

# Stock Market Development, Ownership Concentration, and Investor Protections in Brazil since 1890

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## Abstract

There is significant variation in the concentration of ownership and control across countries. We do not know, however, if this variation is explained by institutional conditions inherited from the past or if it is the consequence of recent shocks or policy changes. This paper uses the case of Brazil, a French civil law country with extreme ownership concentration today, to explore the variation in ownership concentration and the protections for minority shareholders over time. I show preliminary results of ownership concentration in some of the largest Brazilian corporations between 1890 and 1940. The sample is limited, but includes ownership and voting rights for some of the largest non-financial and financial corporations in that country. I show that ownership concentration was not predominant among all large corporations. While concentrated ownership was somewhat dominant, in some of the largest corporations, ownership and voting were in fact widely dispersed. I link the dispersion of ownership with the protections provided by the government in the forms of guaranteed dividends and/or subsidies. I show, in a simple OLS framework, that investors valued government guaranteed stocks more than the average (market to book value), perhaps because these securities paid dividends more regularly. At the end of the paper I explain the main changes in corporate law and policy after the Great Depression, which altered incentives for both controlling shareholders and the government, and generated the concentration of ownership that we observe today.

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## Introduction

Do “early institutions” have a persistent effect over time and determine current economic outcomes? Specifically, does the adoption or inheritance of a legal tradition in the past determine the subsequent course of institutional and financial development? This paper explores these questions by looking at the history of ownership concentration and shareholder protections in Brazil, a country that follows the French civil law tradition.<sup>1</sup>

Most social scientists agree that institutions are important for economic development. But there is little agreement about which institutions cause economic prosperity and which are incidental to growth. To overcome this endogeneity problem, social scientists have turned to history in their search for exogenous factors that might explain the variation in the levels of economic development observed around the world today. In particular, they have wondered whether the conditions in the former European colonies at the time of settlement led to the adoption of specific institutions that had long-term effects on economic growth. Research using current economic indicators has found a strong correlation between certain early institutions and contemporary development levels, suggesting that these “early institutions” might exert a persistent effect over time.<sup>2</sup>

This same logic has been used by a growing and influential body of literature, called the law and finance literature, to argue that variation in financial development is influenced by differences in legal origin, specifically the level of investor protection in any given country. According to this literature, the amount of protection granted to shareholders and creditors determines the degree to which they will be willing to participate in financial markets. Statistical work presented in this literature shows that

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<sup>1</sup> Institutions are obviously treated as something beyond legal norms. Throughout the paper institutions are viewed as sets of beliefs, norms, and organizational features that regularize and legitimize patterns of behavior. See Greif, “Cultural Beliefs” and North, *Institutions*.

<sup>2</sup> See, for example, Acemoglu, Johnson, and Robinson, “Colonial Origins” and La Porta, Lopez de Silanes, Shleifer, and Vishny, “Law and Finance.”

investor protections can significantly explain the variation in financial development in a cross section of 50 countries. Legal origin is thus shown to be a valid exogenous variable for explaining variation in investor protections across these countries.<sup>3</sup>

This legal origin variable is exogenous, according to the law and finance literature, because “countries typically adopted their legal systems involuntarily (through conquest or colonization). The legal family can therefore be treated as exogenous to a country’s structure of corporate ownership and finance.”<sup>4</sup> The literature’s robust statistical findings support the claim that legal origin matters for financial development. The law and finance literature divides the world into two broad legal traditions, common law and civil law, and four legal families: common law, French civil law, German civil law, and Scandinavian civil law.

If specific legal systems have a path-dependent quality, two things should be true. First, the same cross-sectional variation we see today should be observable in cross sections in the past. Second, if the extent and enforcement of investor protections are determined by the inherited legal tradition, we should not find that significant within-country variation in outcomes and investor protections over time.

Preliminary results on variation in financial market size were presented by Raghuram Rajan and Luigi Zingales, “Great Reversals,” who showed that in 1913 the financial markets of many civil law countries were larger (as a percentage of gross domestic product) than they are today, as well as larger than those of common law countries at the time. The authors also found the equity markets in a cross-section of civil law countries to be significantly larger than those in the majority of large common law countries that year. They documented a significant reversal in equity market size following the Great Depression and accelerated growth at the end of the century for

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<sup>3</sup> See, for example, La Porta et al., “Law and Finance,” “Legal Determinants,” and “Investor Protection;” Beck, Demirgüç-Kunt, and Levine, in “Law and Finance” and “Law, Endowments, and Finance.” Berkowitz et al., “Economic Development;” use a similar econometric approach. They argue it is not only about legal origin, but about how the legal system is adapted to local conditions.

<sup>4</sup> La Porta et al, “Law and Finance,” p. 1,126.

most countries. Their evidence does not support the continuous existence of stable differences among legal families predicted by the law and finance literature.<sup>5</sup>

Rajan and Zingales propose an interest-group theory to explain the trends they observed in financial market development. They suggested that incumbent businesses opposed financial development because it could breed competition when international cross-border trade and capital flows diminished in the wake of World War I. Using openness to trade and capital as their main exogenous variables (instrumented using a country's distance from its trading partners), the authors found that countries that remained more open to trade experienced a less radical reversal in financial development after the Great Depression. But they did not study what happened to investor protections throughout the twentieth century. In particular, they did not account for the presence or absence of investor protections. Moreover, we do not know which specific laws were changed, by which groups, and how.

If we assume that for equity markets to develop there has to be in place a system of shareholder protections, then Rajan and Zingales's findings imply one of the following three things. First, circa 1913 protections for shareholders in common law countries appear weaker than they are today and, thus, were very similar to those of contemporaneous civil law countries. Second, civil law countries had, on average, better protections for investors circa 1913 than what they have today and this may be why financial markets were as developed just as is found in common law countries (or even more). Finally, it could be the case that shareholder protections in common and civil law countries circa 1913 were very similar and that is why equity markets showed similar levels of development.

This paper explores what happened to shareholder protections in Brazil throughout the period since 1890 and shows that ownership concentration and shareholder protections were significantly different in the past. I show that in Brazil before 1940 there were simultaneously two systems of ownership in large corporations,

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<sup>5</sup> Rajan and Zingales, "Great Reversals."

one of diffused ownership and one of high concentration of ownership. Finally, I explain some of the protections that drove shareholders to participate actively in some of the diffused owned companies. In fact, given what we now know of shareholder protections in the United States during most of the nineteenth century and the early part of the twentieth century, one could argue that corporate governance in Brazil and the United States was, at the time, somewhat similar.

In the case of the United States, we now have stronger evidence showing that there was significant variation over time in the extent of shareholder protections. In fact, there is evidence that in the past protections for investors were much worse. Eric Hilt has looked at voting rights and ownership concentration in New York in the early part of the nineteenth century. He finds that ownership concentration, voting rights, and the extent of the separation of ownership and control varied across sectors and firms. He argues that “far more common were firms controlled by directors holding or controlling large numbers of shares.” He also finds that some corporations tried to limit the power of large shareholders through the use of gradual voting schemes, which limited the number of votes that large shareholders could have exercised as their shareholdings increased. Naomi Lamoreaux and Jean Laurent Rosenthal also find that the protection for minority shareholders was relatively weak during the nineteenth and early twentieth centuries. Using a large set of court cases they show that directors and large shareholders “engaged in a variety of...actions from which they benefited at the expense of their associates.” Contrary to the belief that one-share one-vote schemes promote more democratic corporate governance, they argued that “the principle of one-vote-per-share meant that shareholders who possessed enough stock to decide elections were effectively dictators.”<sup>6</sup>

Julien Franks and Colin Mayer also find significant variation over time when they analyze the evolution of ownership in England and Germany. In their work on

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<sup>6</sup> Hilt, “Corporate Ownership and Governance” p. 30 and Lamoreaux and Rosenthal, “Corporate Governance and the Plight” p. 5-8.

England, Franks, Mayer and Stefano Rossi show that “while families were important at the beginning of the twentieth century, their significance did not in general derive from long-term large-scale ownership of British companies.” Family ownership was diluted over the century as companies expanded and merged with other firms. Over the course of the century, regulation in the form of disclosure rules and anti-takeover protections prevented further concentration of ownership. On the other hand, in their work on Germany, Franks, Mayer, and Hannes F. Wagner find that, as in England, Germany started with somewhat concentrated ownership, decreasing gradually over time as companies expanded and merged. The percentage of votes controlled by managers also declined over time in this country. Their detailed data on ownership concentration, however, shows that Germany has always had more concentrated ownership than England.<sup>7</sup>

Historical studies of ownership and shareholder protection in countries from the French civil tradition have found less variation in ownership concentration over time. This has perpetuated the idea that in French civil law countries there is no tradition of minority-shareholder protections or dispersed ownership or control. For example, Alexander Aganin and Paolo Volpin found that during the initial stage of equity market development in Italy (1896-1913) “one important cause of the end of the period of growth for the stock market was the lack of protection for minority shareholders.” However, they also found that the high concentration of voting rights suffered no major change since 1947, even though dispersed ownership seems to have been more common before 1950, as we will see below. On the other hand, Abe De Jong and Ailsa Roell show that in Dutch corporations shareholder protections improved over the century, as family influence or control in large companies declined since 1923.<sup>8</sup>

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<sup>7</sup> Franks, Mayer, and Rossi, “Spending Less,” pp. 583-583 and

<sup>8</sup> Aganin and Volpin, “The History,” pp. 336 and 344-45 and De Jong and Roell, “Financing and Control in the Netherlands: A Historical Perspective” pp. 482-490.

Yet, the prevailing idea that countries like France or Brazil had extreme concentration of ownership has not been analyzed against any historical evidence.<sup>9</sup> Thus, we do not know if the implied persistency of the institution of ownership concentration and weak minority shareholder protections passes the test of historical analysis. This paper is a first attempt to study the structure of ownership in some of Brazil's largest corporations since 1890.

The first part of the paper shows preliminary results of ownership concentration in some of the largest corporations between 1890 and 1940. The sample is quite limited, but includes ownership and voting rights for some of the largest non-financial and financial corporations in Brazil. I show that ownership concentration was not necessarily predominant among large corporations. In fact, two different ownership structures were common in Brazil before 1940. While in some corporations ownership and voting were widely dispersed, during the same period of time I find that most corporations in fact had tightly held ownership, with families controlling most shares and voting rights.

The paper dismisses the idea that ownership concentration is determined by the level of legal protections for shareholders in national laws that La Porta et al. consider relevant for stock market development. In fact, I find that the official shareholder rights contained in national laws were *not* stronger in the periods when ownership was less concentrated. In addition, shareholder protections increased significantly in the period when ownership concentration became more acute.

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<sup>9</sup> Antoine Murphy argues that in France a couple of shocks in the eighteenth and early nineteenth centuries ended up producing a weak banking and capital market in the long run. For him, the collapse of the Mississippi Company and hyperinflation during the French Revolution, together the subsequent failure of the Credit Mobilier and the Union Générale, generated distrust on financial intermediaries and money, and had a persistent (path-dependent) effect on how French corporations financed their expansion. For him, these traumas led corporations to rely on self-financing, instead of using outside creditors or shareholders as the main source of funds. Although his instinct to look to past events was a step in the right direction, Murphy presented no historical data on ownership concentration or the financing of corporations in France though. Murphy, "Corporate Ownership in France" p. 187.

The main reason why there were large corporations with diffused ownership in Brazil is because they had more protections for small shareholders in their statutes. Protections for shareholders in the national laws did not explain any of the outcomes since they were weak and each corporation could adopt statutes with stronger protections. I pay special attention to caps on the number of votes any shareholder could have and I find that some of the largest firms used this as a binding constraint against control by any single shareholder (or even blocks of them). I use an original database of shareholder voting rights in 120 Brazilian corporations in 1909 as reported in the *Brazil Yearbook 1909* to show that maximum-voting provisions were common in Brazil in the early part of the twentieth century. Of the sample of firms surveyed in the *Yearbook*, at least 30% of them used limits on the votes of large shareholders.

I then use a small sample of firm-level data from 1905-1909 to determine whether the limits on voting added any value for investors. I study if maximum voting provisions generated higher than the average market to book values or if in companies with maximum votes investors received higher than average dividend payments. I find no significant relation between voting and any of these financial variables. Since there was a government guarantee of minimum dividends for many of the companies that had dispersed ownership, I explore whether investors saw any advantage in these firms. I find that companies with government guaranteed dividends had higher market to book values and higher than average dividend payments.

The second part of the paper explores tentative explanations for the increase and prevalence of concentrated ownership after the 1940s. Most of the ownership data available after the 1940s shows two results. First, the government became a major owner in the corporate landscape of Brazil. The largest corporations after the 1940s were in fact state-owned enterprises (SOEs). Many of these SOEs had been corporations with dispersed ownership that, either for strategic or economic reasons, ended up under the state jurisdiction. The state saved from bankruptcy some of these corporations and bought controlling stakes in others. In newly created SOEs the government always

controlled voting rights, even if some of the voting and non-voting shares were dispersed among smaller investors.

Second, business conglomerates formed in the 1890s grew and dominated the corporate landscape by the 1970s and 1980s. These diversified conglomerates shared one important characteristic in terms of ownership, namely a tendency toward tight family control of the voting shares. Through holding companies and complicated cross-ownership structures, these families ended up controlling a variety of corporations in Brazil. These ownership structures prevailed until the 1990s and shaped our current image of Brazil as country with extreme concentration of ownership and high private benefits of control.

### **Shareholders and Ownership Concentration in Brazil, 1890-1940**

In this section I explore the protection of shareholders and the concentration of ownership in Brazil between 1890 and 1940. Stock markets started to develop once the 1882 Company Law allowed free incorporation, provided limited liability to shareholders, and allowed companies to issue bonds. During this time most of the largest corporations were railways.

I focus on this initial period when studying ownership because that is when the initial phase of corporate development takes place in Brazil. Figures 1 and 2 show there is an initial period of intense stock market activity between 1890 and 1920. Stock market capitalization stays between 15 and 20% of GDP and the number of joint stock companies stays close to 8 per million people (after being below 4 for most of the nineteenth century). After 1920 there is a decline in stock market activity that does not recover until the 1970s (the number of corporations registered jumps in 1946 because the government forced all existing corporations in the country to register at the stock exchange for taxation purposes).

Using data from some of the corporations created during this initial phase before 1940 I look at ownership concentration and voting rights within corporations. I also

study the extent of shareholder protection included in national laws to see if ownership and governance practices in general are determined in a centralized way.

#### *Ownership Concentration: The Data*

The first step in studying ownership concentration historically is to gather data on voting rights and the concentration of ownership and control in some of the largest Brazilian corporations between 1890 and the 1940s. This is a difficult task because only a few Brazilian corporations have archives and the state and national archives gathered only scattered documents and shareholder meeting minutes.

I compiled shareholder lists from some of the largest Brazilian corporations available at the Rio de Janeiro Stock Exchange Archive, in Rio de Janeiro, and the São Paulo State Archive in São Paulo. Most of the shareholder lists I use were part of the published annual report of a sample of corporations. For some companies I was able to consult the entry books where shareholder registered their shares before the shareholder meetings. These books sometimes included information on proxy voting.

The concentration of ownership and voting are estimated directly from these shareholder lists when possible. Sometimes they included detailed data on votes per shareholder that I then derived the protocol from. When this was not the case I looked for voting rights included in the company statutes. Because some of the statutes had to be approved by the government I found these in the collection of national laws, but I had to look for others in the Official Gazette of the State of São Paulo or of the Federation. Finally, for some companies I use the same sources to estimate the share of votes controlled by the directors.

#### *Ownership Concentration in Brazil, 1890-1940s*

I present disaggregated data on ownership concentration in Appendix A. This appendix contains voting rights, ownership concentration, and the concentration of control in some of Brazil's largest corporations. I divided the results into three panels. Panel A includes mostly large corporations with somewhat dispersed ownership and at

the bottom also includes companies for which I only have one observation over time. Panel B focuses on Family-owned firms. For many of these firms I also have data on ownership concentration in 1980, available in Table 4 (ownership concentration in the largest business groups in Brazil). Finally, Panel C includes ownership concentration data for companies created in the late 1930s and early 1940s, many of them under the control of the government.

In Panel D of Appendix A I include ownership concentration information for a sample of firms listed in the Rio de Janeiro Stock exchange at some point between 1890 and 1940. the information on ownership is at the time the company was registered and thus it most likely exaggerates the extent of ownership concentration. Still, according to this table, corporations in Brazil had on average 63% of voting equity controlled by the three largest shareholders.

#### *Widely-held corporations in Brazil*

In Panel A of Appendix A I show that before 1940 some of Brazil's largest corporations actually had dispersed ownership and even more dispersed control rights. In many of these companies the dispersion of control rights was a consequence of the voting schemes that firms adopted. The simplest rule was to cap the maximum number of votes any single shareholder could get. A typical example of a company who employed this practice is the Antarctica brewery. This company was dominated by German immigrants and some of the families which held shares had very large shareholdings. In fact, the concentration of share ownership was quite large (the top three shareholders controlled 62% of the equity). Thanks to the restriction on the maximum votes per shareholder (40 votes), many of the largest shareholders lost the capacity to control the company. Due to the voting cap the top three shareholders controlled only 12% of equity. More dramatically, the top 10 shareholders owned more than 80% of total shares, but controlled less than 50% of total votes. Furthermore, the statutes of this company explicitly prohibited family members to occupy director

positions simultaneously, something that had been extremely common in family-owned corporations.

Many firms regulated the number of votes a shareholder could get as his holdings increased in size, something that generated a more equal distribution of control rights. In the largest companies of the time, such as the Railways E.F. Paulista and the E.F. Mogyana, I find voting caps and gradual voting rights. For instance, the E.F. Paulista gave one vote for every five shares up to 50 votes. Then, with every ten shares the shareholder gained one vote until her total number of votes was 150. Once this threshold of 150 votes was passed, each additional vote required the purchase of 20 shares until the maximum number of votes was reached. The Mogyana had an even more restrictive voting system that required 5 shares per vote until 10 votes were reached, then 10 shares per vote until 20 votes were reached, ending with 20 shares per vote until 40 votes were reached. For this company not only was 40 votes the maximum per shareholder, but no proxy voter could have more than 40 votes. These restrictions ended up reducing the concentration of control in a significant way. In both railway companies the concentration of control rights was extremely low. In most shareholder meetings the top three shareholders usually had less than 10% of the votes, and even the top ten shareholders held less than 20% of the votes. The maximum number of votes was increased as the capital of these companies expanded and the cap ended up disappearing altogether as share issues accelerated during the booming years of stock market activity, 1890-1913.

The reasons why railways ended up with such dispersed ownership vary. First, railways had guaranteed dividends by the federal and state government and these guaranteed dividends encouraged the participation of small shareholders in the company. Second, just as in the United States, railways were owned by their main beneficiaries, in this case coffee planters. The shareholder lists of the most important

lines of São Paulo represent the *Who's Who* of coffee plantations.<sup>10</sup> Third, there is obviously an element of magnitude. Railways required a lot of capital and thus they were more likely to have a larger number of shareholders.

In smaller firms, such as the Companhia Petropolitana, a textile mill, similar voting rights also prevented the concentration of control. This company started out as a family business outside of Rio in the 1890s. The shareholder list when the company was chartered showed somewhat concentrated ownership in the hands of the few founders. They likely introduced the maximum number of votes as a check against each other's power, but as the company expanded and relied on equity issues to finance its growth, the number of shareholders increased. Even though ownership was relatively dispersed by 1928, voting caps reduced the voting power of some of the largest shareholders. The top three shareholders controlled 20% of equity and 12% of votes only.

#### *Family-owned corporations*

While some companies instituted rules to prevent group control, the other ownership scheme that prevailed in Brazil since 1890 was the family-controlled corporation. In these companies family members held large blocks of shares and occupied most managerial positions. An example of this structure was found in the Companhia Fabricadora de Papel (Klabin), controlled by the Klabin family. From the outset members of the Klabin family occupied three out of the five directorships. Out of the 36 shareholders of the company, eight were also part of this family. Out of the top five shareholders only Miguel Lafer was not a direct family member. The other top five shareholders were the brothers Hessel Klabin, Mauricio F. Klabin, and Leão Klabin, as well as the partnership Klabin Irmãos & Comp (a firm of the Klabin brothers). Together, the Klabin brothers and Miguel Lafer controlled 75% of equity. In fact, this corporation

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<sup>10</sup> See Hanley, "It isn't who you know..." *Enterprise and Society* 2004, for a description of some of the relations between these coffee planters and their role in the network of investors and directors in Sao Paulo.

was organized somewhat like a partnership. All shareholders had one vote per share and the directors did not have a fixed salary until 1937. Profits were divided among the directors and shareholders following a formula that guaranteed 10% of profits to directors plus 20% of any amount after paying a 12% dividend. In 1937, the company gave the partnership Klabin Irmãos & Comp. control of 75% of total equity in exchange for forgiving a large debt accumulated with the firm. The Klabin family kept on expanding their empire and by the 1970s controlled one of the largest business conglomerates of Brazil, making it to the list of the top 100 business groups every year.

There is no other family business more notorious among Brazilians than the Matarazzo business empire. In the 1890s, Count Francisco de Matarazzo and his family started a trading business dealing with the coffee plantations in the interior of São Paulo. This Italian family imported know-how and resources from Europe and expanded rapidly into the processing of sugar, wheat, and pork fat. Within a few years they were running a diversified business that operated anything from textile mills to commercial houses. By 1911 their business was so large that they created the first conglomerate in Brazil, the Indústrias Reunidas Fábricas Matarazzo. When the family decided to create this larger holding company and opened up the capital for subscription by friends and other family members, they designed the statutes to be somewhat democratic. For instance, in 1911 the statutes included 10 shares for one vote and a maximum of 50 votes. With these voting scheme the top three, five and 10 shareholders, who controlled most of the equity, restricted their voting power to 10%, 17%, and 34% of total votes respectively. This scheme, however, lasted only a few years. By the 1920s the Matarazzo family had purchased back almost all the equity that held by non-family members and changed the voting rights. First they pulverized share ownership by issuing thousands of small-denomination shares, then they altered the statutes to give the right to vote only to those with holdings of 1:000\$ (a thousand mil-reis). In 1934, only 4 or 5 shareholders had enough shares to vote. From then on, the family purchased most shares and held them tightly.

The Matarazzo family controlled a variety of businesses, including the Banco Italiano del Brasile. Their practice is clear after examining the complete shareholder lists of the Banco Italiano del Brasile. This bank had originally a relatively large number of shareholders from the Italian community. Still the Matarazzo's controlled most of the equity and the shares. Then, in 1907, they used their voting power to dissolve the firm and sell all of its assets to another bank controlled by the family.

This model of concentrated ownership under family control is the stereotypical model for Brazil. This does not mean that it was always the dominant model. In fact, many of the family businesses before the 1930s were relatively small enterprises when compared to railways and large banks. Family-controlled conglomerates did, however, become the dominant corporate forms by the 1980s. In fact, the Matarazzo family appears as the second single largest business group in Brazil in 1980 (see Table 4).

In sum, there were two dominant ownership structures in Brazil before the 1940s. In one group of companies, families controlled a large part of the shares and managers were generally family members. Brazil was also home to a group of large corporations with dispersed ownership who had installed protections for small shareholders in the form of caps in the maximum number of votes for individual shareholders. In these companies, even when large shareholders acted as proxies for many other stockholders, there was no clear dominant group of insiders. One way to see the clear differences between these two types of firms is to look at the Herfindahl-Hirschman Index (HHI) of ownership concentration included in all panels of Appendix A. This particular sample of firms is clearly divided between corporations with highly concentrated control (relatively higher HHI) and corporations with dispersed control (with low HHI). Since caps on voting seemed to generate less concentration of control, in the next section I explore this and other shareholder protections in a sample of firms using a survey for the year 1909.

*Voting Rights and Government Guarantees in Brazil*

How did corporations structure the voting rights of shareholders before 1940? In this section I survey company governance data to explore the voting rights of a sample of 119 Brazilian corporations. This data is available in the *Brazilian Yearbook 1909*, which was intended to promote Brazilian corporations in London. The book includes general information about the company's statutes, such as the management structure and incentive scheme, voting rights for shareholders, the names of the company directors, and in a handful of cases it also includes detailed financial information. The book separates companies registered in Brazil from purely foreign companies, and I include only the former in this study since voting rights of foreign corporations follow the customs and legal practices of their home countries. For instance, most British firms have one-share one-vote provisions. The *Yearbook* includes information for over 300 corporations, although information on voting rights for only 119 companies is available (also excluding companies with graduated voting).

In table 2 I show the voting rights and the management incentives of Brazilian corporations by sector. Shareholder voting rights are the most important factor in the current analysis. At eight shares to a vote, the average number of shares to vote was relatively low in most sectors. Of course eight shares, at mostly 200 mil-reis, was not necessarily in the reach of an average Brazilian worker. In the 1890s it would have taken a peasant or day laborer several months to earn such an amount. However, for landowners or urban homeowners ten shares (2000 mil reis) was not unaffordable.

In table 2 we also see that the majority of firms gave one vote for either every five or ten shares. According to my sample, 38% of companies gave one vote for every five shares, while another 38% of firms preferred ten votes per share. One-share one-vote was less common. Only 16% of the companies employed such a voting structure. In fact, in utilities and transportation, usually the largest corporations with large capital requirements (e.g., railways, port companies, shipping companies, utilities companies,

and tramways), five shares per vote was a more prevalent practice. About 50 to 60% of companies in those sectors included in the sample followed this voting scheme.

In terms of protections for minority shareholders, companies placed limitations on the maximum number of votes. About 23% of the corporations in the survey included such a cap on voting. In some sectors, such as banking, 40% of the *Yearbook* companies capped the maximum number of votes. In some sectors, such as services and mining, there is no company with this voting scheme (but the sample size is small in these sectors).

According to the voting and ownership data presented in Appendix A, having a cap on the number of maximum votes was binding for many of these corporations. That is, the concentration of ownership was larger than the concentration of voting when these caps were introduced. In financial economics there is widespread belief that having one-share one-vote and no cap on the number of votes is better for minority shareholders. This claim, however, is unfounded. Most of the evidence I presented in the previous section points in the opposite direction. Caps on the number of votes, and gradual voting schemes, in fact appear to have reduced the power of large shareholders in Brazilian corporations.

One would expect, then, that in corporations with maximum number of votes per shareholder would be more attractive for small investors, perhaps being traded at a premium. In Table 5 I explore this hypothesis using a simple multivariate approach. I control for some basic firm characteristics and explore if companies with maximum voting schemes had higher market to book values on average. The sample is quite limited, but I do not find any significant effect of maximum vote schemes on market values. In fact, the sign for the maximum vote dummy coefficient is the opposite of what we would expect (it is negative rather than positive).

Many of the companies that had a maximum vote per shareholder were large railway companies, utility companies, or other infrastructure ventures. These ventures often enjoyed a guaranteed dividend provided by the national and/or state

governments. Thus, in specifications 4 to 6 of table 5 I test whether investors actually valued more this government dividend, rather than the maximum vote provision. I find weak evidence showing that investors valued companies with such guarantees higher than the average company. However, the coefficient is not significant when I include industry dummies.

In table 6, I repeat the analysis but this time looking at the average dividends investors received between 1905 and 1909. The hypothesis tested whether companies with maximum votes per shareholder, smaller shareholders would have better chances of getting dividend payments, rather than having insiders controlling profits and reinvesting them into the future of the company or diverting the funds into other non-productive projects. Again, the coefficient of the maximum vote dummy is not significant in any of the specifications. Using cumulative dividends as a dependent variable I get a stronger coefficient for the government guarantees. That is, investors received higher dividends in companies where there were minimum dividends provided by the government.

This result is not striking in the context of the regression alone, but if we think about the previous section of the paper, this result might help us explain how is it that small investors were willing to participate in large corporations. It turns out that the E.F. Mogyana, or the Banco do Estado de São Paulo (in Panel A of Appendix A), were companies with a minimum guaranteed dividend. It is easy to understand that small shareholder would be willing to hold shares of those companies, rather than buying shares in family-controlled firms. This role of trust-provider was played by big investment banks in the United States, by some reputable company founders in Japan, and by large banks in Germany. Again, it may be that in Brazil, as in these other countries, national laws were not hugely relevant for explaining the evolution of ownership and the performance of financial markets.<sup>11</sup>

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<sup>11</sup> For the United States see Bradford De Long, "Did J.P. Morgan's Men...", for Germany see Fohlin, Caroline. "The History," and for Japan see Hideaki Miyajima et al. "Evolution of Ownership."

*Shareholder Rights: Laws vs. Company Statutes*

During the period from 1882 to 1915 Brazil had its first cycle of stock market development. I have shown above that there were two dominant ownership structures in some of the largest corporations traded during this time: dispersed and concentrated ownership. Can we therefore assume that there were strong protections for shareholders in the joint-stock company laws of Brazil? If these protections exist, are they associated with a certain type of governance structure?

There are two competing hypotheses regarding the importance of shareholder rights as expressed in corporate laws. First, according to some of the literature that links law and finance, corporate laws include a basic set of principles or rights that determine the protection of minority shareholders within corporations. If these rights exist in the law, small investors may be encouraged to participate and thus deepen equity markets. On the other hand, there is evidence from England and Germany that stock markets developed rapidly in the late nineteenth and early twentieth centuries even with weak protections for shareholders on paper.<sup>12</sup>

To evaluate these hypotheses, I compiled an index of shareholder rights that were explicitly included in the joint stock company laws of Brazil from 1882 to 2001. I follow the methodology used by La Porta et al. to identify the rights for shareholders considered relevant for the growth of equity markets (relative to GDP) and for the increase of the number of companies that open their capital to the public. La Porta et al. create what they call an anti-director rights index by summing the six rights they consider relevant, where the presence of each right has a value of one. Then they analyze voting rights separately. I modified their methods slightly to include the voting rights stated in each code, but I do not add them for the anti-directors right index.

La Porta et al. consider six rights, which I in turn have traced in the Brazilian case. First, I examined the company information to determine whether there was a one-

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<sup>12</sup> See La Porta et al., "Law and Finance" and Franks, Mayer, and Rossi, "Spending Less" and Franks, Mayer, and Wagner, "The Origins."

vote one-share provision, that is, if each ordinary share carries with it one vote, and there are not limits to the number of votes per shareholder. Second, I looked for information as to whether shareholders can vote if absent from the shareholders' meeting (proxy voting). Third, I checked whether the shares did not have to be deposited before the meeting. Some companies had such provisions, which are supposed to prevent shareholders from selling their equity share for several days after the meeting. Fourth, I looked for cumulative voting or proportional representation, so that minority shareholders have a provision to elect board members. Fifth, I looked for explicit minority shareholder rights such as the right to challenge directors and assembly decisions in court or the option to sell the stock to the firm and end their participation if there is disagreement with a managerial or assembly decision. Sixth, I checked if shareholders have the first right to buy new stock so that their share of the company cannot be diluted by a decision to expand total equity. In addition I coded whether the percentage of capital needed to call for an extraordinary meeting is less or equal to 10%.

Table 3 presents the results of my survey of all joint stock company laws between 1882 and 2001. We can see that the shareholder protections included in the different laws varied throughout the period of study. After the monarchy was overthrown in 1889, the republican government published a series of decrees outlining new regulations for joint stock companies. Decrees 434 and 603 of 1891 were crucial in consolidating all the corporate regulations and modifying the extent of shareholder protections. As we can see in table 3, the 1891 legislation introduced a protection whereby shareholders could protest a managerial or assembly decision in court. This is why the index of shareholder protections increases from two to three in this year.

Throughout the period studied, directors were prohibited to act as proxies. From 1882 to 1940 the only proxies allowed to vote in the name of a shareholder were other shareholders. In theory this should have eliminated a lot of the agency problems that most financial economists would want shareholders to avoid. However, this provision was actually not enforced in practice. Family firms violated this provision openly

because the largest shareholders, who usually voted for all of the family members who had small shareholdings, were usually the managers of the company.

In 1940, the law introduced more protections for minority shareholders. Articles 17 and 107 allowed shareholders who did not agree with directors or assembly decisions to walk away from the company. This gave the shareholder the right to get resell her shares to the company. The value received for each share was equal to the total liquid assets of the company divided by the number of shares.

The 1940 law also included the right of minority shareholders to elect a board member. If a group of shareholders, ordinary or preferential, representing at least 20% of capital disagreed with the election of overseeing board members (*conselho fiscal*), then this group could separately name one member of their preference. Nineteenth century Brazilian corporations operated with a two-tier board, one managing board of three to five directors and an overseeing or auditing board composed of shareholders in charge of monitoring the company accounts.

Shareholder protections increased in 1976 when Article 123 allowed shareholders representing at least 5% of total capital to call an extraordinary shareholders meeting. Until 1940 this right had only been available to shareholders or groups of shareholders representing a minimum of 20% of equity.<sup>13</sup>

The 1976 legislation also introduced a major protection for minority shareholders. Article 141 allowed ordinary shareholders who represented at least 10% of equity to ask for the adoption of multiple votes (and cumulative votes). The mechanism gave each ordinary shareholder as many votes as there were board members and allowed each to pool all their votes and cast them for one candidate if they wanted. This increased the chances of minority shareholders being represented on the board. All of these rights did not apply to corporations chartered before 1976 because Brazilian law does not allow new legislation to have retroactive effect.

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<sup>13</sup> Even more, until 1940 to call for an extraordinary shareholder meeting it took at least 7 shareholders. See appendix for more details.

The 1990s saw an erosion of shareholder rights in the law codes. In 1989 the government eliminated some shareholder protections in order to carry out a large privatization program. Minority shareholders were particularly hurt by the changes in the law. The changes were aimed at facilitating the sale of large blocks of shares that belonged to the government without having to compensate minority shareholders for the transfer of control.<sup>14</sup>

More recently, there was a reversal in shareholder protections in 2000, when the World Bank and some large institutional investors (domestic and international) pressured the government to change the state of domestic shareholder rights.. The product of those pressures was the 2001 law, which focused on protecting minority and preferential shareholders.<sup>15</sup>

However, most of the improvements in the protection of minority shareholders existed only on paper. For instance, the provisions in the law do not correspond to the long-run trajectory of ownership concentration. While ownership became more concentrated after 1940, on paper minority shareholders received more protections over time. As I explain below, as ownership and control of the largest corporations fell in the hands of a few families or business groups, most of the protections for minority shareholders became irrelevant because outsiders held mostly non-voting shares (i.e., preferred shares).

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14 Interview with attorneys Jose Luis de Salles Freire and Antonio Felix de Araújo Cintra of Tozzini, Freire, Teixeira e Silva Advogados. São Paulo, August 17th, 2004.

15 The fact that company law protects minority shareholders in Brazil today is not necessarily a sign that most corporations protect shareholders. The 2001 law did not mandate that all companies should comply with all the regulations. For example, companies that had 75% of preferential shareholders did not have to automatically reduce the proportion to 50% (which is the new maximum by law). Other protections that are not enforced for companies established before 2001 relate to rights of minority shareholders during takeovers. The law includes “tag-along” payments to minority or preferential shareholders when take overs occur, which allow minorities (or preferential) shareholders to sell their shares at a fair price if control of the company is being transferred. One example in which preferential shareholders were at a disadvantage is that of Ambev, the largest brewery in Brazil, which merged with Interbrew, an American brewery, in 2004. The ordinary shareholders of Ambev got Interbrew shares, while preferential shareholders did not. See “Hopping” in *The Economist*, March 25, 2004.

In Table 3 I also include the shareholder protections in England since the beginning of the twentieth century. It is interesting to note that the protection of shareholders in this country varied throughout the century as well. In fact, England lacked strong shareholder protection at the beginning of the twentieth century. A similar story happened in Germany. As Franks, Mayer, and their co-authors argue, England and Germany did not need all the shareholder protections that La Porta et al. consider relevant for the development of equity markets.

### **Ownership concentration after the 1940s**

The corporate landscape of the 1940s differed in two respects from the period discussed above. First, large corporations relied heavily on preferred shares to sell equity to small investors. These corporations had mainly one controlling shareholder (or a family) and hundreds or even thousands of small investors holding preferred shares. Second, the government started to participate actively in the ownership of large corporations, usually controlling the majority of voting shares. Many of the large corporations with dispersed ownership were either bailed out and absorbed by the government or changed their governance when they issued new equity in the form of non-voting shares (preferred shares).

#### *Preferred Shares and the cost of control*

In the 1930s, the cost of controlling a corporation was significantly altered with the introduction of (non-voting) preferred shares. Decree 21,526, June 15, 1932, regulated preferred shares. By this decree there was no explicit limit as to what percentage of total equity these shares could represent. Usually preferred shares did not have voting rights (it was up to each company to decide), but instead granted their owners first rights when the company distributed dividends and/or priority when the company repurchased shares. The right to vote was sacrificed in exchange for a fixed dividend. In the case that the fixed dividend was not paid for three years, preferred shares became ordinary shares with full voting rights.

Preferred shares included other protections. If a group of dissident preferential shareholders disagreed with an assembly or managerial decision, they had the right to walk away. In this instance, the company would have to pay the shares of this group. The value paid was supposedly proportional to their share of total net worth, but it is not clear that this right was ever enforced.

One might argue that preferred shares served to protect small shareholders from the abuses of insiders. Companies could decide whether to give preferred shares the right to vote, but the idea was that these shares would protect their owners by giving them a fixed dividend and priority of payment over other shareholders in case of bankruptcy.

Issuing a large part of a company's equity in preferred shares allowed insiders to acquire control at a lower cost. This is because Brazilian laws increasingly reduced the share of equity necessary to control a company, thus facilitating the migration of Brazilian corporations into a system in which a few investors and families controlled most firms. While the 1940 Company Law in Brazil did not allow preferred shares to surpass 50% of capital, the 1976 law changed this provision and allowed two-thirds of total equity to be denominated as preferred shares.<sup>16</sup> This provision reduced the total equity necessary to control a corporation in many cases from 26% to 17%. After 1976, if a company had 33% of equity in ordinary voting shares, the holder of 17% could control the company, while in 1940 if there were 50% of ordinary shares, 26% was necessary to exercise control.

A good example of the transformation of the structure of ownership that preferred shares created is that of the company Panair do Brasil (see Appendix A Panel C). This airline was operated and controlled by Pan-American Airways of the United States. Pan Am controlled 57.7% of the ordinary (voting) shares of the Brazilian corporation, with 57.7% of the votes in the shareholder assembly (because its statutes established that each ordinary share had one vote). Even though Panair do Brasil had

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<sup>16</sup> Martins, 1977a, p. 101.

thousands of shareholders, most of them held preferred shares, and the 1,238 holders of ordinary shares had such a low percentage of the total that they could not challenge the control of Pan Am U.S.A. The second largest shareholders were the workers of the company, who controlled around 2.5% of the ordinary shares.

Additionally, in 1940 further changes occurred to the regulation of corporations and, specifically, of preferred shares. The low turnover rate of shares and the increase in concentration of corporate control in many corporations generated concern in the Stock Brokers Association of Rio de Janeiro and the federal government. According to Mária Bárbara Levy, the corporate form in Brazil had many vices by the 1930s. One of the most important complaints was that the overseeing board in most corporations was composed of friends of the directors. This was the case because ownership concentration allowed insiders to choose the overseeing board.<sup>17</sup>

Additionally, turnover rates for shares were very low. In the 1930s, government-issued securities overwhelmingly dominated the day-to-day trading at the exchange. Government debt went from around 80% of total trading to over 90%. This meant that the popularity of shares, which had represented approximately 15% of trading in the 1920s, was down to about 7% of total trading.

#### *The Government as a shareholder*

The introduction of preferred shares was of particular interest for the Brazilian government during the 1940s and thereafter. This type of shares allowed the government to attract small investors to participate in the subscription of capital of large strategic enterprises. Small investors would buy small lots of preferred shares, while control would remain in the hands of the government.

With the advent of economic nationalism during the first two regimes of Getúlio Vargas (1930–1937, 1937–45), the federal government started to participate actively in the ownership of large corporations. Many times the reason given for government

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<sup>17</sup> Levy, *História*, pp. 445–446.

involvement and control of a company was “national security.” This was the case of the Companhia Siderúrgica Nacional (National Steel Company). The project was founded during World War II, when Brazil realized that relying on imported industrial goods, such as steel was not good for national security. The government negotiated a loan from the Export-Import Bank of the United States to finance the project. But negotiations failed and Vargas decided the government would finance the mill with the help of domestic industrialists and financiers. The equity offering was one of the most ambitious initial public offerings of the twentieth century. The stock did not sell easily among private entrepreneurs and bankers in Brazil, thus the Treasury paid for most of the ordinary shares, while pension funds took the bulk of preferred shares.<sup>18</sup>

Many times state participation in large corporations was also part of development policy, which placed the government at the center of the process. An example was the case of the Companhia Nacional de Alcalis, which specialized in alkaline products that serve as inputs for the production of glass and soap. This company was chartered in 1944 and all of its ordinary shares were owned by the federal government (50.5% of capital), with hundreds of shareholders holding small blocks of preferred shares.

Many of the corporations that started out with dispersed ownership and many protections for minority shareholders ended up under state control after the 1940s. Most of these interventions were the product of economic difficulties and complications in accessing enough foreign exchange to buy inputs (because the exchange rate was controlled since 1945). By 1950 the federal government directly controlled most of the railways of the country, the shipping line Lloyd (see Appendix A, Panel A), and many other companies (e.g., ports, newspapers, manufacturing companies, etc). In the 1960s, the E.F. Paulista and the E.F. Mogyana were bailed out by the government of the state

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18 For the story of entrepreneur participation in the purchase of equity of the National Steel Company see Dean, *Industrialization*, pp. 218–220. A complete list of ordinary and preferential shareholders can be found in “Cia. Siderúrgica Nacional,” in *Diário Oficial*, May 8, 1941.

of São Paulo and by 1971 a holding company had been created to manage all the state lines.

This was the end of dispersed ownership in many of the corporations that had previously grown thanks to the government guaranteed dividends. Others like the Banco do Estado de São Paulo (see Appendix A, Panel A) were also taken over by the State of São Paulo and maintained about 100 outside shareholders. The rule, however, was from then on more concentrated ownership of voting equity.

#### *Business Groups and Ownership Concentration*

After the 1940s we observe a continuous process of consolidation, in which the largest corporations in Brazil merged and created large holding companies, known as *grupos*. In Table 4 I present data on ownership of the largest business groups in Brazil in 1980. I compiled information of the twenty largest industrial groups in Brazil, *grupos*, according to the reports of magazine *Balanço*, a publication of the *Gazeta Mercantil*, a business newspaper in São Paulo. Most of the ownership information for these groups was not public. The information came from questionnaires directly sent to the entrepreneurs and from estimates done by the magazine staff. The data obtained also includes the percentage of equity controlled by the largest shareholder, the three largest shareholders, and the name of the company or family controlling the *grupo*.<sup>19</sup>

The evidence from Table 4 and Panel C of Appendix A suggest that there was a trend of increasing ownership concentration after the 1940s. In Table 4 we can see that the largest industrial groups in Brazil were controlled by a handful of families. Only a couple of the top groups had dispersed ownership. This was the case of Brahma, one of the two largest breweries, and Alpargatas, a shoe and clothes manufacturer.

The other important trend is that of diversification of the large industrial conglomerates. Ownership became concentrated, and the groups controlling large corporations extended their activities into different sectors (see column 3 of Table 4).

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<sup>19</sup>"Grupos" in *Gazeta Mercantil: Balanço*, IV-4, September, 1980.

The top group in Table 4, Grupo Votorantim, started as a textile mill at the end of the nineteenth century, but by 1980 had interests in cement, aluminum, steel, and heavy machinery production. This table also shows the diversification of the Matarazzo group by 1980.

The introduction of preferred shares is not the only explanation for the entrenchment of concentrated ownership. In fact, there are two hypothesis that help to understand why at the end of the day business groups with concentrated ownership or large state-owned enterprises dominated the corporate landscape of Brazil. The first hypothesis is related to the fact that ownership responds not only to the principal agent problem, but also to other internal conflicts within the firm. For example, Mark Roe maintains that more concentrated ownership in countries such as Italy and Germany was not a product of the legal system but of the political struggles between labor and capital. He argues that owners reduced the conflicts with management by creating large shareholding blocks that could counterbalance the power of labor. In Germany, labor has participated actively in the management of most companies since the 1970s, so the conflict between labor and owners has been taken directly to the board room.<sup>20</sup>

In Brazil, the labor movement increased its political leverage after Getúlio Vargas took power in 1930 and increasingly won positions in Congress. Labor unions were strongly supported by the government, and many pro-labor laws were passed during this period. Labor disputes after 1941 had to be solved in the arbitration courts created by the government. One could imagine that corporations had a hard time dealing with labor in such an environment. Therefore, Roe's argument could possibly be extrapolated to Brazil: To counterbalance the power of labor unions and in order to have more leverage with the government, companies integrated into large diversified holdings and minimized agency costs within the corporation. Concentrated ownership could reduce reducing frictions between owners and managers, while integrating into holdings helped to centralize lobbying costs in a single unit.

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<sup>20</sup> Roe, *Political Determinants*.

Another plausible explanation of the concentration of ownership and control after World War II is related to access to financing. After the creation of the state-owned National Bank of Economic Development in 1952 (BNDE, later BNDES) access to long-term credit increasingly depended on connections with the government. By 1971, the major government-owned financial institutions controlled about 51% of total credit in the country.<sup>21</sup>

Since most long-term lending was concentrated in the BNDES and other government financial institutions, personal relations to bank and government officials were necessary to access these funds. For industrialists, access to credit was privileged to entrepreneurs with connections to the government or to private financial groups. Private financial groups also depended on the credit they could get at subsidized rates from the government. These groups obtained almost half of their funds from subsidized credits of the BNDES and other government-owned financial institutions (such as Banco do Brasil). Then, they lent these funds to private parties at higher rates. Again, only a few financial groups had access to government-subsidized loans, which they could lend at market rates.<sup>22</sup>

## Conclusions

This paper shows preliminary evidence about the development of ownership concentration and shareholder voting rights in Brazil since 1890. The findings do not allow us to make a generalization about the nature of ownership practices in Brazil before the 1940s, when about one third or so of Brazilian corporations limited the number of votes of large shareholders. At that time, some of the largest Brazilian corporations had dispersed ownership with an even lower concentration of voting rights thanks to gradual voting schemes. This somewhat puzzling picture of corporate governance in a French civil law country co-existed with family-controlled corporations. In these family-owned and managed firms we have the same problematic

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<sup>21</sup> World Bank, *Brazil*, pp. xiii-xiv.

<sup>22</sup> World Bank, *Brazil*, p. xiv.

corporate governance practices that we observe today, from tunneling to abuses of the managerial control of company assets. I argue that this system prevailed over the dispersed corporation because it adapted to the changes in the political environment and to restrictions to access financial capital.

This paper contributes to a now large literature exploring the evolution of ownership concentration across countries. What is perhaps significantly different in the case of Brazil is that trust in equity markets was generated from the state. The national and state governments in Brazil provided guarantees to investors in large corporations, in the form of minimum dividends paid by the government. This helped to generate an investment culture and created some large corporations with diffused ownership. We do not know if the government intervened in the drafting of the statutes of many of these widely-held corporations. What we know now is that investors paid a premium for government-guaranteed firms (at least that is what the evidence points out). This impulse might have also helped to reduce the capital of other corporations and to generate a more lively financial market. Of course financial markets in Brazil were not as lively as those of Germany, the U.K. or the U.S., but were certainly one of the largest financial centers among the then emerging markets.

After 2001 the Brazilian government and the São Paulo Stock Exchange have made a significant effort to reform the corporate governance practices in the country. The government included many protections for minority shareholders in the Corporations Law of 2001 and the São Paulo Stock Exchange created a parallel market for companies with higher standards of corporate governance. Many new companies have adhered to these practices, but even with these reform efforts and the improvements in board practices, ownership concentration has not changed significantly in Brazil in the last few years. Perhaps generating the trust necessary to increase the participation of small investors is not easy, especially after decades of dominance of large shareholders.

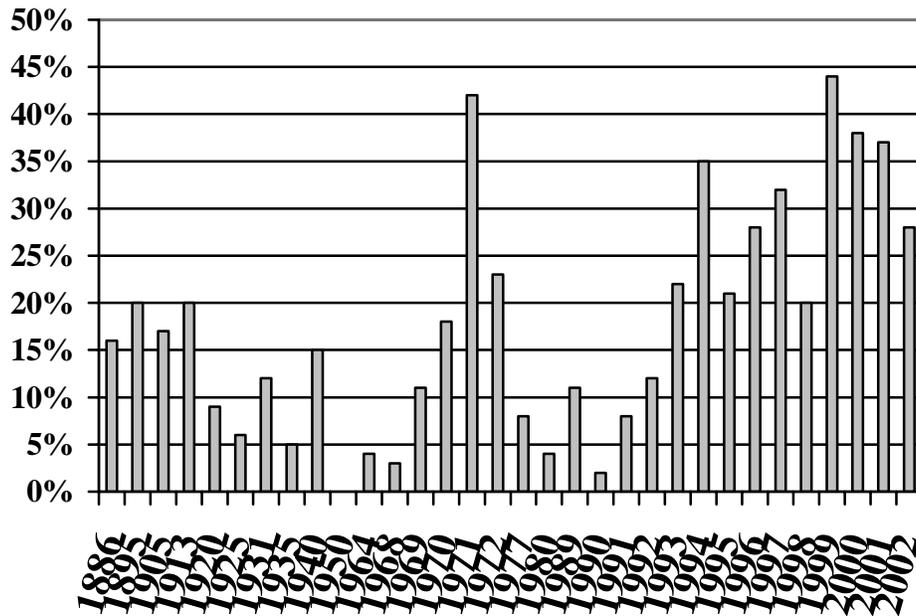
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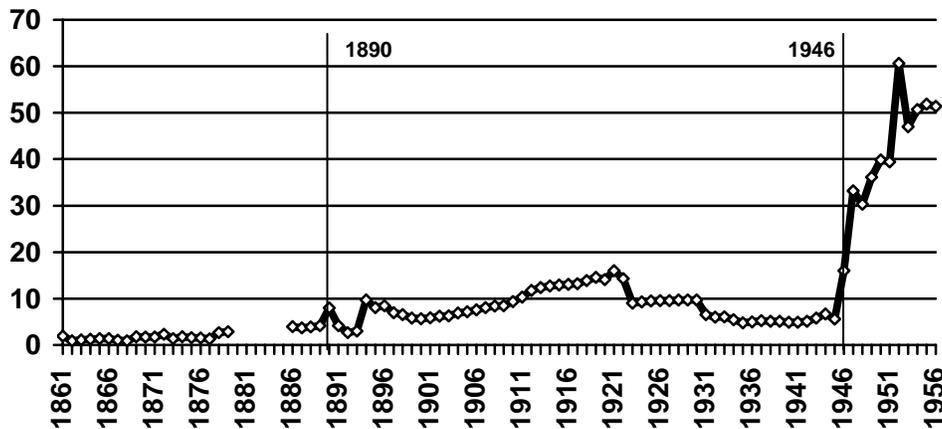
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**Figure 1. Equity Capitalization over GDP in Brazil, 1886 -2002**



Source: *Jornal do Comércio*, *Retrospecto Comercial do Jornal do Comércio*, *Câmara Sindical*, *Relatorio* (1905–1926) and the *Anuário da Bolsa de Valores do Rio de Janeiro* (1926–1942). São Paulo date was taken from Hanley, “Business Finance,” and from the *Anuário da Bolsa de Valores de São Paulo*, 1932–1943. Data for stock market capitalization and total stock of debentures after 1990 come from *The Brazil Handbook*, 1992–2002, and the Brazilian Debenture Service. GDP data from Goldsmith, *Brasil*, Tables 3.1 and 4.2. Notes: São Paulo Stock Exchange data missing for 1920, 1925, and 1935. Data for 1947–1964 excluded because legislation forced all joint stock companies to register at the stock exchange, thus creating data not comparable to other periods and with other countries.

**Figure 2 Number of joint stock companies traded in the Rio de Janeiro Stock Exchange per Million People 1861 -1956**



Source: Levy, *Historia*, Tables 8, 18, 24, 38, 47, and 57.

Table 1. Ownership Concentration in the Ten Largest Non-Financial Companies, Brazil, 2005

Company	Ordinary shares owned by top 3 shareholders	Equity owned by top 3 shareholders	Voting shares to total shares	Top Shareholder
Petrobras	56%	32%	58%	Federal Government
Vale R Doce (n1)	59%	38%	64%	Valepar
Ambev	87%	45%	52%	Interbrew Internationl
Telesp	85%	28%	34%	SP Telecom Holding
Telemar	55%	55%	100%	National Development Bank (BNDES)
Telemar n 1	97%	43%	44%	Telenorte Leste Part.
Embraer	63%	21%	34%	Cia. Bozano
Sid nacional	49%	49%	100%	Vicunha Siderurgia
Cemig (n1)	83%	36%	44%	State of Minas Gerais
Gerdau (n1)	62%	21%	33%	Indac Ind. Adm. e Comércio S.A.
<b>Average</b>	70%	37%	56%	

Source: Data compiled from the 2004 company annual report from Comissao de Valores Mobiliarios, [www.cvm.gov.br](http://www.cvm.gov.br)

Note: N1 denotes that the company complies with the level 1 of corporate governance of the New Market of the Sao Paulo Stock Exchange. Equity owned by top 3 shareholders does not include preferred shares controlled.

**Table 2. Shareholder Voting Rights and Management Incentives in Brazilian Companies, 1909**

	Agriculture (N=10)	Banks (N=16)	Insurance (N=14)	Manuf. (N=44)	Mining (N=2)	Services (N=8)	Transport. (N=10)	Utilities (N=15)	All sectors (N=119)
<b>Management</b>									
Number of Managing Directors	3.1	3.4	2.9	2.8	3.0	1.9	3.3	2.7	2.9
Directors' term (years)	3.3	3.8	4.0	4.0	n.a.	4.0	5.3	6.0	4.1
<b>Management Compensation</b>									
Annual Salary (avg, mil reis)	8,750	25,080	11,314	11,021	12,000	18,300	6,400	7,556	12,722
Directors' Bonus (avg, as a % profits)	0.20	0.44	0.79	0.45	0.50	0.38	0.40	0.40	0.45
<b>Shareholder Voting Rights</b>									
Average shares to vote	6.70	9.56	6.21	7.09	17.50	5.38	16.60	6.87	8.12
Average of one-share one-vote	0.20	0.19	0.14	0.16	0.00	0.38	0.10	0.07	0.16
Average of five shares per vote	0.30	0.25	0.50	0.34	0.00	0.25	0.50	0.60	0.38
Average of ten shares per vote	0.50	0.31	0.36	0.48	0.50	0.38	0.20	0.20	0.38
Average of twenty shares per vote	0.00	0.25	0.00	0.02	0.00	0.00	0.10	0.00	0.05
Average of other voting scheme	0.00	0.00	0.00	0.00	0.50	0.00	0.10	0.13	0.03
<b>Limits on the maximum number votes</b>									
Average of max votes=1	0.30	0.38	0.29	0.20			0.20	0.20	0.23
Companies with maximum votes	3	6	4	9			2	3	27

Note: Sample includes only firms registered in Brazil and with Brazilian statutes. This table excludes companies with gradual voting schemes.

Source: *The Brazilian Year Book 1909*, Compiled and edited by J.P. Wileman, London, McCorquodale, 1909

**Table 3. Shareholder Rights in Brazil and England, 1882-2001**

	Brazil							England		
	1882	1890	1891	1940	1976	1995 <sup>a</sup>	2001	1908	1948	1995
One-share, one-vote <sup>d</sup>	0	0	0	<sup>b</sup> 1	<sup>b</sup> 1	1	<sup>b</sup> 1	1	1	0
Proxy voting	1	1	1	1	1	0	1	1	0	1
Shares not blocked before meeting	1	1	1	1	1	1	1	1	0	1
Cumulative voting or proportional rep.	0	0	0	1	1	0	1	0	0	0
Provision for minorities to challenge directors decisions	0	0	1	1	1	1	1	0	1	1
Shareholders have 1 <sup>st</sup> right to buy new stock	0	0	0	1	1	0	1	0	0	1
Capital needed to call an extraordinary meeting is less than 10%	0	0	0	0	1	1	1	0	1	1
<b>Anti director rights index<sup>c</sup></b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>6</b>	<b>3</b>	<b>6</b>	<b>3</b>	<b>2</b>	<b>5</b>

Sources: Law 3150, November 4, 1882; Decree 164, January 17, 1890; Decree 434, July 4, 1891; and Decree 601, October 17, 1891, from Brazil, *Leis e Estatutos...* 1882, 1890-91. Decree-Law 2627, 1940, from *Anuário da Bolsa de Valores do Rio de Janeiro 1938-1939*, 1940. Laws 6404, December 15, 1976, and 10,303, October 31, 2001, available at <http://www2.senado.gov.br/sf/legislacao/legisla/>. Rights for England from Franks, Mayer, and Rossi, "Spending Less"; Pistor et al. (2003); and the Company (Consolidation) Act of 1908.

<sup>a</sup> 1995 rights follow the classification of La Porta et al., "Law and Finance," Table 4.

<sup>b</sup> One-share, one-vote provisions were introduced in 1940, then ordinary and bearer shares could vote. After 1976 only ordinary nominal shares had the right to vote. Limits to the number of votes per shareholder could be introduced in the statute of the company after 1882. Since 1932 there are preferential shares in Brazil, which can receive the right to vote in the company statute.

<sup>c</sup> The last row of the table presents what LLSV (1998) called the "antidirector rights index," which is just a sum of the number of shareholder rights included in the existing company laws by period. The one-share, one-vote provision is studied separately by LLSV (1998), so I do not discuss it in depth here.

**Table 4. Ownership of the main business groups in Brazil, 1980**

<b>Grupo</b>	<b>Assets in Million Cruzeiros</b>	<b>Main Sectors</b>	<b>Top Shareholder</b>	<b>Top Three Shareholders</b>	<b>Who Controls the company?</b>
Votorantim	27,663	Cement, aluminum, steel, heavy machinery, textiles	>50%		Family Ermirio de Moraes
Matarazzo	24,276	Textiles, coffee, mining, sugar	57%	>74%	Matarazzo Family: Sulema S.A. (57%) and Irben S.A. (17%)
Bradesco	22,381	Banking, Hotels...	>50%		Bradesco Bank
Bonfiglioli	19,500	Finance, foods, publicity, trade	100%		Family Bonfiglioli
Villares	18,663	Steel, Elevators, trade, agriculture	65%		Familia Villares
Caemi	17,138	Mining, steel, agriculture, trade	>50%		ATA Parts and Investments (controlled by Augusto Trajano de Azevedo Antunes)
Bamerindus	14,510	Banking, agriculture	>50%		Family Andrade Vieira
Dedini	14,384	Steel works, machinery and equipment	25.9%	73%	A.D.O. S.A. (25.9%); D.O. S.A. (24.9%); A.D. (22.4%); and, Nidar (22.6%)
Itaú	13,479	Banking and data management	>50%		Itaubanco Foundation
Camargo Corrêa	13,056	Construction, agriculture, textiles, finance...	>50%		Participaciones Morro Vermelho (Holding controlled by Sebastião Ferraz de Camargo Pintado)
Brahma	11,485	Beer	5%	<15%	Dispersed ownership
Suzano-Feffer	10,184	Paper	>50%		Leon Feffer and Max Feffer
Real	9,899	Finance and tourism		>50%	Aloysio de Andrade Faria; Augusto Esteves Neves; and, Rubens Garcia Neves
Copersucar	9,874	Sugar, sugar-gasoline, coffee.			Controlled by 71 sugar mills

(Continues...)

**Table 4 Ownership of the main business groups in Brazil, 1980 (Continued)**

<b>Grupo</b>	<b>Assets in Million Cruzeiros</b>	<b>Main Sectors</b>	<b>Top Shareholder</b>	<b>Top three Shareholders</b>	<b>Who Controls the company?</b>
Varig	9,533	Airline	>50%		Rubem Berta Foundation
Sadia	8,659	Foods, supermarkets, insurance		~50%	Attilio F. Fontana; Osório H. Fulan; Zoé Silveira D'Avila; Maria A. C. Fontana
Alpargatas	8,495	Shoes, clothing, sporting goods			Dispersed ownership (11,000 shareholders)
Comind	7,747	Finance and data management		>50%	Stab S.A. and Brooklyn S.A.
Unibanco	7,722	Finance	>50%		Walter Moreira Salles

Source: "Grupos" in *Gazeta Mercantil: Balanço*, IV-4, September, 1980.

**Table 5. OLS Analysis of Market to Book Value**

Dependent variable is market to book value (market value is the estimated using the average stock price between 1905 and 1909 or last price available. The book value of equity is estimated as paid up capital plus reserves.)

	Spec1	Spec2	Spec3	Spec4	Spec5	Spec6
Constant	-0.22 [0.59]	-0.25 [0.59]	0.45 [0.46]	0.009 [0.49]	-0.03 [0.50]	0.56 [0.64]
Log(assets)	0.04 [1.03]	0.04 [1.13]	-0.08 [0.03]	0.02 [0.03]	0.02 [0.03]	-0.02 [0.54]
Log (age)	0.12 [1.03]	0.12 [1.80]*	0.15 [0.06]**	0.11 [0.06]*	0.12 [0.07]*	0.17 [0.06]**
Max vote dummy		-0.05 [0.13]			-0.11 [0.12]	
Gov't guarantee				0.68 [0.13]***	0.74 [0.18]***	0.02 [0.04]
Sector Dummies	No	No	Yes	No	No	Yes
Num observations	34	34	34	34	34	34
R-squared	0.18	0.18	0.55	0.26	0.28	0.56
F-Statistic	3.31	2.21	7.08	3.58	2.83	4.12
Prob (F-Stat)	0.05	0.10	0.002	0.025	0.042	0.002

Note: \*, \*\*, and \*\*\* denote significance at 10%, 5%, and 1% respectively.

All standard errors are heteroskedasticity-consistent using the Newey-West technique

**Table 6. OLS Analysis of Market to Book Value**

Dependent variable is cumulative dividend payments between 1905 and 1909, expressed as a % of par value of equity

	Spec1	Spec2	Spec3	Spec4	Spec5
Constant	-0.34 [0.17]**	-0.32 [0.17]*	-0.32 [0.17]*	-0.32 [0.15]**	-0.32 [0.22]
Log(assets)	0.03 [0.1]**	0.03 [0.1]**	0.03 [0.1]**	0.03 [0.01]**	0.02 [0.018]
Log (age)	0.04 [0.02]*	0.04 [0.02]*	0.04 [0.02]*	0.03 [0.02]	0.03 [0.025]
Max vote dummy		0.03 [0.06]	0.03 [0.06]		
Gov't guarantee				0.17 [0.03]***	0.15 [0.03]***
Sector Dummies	No	No	Yes	No	Yes
Num observations	57	57	57	56	56
R-squared	0.13	0.14	0.14	0.18	0.22
F-Statistic	4.26	2.88	2.16	3.82	1.65
Prob (F-Stat)	0.019	0.044	0.002	0.015	0.133

Note: \*, \*\*, and \*\*\* denote significance at 10%, 5%, and 1% respectively.

All standard errors are heteroskedasticity-consistent using the Newey-West technique

## Appendix A. Ownership Concentration in some of the Largest Brazilian Corporations

## Panel A. Corporations with Relatively Dispersed Ownership

Year	Company	Sector	Capital	Shares to one vote	Max votes	Num. Shareholders at meeting	Share ownership			Votes			Director's votes	HHI
							Top 3	Top5	Top 10	Top 3	Top5	Top 10		
<b>Antarctica Paulista</b>														
1892	Antarctica Paulista	Beer/Foods	3,000,000	5	40	57	62%	69%	81%	14%	24%	48%	7%	0.034
1913	Antarctica Paulista	Beer/Foods	8,500,000	5	40	80	58%	77%	86%	12%	20%	41%	12%	0.034
1926	Antarctica Paulista	Beer/Foods	12,750,000	5	40	65	80%	89%	95%	13%	21%	42%		0.035
<b>Estrada de Ferro Paulista<sup>a</sup></b>														
1869	E.F. Paulista	Railway	5,000,000	5,10,20	40	64	2%	5%	10%	3%	6%	12%		0.001
1872	E.F. Paulista	Railway	5,000,000	5,10,20	40	654	10%	15%	24%	5%	7%	11%	7%	0.004
1883	E.F. Paulista	Railway	5,000,000	5,10,20	40	153	13%	20%	32%	2%	3%	7%		0.010
1898	E.F. Paulista	Railway	5,000,000	5,10,20	40	514	10%	15%	22%	7%	11%	16%		0.005
1922	E.F. Paulista	Railway	20,000,000	5,10,20	500	268	21%	31%	45%	15%	22%	33%		0.017
1935	E.F. Paulista	Railway	350,000,000	5,10,20	6070	845	14%	20%	30%	9%	12%	18%		0.007
1947	E.F. Paulista	Railway	500,000,000	5,10,20	6070	267	31%	38%	47%	3%	4%	7%		0.053
1957	E.F. Paulista	Railway	500,000,000	5,10,20	6070	487	17%	23%	33%	14%	19%	28%		0.013
<b>Estrada de Ferro Mogyana (Mojiana)</b>														
1873	E.F. Mogyana	Railway	3,000,000	5,10,20	40	350	13%	18%	27%	6%	9%	16%		0.007
1883	E.F. Mogyana	Railway	10,000,000	5,10,20	40	395	13%	17%	25%	4%	7%	12%		0.002
1892	E.F. Mogyana	Railway	30,000,000	5,10,20		168	13%	19%	27%	10%	15%	22%	8%	0.011
1908	E.F. Mogyana	Railway	70,000,000	5,10,20		461	8%	11%	18%	6%	8%	13%		0.001
1918	E.F. Mogyana	Railway	80,000,000	5,10,20		433	36%	39%	43%	27%	29%	33%		0.058
<b>Banco do Estado de Sao Paulo<sup>a</sup></b>														
1889	Banespa	Bank		20, 40		150	14%	22%	33%	13%	19%	32%		0.018
1890	Banespa	Bank		20, 40		135	13%	21%	24%	11%	16%	19%		0.016
1899	Banespa	Bank		20, 40		48	57%	63%	78%	49%	56%	72%		0.111
1910	Banespa	Bank	5,900,000	20, 40		58	18%	35%	50%	15%	33%	71%		0.039
1918	Banespa	Bank		20, 40		71	34%	44%	59%	33%	42%	58%		0.056
1926	Banespa	Bank	30,000,000	10		217	14%	22%	33%	14%	22%	33%		0.018
1932	Banespa	Bank		10		217	20%	27%	39%	20%	27%	39%		0.025
1941	Banespa	Bank		10		17	98%	99%	100%	98%	99%	100%		0.935
1950	Banespa	Bank					99.7%	99.8%	100.0%	99.7%	99.8%	100.0%		0.969
<b>Various Companies</b>														
1892	Tecidos Esperança	Textiles	1,300,000	10		52	26%	38%	55%	26%	38%	55%		0.045
1899	Viação Férrea Sapucaí	Railway	150,000			217	22%	27%	28%					
1901	Lloyd Brasileiro	Shipping	28,000,000	10		9?	75%	81%		75%	81%		40%	0.220
1904	Dos Funcionarios Publicos	Bank	2,000,000	5			39%	48%	68%	39%	48%	68%		
1911	Mercantil do Rio de Janeiro	Bank	5,000,000	10			14%	18%	24%	12%	17%	23%		
1898	Companhia Petropolitana	Textiles	4,000,000	10	100	43	44%	57%	78%	27%	43%	71%		0.058
1928	Companhia Petropolitana	Textiles	7,000,000	10	100	227	20%	26%	36%	12%	19%	30%	4%	0.015

<sup>a</sup>The E.F. Paulista and E.F. Mogyana had a voting scheme in which shareholders would get one vote per 5 shares, up to 50 votes, then they needed 10 votes per share up to 150 votes. After that 20 shares were needed to get any additional votes. Their maximum number of votes changed over time. The Banco do Estado de Sao Paulo had 20 shares per vote up to 50 votes and 40 shares per vote thereafter until the 1920s. Then it changed to 10 shares per vote

## Appendix A. Ownership Concentration in some of the Largest Brazilian Corporations

## Panel B. Family-controlled Corporations

Year	Company	Sector	Capital	Shares to one vote	Max votes	Num. Shareholders at meeting	Share ownership			Votes			Director's votes	HHI
							Top 3	Top5	Top 10	Top 3	Top5	Top 10		
<b>Family-controlled</b>														
1909	Cia. Fabricadora de Papel (Klabin)	Paper	1,500,000	1		36	49%	75%	80%	49%	75%	80%		0.114
1907	Brasileira de Alpargatas e Calçados	Shoes	800,000			41	45%	54%	67%				88%	0.085
<b>Under the control of the Matarazzo Family</b>														
1911	Ind. Reunidas Fab. Matarazzo	Group	10,500,000	10	50	74	83%	86%	91%	10%	17%	34%	67%	0.03
1934	Ind. Reunidas Fab. Matarazzo	Group	21,000,000	1		13	95%	97%	100%	100%	100%	100%	100%	0.51
1937	Ind. Reunidas Fab. Matarazzo	Group	35,000,000	1		14	53%	67%	99%	65%	75%	100%	90%	0.21
1905	Banco Italiano del Brasile	Bank	2,500,000	10		195	68%	71%	78%	68%	71%	78%	27%	0.21
1907	Banco Italiano del Brasile	Bank	2,500,000	10		40	74%	79%	90%	73%	79%	89%	50%	0.25

## Panel C. Ownership Concentration in Large Corporations in the late 1930s and 1940s

Year	Company	Sector	Capital	Shares to one vote	Max votes	Num. Shareholders at meeting	Share ownership			Votes			Director's votes	HHI
							Top 3	Top5	Top 10	Top 3	Top5	Top 10		
1937	Cimento Portland Itaú	Cement	7,000,000	1		81	34%	46%	61%	34%	46%	61%	64%	0.056
1943	Panair do Brasil S.A.	Airline	80,000,000	1		1238	61%	63%	66%	61%	63%	66%	58%	0.335
1941	Cia Siderurgica Nacional	Steel	500,000,000	1		129	73%	90%	95%	73%	90%	95%	44%	0.253
1944	Cia Nacional de Alcalis	Chemicals	50,000,000	1 <sup>b</sup>		630	52%	52%	52%	100%	100%	100%	100%	1.000

<sup>b</sup> The Companhia Nacional de Alcalis had the government holding all voting shares (with one-share one-vote), and had 629 small shareholders holding non-voting preferred shares.

Source: Compiled by the author from Annual Company Reports and published estatutes available in the Arquivo da Bolsa de Valores do Rio de Janeiro, National Archive, Rio de Janeiro, Brazil and at the Sao Paulo State Archive.

## Appendix A. Ownership Concentration in some of the Largest Brazilian Corporations

## Panel D. Ownership Concentration in Various Corporations at the Time of Chartering, Rio de Janeiro, 1889-1949

Year	Company	Sector	Capital Ordinary shares in Mil Reis (Cruzeiros)	HHI	Shares of top 3	Votes top 3	Votes per share	Maximum Votes
1889	Fabrica de tecidos D. Isabel	Textiles	250,000	0.09	36%	36%	5	50
1890	Fiação e Tecidos Santa Barbara	Textiles	4,000,000	0.18	59%	60%	10	
1891	Cia de Tecelagem Santa Luiza	Textiles	360,000	0.43	80%	59%	10	50
1898	Cia. Petropolitana	Textiles	4,000,000	0.06	27%	2%	10	100
1900	Cia Nacional de Tecidos de Linho	Textiles	2,000,000	0.11	46%	46%	10	
1903	Tecidos Cometa	Textiles	2,400,000	0.09	36%	36%	10	200
1905	Fiação e Tecidos Santa Maria	Textiles	300,000	0.07	33%	34%	5	
1905	Fiação e Tecidos Sacramento	Textiles	400,000	0.37	100%	99%	1	500
1912	Industrial Fluminense	Construction	500,000	0.24	81%	82%	10	
1912	E.F. Paracatu	Railroads	10,000,000	0.39	100%	100%	10	
1919	Lanificio Petropolis	Textiles	1,200,000	0.58	95%	95%	10	
1919	Cia Fiação e Tecelagem Alegria	Textiles	1,000,000	0.21	63%	63%	10	
1922	Lanifícios Minerva	Textiles	3,000,000	0.93	98%	98%	1	
1923	Cia. Energia Eletrica Rio Grandense	Utilities	3,000,000	0.28	65%	65%	10	
1924	Carbonifera Prospera	Coal Mining	3,500,000	0.27	74%	74%	10	
1931	Cia. Ferro Brasileiro	Mining & Smelting	2,500,000	0.34	93%	93%	1	
1937	Cimento Portland	Cement	7,000,000	0.06	34%	34%	1	
1937	Renasça Industrial	Textiles	6,000,000	0.15	56%	56%	5	
1946	Refinaria de Petróleos do Distrito Federal	Oil Refining	60,000,000	0.08	36%	36%	1	
1947	Cia. Refrigerantes Guanabara	Soft drinks	7,500,000	0.04	34%	34%	1	
1949	Cia. Lancaster	Textiles	10,000,000	0.34	80%	80%	1	
	Average ownership by top 3 shareholders		63%					
	Average votes controlled by top 3 shareholders		61%					