

FIRM VALUATION, PERFORMANCE AND ORIGIN OF CONTROLLING SHAREHOLDER IN BRAZIL

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Abstract

This study analyzes if the origin of the controlling shareholder influences firm value and performance in Brazil. Although there is a vast literature on this topic, the results vary significantly and, in some cases, are even inconclusive. Our analysis of 407 Brazilian companies from 2002 to 2009 provide evidence that firms controlled by families and government have lower valuation. There is no significant relation between origin of control and firm performance.

Keywords: Ownership and Control, Firm Value, Performance, Corporate Governance, Origin of Controlling Shareholder

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1 Introduction

Corporate governance has become increasingly important both in academia and in the professional market. Although corporate governance can be analyzed through many different aspects (executive compensation, board of directors, conflicts of interest, among others), the ownership and control structure is one of the most important factors, because it directly influences the company's direction and therefore the generation of value or not by them.

Shleifer and Vishny (1997) state that the ownership and control structure is, along with legal protection, one of the two determinants of corporate governance. Thomsen and Pedersen (1997) argue that ownership and control structure is important because: a) the concentration of ownership will create greater incentives on large shareholders to better monitor the performance of the firm; b) the separation of control and ownership may cause the expropriation of minority shareholders; c) the identity and the origin of the controlling shareholder may indicate the guidelines and strategies that will be taken by companies; and d) the liquidity position and risk aversion of controlling shareholders may affect behavior of corporate investments.

There are many studies that analyze whether companies that have controlling shareholders should be traded at a premium or discount, since the existence of a major shareholder can be an incentive to monitor managers (by reducing agency costs) but can increase the expropriation of minority shareholders. The combined effect of these factors may be beneficial or harmful to companies.

One important aspect of the ownership and control structure is the origin of the controlling shareholder (families, governments, foreigners and

institutional investors). There are many studies that analyze if there is a significant relation between firm valuation and origin of capital, and the results obtained so far vary across countries and periods.

Discussions about family control are broad. There are studies indicating that families may be favorable to shareholders, while others indicate they are unfavorable. On one hand, families may be active shareholders and maximize firm value. On the other hand, families can manage the company seeking to maximize only their own benefit, thus damaging the interests of other minority shareholders.

Holderness and Sheehan (1988) find that family-owned companies have lower Tobin's Q, while Reeb and Anderson (2003) find opposite results. Villalonga and Amit (2004) relate family control positively to firm value, but only in companies where the company's founder serves as CEO or is present on the board, highlighting that the benefit of the active presence of the founder overlaps the cost of expropriation of minority shareholders.

Maury (2006) conducts a study with European companies and finds evidence that family control can improve the company's performance. Sciascia and Mezzola (2008) analyze 620 small Italian firms and do not find a statistically significant relationship between family control and performance. The authors point out some negative aspects of family control, especially the difficulty in assessing the management performance.

There are also many studies on State-owned firms. In general, the results indicate that such companies trade at a discount, because, as the main purpose of the government is to maximize social welfare, this interest can go against the objective of maximizing the company returns.

Tian and Estrin (2005) study Chinese companies and find that government control reduces the value of the company as a result of the effects of existing political interference in these companies. In Indonesia, Yonnedi and Sari (2006) find a negative relationship between ROA, ROE and government control.

Alfaraih, Alanezi and Almujaed (2012) analyze 134 companies in Kuwait and report a negative effect of government presence on the value of the company. In Malaysia, Razak, Ahmad and Aliahmed (2005) show that companies controlled by the government have lower value but higher performance (ROA).

Foreign-controlled companies are generally more stable and have stronger global presence, higher efficiency and more technology. Wiwattanakantang (2001) studies Thai companies and find that foreign-controlled firms outperform domestic ones. Choi and Yoo (2005) analyze Korean companies and observe a positive relationship between Tobin's Q and the presence of a foreign shareholder. Kumar (2004) examine Indian companies and find no evidence correlating foreign control and firm performance.

When the largest shareholder is an institutional investor (pension fund, insurance company, private equity firm, etc), the company benefits are diluted among a large number of investors, decreasing the risk of expropriation of minority shareholders. In addition, some institutional investors have good reputation with respect to management and improved governance. In this case, it is expected that the institutional control increase firm valuation and performance.

In the United States, McConnel and Servaes (1990) conclude that companies controlled by institutional investors tend to outperform. Cornett, Marcus, Saunders and Tehranian (2007) study companies in the S&P100 and find a positive relationship between the presence of institutional investors and firm performance.

Seifert, Gonenc and Wright (2005) study companies in different countries and show that the effects of institutional shareholder in firm performance vary, being positive in the US, negative in Japan and not significant in Germany and the UK. Chen and Chen (2007) show that the presence of the institutional shareholder increases the value of the company in New Zealand. Alfaraih, Alanezi and Almujaed (2012) also find evidence of a positive effect of institutional investors on the value and performance of the company.

Bertin, Iturriaga and Foronga (2009) show that institutional investors that have business relationship with the company, such as banks and insurance companies, do not increase the company's performance, because they cannot maintain an independent position. Bhattacharya and Graham (2007) find a similar conclusion in Finland.

This paper analyzes if the origin of the controlling shareholder influences the value and performance of Brazilian companies. We classify companies according to the nature of the controlling shareholder (family, government, foreigners and institutional investors) and relate it with firm value (price-to-book) and performance (return on assets - ROA). Our analysis of 407 Brazilian companies from 2002 to 2009 shows that companies controlled by families and governments have lower valuation. With regard to performance, we do not find significant relation between origin of capital and ROA.

2 Data and methodology

Our sample consists of 407 companies listed on BM&FBovespa from 2002 to 2009. For each company, we identify their controlling shareholders and the origin of their capital (family, government, foreign and institutional). The companies are classified as "dispersed capital" if the largest shareholder does not have at least 50% of voting capital.

Because of cross-shareholdings and pyramids, the analysis of the control structure should not be restricted to direct ownership. Therefore, we also analyze who is the ultimate controller of the company. Identification of the final or indirect controlling shareholders helps to better identify the origin of capital. The information on the ownership and structure is obtained from the Brazilian Securities & Exchange Commission ("CVM").

Firm value and profitability are measured by price to book ("P/B") and return on assets ("ROA"), respectively. We use several firm's characteristics as control variables, such as leverage and firm size. All financial variables are obtained from Economica database.

We estimate several panel models (common, fixed and random effects) to verify the relationship between capital origin, value and performance of Brazilian companies. The models are expressed below:

$$P/B_{i,t} = \beta_0 + \beta_1 FAM_{i,t} + \beta_2 GOV_{i,t} + \beta_3 FOR_{i,t} + \beta_4 INS_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 LEV_{i,t} + \varepsilon_{i,t}$$

$$ROA_{i,t} = \beta_0 + \beta_1 FAM_{i,t} + \beta_2 GOV_{i,t} + \beta_3 FOR_{i,t} + \beta_4 INS_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 LEV_{i,t} + \varepsilon_{i,t}$$

Where P/B is the price-to-book (market value/equity), ROA is the return on assets (EBITDA/total assets), FAM is a dummy variable that

takes the value 1 when the controlling shareholder is a family and 0 otherwise, GOV is a dummy variable that takes the value 1 when the controlling

shareholder is the government and 0 otherwise, FOR is a dummy variable that takes the value 1 the controlling shareholder is a foreign group and 0 otherwise, INS is a variable dummy that takes the value 1 when the controlling shareholder is an institutional investor and 0 otherwise, SIZE is firm size (log of total assets) and LEV is leverage (non-equity liabilities/total assets).

We also use industry dummy variables for each economic sector according to the BM&FBovespa classification: oil and gas, basic materials, industrial goods, construction and transportation, consumer non-cyclical, consumer cyclical, information technology, telecommunications, public utilities, financial and other.

According to the evidence of many international studies (presented in the previous section), we expect the family-controlled firms have lower valuation, because the incentives to expropriate minority shareholders may be higher because these shareholders are no so active in Brazil when compared to developed markets.

Governmental control must adversely affect the value and performance of companies in Brazil, because there are many political conflicts that may increase the divergence and conflicts of interests between the government and minority shareholders.

With regard to foreign and institutional ownership, we expect that companies controlled by foreign and institutional investors have higher valuation and performance, since they have more efficiency, activism and fewer incentives to expropriate minority shareholders.

3 Results

Table 1 shows the descriptive statistics of the variables used in the study. The results show that the most frequent type of controlling shareholder in the sample is family (42%), followed by foreigners (17%), government (9%) and institutional investors (6%). On average, Brazilian companies have a price-to-book of 2.45, ROA of 3.95% and leverage of 59.8%.

Table 1. Descriptive statistics

Variables	FAM	GOV	FOR	INS	VOT	P/B	ROA	LEV	SIZE
Mean	0.42	0.09	0.17	0.06	0.62	2.45	3.95	59.80	6.22
Median	0.00	0.00	0.00	0.00	0.62	1.40	3.45	61.10	6.20
Min	0.00	0.00	0.00	0.00	0.00	0.10	-65.80	0.00	3.55
Max	1.00	1.00	1.00	1.00	1.00	73.90	61.30	99.90	8.85
St Dev	0.49	0.28	0.38	0.24	0.27	4.57	9.49	22.21	0.79

We classify the companies by industry and the most frequent economic sector in our sample (not reported) is basic materials (17%), financial (16%), public utilities (14%) and consumer cyclical (13%). Families are the most frequent controlling shareholder in almost every sector except in telecommunications (foreign and institutional predominance) and public utilities (predominantly government and foreigners). On average, the sectors with the highest P/B are consumer cyclical and non-cyclical (3.36 and 2.77, respectively), whereas the sectors with the highest

ROA are industrial goods (5.84%) and public utilities (5.76%).

Table 2 shows the correlation matrix between variables. The variable FAM has negative and statistically significant correlation with P/B and ROA. The variable FOR has positive and statistically significant correlation with ROA. The variable GOV has negative correlation with P/B and ROA, but their values are not statistically significant. The variable INS has negative correlation with P/B and positive correlation with ROA, but their values are not statistically significant.

Table 2. Correlation matrix

Variables	P/B	ROA	FAM	GOV	FOR	INS	SIZE	LEV
P/B	1.00							
ROA	0.01**	1.00						
FAM	-0.10**	-0.07**	1.00					
GOV	-0.03	-0.04	-0.26**	1.00				
FOR	0.02	0.14**	-0.38**	-0.14**	1.00			
INS	-0.01	0.04	-0.23**	-0.08**	-0.12**	1.00		
SIZE	-0.02	0.11**	-0.25**	0.22**	0.09**	0.15**	1.00	
LEV	0.21**	-0.31**	-0.03	0.10**	-0.05**	0.03	0.32**	1.00

Note: **denotes statistical significance at 5%

Regarding the control variables, firm size has positive correlation with ROA, GOV, FOR, INS, LEV and negative correlation with FAM, all with statistical significance at 5%. Leverage has positive correlations with P/B, GOV and SIZE and negative correlation with ROA and FOR, all with statistical significance at 5%.

Table 3 shows the average and median P/B and ROA for companies according to the origin of the capital. We run test of differences in mean and median to verify if companies controlled by the government, foreigners and institutional investors have greater value and performance when compared to family firms.

Table 3. Firm value and performance by capital origin

Variables	FAM	GOV	FOR	INS
P/B	1.90 (1.10)	1.93 (1.00)	2.61** (1.70**)	2.35 (1.60**)
ROA	3.11 (2.90)	2.60 (2.45)	7.02** (5.80**)	5.43** (3.80)

Note: Obs: Coefficients of mean and median (in parentheses). ** denotes that the P/B or ROA are significantly higher (at 5% level) than those of family firms

The results indicate that foreign companies have higher P/B than family firms (mean of 2.61 versus 1.90; and median of 1.70 versus 1.10). Both differences in means and medians are statistically significant at 5%. The companies controlled by institutional investors also have average and median P/B (2.35 and 1.60) superior to family businesses, but only the latter is statistically significant.

Foreign-controlled companies have higher ROA than family firms (mean of 7.02% vs. 3.11% and median of 5.80% versus 2.90%). Both differences in means and medians are statistically significant at 5%. The companies controlled by institutional investors also have average and median ROA (5.43% and 3.80%) higher than family businesses, but only the first is statistically significant.

Overall, the results of Tables 3 indicate that companies controlled by foreigners and institutional

investors have higher value (price-to-book) and performance (ROA) than family firms. State-owned companies have value and performance similar to family businesses.

Table 4 shows the results of the panel regressions for P/B. The FAM and GOV coefficients are negative and statistically significant, so we can conclude that family and State-owned firms have lower market value. The FOR and INS variables are not statistically significant, so we cannot conclude that companies controlled by foreigners and institutional investors have higher value. The firm size and leverage have negative and positive coefficients, respectively, both statistically significant, indicating that smaller and more leveraged companies tend to have higher market value when compared with larger and less leveraged firms.

Table 4. Firm value (P/B) regressions on capital origin

Variables	Common-Effects	Fixed-Effects	Random- Effects
FAM	-1.37*** (0.00)	-1.98*** (0.00)	-1.88*** (0.00)
GOV	-0.94** (0.04)	-1.80 (0.24)	-1.59** (0.05)
FOR	-0.08 (0.81)	-0.48 (0.58)	-0.27 (0.62)
INS	-0.66 (0.18)	-0.69 (0.54)	-0.97 (0.21)
SIZE	-0.63*** (0.00)	-1.57** (0.04)	-1.30*** (0.00)
LEV	0.06*** (0.00)	0.08*** (0.00)	0.07*** (0.00)
Year Dummy	Yes	Yes	Yes
Industry Dummy	Yes	Yes	Yes
Adj R ²	0.10	0.48	0.08
Obs	1,858	1,858	1,858

Note: Obs: Coefficients and p-value (in parentheses). ***, ** and * denote statistical significance at 1%, 5% and 10%, respectively

Table 5 shows the panel regression for ROA. In the first model, GOV has negative coefficient, whereas FOR and INS have positive coefficients, all of them with statistical significance. However, in none of the other models, the coefficients are statistically significant, so we do not have strong statistical

evidence indicating that there is a correlation between the origin of the control and firm performance. Firm size and leverage have positive and negative coefficients, respectively, indicating that larger and less leveraged companies have superior performance.

Table 5. Firm performance (ROA) regressions on capital origin

Variables	Common-Effects	Fixed-Effects	Random- Effects
FAM	-0.11 (0.83)	-0.18 (0.86)	-0.02 (0.98)
GOV	-1.87** (0.03)	-2.38 (0.43)	-2.06 (0.20)
FOR	2.81*** (0.00)	-0.67 (0.69)	1.04 (0.34)
INS	2.15** (0.03)	0.87 (0.69)	1.98 (0.20)
SIZE	2.69*** (0.00)	3.95*** (0.01)	3.36*** (0.00)
LEV	-0.16*** (0.00)	-0.23*** (0.00)	-0.20*** (0.00)
Year Dummy	Yes	Yes	Yes
Industry Dummy	Yes	Yes	Yes
Adj R ²	0.19	0.55	0.15
Obs	1,858	1,858	1,858

Note: Obs: Coefficients and p-value (in parentheses). ***, ** and * denote statistical significance at 1%, 5% and 10%, respectively

4 Conclusion

Although there are several studies on the relation between the origin of capital and firm value and performance, there is no consensus on the conclusions since results vary widely across countries. On one hand, ownership concentration can enhance monitoring and reduce agency costs, but on the other hand it can also generate incentives for expropriation of minority shareholders.

This paper analyzes if the origin of the controlling shareholder influence the value and performance of Brazilian companies. We classify companies according to the nature of the controlling shareholder (family, government, foreigners and institutional investors) and relate it with firm value (price-to-book) and performance (return on assets - ROA).

Our analysis of 407 Brazilian companies from 2002 to 2009 provides evidence that companies controlled by families and governments have lower valuation. These results are in line with international studies that show that families and government can manage the company without maximizing shareholder value (Holderness and Sheehan (1988), Sciascia and Mezzola (2008), Tian and Estrin (2005), Alfaraih, Alanezi and Almujaed (2012)).

With regard to performance, we do not find significant relation between origin of capital and ROA. Therefore, although many international studies cite factors that would indicate better performance of

firms controlled by foreign and institutional shareholders, we cannot infer conclusions with respect for our sample.

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