OWNERSHIP AND CONTROL STRUCTURE OF BRAZILIAN COMPANIES

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RICARDO PEREIRA CÂMARA LEAL²

ABSTRACT

This paper analyzes the structure of ownership and control of public Brazilian companies using data from 325 companies listed at the São Paulo Stock Exchange. We show a high degree of ownership concentration. The major shareholder has, on average, 41 percent of the equity capital, while the five major have 61 percent. Concentration occurs mainly with voting shares with 62 percent of the companies having one shareholder with more than 50 percent of the voting shares. Actually, the violation of the one share-one vote rule with the use of non-voting shares is very common. Only 11 percent of the companies do not have non-voting shares and the companies have, on average, only 54 percent of their equity capital as voting capital. We also analyze the indirect ownership structure. Pyramiding structure is not commonly used as a way of violating the one share - one vote rule. Control is maintained through more than one tier. We also show the importance of different shareholder classes. Corporations are the main investor category in the direct ownership structure while individuals are more important when indirect control is accounted for.

Key words: Corporate Governance, Ownership Structure, Agency Conflicts, Minority Shareholders.
JEL Classification: G23

RESUMEN

Este artículo analiza la estructura de propiedad y control de empresas brasileñas, utilizando información acerca de 325 compañías listadas en la Bolsa de São Paulo. Se encuentra un alto grado de concentración de propiedad. El mayor accionista en promedio posee un 41 por ciento del capital accionario, mientras que los cinco mayores un 61 por cien-

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The objective of this article is to analyze the ownership and control structure of Brazilian companies. We evaluate the degree of concentration in company ownership along with the mechanisms utilized to separate control from ownership. We will observe a high degree of utilization of non-voting shares, while the use of pyramidal structures, although widespread, does not appear to be used to separate ownership from control. We also categorize the owners of companies.

To understand ownership structure is very important since it influences directly the efficiency of the market for corporate control. First it shows the degree of risk diversification of shareholders. When the ownership structure is more concentrated, there is less risk diversification by shareholders. If individuals are risk averse, a high concentrated structure represents a higher cost to shareholders in terms of excessive risk exposure.

We will show that the control and ownership structure for Brazil is quite similar to that of Continental European countries. In other words, there is a high concentration of equity capital ownership. As an example, France, Italy, Germany and other nations, in contrast to Anglo Saxon countries, are characterized by a strong concentration of ownership and control. In Italy, of the 500 largest non-financial companies, 95 percent have a single shareholder detaining more than 50 percent of the voting capital (Bianchi and Casavola, 1995), while in Germany this is the case for 57 percent of the companies taken from a sample of the 171 largest firms listed on stock exchanges (Franks and Mayer, 1998).

The question arises, then, of why capital is so concentrated. Considering
risk averse individuals, this concentration of capital implies incurring a cost due to additional risk. This will only occur if individuals expect extra returns for owning such a high portion of a company. This is to say, there must be some benefit to be obtained from holding such a large interest. The origin of this benefit is normally linked to less protection for minority shareholders in these countries. La Porta et al. (1998) show a strongly negative correlation between concentration of ownership (measured as the proportion of a company held by the three largest shareholders) and the quality of legal protection to investors in a given country. There are several possible explanations for this relationship.

As pointed out by La Porta et al. (1998), when the law does not protect investors, they need to demand that managers provide a sufficient return on their investments. Greater ownership concentration increases the benefits to shareholders from monitoring management, reducing the problem of free-riders (Shleifer and Vishny, (1986)). Thus, in jurisdictions where little protection is guaranteed by law, the benefits of monitoring would be greater, possibly exceeding the risk of owning a larger portion of the company, tending to favor a greater degree of ownership concentration. Brazilian law follows the French code law tradition and seems to offer less protection to investors, both with regard to written laws and their enforcement (La Porta et al. (1998)). Thus, as would be expected, our results indicate a high concentration of capital, particularly of voting capital.

A large portion of the literature studying these mechanisms has been concerned with explaining the problem that exists in large corporations where ownership is diffuse and controllers, those who have the “residual rights of control”, are the managers (Shleifer and Vishny, (1997)). When there is a stockholder that can influence the control of a company, a new agency problem can arise, this time between controlling shareholders and minority shareholders (and not between management and shareholders, as when ownership is more diffuse). When a shareholder’s stake is large enough to directly influence the fortunes of a company, he or she will also have an incentive to reduce the return to minority shareholders. So, there will be a different type of agency problem and the mechanisms that will guarantee efficiency here will be different from those in an environment with diffuse ownership. Then, it is important to know which structure you have, to know which mechanisms would enhance efficiency in this environment.
We will examine this issue by looking into direct and indirect ownership concentration of all Brazilian companies listed at the São Paulo Stock Exchange (Bovespa) for which we have data for. Besides a high concentration of voting capital, we will observe wide utilization of non-voting shares, implying a disparity from the one share – one vote rule. This is because even in situations with high capital concentration, there can be mechanisms permitting separation of control from ownership, as is the case of non-voting shares, or of subsidiaries with publicly traded stock. These mechanisms allow raising funds in the market without giving up control of the company because control is kept with less than 50 percent of the total capital. We will observe broad utilization of non-voting shares in Brazil, which can separate ownership and control. As a matter of fact, the Brazilian law allows the issuance of up to 2 non-voting shares for each voting share, making non-voting shares the most liquid in the secondary market while voting shares are held by controlling shareholders. This mechanism renders controlling the company with much less than 50 percent of total shares possible. One would actually need no more than 51 percent of one third of total shares to control a Brazilian company if the company’s proportion of voting to non-voting shares is the maximum permitted by the law.

As for the use of publicly listed subsidiaries, or the presence of pyramidal control structures, despite being quite common in Brazil, these do not appear to have the primary goal of separating ownership from control. We also show that the pyramidal structure can be used to ease ownership control on behalf of one group of major shareholders against another group of shareholders that also hold large stakes in the company. So, even if the shareholder is major, he or she can also be diluted by another major shareholder, and the ownership structure is used by one shareholder group to protect itself from other major shareholder groups. This hypothesis is different from the usual one in the literature that says that the pyramidal ownership is used to ease the control of a major shareholder against minority shareholders. This is important in the case of Brazil, since the ownership structure is very concentrated and block trades happen among groups of major shareholders.

We also analyze the participation of various investor groups (banks and insurance companies, other corporations, individuals, and foreigners, among others) in the ownership and control of companies. In this respect,
once more we will find Brazil to be closer to countries such as France and Germany, where other companies are the main direct shareholders, along with families and individuals. On the other hand, in the United States and the U.K., the large shareholders with more than 5 percent of the company capital are more likely to be individuals, pension funds, investment funds and insurance companies (Renneboog, 1996). To look into different types of controller or majority shareholders is very important because family control can be different from bank control – the way the manager of the company is chosen, for instance, can be different depending on the type of controlling shareholder, with consequences for the efficiency of the company.

This article proceeds as follows. In Section I we describe the sample under consideration. Section II contains an analysis of the direct shareholding composition of companies, along with the utilization of non-voting shares as a way of financing them. Indirect shareholding and the use of pyramidal structures are discussed in Section III. Section IV shows the participation of various groups of investors in the ownership of Brazilian companies, and Section V concludes.

I. DATA

The sample comes from companies listed on the São Paulo Stock Exchange (Bovespa) that are not controlled by the State. We collected information on the shareholding structure from the Brazilian Securities Commission (CVM). Publicly traded companies are required to issue an Annual Report by the end of the first semester of each year regarding the last fiscal year. This report must supply, among other data, information about the equity capital. We selected Annual Reports submitted in the first semester of 1997, with data referring to the 1996 year end (in Brazil the fiscal year runs concurrently with the calendar year). Among the listed companies, only 325 reports were available in complete form with 26 of those from companies in the financial industry (banks and insurance companies). These companies formed the sample considered here. Our sample corresponds to over 95 percent of the total market capitalization by year-end 1996.

We analyze two forms of shareholding composition: direct and indirect. Direct shareholders are those who own shares in the company itself. We
consider all shareholders with 5 percent or more of the voting capital. This is in Brazil. Indirect composition represents stockholders who ultimately own the company. For example, if a shareholder has 50 percent of a company that owns 50 percent of another company, the former has 25 percent of the capital of the latter company (50 percent times 50 percent). A situation such as this is found in Figure 1, that shows the shareholding composition of Lojas Americanas. Directly, the company has only one large shareholder (who holds 5 percent of the voting capital), the firm Varbra S.A.\(^1\) with 51.11 percent of the voting capital and 18.79 percent of the total capital. This company (Varbra S.A.), in turn, is held by three shareholders, with 50.05 percent, 11.08 percent and 11.08 percent of the voting capital and 34.54 percent, 12.63 percent and 12.63 percent of the total capital each. In other words, Lojas Americanas indirectly has three shareholders, with the major one having 25.6 percent (50.05 percent times 51.11 percent) of the voting capital and 6.45 percent (34.54 percent times 18.79 percent) of the total capital.

Another example of how indirect ownership can differ from direct ownership occurs when a shareholder owns 100 percent of two companies that are in turn shareholders of a third. Indirectly this shareholder owns the sum of the interests of these two companies. This situation can be seen in Figure 2, where we show the shareholding composition of Construções Comércio Camargo Corrêa S.A. Directly the company has three shareholders, but indirectly it has only one (with more than 5% of the voting capital), who owns 94.1 percent (27.11 percent + 96.76 percent x 18.24 percent + 96.76 x 99.99 percent x 51 percent) of the voting capital and 91.2 percent (14.53 percent + 97.67 percent x 51.88 percent + 97.6 x 99.99 percent x 27.33 percent)\(^2\) of the total capital. In this type of analysis it is important to understand who really owns and controls companies, especially where there are complex ownership structures, as is the case of Votorantim Celulose e Papel S.A., shown in Figure 3. Despite a complex ownership structure, the company is owned by four shareholders, with the voting capital divided equally among them.

\(^1\) An S.A. company is a corporation, either publicly traded or privately held.

\(^2\) This shareholder has 27.11 percent (14.53 percent) of the voting (total) capital directly, and 96.76 percent (96.76 percent) of the voting (total) capital of a second company that own 18.24 percent (51.88 percent) of the voting (total) of Construções Comércio Camargo Corrêa S.A. and 99.99 percent (99.99 percent) of the voting (total) capital of a third company that owns 51 percent (27.33 percent) of the voting (total) capital of Construções Comércio Camargo Corrêa S.A.
This analysis was possible because the Annual Reports also show the shareholding composition of parent companies when they exist. Thus, we analyzed the shareholding composition backwards until we were able to classify the true owners into one of the following groups: individuals, banks, insurance companies, pension funds, employees, foreigners (either individuals or entities), government, foundations, or investment funds. This will be important when we analyze the participation of each of these groups in the control and ownership of companies.

II. DIRECT SHAREHOLDING COMPOSITION

Of the 325 companies, 203 (62.5 percent) have a single shareholder holding more than 50 percent of the voting capital. The major shareholder has an average of 74 percent of the voting capital, very near the median of 73.5 percent. Among the companies where control is not held by only one shareholder (122), the major one owned an average of 32 percent of the voting capital, with a median of 29 percent. This shows that even when a single shareholder does not have the majority of the votes, the major shareholder holds a considerable portion of them. Considering the sample as a whole, the major shareholder, the three major, and the five major have, respectively, 58 percent, 78 percent and 82 percent of the voting capital, as can be seen in Table 1.

This shows a large degree of concentration of the voting capital. We can say that control is well-defined, which is to say that normally the shareholders (or more commonly the shareholder) controlling the company are easily identified. Even when there is no majority shareholder, the major one owns a significant portion of the voting capital, and the company is, on average, controlled by its three major shareholders. Besides this, 82 percent of the voting capital of companies is in the hands of the five major shareholders. This means that there is little dilution of the voting capital. The votes are concentrated in the hands of just a few individuals or entities. It should be mentioned that this virtually precludes any opportunity for the hostile takeovers of these firms.

3 We stopped when reaching banks/insurers because we also had the goal of analyzing the role of this group in the direct and indirect ownership and control of companies. Nevertheless, we made an analysis where the investigation of shareholding composition did not stop at banks/insurers. The results were not significantly different.
TABLE 1
DIRECT SHAREHOLDING COMPOSITION OF COMPANIES

Direct shareholding composition of 325 Brazilian companies. A company with a majority shareholder is one where a single shareholder has more than 50 percent of the voting capital. Date collected from Annual Reports filed with the CVM in the first half of 1997, referring to year-end 1996.

<table>
<thead>
<tr>
<th></th>
<th>Companies with a majority Shareholder (203)</th>
<th>Companies without a majority Shareholder (122)</th>
<th>Total sample (325)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Voting capital Total capital</td>
<td>Voting capital Total capital</td>
<td>Voting capital Total capital</td>
</tr>
<tr>
<td>Average of largest shareholder</td>
<td>74% (73%) 51% (50%)</td>
<td>32% (29%) 25% (18%)</td>
<td>58% (58%) 41% (36%)</td>
</tr>
<tr>
<td>Average of 3 largest shareholders</td>
<td>89% (93%) 63% (63%)</td>
<td>67% (65%) 49% (42%)</td>
<td>78% (82%) 58% (53%)</td>
</tr>
<tr>
<td>Average of 5 Largest shareholders</td>
<td>90% (94%) 64% (64%)</td>
<td>76% (73%) 56% (48%)</td>
<td>82% (87%) 61% (56%)</td>
</tr>
</tbody>
</table>

In comparison with the Anglo-Saxon model, we can cite Shleifer and Vishny (1986) and Demsetz and Lehn (1985) who state that the five largest shareholders own an average of 28 percent of the Fortune 500 companies, and 23 percent of these firms have no shareholder with more than 5 percent of the votes. In Brazil, the first average is 85 percent for voting capital (62 percent for total capital) and the second is zero. The Brazilian norm is closer to that of Continental Europe. Like Brazil, in both Germany and France more than half of the companies have a single majority shareholder (Renneboog, (1996); Franks and Mayer, (1998)).

Despite this great concentration of voting capital, one can note a reasonable difference between the percentage of voting and total capital held by major shareholders. In Brazil companies are permitted to issue shares without voting rights in an amount up to two-thirds of the total capital stock (Law 6404 – Law of Corporations). This allows companies to issue shares without relinquishing control and is therefore a way of separating ownership from control. Control of a company can be guaranteed with only one-sixth of its total capital. The issuance of non-voting shares is widely used by Brazilian companies. In this sample, only 35 firms (11 percent) do not have such shares. The average for utilization of non-
voting shares as a proportion of total shares is 54 percent, where the median is 50 percent. In other words, on average the equity capital composition is 54 percent of voting shares with 46 percent non-voting. Besides this, 88 companies (27 percent) are practically at the limit for issuing non-voting shares (having less than 34 percent of their company capital made up of voting shares). In this fashion, despite the strongly concentrated ownership of voting capital, the utilization of non-voting stock allows a certain degree of separation of ownership and control. This mechanism appears to be used, at first glance, by large shareholders to maintain control of the firm without having to hold 50 percent of the total capital. In companies with a single majority shareholder, this investor has on average 74 percent of the votes but only 51 percent of the total capital and 22 percent of the non-voting capital. Considering the entire sample, the five largest shareholders have 82 percent of the voting capital but only 61 percent of the total capital. If there is some diffusion in ownership of the firm, this occurs through non-voting shares. Thus, small shareholders normally do not have voting rights, and therefore lack the formal power to guarantee their rights from the company managers.

Nevertheless, although nearly 90 percent of firms issue non-voting shares, in most of these companies the controlling shareholder has more than 50 percent of the voting capital. In only 11 of the 203 companies with a single controlling shareholder does the major shareholder have just 50 percent of the voting capital, and of these 11, in only six is the fraction of total capital owned by the controlling shareholder near one-sixth, which is the maximum legal separation between ownership and control. So, control is usually guaranteed with more than the minimum necessary ownership. A discussion of the implications of these results for future research is left for the last section of this article.

III. INDIRECT SHAREHOLDER COMPOSITION

The first phenomenon to be emphasized is the diminished ownership position of major shareholders in the case of companies where the major shareholder holds more than 50 percent of the voting capital. For these companies we can say indirect ownership is more diluted. In direct form, the average majority shareholder owns 74 percent of the voting capital and 51 percent of the total, while indirectly the figures are, respectively, 51 percent and 35 percent. Nevertheless, this reduced participation of the
major stockholder does not occur in the case of companies where there is no single majority shareholder. On the contrary, the data actually show a small increase in the capital invested, as can be seen in Table 2.

TABLE 2
INDIRECT SHAREHOLDING COMPOSITION

Indirect shareholding composition of 325 Brazilian companies listed on the Bovespa with data on composition complete and available. The indirect composition shows the indirect interest of shareholders. Such participation was analyzed backwards until the effective shareholder was revealed to be from one of the following groups: legal entities (companies, corporations) other than financial, banks and/or insurance companies, pension funds, employees, foreigners (companies or individuals), government (federal or state), foundations, or investment funds. Participation calculation was performed by multiplying the levels of shareholding interest (in other words, if a shareholder has 60 percent of a company that has 40% of another, that shareholder has 40 percent \(\times\) 60 percent = 24 percent). A company with a majority shareholder is one where a single shareholder detains more than 50 percent of the votes directly. The data were collected from Annual Reports forwarded to the CVM in the first semester of 1997, referring to year-end 1996.

<table>
<thead>
<tr>
<th></th>
<th>Companies with a majority</th>
<th>Companies without a majority</th>
<th>Total sample (325)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Voting capital</td>
<td>Total Capital</td>
<td>Voting capital</td>
</tr>
<tr>
<td>Average for largest shareholder (median)</td>
<td>51%</td>
<td>35%</td>
<td>33%</td>
</tr>
<tr>
<td>Average for 3 largest shareholders (median)</td>
<td>72%</td>
<td>49%</td>
<td>61%</td>
</tr>
<tr>
<td>Average for 5 largest shareholders (median)</td>
<td>79%</td>
<td>54%</td>
<td>70%</td>
</tr>
</tbody>
</table>

This fact may indicate a certain utilization of pyramidal structures or publicly traded subsidiaries to maintain control with reduced overall investment in the company. Thus, if some given shareholder owns just over 50 percent of a company that in turn owns the same proportion of another firm, this shareholder can control that latter firm with only a 25 percent interest. If such a pyramidal structure occurs at several levels, the separation between ownership and control, and also the disparity from the one share - one vote rule, becomes even greater. This mechanism is widely employed in various countries, such as Germany (Franks and Mayer, 1998),
Belgium and Italy (Renneboog, 1996). To verify this, we analyze the companies with one controlling shareholder, comparing the direct and indirect interest.

In this form, we classify the 203 companies in which there was one controlling shareholder into five categories, as can be seen in Table 3. The first group refers to companies where control is not maintained indirectly. For these companies control is not maintained at some level of the pyramid, i.e., there is no shareholder with more than 50 percent of the voting capital at all levels of ownership. An example of this situation can be seen in Figure 4, showing the indirect shareholder composition of Inepar S.A. Indústria e Comércio. Although, at the first level, one company (Inepar Administração e Participações S.A.) has a controlling 56 percent stake, this latter firm has five shareholders with no single controller. In this case, we say there is no indirect control since, in the sequence, no shareholder has more than 50 percent of the voting capital. Eighty-three of the 203 initial companies with a direct controlling shareholder fall in this group (40.9 percent). This indicates that control is less defined than it appears if looking only at direct composition. There are fewer cases of a single indirect controlling shareholder.

In 83 companies (again, 40.9 percent) we observe a pyramid with maintenance of control - at all levels there is a shareholder with more than 50 percent of the voting capital, with control thus exercised by a single shareholder. We divide these companies into three groups: those with concentration of capital, i.e., indirectly the largest shareholder has a greater interest than it does directly; those where participation is maintained; and those where the participation in the total capital is reduced. There are 21 firms in the first group (10.3 percent). An example of how this can occur is shown in Figure 2 for Construções Comércio Comargo Corrêa S.A. While there are three direct shareholders, with one controller holding 51 percent of the voting stock and 27 percent of the total, indirectly there is only one large shareholder, which has 94 percent and 91 percent of the voting and total capital, respectively. This occurs because this shareholder, besides being a direct owner, also detains nearly all of the capital of the companies that are the remaining shareholders.

In the second group, where the level of control and participation is maintained, there are 18 firms (8.9 percent). An example can be seen in Figure 5, showing Dana Albarus S.A. Indústria e Comércio. The indirect controller, Dana Corporation, owns 100 percent of the capital of the di-
rectly controlling shareholder, Dana Equipamentos Ltda. Thus, it controls the company with the same proportion of the capital.

The next group contains companies with a controlling shareholder that indirectly has a lesser interest than directly. There are 44 firms in this group (22.7 percent). An example is shown in Figure 1, Lojas Americanas. In this case, control is maintained with 26 percent of the voting capital and only 6.5 percent of the total. The pyramidal structure allows the controlling shareholder to leverage his or her position. The minimum to maintain control of a company without resorting to a pyramid is 16.7 percent of the total capital (by holding just over 50 percent of the voting capital when this represents the lower legal limit of one-third of the total capital). Thus, this group may represent companies where a pyramidal structure is used to separate ownership and control, or to maintain distance from the one-share - one vote rule.

The last group contains companies with the same ownership structure. These are companies that do not use a pyramidal control structure. There are 37 companies in this group (18.2 percent).

The data in Table 3 appear to indicate pyramid structures as a mechanism to maintain control of companies at a lower cost is not very common. On the contrary, we see that the control of companies is less defined, i.e., there seems to be more competition for control than would appear at first glance. This competition is within the controlling group.

Of the 166 companies where a pyramidal structure exists and where the direct and indirect interest is different, only 44 (26.5 percent) have a shareholder that maintains control with a reduction in the percentage of capital invested. On average, while the majority shareholder ensures control with 52 percent of the company capital, indirectly it does this with 33 percent. Eighty-three firms (50 percent) do not have more than one controlling shareholder.

To strengthen the contention that the utilization of a pyramidal structure does not appear to be an effort to avoid the one share - one vote rule, we analyze the data from a different perspective. In the 166 companies with a pyramidal ownership structure (we eliminated the 37 firms where the same shareholder has the same capital invested directly and indirectly), we make the following calculations. First we compute the number of levels in the pyramid where control is maintained. For example, the company shown in Figure 1 has two levels (where level 1 corresponds to the

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4 A Ltda. is a Limited Liability Company.
direct participation). From that point on, we measure the utilization of a pyramid to reduce the percentage of capital invested by dividing the direct interest of the controlling shareholder in the capital by his or her indirect participation. We then carry out the same calculation for the voting capital. Any time this result is greater than what was obtained at the first level, there is maintenance of control with reduction of capital invested.

**TABLE 3**

*INDIRECT PARTICIPATION OF CONTROLLING SHAREHOLDERS*

We separate the companies that have only one majority shareholder (with more than 50% of the voting capital) and analyze their indirect participation. To do this, we divide the companies into five groups: (i) shareholder does not maintain control indirectly; (ii) shareholder maintains control and increases its interest in the company capital; (iii) shareholder maintains the same interest; (iv) shareholder maintains control while reducing his or her participation in the total capital; and (v) there is no change in the shareholder nor in the level of indirect and direct interest. Indirect interest is calculated as follows: when a shareholder has, for example, 40% of a company that owns 60 percent of another, he or she has indirectly 24 percent of the latter company. The data refer to year-end 1996 as published in Annual Reports submitted to the CVM.

<table>
<thead>
<tr>
<th>Do not maintain control (83)</th>
<th>Direct participation of majority shareholder</th>
<th>Indirect participation of majority shareholder</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Voting capital</td>
<td>Total capital</td>
</tr>
<tr>
<td>Concentration (21)</td>
<td>68%</td>
<td>49%</td>
</tr>
<tr>
<td>Maintenance (18)</td>
<td>78%</td>
<td>54%</td>
</tr>
<tr>
<td>Diversification (44)</td>
<td>77%</td>
<td>52%</td>
</tr>
<tr>
<td>Average</td>
<td>74.8%</td>
<td>50%</td>
</tr>
<tr>
<td>Average of four groups</td>
<td>72%</td>
<td>55%</td>
</tr>
</tbody>
</table>

The advantage of this type of analysis is that it considers the fact that even in cases where there is no maintenance of control indirectly (in the 83 companies where there is diversification), the pyramidal structure might be being used as a way to keep control of the company with a lower participation in its capital. This would be the case of utilizing pyramids by other companies. This can be observed in the case of Construtora Norberto Odebrecht S.A., whose shareholding structure is shown in Figure 6. In this case, the firm Kieppe Patrimonial Ltda. is the controlling shareholder at the third level of the pyramid (and the final level where
OWNERSHIP STRUCTURE OF DANA ALBARUS
INDÚSTRIA E COMÉRCIO

Dana-Albarus SA
Indústria e Comércio

79.33%

Dana Equipamentos
Ltda

100.00%

Dana Corporation
FIGURE 6

OWNERSHIP STRUCTURE OF CONSTRUTORA NORBERTO ODEBRECHT SA

OWNERSHIP AND CONTROL STRUCTURE OF BRAZILIAN COMPANIES
control of the company is maintained by only one shareholder). In other words, this pyramid has three floors. While the controlling stockholder owns 99.72 percent of the total capital, indirectly he or she holds 27.74 percent of the total capital. Thus, the total direct capital/total indirect capital ratio is 3.59. For voting capital, this figure is 1.87. The calculations were performed for each one of the four groups the 166 companies have been divided into, and can be seen in Table 4.

**TABLE 4**

**USE OF PYRAMIDS WITH MAINTENANCE OF CONTROL**

For the 166 companies where there is a direct majority shareholder and this is not the same as the indirect shareholder, the following calculations were done: the controlling shareholder was considered the last shareholder in the ownership structure of the firm that detains (directly or indirectly) the control, i.e., until there is a sequence of shareholders that each have more than 50 percent of the voting capital of the company. From that point, we calculate the level where this shareholder is on the pyramid (where 1 corresponds to direct shareholding composition), and the ratio of the direct/indirect capital for both voting and total capital. Indirect participation is found as follows: when a shareholder has, say, 40 percent of a company that owns 60 percent of another, it indirectly has 24 percent of the latter company. These results are calculated for the first four of the groups presented in Table 3.

<table>
<thead>
<tr>
<th>Number of levels</th>
<th>Direct/indirect voting capital</th>
<th>Direct/indirect total capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not maintain control (83 - 50%)</td>
<td>1.48</td>
<td>1.07</td>
</tr>
<tr>
<td>Maintains Control (83 – 50%)</td>
<td>2.06</td>
<td>1</td>
</tr>
<tr>
<td>(18 – 10.8%) Maintenance Concentration (21 – 12.6%) Diversification (44 – 26.5%)</td>
<td>2</td>
<td>0.88</td>
</tr>
<tr>
<td>(44 – 26.5%)</td>
<td>2.59</td>
<td>1.42</td>
</tr>
<tr>
<td>Average</td>
<td>1.9</td>
<td>1.13</td>
</tr>
<tr>
<td>Median</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

We can reaffirm the low utilization of pyramidal structures to reduce the relative cost of controlling a company. Not only is there a low number of levels, but also a small direct/indirect total capital ratio (1.38 on average). In the case of a company that has 50 percent of a second company that has 50 percent of a third, this ratio would be 2. Renneboog (1996), analyzing all firms listed on the Brussels Stock Exchange, found an average of 2.2 levels and a direct/indirect capital ratio of 2.9.\(^5\) With

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\(^5\) Besides considering the uninterrupted chains of shareholders detaining over 50% of the voting capital of the company, he also considers the chains where each at each level the shareholder has 25% or more of the total company capital while no other shareholder ever has more than 25% of the total capital.
an average number of levels a bit higher than in Brazil, there was a greater reduction in the percentage of capital invested in the firm. Besides this, in Brazil, in 102 of the 166 companies (61.4 percent), the direct/indirect capital invested ratio is not above 1, meaning there is no reduction of capital invested.

The existence of pyramidal ownership structures is common in Continental European countries, such as France, Germany and Italy. Normally the principal objective is attributed to the desire to keep control with a lower portion of the overall capital. This, however, does not appear to be the case in Brazil. Even with a large amount of inter-company ownership, or of groups of companies where more than one is publicly listed, there is not a great disparity from the one share - one vote rule created by this mechanism. One of the possible explanations is the widespread use of non-voting shares as a way to separate ownership from control. Another explanation might be the need of controllers to maintain a large participation in the capital invested in the company. As discussed previously, in markets with weak protection for small investors, it can become necessary for the controlling shareholder to maintain a large interest in the company.

However, it would be interesting to be able to point out the main reasons for the existence of pyramids, or of such complex control structures as the one found for Votorantim Celulose e Papel S.A. in Figure 3.

One of the reasons for pyramidal structures appears to be to keep control of a firm within the same family. An example of this situation is shown in Figure 7, representing the structure of Freios Varga S.A. If Varga Participações S.A. did not exist and each shareholder had a direct stake in Freios Varga S.A., decisions could be taken without the majority of the Varga family votes (for example, if Estevan Varga joined with Lucas Industries, both together would have 53.6 percent of the votes). Nevertheless, with the structure represented in Figure 7, the company Varga Participações S.A. has the majority of votes in Freios Varga S.A. In this fashion, any decision needs the majority of the family’s votes. In the same form, some companies operate as coalitions among shareholders.

This is a very interesting point. Here the indirect ownership structure is used to ease the control of one group of major shareholders against another group of shareholders that are major as well. So, even if the shareholder is major, he or she can also be diluted by another major shareholder, and
the ownership structure is used by one major shareholder to be protected from other groups of likewise major shareholders. This hypothesis is different from the usual one in the literature that says that the pyramidal ownership is used to ease the control of a major shareholder against minority shareholders. And this is important in the case of Brazil, since the ownership structure is very concentrated and block trades happen among groups of major shareholders.

IV. THE IMPORTANCE OF DIFFERENT TYPES OF INVESTORS

Another important question to address is the importance of various kinds of shareholders, such as banks, and other firms or individuals as company shareholders. To do this, we group shareholders into eight groups: individuals, private non-financial companies, banks and insurance companies, pension funds, government, foreigners (company, bank or individual), and foundations. All shareholders with over 5 percent of the voting capital are considered and we calculate the average for each group. Thus, as can be seen in Table 5, other companies (with 53 percent of the voting capital) are most likely to have direct holdings, followed by individuals (15 percent) and foreigners (8 percent). This greater participation of companies and smaller of institutional investors, places Brazil once again closer to countries such as Germany and France than to the United States and the U.K.

When we consider indirect participation, the main group is individuals with 51 percent. Another important category with a large increase in indirect participation against direct is foreigners. These are groups that participate in the voting capital of companies via other firms.

Regarding government participation, it must be pointed out that we are only considering non-state owned companies here, so we ignore government participation in the Brazilian economy. In any event, today the government is not usually a minority shareholder in Brazilian corporations.
The table shows the participation of eight categories in the ownership of non-state-owned Brazilian companies. The data refer to year-end 1996 and were collected from the CVM. Considering all shareholders with more than 5 percent of the voting capital of a company, the average that each category possesses was calculated, both for direct and indirect interest.

<table>
<thead>
<tr>
<th>Category</th>
<th>Direct composition</th>
<th>Indirect composition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Voting capital</td>
<td>Total capital</td>
</tr>
<tr>
<td>Individuals</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>Non-state-owned non-financial companies</td>
<td>53%</td>
<td>35%</td>
</tr>
<tr>
<td>Banks and insurance companies</td>
<td>3.8%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Pension funds</td>
<td>3.1%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Government</td>
<td>0.5%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Foreigners</td>
<td>8%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Employees</td>
<td>0.43%</td>
<td>0.19%</td>
</tr>
<tr>
<td>Foundations</td>
<td>1.23%</td>
<td>0.87%</td>
</tr>
<tr>
<td>Others4</td>
<td>0.58%</td>
<td>0.64%</td>
</tr>
<tr>
<td>Total</td>
<td>85.5%</td>
<td>61.7%</td>
</tr>
</tbody>
</table>

Finally, we analyze group membership of major shareholders (more than 50 percent of the voting capital). The data presented in Table 6 indicate, once again, that individuals control companies mainly indirectly. However, in the form we calculate indirect composition, we cannot have companies as indirect controllers. If we considered the last shareholder with more than 50 percent of the voting capital at each level as being the indirect controller, we would also have to consider the 80 firms where control is maintained. Of these, in 28 cases other companies maintain control indirectly (in these 28, there is a company at the second level or above that detains control). In other words, the participation of individuals and foreigners is greater as indirect controllers.
The table shows the category of the controlling shareholder. Direct controlling shareholders hold over 50 percent of the voting capital of the company directly. Indirect controlling shareholders maintain control when at the end of the chain he or she has more than 50 percent of the voting capital. The data on shareholder composition refer to December 1996 and were collected from the CVM.

<table>
<thead>
<tr>
<th>Category</th>
<th>Direct controller</th>
<th>Indirect controller</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals</td>
<td>13</td>
<td>70</td>
</tr>
<tr>
<td>Non-financial companies</td>
<td>162</td>
<td>-</td>
</tr>
<tr>
<td>Banks and insurance companies</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Foreigners</td>
<td>15</td>
<td>31</td>
</tr>
<tr>
<td>Employees</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Foundations</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>203</td>
<td>120</td>
</tr>
</tbody>
</table>

V. CONCLUSION, DISCUSSION AND DIRECTIONS FOR FUTURE RESEARCH

There is a great concentration of capital, mainly of voting capital, in Brazil. The widespread issuance of non-voting shares allows a certain distance from the one share - one vote rule. Despite the frequent presence of pyramidal ownership structures, their main objective does not appear to be to maintain control at a lower cost. The participation of other companies as shareholders is common and they are most often present in the direct control coalition of firms. Indirectly, individuals, followed by foreigners are most common. We also have shown that these two groups are the main indirect controllers of companies.

As a consequence of the concentration of ownership and control, the most relevant agency problem is between majority and minority shareholders. So it is important to study which rules allow a better monitoring of majority shareholders by minority shareholders. One way to do this is to force the company to disclose more information to the market. The quantity and quality of information that Brazilian public companies provide to the market is much less than in the USA, for example. This is one of the measures that could make the stock market more attractive to minority shareholders.
The second point to consider is related to the market for control. As we have already mentioned, it is important that the company is managed by the best management. In a market with concentrated ownership, we do not have mechanisms like “hostile takeovers” in order to increase the efficiency of the company. Here, control usually changes hands only with block trades. So the rules that regulate block trades should enhance the efficiency of the trades. Considering control dynamics, it is important to understand the change of management inside a family, considering the importance of family groups in the control of companies in Brazil.

A third point to consider is the study of the use of no voting shares and its impact on the development of the stock market. Its use is widespread by Brazilian companies, contrasting with what happens in many other countries. Since there are arguments on both sides, it is important to understand well the impact of this kind of equity capital on the efficiency of corporate management and on the development of the stock market.

At last we want to comment on the need to increase protection to minority shareholders as a whole. In Brazil, the lack of protection creates a high value of control with a high concentration of ownership. One of the possible consequences of this situation is a less developed stock market. The market value of domestic companies listed in Stock Exchanges relative to the GDP is 20.5 percent, compared with 166 percent in the US and 189 percent in the UK\(^6\). Other countries that also have less protection to minority shareholders, like France and Italy, also seem to have a less developed market. The same ratio for these two countries are equal to 62 percent and 48 percent, respectively. Besides that, since the beginning of the nineties we see a decrease in the number of domestic companies listed in Brazil.

However, as pointed out by Bergstrom and Rydqvist (1990), the relationship that often exists between low investor protection causing a greater concentration of capital is related to total capital and not just to voting capital. According to Jensen and Meckling (1976), minimization of the agency problem between controllers and small shareholders only occurs when the former have a large portion of the company capital because any move that would tend to reduce the market value of the firm would also harm the interests of the majority shareholder. Leland and Pyle (1977)

\(^6\) These data are from CVM (Brazilian Securities Commission) and are for 1998.
show that the controller should have a large share of the firm’s capital to signal to the market that the company is lucrative, even in a situation where only the controller has full information on such profitability. Because, in maintaining a large portion of the capital, the controller is incurring an excess risk cost, he or she is at the same time signaling to the market that the firm is profitable and that the expected return for maintaining ownership of the capital exceeds its cost.

Gomes (1997) emphasizes that the possible need to return to the capital market to raise more funds will cause the controlling shareholder to act in harmony with the interests of small investors, extracting little benefit from its sole control in order to maintain a good reputation with the market. Nevertheless, to return to the market repeatedly without losing control of the company, the controlling shareholder will have to keep more than 50 percent of the voting capital. If able to issue non-voting shares, the controller will still need only 50 percent of the voting shares unless the company is at the limit of issuance of non-voting stock. Thus, the ability to issue non-voting shares makes it easier to go back to the market for further capitalization without losing control of the firm, increasing the importance of the reputation effect even more. According to this argument, the possibility of subscribing non-voting shares can be beneficial for the development of the capital market in a scenario of little legal protection for small investors. This argument, however, seems to be inconsistent with Leland and Pyle’s (1977) argument that the fraction of the wealth invested by the entrepreneur signals the convergence of interests between major and minority shareholders.

The issuance of non-voting shares, then, allows maintenance of control with a lower participation in the firm’s capital, and this can lead to a separation of ownership from control, in turn creating more potential incentive for harming the interests of small investors. Nevertheless, despite the wide use of these shares by Brazilian companies, it remains to be seen if this in practice leads to a lesser utilization of the total capital or to greater expropriation from small investors, or if, as posited by Gomes, it has had a positive effect on the development of the Brazilian capital market.

A better analysis of this aspect is extremely relevant for the study of the Brazilian capital market, given the possibility of issuing non-voting shares and the frequent use of this type of stock in Brazil. Knowing if this has a net positive or negative effect on the capital market is very
important. One way to resolve the divergence between Gomes’ positive view and the negative opinion of other authors would be to measure the degree to which the controlling shareholders return to the stock market via new stock issues, as this is exactly the basis of his argument. If this does not occur regularly in practice, we could conclude that the controller is not interested in maintaining a low extraction of private benefits with the objective of returning to the capital market. Another issue is to verify if value is destroyed as control gets more concentrated as in Leal et al. (2000). This would be, then, an important subject for future study.\footnote{We gratefully acknowledge the comments of Márcio Garcia regarding this point.}

REFERENCES


