along has a Q ratio approximately 6% higher on average than companies that do not grant 100% of tag along. Nevertheless, companies that grant full tag along pay, on average, approximately only one quarter of the dividends than companies that do not grant tag along rights to minority shareholders.

Table 10 (in Appendix 3) shows that some independent variables are highly correlated with the dependent variable - Q and PAY. Regarding the dependent variables, some show significant correlation with each other, as can be seen with the markings on asterisk (*). Two variables that stand out in the array are the ZCASH and GROW for opposite reasons. While GROW does have significant correlation with three variables, the ZCASH are statistically

correlated with all variables except GROW. However, The Q variable has no significant correlation with D_TAG_100.

This analysis shows that the ROA have significant and positive correlation with ZCASH and SIZE, indicating that the selected sample, companies with higher returns on assets have more cash and are larger. Their relationship is negative and significant with LEV (debt), which indicates that companies with more debt have lower ROA. The ZCASH variable, in turn, has a positive relationship and significant with SIZE indicating that larger companies have relatively more resources available. Confirming this trend, the significant negative relationship between Size and Leverage indicate that larger companies tend to have less debt in the sample.

Examining whether such correlation impacted the results in terms of multicollinearity and through the VIF test³ (variance inflation factor), we verified the absence of problems in the model (showed in Appendix 1). According to Nogueira *et al.* (2009), the correlation analysis in studies using the Tobin's Q result in low overall correlation between this ratio and the traditional financial measures.

Difference of means and the correlation of variables involving PAY and tag along rights points to the rejection of the H₃ hypothesis of this research, which suggest a positive direct relationship between granting tag along and increasing the wealth of the minority shareholder, as a proxy for payout. None of the above analysis involving Tobin's Q and tag along rights points to the rejection of the H₁ hypothesis of this research. However, the analysis of the models with the regressions is very important to define this relation and significance robustly.

Before presenting the results, it is noteworthy that all the coefficients were obtained through models with random effects panel, which was the best choice, as in the result of the tests: Breusch-Pagan, Chow and Hausman. The last test indicated the use of random effects in the regression. In order to analyze the potential impact of tag along rights concession in value generation, we performed multiple regressions. The results from two different model specifications performed with regression tables are presented in Table 8, which full tag along (D_TAG_100 dummy) is studied.

³ The VIF test shows that none of the variables in any of the models have a value greater than 10 and the total average value is not above that too. This means that there is no multicollinearity in the proposed models.

Table 8 – Results of panel data regressions, showing the constants, coefficients and errors for each regressions.

	(1) Q	(2) PAY
SIZE	-0.1382*** (-4.74)	0.2367*** (3.04)
BETA	-0.0530 (-1.19)	0.0437 (1.13)
ZCASH	-0.0481 (-1.54)	0.0265 (1.33)
PAYOUT	-0.0222 (-0.73)	.
ROA	0.2650 (1.64)	0.3613** (2.49)
ROE	0.1810*** (3.66)	0.0035 (0.07)
LEV	0.8771*** (17.21)	-0.0476 (-1.08)
Q	.	0.0140 (0.66)
GROWTH	0.0071 (1.43)	0.0028 (0.56)
LIQUIDY2	0.0119* (1.91)	0.0060 (1.57)
D_TAG_100	0.2367*** (3.04)	-0.0875* (-1.83)
Food and Drinks	0.9092** (2.30)	-0.0961 (-0.61)
Commerce	0.9195** (2.16)	0.1173 (0.73)
Construction	0.0610 (0.15)	-0.0385 (-0.24)
Electronics	0.6249 (1.36)	-0.1184 (-0.68)
Electric Power	0.5422 (1.39)	0.0291 (0.19)
Nonmetallic Minerals	1.4650*** (2.75)	0.2603 (1.36)
Mining	1.5342*** (3.05)	-0.1240 (-0.66)
Industrial Machines	0.4855 (0.99)	0.1096 (0.61)
Others	0.6980* (1.85)	-0.0130 (-0.09)
Paper and Cellulose	0.6075 (1.27)	0.1678 (0.93)
Oil and Gas	0.6232 (1.41)	-0.0536 (-0.32)
Chemistry	0.6814* (1.71)	0.1077 (0.69)

Steel & Metals	0.4918 (1.26)	-0.0351 (-0.23)
Software and Data	1.4385*** (2.59)	0.1401 (0.52)
Telecommunications	0.7263* (1.83)	0.1372 (0.88)
Textile	0.3512 (0.88)	-0.0976 (-0.63)
Transport and Services	0.7933* (1.78)	0.0364 (0.20)
Vehicles and Parts	0.8431** (2.05)	0.0320 (0.20)
_cons	1.8052*** (3.69)	0.1457 (0.66)
N	1130	1130
Dummy for year	Yes	Yes
Chi2	754.2382	603.0951

Note: The symbol * correspond 10%, ** 5% and *** 1% of statistical significance.

Source: The author (2016)

The relationship of SIZE is significant for Q and PAYOUT, confirming the correlation of this variables in Appendix 3. The variable SIZE has a positive relationship with the payment of dividends, indicating that larger firms are more likely to pay dividends. This variable is also interpreted as an indication of age/maturity of the firm, since companies with these characteristics usually do not have many possibilities for new investments, and access to other sources of funding and there is no need to retain profits to make such investments. This result corroborates with Rodrigues and Ambrozini (2016) and Forti, Peixoto and Alves (2014).

ROA, confirming the theory of Lintner (1956) and corroborating Forti, Peixoto and Alves (2014) and Rodrigues and Ambrozini (2016), has a positive sign and also statistical significance with dividends. Managers are more comfortable paying dividends when the company has increased profitability and return on their investments. In addition, own shareholders expect higher dividends when the company has increased profitability.

The relationship of Tobin's Q and ROE is significant and positive, whereas if firm have more ROE, investments are more possible and viable and the market give value for firms with an appreciation of their shares and motivating managers to increase investments in the company. As the same, the liquidity shows a positive relation with Tobin's Q. Firms which have more liquidity could invest in assets to generate greater value, because they have cash and

better conditions of financing their (successful) projects. The relationship of leverage (LEV) is significant and positive for Tobin's Q. An increase in the firm's leverage levels would be a sign that the firm expects a high future cash flow by financing projects. Thus, investments increase, as well as its value. Moreover, SIZE has a negative relationship with Tobin's Q, indicating that large firms could be mature, do not have many possibilities for new investments and they are discouraged by the controllers to improve, which decrease the firm's value.

The dummy D_TAG_100, which indicates 100% of tag along concession for firms to all sort of shareholders, has a positive and significantly relation with Tobin's Q (at level of 1%). La Porta *et al.* (2000) show that firm value is positively associated with the rights of shareholders and this study confirms analyzing the tag along governance rule. As the same, Gompers *et al.* (2001) find that firms with stronger shareholder rights had higher firm value, higher profits, higher sales growth, and lower capital expenditures. Other studies which found positive and significant relation between governance corporative instruments and Tobin's Q is Morck *et al.* (1988) and de Jesus Lameira and Ness (2007). Furthermore, the studies of Silveira (2002), da Silva (2004), Klapper and Love (2004), Barros and Famá (2006), Bhagat and Bolton (2008), Dahya *et al.* (2008) show a positive and significant relationship between corporate governance instruments and value creation and this study corroborated with Bennedsen *et al.* (2012), which found a positive relationship between the granting of tag along and abnormal returns on stock market (value).

Otherwise, the same dummy has a negative and significantly relation with payout (PAY) variable (at level of 10%), confirming the results of difference of means and correlation of variables involving PAY and tag along rights, points to the rejection of the H₃ hypothesis of this research. These facts mean that firms which give tag along for minorities give less dividends and JCP than firms which firms that do not give 100% tag along for minority shareholders. This result is aligned to Forti, Peixoto and Freitas (2011), which affirms that the market value of a firm is positively affected by the companies' cash retention and with Chae, *et al.* (2009). The results confirm the hypothesis that companies with higher cash retentions can benefit from this strategy before competing with smaller reserves and/or higher debt and consequently lower financial sustainability. Thus, it can be that companies that adopt an efficient cash management that prevents the distribution of dividends and consistent with contemporary views on the subject are more likely to thrive in the face of current competitiveness, and to finance better and can invest in new projects that generate valuation of its assets in the market.

In sectors, we point the Software and Data segment, which showed a positive and significant relationship with Tobin's Q. This can be explained because this sector is characterized by increasing investment, which has led its assets are appreciating in the stock market. Another sector is Mining and Nonmetallic Minerals, which is historically a branch export Brazilian commodity. Finally, the Vehicle and Parts industry also has a positive and significant relationship with investment and value, being in an industry that grows historically over time on the national scene.

Therefore, in general, the model 2 (PAY) was able to identify some factors that influence the payment of dividends of Brazilian companies listed on the BM&F Bovespa. Through its analysis it was possible to map what are the characteristics and the main factors influencing the propensity of firms to pay more or less dividends, in particular the granting of 100% tag along rights to minority shareholders.

5 Conclusion

The power-sharing relationship between stock market investors (minority shareholders) and majority shareholders is defined by the rules of corporate governance. Beginning in the late 2000s, there has been significant and stable variation of these rules across different firms in Brazil. Using the tag along criteria, we built a sample of Brazilian firms and the data analysis was performed with robust econometric techniques. We then analyzed the empirical relationship of this tag along dummy with corporate and minority shareholders' value generation.

The purpose of this research was to evaluate the relationship between tag along concession to minority shareholders with respect to the wealth of minority shareholders (PAY) and the wealth and the incentive of investments of the firm (Tobin's Q), analyzing the performance of Brazilian companies listed on the BM&F Bovespa, between the years 1995 and 2013. As to the method used, the data analysis was performed with Panel data, using random effects modeling.

According to the Instituto Brasileiro de Governança Corporativa [IBGC] (2003), the good corporate governance practices aim to increase the value of the company, facilitate its access to capital and contributing to its perpetuity. The Brazilian Institute of Corporate Governance (IBGC) has strengthened its principles of equity and corporate responsibility in

dealing innovatively rights of minority in the buyout: 100% tag along rights for all minority and partial acquisition of control.

Corporate governance exists to provide checks and balances between majority and minority shareholders and thus to mitigate agency problems. Firms with better governance quality should incur less agency conflicts. As the overall quality of corporate governance affects the extent of agency costs and the agency costs, in turn, influence dividend payouts, we thus hypothesize (H_2) that governance quality is related positively to dividend policy, based in Jiraporn *et al.* (2011).

But the H_2 hypothesis was not confirmed. The analysis of data shows that the more a company grants tag along rights to minority shareholders (100%), less the amount paid by it to its shareholders in the form of dividends. The substitution hypothesis argues that, to be able to raise capital in attractive terms, firms with weak governance need to establish a reputation for not extracting private rent from shareholders. Paying generous dividends fulfills this need as it reduces the amount of free cash flow that remains for potential expropriation. This hypothesis thus predicts larger dividends for firms with lower governance quality, i.e. an inverse relation between governance quality and dividend payouts. The relation is negative and confidence level was 10% which confirms, therefore, the rejection of H_2 that said there is a direct positive relation between the granting of tag along to minority shareholders and the payout of firms listed on the BM&F Bovespa and agreement with John and Knyazeva (2006), Nielsen (2006), Officer (2007) and Jo and Pan (2009). This result could be explained because according Rodrigues and Ambrozini (2016) Brazilian companies do not use the dividend policy as a mechanism to reduce potential agency conflicts between controlling and minority shareholders. The rejection of this hypothesis is contrary to Bird in the hand Theory and also Jiraporn, Kim and Kim (2011) study, and is aligned with the Forti, Peixoto and Alves (2014), La Porta *et al.* (2000), Chae, Kim and Lee (2009) and John and Knyazeva (2006) researches. Thus, the results also showed that the payout is positively related to the size and the company's profitability (ROA).

The results still point to a significant and positive relationship between of tag along concession to minority shareholders and the company value - Tobin's Q. Thus, the data analysis shows that the more a company grants tag along rights to minority shareholders (100%), higher the relative market value of the company and incentive to investments (Tobin's Q). In analytical terms, the confidence level was 1% which confirms, therefore, the acceptance of H_3 that says there is a direct positive relation between the tag along concession to minority shareholders and

the Q ratio of firms listed on the BM&F Bovespa and agreement with Klapper and Love (2004), Morck *et al.* (1988), de Jesus Lameira and Ness (2007), Silveira (2002), da Silva (2004), Klapper and Love (2004), Barros and Famá (2006), Bhagat and Bolton (2008), Dahya *et al.* (2008) and Bennedsen *et al.* (2012). In theory, the higher Tobin's Q (greater than 1) in margins, means that the firm has an incentive to invest because their shares are appreciating, causing the value of invested physical capital exceeds its cost. The lower Tobin's Q (less than 1), the firm will have no incentive to invest, since its shares have suffered depreciation. (Lindenberg & Ross, 1981).

The wealth of Tobin's Q ratio is a form of shareholder's wealth too. If tag along firms do not give cash to minority shareholders immediately (payout), is it possible that the firm invest in success projects that could be raise their value in the capital market. So, in the long-term minority shareholder also benefits with the performance of the firm. As there is a negative relationship between tag along and dividends, but there is a positive relationship between tag along and Tobin's Q, the short term minority shareholder, ceases to receive dividends (not confirming the Bird in the hand Theory) favoring long-term investor who believes in a future return of company assets with the value of their shares. On the other hand the company does not need to compromise cash distributing dividends and can apply it resource in lucrative projects, increasing their profits. Thereby, the shareholder compensates for the lack of dividends (payout) in the present in exchange for future appreciation of assets in the market for investments made by the company (Tobin's Q). Thus, the results show that the tag along concession generates wealth for the firm and for the long-term shareholder in the form of valuation (and not in the form of dividends).

The contribution of this research for firms is that the positive relation between tag along concession and Tobin's Q could incentive Brazilian firms to improve their governance through tag along concession in order to increase the value of the company and wealth. The negative relation between tag along concession and payout helps the shareholders to choose shares on market based on tag along criteria, choosing non tag along firms if they want dividends or choosing tag along firms if they do not need dividends, but need the valuation of shares through the company's value increase (cliente effect). Moreover, the goal of this research is was achieved, showing that the value of the firms listed on the BM&F Bovespa and the wealth of minority shareholders are influenced by granting full tag-along rights.

The social contribution of the study is to help people understand the Brazilian environment of investing, for choose better shares on an undeveloped stock market and inside

an information asymmetry outlook. Additionally, support to understand what factors generates the allocation of investments by companies and, consequently, what is the return scenario of the investments made by the shareholders, through tag along as a CG mechanism. Moreover, contribute to improving the economic and social quality of life for people, by saving investments through better probability of choice of wealthy firms and assets. Finally, the research identify tag along as an instrument that could increase value for shareholders and firms, assisting in the allocation of financial resources of both. This study contributes to the literature on the factors that affect firm value, mainly involved the granting of tag along, a GC mechanism not much studied in Brazil. The findings may be useful for financial managers, investors, and financial management consultants.

For further studies, we suggest an analysis of other countries that use the corporate governance practice to grant tag along to its shareholders. Additionally, studying the effect of corporate governance through a corporate governance index like listing segments of BM&F Bovespa might also add value to this area of investigation. As for this research limitation, this study cover the global financial crisis in 2008 that could have caused distortion in the data and it may be best treated.

References

- Aharony, J., & Swary, I. (1980). Quarterly dividend and earnings announcements and stockholders' returns: An empirical analysis. *The Journal of Finance*, 35(1), 1-12.
- Aivazian, V., Booth, L., & Cleary, S. (2003). Dividend policy and the organization of capital markets. *Journal of Multinational Financial Management*, 13(2), 101-121.
- Akerlof, G. (1995). The market for "lemons": Quality uncertainty and the market mechanism. In *Essential Readings in Economics* (pp. 175-188). Macmillan Education UK.
- Alchian, A. A. (1965). The basis of some recent advances in the theory of management of the firm. *The Journal of Industrial Economics*, 30-41.
- Almeida, M. A., & Santos, J. F. (2008). O efeito das dimensões de governança corporativa sobre o payout das empresas não financeiras brasileiras. *ANAIS DO XXXII ENANPAD, Rio de Janeiro (RJ)*.
- Andrade, A., Rossetti, José Paschoal. (2006). *Governança Corporativa: fundamentos, desenvolvimento e tendências.*—2ª Ed.—São Paulo: Atlas.
- Arrazola, M., De Hevia, J., & Mato, G. (1992). Determinantes de la distribución de dividendos. *Investigaciones económicas*, 16(2), 235-258.
- Assaf, A. Neto. (2003). *Finanças corporativas e valor*. Atlas.
- Bagüés, E., & Fumás, V. (1995). Explicaciones alternativas para la política de dividendos: análisis empírico con datos empresariales españoles. *Investigaciones económicas*, 19(3), 329-348.
- Banco Central do Brasil. (2011). *PEDD Padrão Especial de Disseminação de Dados*. Recovered on december 10, 2015 from http://www.bc.gov.br/pec/sdds/port/pib_p.shtm.
- Barclay, M. J., Smith, C. W., & Watts, R. L. (1995). The determinants of corporate leverage and dividend policies. *Journal of applied corporate finance*, 7(4), 4-19.
- Bellato, L. L. N., SILVEIRA, A., & Savoia, J. R. F. (2006). Influência da estrutura de propriedade sobre a taxa de pagamento de dividendos das companhias abertas brasileiras. *Encontro Nacional da Associação Nacional dos Programas de Pós-Graduação Em Administração*, 30.
- Ben Naceur, S., Goaid, M., & Belanes, A. (2006). On the determinants and dynamics of dividend policy. *International review of Finance*, 6(1-2), 1-23.
- Bennedsen, M., Nielsen, K. M., & Nielsen, T. V. (2012). Private contracting and corporate governance: Evidence from the provision of tag-along rights in Brazil. *Journal of Corporate Finance*, 18(4), 904-918.

Black, B. (2001). Does corporate governance matter? A crude test using Russian data. *University of Pennsylvania Law Review*, 149(6), 2131-2150.

Bolsa de Valores, Mercadorias e Futuros de São Paulo (2014). *O que são Segmentos de Listagem*. Recovered on July 18, 2014 from <http://www.bmfbovespa.com.br/pt-br/servicos/solucoes-para-empresas/segmentos-de-listagem/o-Que-sao-segmentos-de-listagem.aspx?idioma=pt-br>.

Bolsa de Valores, Mercadorias e Futuros de São Paulo (2015). *Índice Bovespa - Ibovespa, maio, 2015*. Recovered on December 10, 2015 from <http://www.bmfbovespa.com.br>

Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of corporate finance*, 14(3), 257-273.

Bharadwaj, A. S., Bharadwaj, S. G., & Konsynski, B. R. (1999). Information technology effects on firm performance as measured by Tobin's q. *Management science*, 45(7), 1008-1024.

Bhattacharya, S. (1979). Imperfect information, dividend policy, and “the bird in the hand” fallacy. *Bell journal of economics*, 10(1), 259-270.

Bhattacharya, S. (1980). Nondissipative signaling structures and dividend policy. *The quarterly journal of Economics*, 1-24.

Brainard, W. C., & Tobin, J. (1968). Pitfalls in financial model building. *The American Economic Review*, 58(2), 99-122.

Bruni, A. L., Gama, A., Famá, R., & Firmino, A. (2003). O anúncio da distribuição de dividendos e seu efeito sobre os preços das ações: um estudo empírico no Brasil. In *Congresso USP de controladoria e Contabilidade* (Vol. 3).

Casey, K. M., & Dickens, R. N. (2000). The effects of tax and regulatory changes on commercial bank dividend policy. *The Quarterly Review of Economics and Finance*, 40(2), 279-293.

Chae, J., Kim, S., & Lee, E. J. (2009). How corporate governance affects payout policy under agency problems and external financing constraints. *Journal of Banking & Finance*, 33(11), 2093-2101.

Chung, K. H., & Pruitt, S. W. (1994). A simple approximation of Tobin's q. *Financial management*, 70-74.

Claessens, S., Djankov, S., Fan, J. P., & Lang, L. H. (2002). Disentangling the incentive and entrenchment effects of large shareholdings. *The journal of finance*, 57(6), 2741-2771.

Coelho, F. U. (2001). *Curso de direito comercial* (Vol. 1). Editora Saraiva.

Comissão de Valores Mobiliários (2002). *Recomendações da CVM Sobre Governança Corporativa*. Recovered on November 25, 2015 from www.cvm.gov.br/port/public/publ/cartilha/cartilha.doc.

da Silva, A. L. C. (2004). Governança corporativa, valor, alavancagem e política de dividendos das empresas brasileiras. *Revista de Administração da Universidade de São Paulo*, 39(4).

da Silva, S. F., Formentini, B. F., Reina, D., & Sarlo, A. N. (2016). Empresas que distribuem dividendos e adotam governança corporativa tem retornos anormais em suas ações?. *Revista Ambiente Contabil*, 8(2), 233.

da Silveira, A. D. M. (2006). *Governança corporativa e estrutura de propriedade: determinantes e relação com o desempenho das empresas no Brasil*. Saint Paul Institute of Finance.

do Nascimento Ferreira, R., dos Santos, A. C., Lopes, A. L. M., Fonseca, R. A., & Nazareth, L. G. C. (2013). Governança corporativa, eficiência, produtividade e desempenho. *Revista de Administração Mackenzie*, 14(4).

Dahya, J., Dimitrov, O., & McConnell, J. J. (2008). Dominant shareholders, corporate boards, and corporate value: A cross-country analysis. *Journal of Financial Economics*, 87(1), 73-100.

Dami, A. B. T., Rogers, P., & de Sousa Ribeiro, K. C. (2007). Estrutura de propriedade no Brasil: evidências empíricas no grau de concentração acionária. *Contextus*, 5(2).

Eades, K. M. (1982). Empirical evidence on dividends as a signal of firm value. *Journal of Financial and Quantitative Analysis*, 17(04), 471-500.

de Jesus Lameira, V., & Ness, W. L. N. Junior. (2007). Governança corporativa: impactos no valor das companhias abertas brasileiras. *Revista de Administração*, 42(1), 64-73.

Elton, E. J., & Gruber, M. J. (1970). Marginal stockholder tax rates and the clientele effect. *The Review of Economics and Statistics*, 68-74.

Espitia Escuer, M., & Ruiz Cabestre, F. (1995). El valor informativo de los dividendos sobre los beneficios futuros en el mercado de capitales español. *Revista Española de Financiación y Contabilidad*, 24(82), 201-218.

Faccio, M., & Lang, L. H. (2002). The ultimate ownership of Western European corporations. *Journal of financial economics*, 65(3), 365-395.

Fama, E. F., Fisher, L., Jensen, M. C., & Roll, R. (1969). The adjustment of stock prices to new information. *International economic review*, 10(1), 1-21.

Fatemi, A., & Bildik, R. (2012). Yes, dividends are disappearing: Worldwide evidence. *Journal of Banking & Finance*, 36(3), 662-677.

Forti, C. A. B., Peixoto, F. M., & Alves, D. L. (2014). Pagamento de dividendos no Brasil: um estudo empírico sobre seus determinantes. *XIV Ebfin*.

Forti, C. A. B., Peixoto, F. M., & Freitas, K. S. (2011). Retenção de caixa, desempenho operacional e valor: um estudo no mercado de capitais brasileiro. *Revista de Contabilidade e Organizações*, 5(13), 20-33.

Gama, U. de O., Barbosa, M. V., Coutinho, R. E. T., Ferreira, S., Novikoff, C. (2013). Governança Corporativa: Valor de Mercado das Ações no Brasil e o Novo Mercado. Simpósio de Excelência em Gestão e Tecnologia. *Anais Eletrônicos. X SEGET*.

Gompers, P. A., Ishii, J. L., & Metrick, A. (2001). *Corporate governance and equity prices* (No. w8449). National bureau of economic research.

Gordon, M. J. (1959). Dividends, earnings, and stock prices. *The review of economics and statistics*, 99-105.

Graham, J. R., & Kumar, A. (2006). Do dividend clienteles exist? Evidence on dividend preferences of retail investors. *The Journal of Finance*, 61(3), 1305-1336.

Harford, J., Mansi, S. A., & Maxwell, W. F. (2012). Corporate governance and firm cash holdings in the US. In *Corporate Governance* (pp. 107-138). Springer Berlin Heidelberg.

Himmelberg, C. P., Hubbard, G. R., & Love, I. (2000). Investor protection, ownership, and investment. *Mimeograph, Columbia University*.

Holanda, A. P., & Coelho, A. C. D. (2012). Dividends and clientele effect: evidence in the Brazilian market. *Revista de Administração de Empresas*, 52(4), 448-463.

Huang, Y. S., & Walkling, R. A. (1987). Target abnormal returns associated with acquisition announcements: Payment, acquisition form, and managerial resistance. *Journal of Financial Economics*, 19(2), 329-349.

Instituto Brasileiro de Governança Corporativa (2003). Códigos das melhores práticas de governança corporativa. Recovered on november 22, 2015 from <http://ibgc.org.br>.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.

Jiraporn, P., Kim, J. C., & Kim, Y. S. (2011). Dividend payouts and corporate governance quality: An empirical investigation. *Financial Review*, 46(2), 251-279.

Jo, H., & Pan, C. (2009). Why are firms with entrenched managers more likely to pay dividends?. *Review of Accounting and Finance*, 8(1), 87-116.

John, K., & Knyazeva, A. (2006). Payout policy, agency conflicts, and corporate governance. *Agency Conflicts, and Corporate Governance (May 2006)*.

Kaldor, N. (1966). *Causes of the slow rate of economic growth of the United Kingdom: an inaugural lecture*. Cambridge University Press.

Kania, S. L., & Bacon, F. W. (2005). What factors motivate the corporate dividend decision. *ASBBS E-Journal*, 1(1), 97-107.

Klapper, L. F., & Love, I. (2004). Corporate governance, investor protection, and performance in emerging markets. *Journal of corporate Finance*, 10(5), 703-728.

Klock, M., & Thies, C. F. (1995). A test of Stulz's overinvestment hypothesis. *Financial Review*, 30(3), 387-398.

Kumar, J. (2006). Corporate governance and dividends payout in India. *Journal of Emerging Market Finance*, 5(1), 15-58.

Kwan, C. (1981). Efficient market tests of the informational content of dividend announcements: critique and extension. *Journal of Financial and Quantitative Analysis*, 16(2), 193-206.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1999a). The quality of government. *Journal of Law, Economics, and organization*, 15(1), 222-279.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. & Vishny, R. (1999b). Investor protection and corporate valuation. *National Bureau of Economic Research: Cambridge, MA*, NBER Working Paper 7403.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. *Journal of financial economics*, 58(1), 3-27.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Agency problems and dividend policies around the world. *The journal of finance*, 55(1), 1-33.

Lang, L. H., Stulz, R., & Walkling, R. A. (1991). A test of the free cash flow hypothesis: The case of bidder returns. *Journal of Financial Economics*, 29(2), 315-335.

Lei nº 6.385, de 7 de dezembro de 1976 (1976). Dispõe sobre o mercado de valores mobiliários e cria a Comissão de Valores Mobiliários. Brasília, 1976. Recovered on december 10, 2015 from www.planalto.gov.br/ccivil_03/leis/L6385.htm.

Lei nº 6.404, de 15 de dezembro de 1976 (1976). Dispõe sobre as Sociedades por Ações. Brasília, 1976. Recovered on december 10, 2015 from http://www.planalto.gov.br/ccivil_03/Leis/L6404consol.htm.

Lei nº 8.021, de 12 de abril de 1990 (1990). Dispõe sobre a identificação dos contribuintes para fins fiscais, e dá outras providências. Brasília, 1990. Recovered on december 10, 2015 from http://www.planalto.gov.br/ccivil_03/leis/L8021.htm.

Lei nº 8.088, de 31 de outubro de 1990 (1990). Dispõe sobre a atualização do Bônus do Tesouro Nacional e dos depósitos de poupança e dá outras providências. Brasília, 1990. Recovered on december 10, 2015 from http://www.planalto.gov.br/ccivil_03/leis/L8088consol.htm.

Lei nº 9.249, de 26 de dezembro de 1995 (1995). Altera a legislação do imposto de renda das pessoas jurídicas, bem como da contribuição social sobre o lucro líquido. Recovered on december 10, 2015 from http://www.planalto.gov.br/ccivil_03/leis/L9249.htm.

Lei nº 9.457, de 5 de maio de 1997 (1997). Altera dispositivos da Lei nº 6.404, de 15 de dezembro de 1976, que dispõe sobre as sociedades por ações e da Lei nº 6.385, de 7 de dezembro de 1976, que dispõe sobre o mercado de valores mobiliários e cria a Comissão de Valores Mobiliários. Recovered on december 10, 2015 from http://www.planalto.gov.br/ccivil_03/leis/L9457.htm.

Lei nº 10.303, de 31 de outubro de 2001 (2001). Altera e acrescenta dispositivos na Lei nº 6.404, de 15 de dezembro de 1976, que dispõe sobre as Sociedades por Ações, e na Lei nº 6.385, de 7 de dezembro de 1976, que dispõe sobre o mercado de valores mobiliários e cria a Comissão de Valores Mobiliários. Recovered on december 10, 2015 from http://www.planalto.gov.br/ccivil_03/leis/LEIS_2001/L10303.htm.

Lewellen, W., Loderer, C., & Rosenfeld, A. (1985). Merger decisions and executive stock ownership in acquiring firms. *Journal of Accounting and Economics*, 7(1-3), 209-231.

Lindenberg, E. B., & Ross, S. A. (1981). Tobin's q ratio and industrial organization. *Journal of business*, 1-32.

Lintner, J. (1956). Distribution of incomes of corporations among dividends, retained earnings, and taxes. *The American Economic Review*, 46(2), 97-113.

Liu, C., Uchida, K., & Yang, Y. (2012). Corporate governance and firm value during the global financial crisis: Evidence from China. *International Review of Financial Analysis*, 21, 70-80.

Lopes, A. B., & Martins, E. (2007). *Teoria da contabilidade: uma nova abordagem*. Atlas.

Loughran, T., & Vijh, A. M. (1997). Do long-term shareholders benefit from corporate acquisitions?. *The Journal of Finance*, 52(5), 1765-1790.

Macagnan, C. B. (2009). Evidenciação voluntária: fatores explicativos da extensão da informação sobre recursos intangíveis. *Revista Contabilidade & Finanças*, 20(50), 46-61.

Markowitz, H. (1952). Portfolio selection. *The journal of finance*, 7(1), 77-91.

Martins, A. I., & Famá, R. (2012). O QUE REVELAM OS ESTUDOS REALIZADOS NO BRASIL SOBRE POLÍTICA DE DIVIDENDOS?/WHAT THE STUDIES CONDUCTED IN BRAZIL REGARDING DIVIDEND POLICY REVEAL/? QUÉ REVELAN LOS ESTUDIOS REALIZADOS EN BRASIL SOBRE POLÍTICA DE DIVIDENDOS?. *Revista de Administração de Empresas*, 52(1), 24.

Maher, M., & Andersson, T. (2000). Corporate governance: effects on firm performance and economic growth. Available at SSRN 218490.

Mayne, L. S. (1980). Bank dividend policy and holding company affiliation. *Journal of Financial and Quantitative Analysis*, 15(02), 469-480.

Michaely, R., & Roberts, M. (2006). Dividend smoothing, agency costs, and information asymmetry: Lessons from the dividend policies of private firms. *Unpublished working paper*.

Mitton, T. (2004). Corporate governance and dividend policy in emerging markets. *Emerging Markets Review*, 5(4), 409-426.

Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American economic review*, 48(3), 261-297.

- Moh'd, M. A., Perry, L. G., & Rimbey, J. N. (1995). An investigation of the dynamic relationship between agency theory and dividend policy. *Financial Review*, 30(2), 367-385.
- Morck, R., Shleifer, A., & Vishny, R. W. (1990). Do managerial objectives drive bad acquisitions?. *The Journal of Finance*, 45(1), 31-48.
- Mulherin, J. H., & Boone, A. L. (2000). Comparing acquisitions and divestitures. *Journal of corporate finance*, 6(2), 117-139.
- Nielsen, A. E. B. (2005, August). Corporate governance, Leverage and dividend policy. In *EFA 2006 Zurich Meetings*.
- Nogueira, I., Lamounier, W., & Colauto, R. (2007). Q de Tobin e medidas financeiras tradicionais em companhias siderúrgicas brasileiras e americanas com ações na BOVESPA e na NYSE. In *7º Congresso USP de Controladoria e Contabilidade* (pp. 1-15).
- Novis, J. A., Neto. (2002). Dividend yield e persistência de retornos anormais das ações: evidência do mercado brasileiro.
- Officer, M. (2006). Dividend policy, dividend initiations, and governance. *Unpublished working paper. University of Southern California*.
- Peixoto, F. M., & Buccini, A. R. A. (2013). Separação entre propriedade e controle e sua relação com desempenho e valor de empresas brasileiras: onde estamos?. *Revista de Contabilidade e Organizações*, 7(18).
- Perin, E., Jr. (2004). A lei n. 10.303/2001 e a proteção do acionista minoritário. *São Paulo: Saraiva*.
- Pettit, R. R. (1972). Dividend announcements, security performance, and capital market efficiency. *The Journal of Finance*, 27(5), 993-1007.
- Pettit, R. R. (1977). Taxes, transactions costs and the clientele effect of dividends. *Journal of Financial Economics*, 5(3), 419-436.
- Procianoy, J. L. (1996). Dividendos e tributações: o que aconteceu após 1988-1989. *Revista de Administra&ccdeil; ão da Universidade de São Paulo*, 31(2).
- Rau, P. R., & Vermaelen, T. (1998). Glamour, value and the post-acquisition performance of acquiring firms. *Journal of financial economics*, 49(2), 223-253.
- Raupp, F. M., & Beuren, I. M. (2003). Metodologia da pesquisa aplicável às ciências sociais. *Como elaborar trabalhos monográficos em contabilidade: teoria e prática*, 3, 76-97.
- Renneboog, L., & Trojanowski, G. (2011). Patterns in payout policy and payout channel choice. *Journal of Banking & Finance*, 35(6), 1477-1490.
- Requião, R. (1986). *Aspectos modernos de direito comercial: estudos e pareceres*. Editora Saraiva.

- Ribeiro, M. A. F., Dias, J. M., Carvalho, C. V. D. O. C. J., Almeida, C. S. L., & dos Santos, E. B. (2013). Um Estudo sobre a Associação Entre Práticas de Governança Corporativa e Políticas de Dividendos no Brasil. *X Simpósio De Excelência Em Gestão E Tecnologia*.
- Rodrigues, R. L., & Ambrozini, M. A. (2016). Teoria de Agência e Política de Dividendos: Evidências nas Empresas Brasileiras de Capital Aberto no Período de 2000 a 2013. In *Anais do XLIII Encontro Nacional de Economia [Proceedings of the 43rd Brazilian Economics Meeting]* (No. 129). ANPEC-Associação Nacional dos Centros de Pósgraduação em Economia [Brazilian Association of Graduate Programs in Economics].
- Ross, S. A. (1977). The determination of financial structure: the incentive-signalling approach. *The bell journal of economics*, 23-40.
- Renneboog, L., & Szilagyi, P. G. (2015). How relevant is dividend policy under low shareholder protection?. *Journal of International Financial Markets, Institutions and Money*.
- Rozeff, M. S. (1982). Growth, beta and agency costs as determinants of dividend payout ratios. *Journal of financial Research*, 5(3), 249-259.
- Saito, R., & Silveira, A. D. M. D. (2008). Governança corporativa: custos de agência e estrutura de propriedade. *Revista de Administração de Empresas*, 48(2), 79-86.
- Saito, R., & Silveira, A. D. M. D. (2010). The Relevance of tag along rights and identity of controlling shareholders for the price spreads between dual-class shares: the Brazilian case. *BAR-Brazilian Administration Review*, 7(1), 01-21.
- Sawicki, J. (2009). Corporate governance and dividend policy in Southeast Asia pre-and post-crisis. *The European Journal of Finance*, 15(2), 211-230.
- Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *The journal of finance*, 19(3), 425-442.
- Silva, S. (2003). The influence of agency costs on the dividend policy of brazilian listed companies. *Encontro Nacional da Associação Nacional dos Programas de Pós-Graduação em Administração*, 27.
- Silveira, A. D. M. D. (2002). *Governança corporativa, desempenho e valor da empresa no Brasil* (Doctoral dissertation, Universidade de São Paulo).
- Silveira, A. D. M. D., Barros, L. A. B. D., & Famá, R. (2006). Atributos corporativos, qualidade da governança corporativa e valor das companhias abertas no Brasil. *Revista Brasileira de Finanças*, 4(1), 1-30.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance*, 52(2), 737-783.
- Sloan, R. (1996). Do stock prices fully reflect information in accruals and cash flows about future earnings?(Digest summary). *Accounting review*, 71(3), 289-315.
- Smith, C. W., & Watts, R. L. (1992). The investment opportunity set and corporate financing, dividend, and compensation policies. *Journal of financial Economics*, 32(3), 263-292.

Sonza, I. B., & Kloeckner, G. D. O. (2014). Governance in concentrated ownership structures: new evidences from Brazil. *Revista de Administração (São Paulo)*, 49(2), 322-338.

Spence, M. (1973). Job market signaling. *The quarterly journal of Economics*, 355-374.

Tobin, J. (1969). A general equilibrium approach to monetary theory. *Journal of money, credit and banking*, 1(1), 15-29.

Vieira, S. P., & Mendes, A. G. S. T. (2005). Governança corporativa: uma análise de sua evolução e impactos no mercado de capitais brasileiro. *Revista Organizações em Contexto-online*, 2(3), 48-67.

Wald, A. (2002). A Reforma da Lei das Sociedades Anônimas: os Direitos dos Minoritários na Nova Lei das SA. *Reforma da Lei das Sociedades Anônimas. Rio de Janeiro: Forense*.

Watts, R. (1973). The information content of dividends. *The Journal of Business*, 46(2), 191-211.

Woolridge, J. R. (1982). The information content of dividend changes. *Journal of Financial Research*, 5(3), 237-247.

Zagonel, T. (2013). Política de dividendos, tributação e governança corporativa no Brasil.

Appendix 1 – VIF Tests

Variable Q	VIF	1/VIF
SIZE	1.87	0.533737
ROA	1.46	0.686810
ROE	1.07	0.937485
ZCASH	1.49	0.669931
LEV	1.44	0.695082
LIQUI2	1.16	0.861703
BETA	1.13	0.881391
D_TAG_100	1.10	0.910034
PAY	1.06	0.942478
GROWTH	1.01	0.993940
Mean VIF	1.28	

Variable PAY	VIF	1/VIF
Q	2.29	0.436671
SIZE	1.90	0.525359
ROA	1.47	0.679388
ROE	1.13	0.886127
ZCASH	1.49	0.672817
LEV	2.63	0.379693
LIQUI2	1.16	0.861547
BETA	1.13	0.882193
D_TAG_100	1.10	0.909059
GROWTH	1.01	0.991726
Mean VIF	1.53	

Appendix 2 – Robustness check

We tested the use of D_TAG_100_TRAD rather than D_TAG_100, as mentioned in the originally model 1 and model 2 specifications. That is the only difference between this specifications in this appendix. This new dummy is a dummy that indicates 100% tag along for firms (like D_TAG_100) and, at the same time, belongs to the traditional market (“Tradicional”) of the Brazilian stock exchange, which has no obligation to grant tag along to its shareholders. The results of this regressions show similar results in terms of statistical significance, presented in Table 9.

Table 9 – Results of panel data regressions, showing the constants, coefficients and errors for each regressions.

	(1b)	(2b)
	Q	PAY
SIZE	-0.1308*** (-4.45)	0.0025 (0.17)
BETA	-0.0479 (-1.08)	0.0299 (0.78)
ZCASH	-0.0494 (-1.58)	0.0282 (1.41)
PAY	-0.0258 (-0.85)	.
ROA	0.2664* (1.65)	0.3808*** (2.61)
ROE	0.1833*** (3.72)	0.0038 (0.08)
LEV	0.8629*** (16.89)	-0.0308 (-0.70)
Q	.	0.0066 (0.31)
GROWTH	0.0070 (1.42)	0.0035 (0.70)
LIQUIDY2	0.0109* (1.75)	0.0064* (1.69)
D_TAG_100_TRAD	0.3781** (2.19)	0.1415 (1.03)
Food and Drinks	0.8238** (2.05)	-0.0731 (-0.46)
Commerce	0.8692** (2.00)	0.1054 (0.65)
Construction	0.0204 (0.05)	-0.0279 (-0.17)

Electronics	0.5333 (1.14)	-0.0943 (-0.54)
Electric Power	0.4539 (1.14)	0.0491 (0.32)
Nonmetallic Minerals	1.4521*** (2.67)	0.2475 (1.29)
Mining	1.4472*** (2.82)	-0.0934 (-0.50)
Industrial Machines	0.4359 (0.87)	0.1170 (0.65)
Others	0.6535* (1.70)	-0.0058 (-0.04)
Paper and Cellulose	0.4767 (0.98)	0.1963 (1.09)
Oil and Gas	0.4914 (1.09)	-0.0234 (-0.14)
Chemistry	0.5558 (1.37)	0.1372 (0.89)
Steel & Metals	0.3885 (0.98)	-0.0255 (-0.17)
Software and Data	1.5429*** (2.72)	0.0986 (0.37)
Telecommunications	0.6055 (1.50)	0.1688 (1.08)
Textile	0.2553 (0.63)	-0.0742 (-0.48)
Transport and Services	0.8105* (1.78)	0.0133 (0.07)
Vehicles and Parts	0.7678* (1.83)	0.0309 (0.20)
_cons	1.8201*** (3.66)	0.1689 (0.77)
N	1130	1130
Chi2	736.6292	599.5454

Note: The symbol * correspond 10%, ** 5% and *** 1% of statistical significance.

Source: The author (2016)

As expected, one of the most influential factors on investments and value of firms is the full tag along concession for the BM&F Bovespa level “Tradicional” market, with no tag along concession mandatorily. D_TAG_100_TRAD dummy, which identifies this type of firms, indicates in model 1b a positive and significant relation with Tobin’s Q variable, as D_TAG_100 of the main model 1 regression result. The sector analysis moves as the same: Food and Drinks, Commerce, Vehicles and Parts, Software and Data, Nonmetallic Minerals, Transport and Services and Mining. Thus, it is plausible to infer that, from the specification

point of view, the model is robust. It is important to note that even when the specification of the original model 1 is changed (tag along dummy), this results remain remarkably consistent.

Despite the difference in the magnitude of some of the results, as indicated below, all of the signs and almost significances were unchanged with the exception of, specially, the dummy `D_TAG_100_TRAD` for `PAY`, which became statistically insignificant. Nevertheless, according to model 2b, the return on assets of the firms has a direct influence on its dividend policy. Thus, the ROA represents the firms' ability to generate cash and also reinforces the use of dividends to provide information regarding the quality of assets by sending a credible signal regarding the firms' ability to generate earnings. It confirms the theory of Lintner (1956) and Forti, Peixoto and Alves (2014) and the model 2 results.

Appendix 3 – Correlation of variables

Table 10 - Correlation of variables

	BETA	SIZE	ROA	LEV	Q	GROW	ROE	PAY	ZCASH	LIQ2	D_TAG_100
BETA	1.000										
SIZE	0.1747*	1.000									
ROA	-0.0553*	0.3815*	1.000								
LEV	0.0423	-0.3381*	-0.4314*	1.000							
Q	-0.0229	-0.3454*	-0.2572*	0.6610*	1.000						
GROW	0.0031	-0.0237	-0.0070	-0.0010	0.0359*	1.000					
ROE	-0.0454*	-0.0012	0.1007*	0.0872*	0.1948*	0.0733*	1.000				
PAY	-0.0757*	0.1292*	0.1688*	-0.1039*	-0.0705*	0.0310*	0.0330	1.000			
ZCASH	0.1415*	0.4928*	0.1618*	-0.1082*	-0.0783*	0.0022	0.0401*	0.1305*	1.000		
LIQ2	-0.0807*	-0.1528*	0.0175	-0.2124*	-0.0838*	0.0089	-0.0294	0.0327*	-0.0325*	1.000	
D_TAG_100	0.1846*	0.2772*	0.0962*	-0.1331*	0.0315	0.0062	-0.0090	-0.1004*	0.0932*	0.0407*	1.000

Note. Legend: BETA: Beta, a measure of risk - SIZE: Size of a firm - ROA: Profitability, return on assets - LEV: Leverage of firms - Q: Tobin's Q - GROW: Rise of profits – ROE: Return on Equity – PAY: Payout, value of dividends and JCP for shareholders – ZCASH: Standardized cash volume – LIQ: Liquidity of the firm – LIQ2: squared liquidity of the firm – FCF: Free cash flow.

Source: The author (2016)