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ARTICLE

Ownership concentration of equity shares with and without voting rights: Does it influence CSR voluntary disclosure?

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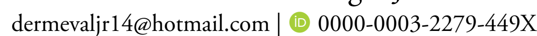
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ABSTRACT

The aim of this study is to examine the relationship between ownership and control concentration and voluntary disclosure of corporate social responsibility (CSR) reports. Our sample was comprised of 207 listed firms with data among the period between 2012 and 2019. We collected firm's financial data and CSR reports, which were analyzed through logistic regression models. The main results suggest that the higher the concentration of equity shares with voting rights in the hands of the largest shareholder, or even the aggregate shares of the three largest ones, the less likely the firm is to voluntarily disclose CSR reports. This research demonstrates the relevance of legitimacy theory to explain aspects concerning capital markets and corporate reports disclosure. It also indicates a possible principal-principal conflict, in which the largest shareholders are not inclined to disclose CSR reports that could bring informational benefits to minority shareholders. Finally, this study highlights the need to protect minority shareholders in respect to their demands for voluntary CSR information.

KEYWORDS

Ownership Concentration, Voting Rights, CSR Disclosure.

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CONCENTRAÇÃO DE PROPRIEDADE EM AÇÕES COM E SEM DIREITO A VOTO: HÁ INFLUÊNCIA NA DIVULGAÇÃO VOLUNTÁRIA DE RSC?

RESUMO

O objetivo deste estudo é examinar a relação entre a concentração de propriedade e controle e a divulgação voluntária de relatórios de responsabilidade social corporativa (RSC). A amostra foi composta por 207 empresas listadas em bolsa com dados no período de 2012 a 2019. Foram coletados dados financeiros das empresas e seus relatórios de RSC, os quais foram analisados por meio de modelos de regressão logística. Os principais resultados sugerem que quanto maior a concentração de ações com direito a voto nas mãos do maior acionista, ou mesmo as ações agregadas dos três maiores acionistas, menos provável é que a empresa divulgue voluntariamente relatórios de RSC. Esta pesquisa demonstra a relevância da teoria da legitimidade para explicar aspectos relativos ao mercado de capitais e à divulgação de relatórios corporativos. Também indica um possível conflito do tipo principal-principal, no qual os maiores acionistas não estão dispostos a divulgar relatórios de RSC que possam trazer benefícios informacionais aos acionistas minoritários. Por fim, este estudo destaca a necessidade de proteger os acionistas minoritários com relação às suas demandas por informações voluntárias de RSC.

PALAVRAS-CHAVE

Concentração de propriedade, Direito a voto, Divulgação de RSC

1. INTRODUCTION

The aim of this study is to examine the relationship between ownership and control concentration and discretionary disclosure of corporate social responsibility (CSR) reports. When addressing CSR disclosure, most previous studies are concerned with its effects on firms' performance, such as cost of equity (Dhaliwal et al., 2014), market value (Nekhili et al., 2017), profitability (Chen et al., 2018) and cost of debt (Houqe et al., 2020). Recently, researches have started to incorporate discussions based on the drivers of CSR practices, including elements of firms' structure. For example, Lopatta et al. (2020) observed that the presence of labor representatives and gender diversity on directors and supervisory boards is significantly associated with CSR performance; Chan et al. (2020) found better corporate governance auditing mechanisms in firms engaged in CSR disclosure; and Al Fadli et al. (2020) documented high levels of CSR reporting for firms with independent board of directors. Here, we attempt to incrementally contribute to this latter stream of CSR literature by providing related evidence regarding firms' ownership concentration with focus on property and control rights of largest shareholders.

Our assumption for a relationship between ownership and control concentration and CSR reporting is based on legitimacy theory. According to legitimacy theory, the system of norms, values, and beliefs, which is socially constructed, defines whether the organization's activities are considered appropriate or desirable by society (Suchman, 1995). In this sense, CSR disclosure works as an instrument that enables firms to show their commitment to society expectations and demands (Burlea & Popa, 2013). We argue that firms with high ownership and control concentration are less prone to voluntary disclose CSR information, because, as minority shareholders have

low influence and decision power, there is not sufficient incentives for the firm to legitimize its socially responsible activities towards them. This argument is in line with previous empirical findings, which indicated poor social performance in firms with high ownership concentration (Ducassy & Montandrau, 2015).

To test our hypotheses, we analyze a panel dataset from a sample of 207 publicly traded corporations during the period 2012 to 2019, which formed 1,155 firm-year observations. The data were analyzed through descriptive statistics and logistic regression models. Our main results suggest that the higher the concentration of equity shares with voting rights in the hands of the largest shareholder or even the percentage sum of the three largest ones, the less likely the firm is to voluntarily disclose CSR reports. In other words, we found a negative linear relationship between firm's control concentration and CSR disclosure, thus supporting the legitimacy theory approach for discretionary disclosure. The results were not robust for the ownership concentration of equity shares without voting rights.

Our study incrementally contributes to literature on two main fronts. First of all, by evidencing a negative relationship between control structure concentration and CSR disclosure, we provide a new potential determinant of CSR voluntary reporting, which was not contemplated in previous research about the subject. For example, Farook et al. (2011) indicated the level of social and political freedom, as well as the investment account deposits to total assets ratio, as determinants of CSR disclosure; Dyduch and Krasodomska (2017) found a firm's turnover, time listed on stock exchange, and foreign capital share associated with CSR disclosure; and Giannarakis (2014) documented significant effects of board size and CEO duality on CSR disclosure. Specifically, regarding ownership structure, the literature already explored some related determinants like board ownership (Qa'dan & Suwaidan, 2019), free floating rate (Kiliç, 2016), and state ownership (Li et al., 2013). Despite this, to the best of our knowledge, the effects of ownership and control concentration on CSR voluntary disclosure, focusing on property and control rights of largest shareholders, has not been reported to date in the Brazilian market.

Crisóstomo and Freire (2015) argue that ownership concentration, which is a special feature of the Brazilian capital market, has a relevant impact on CSR practices. The explanation for this is that the few shareholders who concentrate a firm's ownership usually have their names strongly linked to it, so CSR policies function as an instrument that improves company's image and reputation. Although Crisóstomo and Freire (2015) empirically evidenced a significant relationship between ownership concentration and CSR practices, they pointed out some possible suggestions for future studies, as a way to advance in the knowledge we have about the subject. For example, one of their recommendations refers to the inclusion of some characteristics associated to large shareholders when addressing the relationship between ownership concentration and CSR, such as family or government ownership. In this sense, this research advances by incorporating the voting rights carried by the largest shareholders in the analysis of the effects of ownership concentration on CSR voluntary disclosure.

This study also contributes by addressing an institutional arrangement that is traditionally little explored in the scope of information disclosure, which is the conflict between controlling and minority shareholders. According to Martínez-Ferrero et al. (2015) voluntary disclosure arises from agency problems and information asymmetry. Although principal-agent problems (Jensen & Meckling, 1976) constitute the mainstream approach on corporate interest conflicts and, because of that, it is widely considered by disclosure research, other perspectives are likewise relevant, such as principal-principal problems. Principal-principal problems refer to the conflicts between controlling and minority shareholders, and arise from, among other aspects, concentrated

ownership, thus characterizing a major concern on emerging economies (Young et al., 2008). Here, we shed light to principal-principal conflicts and their effects on voluntary disclosure as we address the ownership and control rights of largest shareholders and its relationship with CSR reporting practices.

2. LITERATURE REVIEW

There is a discussion about whether the decision to disclose socially responsible information constitutes a genuine commitment of a firm with those activities or if it is just a mechanism that aims to improve company image towards its stakeholders, especially shareholders. Michelon et al. (2015) argue that CSR disclosure is much more a symbolic act, which aims to influence stakeholders' perceptions about the firm, than something substantive, focused on the alignment between corporate and society interests. This is because Michelon et al. (2015) observed that CSR disclosure is not associated with information quality improvements, i.e., it does not imply in effective firm communication about its commitment to social and environmental problems. Thus, the understanding is that CSR disclosure occurs as way of legitimizing corporate activities towards its public of interest.

The legitimacy theory presupposes that the activities of a firm take place in obedience to a social contract, through which socially desired standards are implicitly established and must be fulfilled to corporate objectives became accepted (Guthrie & Parker, 1989). Guthrie and Parker (1989) also state that firm is compelled to disclose socially relevant information so society can assess its suitability to community interests. According to Bebbington et al. (2008), the firm will suffer sanctions, which may even result in its extinction, if the social contract signed with society gets broken, due to the incompatibility between social expectations and organizational activities. It is understood, therefore, that legitimacy theory explains the voluntary disclosure of CSR reports in the sense that CSR disclosure would alleviate some concerns and demands of the community in which the firm is inserted, regarding possible existent divergences between corporate activities and social expectations (Lanis & Richardson, 2013).

Patten (2020) discusses the application of legitimacy theory to explain CSR disclosure, also, recent literature presents empirical evidence in this regard. For example, Islam et al. (2020), from a legitimacy theory perspective, conducted interviews with managers and collected financial data and CSR disclosure indexes to verify whether financial institutions managers use CSR reports as a strategy to legitimize the firm's activities. Their results supported legitimacy theory in three main ways. First, firms studied who had lower proximity to their public were those that disclosed more CSR information. Second, younger firms, which were therefore not very close to the public, also published more CSR reports as a way to legitimize their operations. And, finally, firms disclosed more CSR information in response to the informational demands of their stakeholders, especially regulators.

From legitimacy theory perspective, we argue that ownership and control concentration of a firm has an influence on its decision to disclose CSR information. The reason is because, when an ownership and control structure is concentrated in a few large shareholders, managers must report to a reduced number of owners and, as consequence, the social pressure to legitimize its operational activities would be lower than if the ownership was dispersed among a huge number of shareholders. In the situation, there would not be sufficient incentives for the voluntary disclosure of CSR information, since CSR disclosure is considered a symbolic mechanism, whose focus is on improving the company's institutional image, and not a substantive one which aims to improve the firm's information environment (Michelon et al., 2015).

Prior research supports our arguments. Ducassy and Montandrau (2015) state that when there is a concentration of ownership, the main shareholder is not interested in spending on social activities, since the pressure to legitimize firm's operations is low. On the other hand, when ownership is dispersed among several shareholders, there is greater commitment of top management in adopting socioenvironmental practices, especially as a way of minimizing conflicts between minority and majority shareholders. Ducassy and Montandrau (2015) also argue that, in cases of concentrated ownership, shareholders are not willing to accept investments on activities not directly focused on the return on invested capital, even if they bring some positive social benefit to the firm. Hence, as large shareholders usually have the power to influence management, it is plausible to expect a negative relationship between the concentration of ownership and the social performance of the firm.

Khediri (2021) presents arguments in the sense that the problems with investments on CSR activities, debated by Ducassy and Montandrau (2015) when addressing companies with ownership concentration, could be minimized by mechanisms for minority shareholders protection. Khediri (2021) quotes that minority shareholders protection prevents insiders from spending resources on for their own private benefits. In this sense, Khediri (2021) demonstrated that the protection of minority shareholders has a positive moderating effect on the relationship between investment efficiency and CSR performance, thus reinforcing the discussions by Ducassy and Montandrau (2015).

Smith et al. (2021) state that it is recognized in the literature that minority shareholders' rights are compromised in firms with a strong controlling shareholder. Therefore, Smith et al. (2021) argue that minority shareholders from firms with high ownership concentration exercise less power in CSR disclosure practices. Additionally, Smith et al. (2021) demonstrated that concentrated ownership companies are perceived as less motivated to satisfy shareholder demands, which could have some implication in reporting practices. Since majority shareholders have a greater influence over firms' decisions, their needs are usually better addressed when compared to those of minority shareholders, resulting in a shareholders' conflict called principal-principal problem (Young et al., 2008).

From the literature review, it seems some mechanisms may justify a negative effect of ownership concentration on CSR disclosure. The first one is based on the lower pressure faced by firms with ownership concentration to perform voluntary CSR activities (Ducassy & Montandrau, 2015). The second mechanism concerns the weak protection of minority shareholders, which means they have insufficient power to stimulate CSR practices (Khediri, 2021). Finally, the significant difference in information access and processment between majority and minority shareholders lead to principal-principal conflicts, with reflection on CSR information demands (Smith et al., 2021). All those mechanisms led us to propose the following hypothesis:

- **H_1:** there is a negative relationship between control structure concentration and disclosure of CSR reports.

It is worth mentioning that, in Brazil, there are two different kinds of firm's shares traded on market: common and preferred stocks. Common stocks are shares of a firm's equity, which give voting rights to their holder. On the other hand, preferred stocks usually do not carry voting rights, but assure to shareholders the preference over company's assets, in case of liquidation, and cash flows distribution. Therefore, preferred shareholders have ownership, because they hold a share of a company's equity, but don't have the control, since they can't decide on corporate assemblies due to their lack of voting rights. Because of this, we also propose a hypothesis including ownership referring to all equity shares from a firm regardless of their voting rights, i.e., comprising the concentration structure of common and preferred stocks, which is:

- **H_2:** there is a negative relationship between property structure concentration and disclosure of CSR reports.

3. METHODOLOGY

3.1. Sample selection and data

According to Ducassy and Montandrau (2015) the influence of ownership structure and corporate governance practices on CSR policies is not yet clear and research results are conflicting, with the vast majority of these studies being developed in the U.S. market. In view of this, we think that the difficulty of identifying the effects of ownership structure on aspects related to CSR may be precisely in the choice of developed markets as an object of study, since such markets are characterized by dispersed firm ownership. For example, Barnea and Rubin (2010) observed that spending on CSR activities creates conflicts between different types of shareholders. However, their results were statistically significant only for insider ownership, and even so, they were weak regarding control structures. Barnea and Rubin (2010) explain that this occurs due to the low control structure concentration of insider shareholders in U.S. market (average of 2.99% in their sample), which prevents them from having a significant impact on CSR decisions.

Therefore, to examine the relationship between ownership and control concentration and voluntary disclosure of CSR reports, our sample includes companies listed on Brazilian Stock Exchange, which is recognized as an emerging market characterized by high concentration of ownership and control structure. According to Pellicani and Kalatzis (2019), the high concentration of equity shares in the hands of a few shareholders is one of the main characteristics of Brazilian listed companies, since in 2008 a single shareholder concentrated on average 77% of firm control rights, while the sum of three largest ones' shares corresponded to more than 87%. In addition, Crisóstomo and de Freitas Brandão (2019) state that, despite the efforts in the last two decades to strengthen the Brazilian capital market, the number of companies without a single controlling shareholder has barely increased—hence, our choice to use the Brazilian market to investigate the relationship between ownership and control concentration and voluntary disclosure of CSR reports.

We collected financial data and information about disclosure of CSR reports from all companies listed on Brazilian Stock Exchange from 2012 to 2019. The financial data were collected from the Economatica database. Information about the publication of CSR reports was obtained from the Brazilian Stock Exchange, through the reports of the initiative "report or explain". The

“report or explain” is a voluntary initiative of the Brazilian Stock Exchange that consists of asking listed companies if CSR information has been published and, if so, in which reports, as well as an explanation for the non-publication, when applicable. The period from 2012 to 2019 was chosen due to data availability regarding “report or explain” initiative. Table 1 shows the sample composition of this study.

Table 1
Sample selection and firm-year observations

Panel A: Sample selection	
Brazilian listed firms available on database (775 firms x 8 years)	6,200 observations
Less	
Observations with missing value for any variable	(5,045) observations
Final sample	1,155 observations

Panel B: Sample observations by industry and year

Industry / Year	2012	2013	2014	2015	2016	2017	2018	2019	Total
Building	14	14	15	12	12	11	11	9	98
Chemical	1	1	1	2	2	2	3	3	15
Commerce	9	8	8	10	9	10	10	8	72
Electric power	24	20	22	22	26	24	24	25	187
Electronics	4	2	3	2	1	1	1	0	14
Farming and fishing	3	3	3	3	3	3	3	3	24
Finance and insurance	2	2	2	3	4	4	4	4	25
Food and beverage	10	10	11	10	9	8	6	7	71
Machine	4	4	4	4	4	4	4	4	32
Mining	1	0	0	0	0	0	0	0	1
Nonmetal mining	2	2	2	2	2	2	2	2	16
Oil and gas	3	5	4	3	2	3	5	5	30
Other	36	34	35	34	31	32	38	30	270
Pulp and paper	2	2	2	1	1	1	1	1	11
Software and data	1	1	1	1	1	1	1	0	7
Steel and metallurgical	13	13	13	11	12	13	13	13	101
Telecommunications	2	2	1	1	1	1	1	2	11
Textile	14	11	11	9	10	9	10	10	84
Transportation	6	5	7	8	8	8	8	8	58
Vehicles and parts	6	4	4	3	2	3	3	3	28
Total	157	143	149	141	140	140	148	137	1,155

Source: own elaboration.

As shown in Table 1, the database has records of 775 companies, with the 8 years of studied period would result in 6,200 firm-year observations. However, many of those companies had already ended their activities before 2012 and, as a result, did not have financial data available from that year. In addition, even for some still operating companies, the database indicated missing values for some variables and years. As a result, after excluding observations with missing values, our final sample comprised 207 different firms and 1,155 firm-year observations. Table 1 also shows the number of observations separated by industry and year. The observations were divided into 20 different industry categories, one of which refers to "Others" category, in which firms that did not fit into any of the 19 established sectors were classified.

3.2. Dependent variable

We employed disclosure of CSR reports (CSRD) as our dependent variable. The CSRD variable was measured by a dummy, with the value 1 for companies that released a CSR report and the value 0 otherwise. The use of dummy variables to measure CSR disclosure is extensively adopted and widely accepted in the literature. Ting (2021) used a dummy variable that received the value 1 for firms that disclosed CSR practices and 0 otherwise, in order to evaluate the relationship between firm size and disclosure of CSR reports. Similarly, Hu et al. (2018) employed a dichotomous variable to analyze the relationship between the type of ownership and the likelihood of CSR disclosure. Finally, Zhong and Gao (2017) also used a dummy for the disclosure of CSR to investigate the impact of CSR disclosure on investments efficiency at the firm level.

3.3. Independent variables

We included, as independent variables of interest, four measures to estimate the concentration of ownership and control structure, namely: CONT1, the percentage of equity shares with voting rights in the property of the largest shareholder; CONT3, the sum of the percentage of equity shares with voting rights held by the three largest shareholders; PROP1, the percentage of equity shares of all types (with or without voting rights) owned by the largest shareholder; and PROP3, the sum of the percentage of equity shares of all types (with or without voting rights) held by the three largest shareholders. The variables CONT1 and CONT3 address the concentration of control structure, as they only include equity shares that carry voting rights held by largest shareholders. In other turn, the variables PROP1 and PROP3 refer to the concentration of property structure, given they consider all types of equity shares owned by largest shareholders, regardless of the rights they confer. The data for the composition of all these variables were collected from Economatica database.

Prior studies have already employed measures based on the percentage of equity shares held by largest shareholders to estimate ownership concentration. Yasser and Al Mamun (2015) considered the percentages of equity shares owned by the largest shareholder, as well as of the two largest, three largest, five largest, and ten largest, to analyze the association between ownership concentration and firm performance. Similarly, Nguyen et al. (2015) measured ownership concentration through the average percentage of common equity shares held by shareholders who owned at least 5% of a firm's total common shares, in order to analyze the relationship between ownership concentration and financial performance. Finally, Akben-Selcuk (2019) used the percentage of equity shares held by largest shareholder to verify the moderating effect of ownership concentration on the relationship between corporate social responsibility and financial performance.

3.4. Control variables

We included, as control variables, the main factors that previous studies have already indicated to be related to CSR disclosure. Our first control variable was leverage (LEV), obtained from the ratio between liabilities and total assets (Habbash, 2016). Then, we considered market-to-book ratio (MTB), obtained from the ratio between market value and book value (Martínez-Ferrero et al., 2015). We also included growth opportunity (GROWTH), measured by sales increase rate from one year to another (Hu et al., 2020; Ting, 2021). Finally, we included return on assets (ROA), measured by net income divided by total assets (Gunardi et al., 2016). Table 2 shows the description of all variables of this study.

Table 2
Variable descriptions

Panel A: Dependent variable		
Notation	Measure	Source
CSRD	Dummy with value 1 for companies that released a CSR report and value 0 otherwise	Brazilian Stock Exchange
Panel B: Independent variables of interest		
Notation	Measure	Source
CONT1	Percentage of equity shares with voting rights held by the largest shareholder	Economatica
CONT3	Percentage of equity shares with voting rights held by the three largest shareholders	Economatica
PROP1	Percentage of equity shares of all types (with or without voting rights) held by the largest shareholder	Economatica
PROP3	Percentage of equity shares of all types (with or without voting rights) held by the three largest shareholders	Economatica
Panel C: Control variables		
Notation	Measure	Source
LEV	Leverage measured by the ratio between liabilities and total assets	Economatica
MTB	Market-to-book measured by the ratio between market value and book value	Economatica
GROWTH	Growth opportunity measured by sales increase rate from one year to another	Economatica
ROA	Return on assets measured by net income divided by total assets	Economatica
INDUSTRY	Vector of dummy variables for 20 industry categories	Economatica
YEAR	Vector of dummy variables for years from 2012 to 2019	Economatica

Source: own elaboration.

3.5. Analysis procedures

To examine the relationship between ownership and control concentration and voluntary disclosure of CSR reports, we employed logistic regression models with panel data. The econometric models are given by the following equations:

$$ln(CSRD_{i,t}=1)= \beta_0+\beta_1 CONT1_{i,t}+\beta_2 LEV_{i,t}+\beta_3 MTB_{i,t}+\beta_4 GROWTH_{i,t}+\beta_5 ROA_{i,t}+\sum_{j=1}^{20}\gamma_j * INDUSTRY_j+\sum_{t=2012}^{2019}\theta_t * YEAR_t+\varepsilon_{i,t} \quad (1)$$

$$ln(CSRD_{i,t}=1)= \beta_0+\beta_1 CONT3_{i,t}+\beta_2 LEV_{i,t}+\beta_3 MTB_{i,t}+\beta_4 GROWTH_{i,t}+\beta_5 ROA_{i,t}+\sum_{j=1}^{20}\gamma_j * INDUSTRY_j+\sum_{t=2012}^{2019}\theta_t * YEAR_t+\varepsilon_{i,t} \quad (2)$$

$$ln(CSRD_{i,t}=1)= \beta_0+\beta_1 PROP1_{i,t}+\beta_2 LEV_{i,t}+\beta_3 MTB_{i,t}+\beta_4 GROWTH_{i,t}+\beta_5 ROA_{i,t}+\sum_{j=1}^{20}\gamma_j * INDUSTRY_j+\sum_{t=2012}^{2019}\theta_t * YEAR_t+\varepsilon_{i,t} \quad (3)$$

$$ln(CSRD_{i,t}=1)= \beta_0+\beta_1 PROP3_{i,t}+\beta_2 LEV_{i,t}+\beta_3 MTB_{i,t}+\beta_4 GROWTH_{i,t}+\beta_5 ROA_{i,t}+\sum_{j=1}^{20}\gamma_j * INDUSTRY_j+\sum_{t=2012}^{2019}\theta_t * YEAR_t+\varepsilon_{i,t} \quad (4)$$

We estimated the models with robust standard errors to address econometric concerns such as heteroscedasticity and autocorrelation. To mitigate the effects of extreme outliers, we employed the winsorize procedure at the maximum level of 0.025. We also employed variance inflation factor test (VIF) to identify possible multicollinearity problems between our variables.

4. RESULTS

Table 3 presents the descriptive statistics for the following variables: disclosure of CSR reports (CRSD), control structure concentration (CONT1 and CONT3), property structure concentration (PROP1 and PROP3), leverage (LEV), market-to-book ratio (MTB), growth opportunity (GROWTH) and return on assets (ROA).

Table 3
Descriptive statistics

Variable	Obs.	Mean	S.D.	Min.	P_{10}	P_{25}	P_{50}	P_{75}	P_{90}	Max.
CSRD	1,155	0.390	0.488	0.000	0.000	0.000	0.000	1.000	1.000	1.000
CONT1	1,155	47.522	26.702	8.854	15.053	23.958	46.980	66.646	90.000	98.773
CONT3	1,155	66.070	23.489	19.874	32.526	48.723	67.907	89.006	97.843	99.922
PROP1	1,155	49.491	26.807	9.032	17.431	28.191	46.014	65.924	96.649	100.000
PROP3	1,155	67.827	22.481	20.737	36.573	52.961	68.078	86.812	99.678	100.000
LEV	1,155	0.703	0.474	0.110	0.298	0.471	0.617	0.778	1.005	2.639
MTB	1,155	2.025	2.481	-0.778	-0.003	0.541	1.250	2.529	5.020	11.325
GROWTH	1,155	0.004	0.260	-0.705	-0.295	-0.102	0.013	0.114	0.257	0.800
ROA	1,155	0.060	0.096	-0.199	-0.050	0.016	0.062	0.110	0.166	0.303

Notes: Obs.: observations; S.D.: standard deviation; Min.: minimum value; P_k: k percentile; Max.: maximum value. See Table 2 for variable descriptions.
Source: own elaboration.

The results of Table 3 show that, for the sample of 1,155 firm-year observations, only 39% of them refer to a disclosed CSR report. Therefore, despite the growth of CSR disclosure practices in last decades (Cho et al., 2015), our findings suggest that the publication of CSR reports is still modest for firms listed on Brazilian Stock Exchange. Evidently, as it is a kind of discretionary disclosure, it is natural that CSR reporting adoption is relatively low, especially in emerging markets. Bhatia and Makkar (2020) examined the extent of CSR disclosure practices of firms in developed and developing markets, their findings indicated higher scores of CSR reporting for the former (53,5%) when compared to the latter (49,4%). Our results are thus consistent with Bhatia and Makkar (2020) in this regard.

Concerning ownership concentration of sample firms, the results in Table 3 indicate that, on average, the largest shareholder holds 47.52% of equity shares with voting rights (CONT1). When considering the sum of the percentage of equity shares with voting rights owned by the three largest shareholders, the average rises to 66.07% (CONT3). The findings are similar for variables that estimate the percentage of ownership of all kinds of firm equity shares, i.e., with or without voting rights. The largest shareholder concentrates, on average, 49.49% equity shares ownership (PROP1), while the sum of the percentage of the three largest shareholders averaged 67.83% (PROP3). These findings suggest that Brazilian capital market is still very concentrated in terms of listed firms' ownership and control structure, which supports Pellicani and Kalatzis (2019) and Crisóstomo and de Freitas Brandão (2019) discussions about ownership concentration in Brazil.

As for the variables related to firm characteristics, we observe that sample firms have on average 70% of their resources obtained from a third party (LEV), which refers to the liabilities to total assets ratio. The market value of sample companies, on average, exceeds in twice their book value (MTB). Despite this, in general, sample firms have not shown a significant increase in their revenues from one year to another, since the mean rate of revenue growth (GROWTH) is only 0.004. Finally, the average return on assets (ROA) of sample firms is positive, with value of 6%.

To examine the effect of control structure concentration on discretionary disclosure of CSR reports (H1), we estimate two logistic regression models. Table 4 reports the results from Model 1 and Model 2.

The results presented in Table 4 demonstrate a negative and statistically significant relationship between control structure concentration and disclosure of CSR reports. This means that the higher the percentage of equity shares with voting rights held by the largest shareholder, or even the three largest ones, less likely the firm is to voluntarily disclose CSR reports. This evidence is consistent with the fundamentals of legitimacy theory and, thus, supports our first hypothesis (H1). It should also be noted in Table 4 that some variables for firm characteristics indicate a significant relationship with the disclosure of CSR reports. In both models, we document a negative association between leverage and CSR disclosure. This suggests that highly leveraged firms tend to not publish CSR reports. On the other hand, measures for return of assets and market-to-book ratio were positively related to the dependent variable, i.e., firms with better profitability and higher market-to-book ratio are more prone to disclose CSR reports.

In order to investigate the effect of ownership structure concentration on disclosure of CSR reports (H2), we estimate other two models (Model 3 and Model 4). Table 5 presents the results for Models 3 and 4.

Table 4
Effect of control structure concentration on disclosure of CSR reports

Variable	Model 1			Model 2		
CSRD	b	rse	sig.	b	rse	sig.
CONT1	-0.009	0.003	0.003			
CONT3				-0.010	0.004	0.007
LEV	-0.846	0.152	0.000	-0.859	0.151	0.000
MTB	0.081	0.033	0.014	0.079	0.033	0.016
GROWTH	-0.093	0.291	0.750	-0.091	0.291	0.756
ROA	2.336	0.872	0.007	2.250	0.863	0.009
constant	0.403	0.533	0.449	0.610	0.562	0.278
INDUSTRY		YES			YES	
YEAR		YES			YES	
R-squared		0.238			0.237	
Mean VIF		2.560			2.570	
Obs.		1,136			1,136	

Notes: b: coefficients; rse: robust standard errors; sig.: statistical significance; VIF: variation inflation factor; Obs.: observations. See Table 2 for variable descriptions.
Source: own elaboration.

Table 5
Effect of property structure concentration on disclosure of CSR reports

Variable	Model 3			Model 4		
CSRD	b	rse	sig.	b	rse	sig.
PROP1	7E-05	0.003	0.979			
PROP3				-0.004	0.003	0.285
LEV	-0.873	0.148	0.000	-0.902	0.151	0.000
MTB	0.086	0.032	0.008	0.085	0.032	0.009
GROWTH	-0.004	0.285	0.988	-0.022	0.285	0.938
ROA	2.218	0.856	0.010	2.278	0.860	0.008
constant	-0.051	0.501	0.919	0.146	0.521	0.779
INDUSTRY		YES			YES	
YEAR		YES			YES	
R-squared		0.232			0.233	
Mean VIF		2.590			2.370	
Obs.		1,136			1,136	

Notes: b: coefficients; rse: robust standard errors; sig.: statistical significance; VIF: variation inflation factor; Obs.: observations. See Table 2 for variable descriptions.
Source: own elaboration.

In view of Table 5, the findings for the relationship between ownership structure concentration and disclosure of CSR reports were not statistically significant, thus we do not corroborate our second hypothesis (H2). The results for firm characteristics were similar to those observed in Table 4, in which leverage is inversely related to CSR disclosure and market-to-book and return on assets maintain a positive relationship.

The results of this study demonstrate that the rights granted to shareholders from the ownership of firm's equity shares constitute a fundamental element in the evaluation of the relationship between ownership concentration and CSR disclosure, since our findings show that only the concentration of equity shares that carry voting rights seems to influence the voluntary disclosure of CSR reports. A possible explanation for this is that the large shareholders, when controlling the firm through ownership concentration of equity shares with voting rights, have the majority in company deliberations, e.g. managers selection, so they are able to strongly influence firm's policies, such as the decision to disclose or not a CSR report. On the other hand, the concentration of equity shares without voting rights (such as preferred shares), hypothetically, would restrict the influence of large shareholders on corporate decisions, since it doesn't imply necessary in a preponderance on company deliberations.

Our results are also in line with legitimacy theory. According to Burlea and Popa (2013), based on legitimacy theory approach, the CSR disclosure may be characterized as a mechanism employed by the firm to demonstrate its commitment to society's interests. Therefore, our findings suggest a possible conflict between controlling and minority shareholders (a principal-principal problem), rising from the control structure concentration, which culminates in non-disclosure of CSR reports voluntarily. Since minority shareholders have little influence and decision-making power in a situation of concentrated control structure, there are insufficient incentives for the firm to legitimize its CSR activities towards them. This corroborates Ducassy and Montandrau (2015)'s arguments that the main shareholder is not interested in spending on social activities when the pressure to legitimize firm's operations is low.

Regarding firm characteristics, consistent with prior literature, our results showed that leverage is an inhibitor factor of the probability of CSR disclosure. According to Habbash (2016), leveraged firms face a trade-off between developing voluntary social initiatives, thus incurring in additional costs with the subsequent disclosure, and paying their existing debts. In this sense, Habbash (2016) argues that it is more likely for most firms to choose the second option, i.e., to pay off their debts instead of increasing expenses with social activities, which negatively impacts the discretionary disclosure of CSR reports.

Also, in line with previous studies, we found that market-to-book ratio and return on assets are positively associated with the firm's likelihood to voluntary disclose CSR reports. Martínez-Ferrero et al. (2015) argue that CSR disclosure reduces information asymmetry, thus increasing firm's market value and, as a consequence, its market-to-book ratio. Regarding return on assets, Gunardi et al. (2016) state that the greater firm's profitability, the more funds it will have to employ in its social activities. Hence, it is positive impact on CSR disclosure.

5. CONCLUSION

The purpose of this study was to examine the relationship between ownership and control concentration and disclosure of CSR reports. Unlike previous studies, here we investigated ownership concentration focusing on the rights granted by firm equity shares to their holders, specifically voting rights, from an approach based on legitimacy theory. We analyzed data from 207 listed companies in the period from 2012 to 2019, which totaled 1,155 firm-year observations.

In addition, we evaluated variables for firm characteristics that prior literature had indicated to be associated with CSR disclosure.

Our findings demonstrated that control structure concentration is negatively related to the firm's probability of disclosing CSR reports. This means that the higher the percentage of equity shares with voting rights in the hands of the largest shareholder, or even the sum of the percentual from the three largest ones, less likely the firm is to disclose CSR reports. Regarding ownership structure concentration, i.e., taking into account equity shares with and without voting rights, the results were not statistically significant. With respect to firm characteristics, the leverage, market-to-book ratio and return on assets were significantly associated with disclosure of CSR reports.

The results of this study are consistent with legitimacy theory, since they demonstrated that the concentration of equity shares with voting rights by largest shareholders implies in the non-disclosure of CSR reports, thus suggesting that large controlling shareholders do not have sufficient incentives to legitimize firm's activities towards minority shareholders through CSR reports and, therefore, choose to not disclose that kind of information. In this sense, the results presented in this paper also indicate a possible principal-principal conflict, in which the largest shareholders are not inclined or pressured to disclose CSR reports that could bring informational benefits to minority shareholders.

This study is subject to some limitations. First of all, our CSR disclosure measure is based on a dummy variable. There are some concerns about the use of dummy variables to measure CSR disclosure. This occurs because this type of measure does not include the textual content published neither allow the evaluation of the standards adopted in CSR reports as well their eventual differences. Therefore, in this research we couldn't deepen the understanding of CSR reports contents or investigate different topics that permeate them, such as environment protection, pollution reduction, labor practices, gender issues, among others.

For future research, we recommend deepening the understandings of CSR reports contents, since this study is subject to the limitations arising from the simple observation of the publication of CSR reports, i.e., we did not address the textual contents of these documents. In addition, another study could better explore the standards adopted in CSR reports as well their differences, since here we were not concerned with the standards employed in the CSR reports of our sample.

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DJ: Conceptualization (Lead); Data curation (Lead); Formal analysis (Lead); Investigation (Lead); Methodology (Lead); Project administration (Lead); Software (Lead); Supervision (Equal); Validation (Lead); Visualization (Lead); Writing-original draft (Lead); Writing-review & editing (Lead). **DS**: Conceptualization (Supporting); Data curation (Supporting); Formal analysis (Supporting); Investigation (Supporting); Methodology (Supporting); Project administration (Supporting); Software (Supporting); Supervision (Supporting); Validation (Supporting); Visualization (Supporting); Writing-original draft (Supporting); Writing-review & editing (Supporting).

CONFLICTS OF INTEREST

There is no conflict of interest to report in this submission.

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