Say on pay determinants in Brazilian public companies

Determinantes do say on pay *em empresas brasileiras de capital aberto*

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Abstract

This article examines how performance, compensation, and corporate governance are related to the rejection of compensation proposals in Brazil. Regulatory changes have expanded the disclosure of compensation and introduced distance voting, providing new information which was hand collected from 895 minutes of shareholders' meetings and 1,074 voting tables. The sample consists of data from 179 Brazilian companies between 2015 and 2018. Rejection dependent variables were regressed using logit models that considered random effects panel data as well as Bernoulli's method of quasi-likelihood. The percentage of companies with rejected proposals is below 3%, which is as low as the figure reported internationally. Performance coefficients are positive relative to compensation proposal rejections. Perhaps investors believe that good performance encourages majority shareholder abuse. Certain aspects of compensation are more important than the total amount in explaining rejection rates, which may indicate a certain investor ability to analyze beyond the total compensation figure. The quality of corporate governance is positively associated with rejections while the concentration of control is negatively associated with rejections. The difficulty of rejecting a proposal may explain this result. The findings indicate that these investors are aware of the perverse incentives that good performance can represent, analyze various aspects of the remuneration proposal, and may vote against it under more favorable governance environments. This last aspect suggests that improving corporate governance regulation and expanding opportunities for participation are effective paths for increasing the voice of shareholders.

Resumo

Este artigo examina como o desempenho, a remuneração e a governança corporativa se relacionam com a rejeição de propostas de remuneração no Brasil. Mudanças regulatórias aumentaram a divulgação da remuneração e introduziram o voto à distância, permitindo a coleta manual de novas informações em 895 atas de assembleias e em 1.074 boletins de votação. A amostra compreende 179 empresas brasileiras entre 2015 e 2018. Variáveis dependentes de rejeição foram regredidas usando modelos logit considerando um painel de dados de efeitos aleatórios, bem como com o método de quase-verossimilhança de Bernoulli. O percentual de empresas com propostas rejeitadas é inferior a 3%, nível tão baixo quanto o reportado internacionalmente. O desempenho tem relação positiva com a rejeição de propostas de remuneração. Talvez os investidores acreditem que o bom desempenho incentive o abuso do acionista majoritário. Certos aspectos da remuneração são mais importantes do que o valor total para explicar as taxas de rejeição, o que pode indicar certa capacidade do investidor em analisar além da remuneração total. A qualidade da governança corporativa tem relação positiva, enquanto a concentração do controle está negativamente associada às rejeições. O grau de dificuldade para conseguir rejeitar uma proposta pode explicar esse resultado. Os resultados mostram às empresas um investidor atento aos incentivos perversos que o bom desempenho pode representar, que analisa a proposta de remuneração em diversos aspectos e que vota contrariamente em ambientes de governança mais favoráveis. Este último aspecto sugere que melhorar a regulamentação da governança corporativa e expandir as oportunidades de participação são caminhos eficazes para permitir mais voz aos acionistas.

Practical implications

The results help companies understand what influences shareholder voting on executive remuneration packages. They also indicate how regulatory changes (which are easier to implement than legal changes) increase the voice of shareholders and favor corporate governance.

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1 INTRODUCTION

Say on pay (SOP) is the binding or advisory right of shareholders to vote on compensation proposals as a form of activism that has gained importance since the 2008 financial crisis (Stathopoulos & Voulgaris, 2016; Cai & Walkling, 2011; Ertimur et al., 2011). Executive compensation is a corporate governance (CG) mechanism that is designed to align the interests of shareholders with managers (Jensen & Murphy, 1990). SOP research has concentrated particularly on the United States and the United Kingdom (Lozano-Reina & Sánchez-Marín, 2020; Obermann & Velte, 2018).

The literature, based mainly on agency theory, investigates what influences rejection in this context. Performance, compensation and corporate governance are frequently investigated. Shareholders are less receptive to compensation proposals if performance and governance are poor and compensation is high. Poor accounting or market performance tends to increase the chances of rejection for these compensation proposals (Conyon, 2016; Fisch et al., 2018; Krause et al., 2014). Compensation is observed in several different aspects. The chances of rejection increase the greater its amount, its excess in relation to the industry, or expected values, and decrease the more sensitive remuneration is to performance (Alissa, 2015; Porac et al., 1999; Fisch et al., 1999; Fisch et al., 2018). The influence of corporate governance on the rejection of proposals is also observed. Rejection tends to be lower in companies with good governance, larger boards and concentrated control, and it tends to be higher in companies with more independent board members (Conyon, 2016; Cai & Walking, 2011). The research presented here verifies these findings and complements them by analyzing an environment different from the one investigated in the literature. This study is distinct in that it observes the effects of various constructs and proxies and data on distance voting.

Brazil offers investors few legal protections, has a high concentration of control, and makes frequent use of non-voting shares and pyramidal structures (Crisóstomo & Brandão, 2019; Guimarães et al., 2018). Yet, it introduced three premium CG listing segments in 2001 which included 45% of the listed companies, with 33% in the most demanding segment. Activism is not very common, but it has increased (Vargas et al., 2018). The General Shareholders Meeting (GSM) must vote on the total compensation value of executives and directors. Beginning in 2010, the securities commission demanded the disclosure of the maximum, minimum, and average compensation for top managers and directors, but it does not require individual compensation disclosure. In 2015, it introduced distance voting and required the disclosure of voting tables that reveal rejection percentages of compensation proposals. Distance voting is not on-line voting and became optional in 2016, mandatory for companies in two local stock indices in 2017, and all listed companies in 2018.

Leal et al. (2015) and Miceli et al. (2010) observed a small reduction in the concentration of control and an increase in the quality of CG after 2004. There was an IPO boom before the 2008 financial crisis and again in 2020-2021. Santos et al. (2019) examine the relationship between foreign investors and CG in Brazilian companies. Duarte and Leal (2021) report on the role of institutional investors in partner conflicts in Brazil. These characteristics, innovations, and the growing presence of foreign, institutional and individual investors lend relevance to the analysis of SOP and distance voting in a large emerging market.

This paper answers the following question: which aspects of compensation, governance and performance are related to voting outcomes considering compensation proposals in Brazil? This study analyzes 179 listed Brazilian companies between 2015 and 2018, with two years prior to the full introduction of distance voting and the two following it, collecting voting results from minutes and the percentages of votes against a proposal. Compensation is considered in various forms, including its amount, composition, excess in comparison with others, and its link to performance. CG is represented through board of director (BOD) characteristics, ownership structure, and listings in premium segments. The representation of performance includes accounting and market indicators.

Variable compensation and excess pay present positive significant relationships with rejections, and pay performance sensitivity has a negative significant relationship with rejections, while there were no significant relationships for compensation amounts and performance, which is in contrast with international studies. The concentration of control had a negative association with rejections and better overall CG had a positive correlation with rejections, while BOD characteristics had little impact, again in contrast with the literature. Perhaps CG characteristics are more important than performance when there is little legal investor protection, and investors pay more attention to the composition of compensation and its correlation with performance.

This study contributes to the literature on SOP by presenting original evidence from a legal context that is distinct from other contexts which have been extensively investigated. It suggests that good CG strengthens the shareholders' voice even when there is little legal protection and low concentrations of control, which may have practical implications for investor portfolio selection in emerging markets. Regulations that ease shareholder

participation had a positive impact on rejection rates. The next section presents a review of the literature and our hypotheses, followed by the study's methodology, results and conclusions.

2 REVIEW OF THE LITERATURE

Executive compensation can align the interests of managers and shareholders. Shareholders, as residual claimants, decide executive compensation (Jensen & Murphy, 1990). Agency theory supports most SOP studies, but institutional and stakeholder theories have also been noted (Lozano-Reina and Sánchez-Marín, 2020). Krause et al. (2014) showed the asymmetric reaction of shareholders in rejecting compensation proposals more often when performance is poor under prospect theory, for example.

Large US companies have had to adopt an advisory SOP since 2011 and all companies have had to do so since 2013. UK shareholders have voted on compensation proposals since 2003, but this vote only became binding in 2013 (Ferris & Maber, 2013). SOP adoption increased notably around the world after the financial crisis of 2008. Stathopoulos and Voulgaris (2016) listed SOP characteristics in 15 countries, with most of them adopting it during the second decade of this century. Australia adopted a non-binding SOP rule in 2012 in which the entire BOD is subject to re-election after two SOP rejections rates above 25% (Fisch et al. 2018; Stathopoulos & Voulgaris, 2016). Correa and Lel (2016) concluded that SOP is associated with lower CEO compensation, disparity, and greater performance sensitivity relative to a control group in 39 countries.

Conyon (2016) finds a higher frequency of compensation proposal rejections in companies with poor accounting or market performance. Fisch et al. (2018) and Krause et al. (2014) show that performance explains proposal rejections and claim that shareholders are more concerned about compensation when short-term performance is poor. Thus, this study's first hypothesis is:

(H₁) The rejection of compensation proposals is negatively related to company performance.

Obermann and Velte (2018) reviewed the literature on the determinants and consequences of activism related to compensation and observed that compensation was represented by absolute amounts and relative to company and industry metrics, as well as some specific characteristics of compensation, such as stock options. Changes in the SOP legislation in the US showed a greater positive market reaction for firms with abnormal payments to the CEO and low compensation-performance sensitivity (Cai & Walkling, 2011). Conyon (2016) finds a greater rejection frequency of compensation proposals when CEO compensation is high or excessive, which is a result similar to that found by Alissa (2015). In contrast, Ertimur et al. (2011) differentiated CEO compensation as expected, based on economic determinants, and residuals (excess) and did not find differences in their effect on the probability of the company being a target of activism. The mix of results and the ways in which the compensation is examined in the literature suggest a set of hypotheses. The rate of rejection of executive compensation proposals is:

(H₂ₐ) positively related to the executive compensation amount.

(H₂ᵦ) positively related to excess executive compensation.

(H₂ᵧ) positively related to executive compensation relative to the industry average.

(H₂ᵨ) negatively related to pay-performance sensitivity.

Regarding the mechanisms of CG, higher compensation is associated with weaker CG (Core et al., 1999). Cai and Walkling (2011) find a positive market value reaction to the introduction of SOP in firms with weaker CG. Better and larger BODs are associated with less rejection of compensation proposals (Conyon, 2016; Cai & Walkling, 2011). Perhaps smaller BODs have less monitoring ability. A board with more independent members may be more receptive to the demands of minority shareholders, and they have been associated with higher rejection rates (Cai & Walkling, 2011). Proposal rejection rates are lower when there is a greater concentration of control (Conyon & Sadler, 2010; Conyon, 2016).

The third and last set of hypotheses refers to the CG characteristics of companies. The rate of rejection of executive compensation proposals is:

(H$_{3a}$) negatively related to the overall quality of the firm's CG.

(H$_{3b}$) negatively related to the size of the BOD.

(H$_{3c}$) positively related to the percentage of independent directors on the BOD.

(H$_{3d}$) negatively related to the concentration of control.

3 METHODOLOGY

3.1 Sample selection

Starting with all companies listed on the Brazilian stock exchange, the final sample consists of 179 companies, because it includes only those that were listed between 2015 and 2017 and whose shares were traded during at least 80% of the trading days in this period. We used voting outcomes in GSM minutes and distance voting maps which are available for manual collection on the securities commission's website. Executive compensation proposals must be voted on during the first GSM meeting of the year. Distance voting maps were available for companies that voluntarily adopted distance voting in 2016, for the ones required to adopt distance voting in 2017, and finally for all listed companies since 2018. Thus, there were two years prior to the full adoption of distance voting, and two years after it.

There were 895 GSM minutes and 1,074 consolidated and distance voting tables available during this period. The compensation proposal data was obtained from these minutes. In 2015 and 2016, only the outcome of votes was obtained which indicated rejection, majority approval, or unanimous approval of the proposal, without percentage details. In 2016, voting tables with the results of votes and the percentages of votes from the few companies that voluntarily adopted the distance voting that year were available. In 2017 and 2018, in addition to the voting outcome, there was also the percentage of proposal votes for, against, and abstentions. The rejection rates were calculated as the ratio between the sum of the against votes and the total number of votes.

3.2 Variable definitions

Voting outcomes indicate support or rejection of proposals. This study observes rejections in two distinct informational environments: before and after the introduction of distance voting. In the first environment (2015 and 2016), GSM minutes indicated rejection, majority approval, or unanimous approval, without details about the number of votes. In this situation, "rejected proposals" are those effectively rejected and those approved by a majority. With the introduction of distance voting it was possible to obtain the rejection percentage of compensation proposals through the voting tables in 2017 and 2018, as well as in 2016 for a few companies that voluntarily adopted distance voting. So, in this second situation, the primary analysis considered the rejection rate as the percentage of against votes over total votes as in Conyon (2016). Alternatively, rejection rates were computed as the sum of votes against and abstentions, in a sensitivity analysis, as in Conyon and Sadler (2016). Ferri and Maber (2013) argue that institutional investors may use abstentions to signal their discontent and possible votes against compensation proposals in the next GSM.

The Appendix A lists all of the variables used in this study. The *Comdinheiro*^{R} database, which gathers data from publicly traded Brazilian companies, investment funds and other economic data, is the source for the variables.

The estimation of the CEO's excess compensation was done in two stages. First, a regression was estimated to obtain the determinants of the total compensation of executives, as reported in Terra and Funchal (2010). This methodology has been used in several countries, including Brazil, which permits a comparison of the results. The model for the determinants of the total compensation of executives is presented in Equation 1. Y_{it} is the total executive compensation for company *i* in year *t*. $PERF_{it}$ are performance variables *ROA*, *SDROA*, and *Q*. CG_{it} are the company's CG characteristics: BOD size; average age of BOD members; CEO duality; the number of independent BOD members; and the percentage of the voting shares of the largest shareholder. $EXECUTIVES_{it}$ are characteristics of the executive officers: their number; average age; and average tenure. $SIZE_{it}$ is the logarithm of total assets.

$$Y_{it} = \alpha + \beta_1 PERF_{it} + \beta_2 CG_{it} + \beta_3 EXECUTIVES_{it} + \beta_4 SIZE_{it} + e_{it} \qquad (1)$$

In the second stage, the methodology in Core et al. (1999) was employed to determine the excess of total compensation portion. The previous stage makes it possible to calculate the expected executive compensation, $\hat{Y}_{f\,it}$, from the estimated model. The excess compensation is the difference between the observed value $\hat{Y}_{f\,it}$ it and the expected value $\hat{Y}_{f\,it}$, as in Equation 2. The excess compensation dummy variable is equal to 1 when EXCESS$_{it}$ is positive and 0 otherwise. According to H$_{2b}$, a positive correlation is expected between the presence of excess compensation and the rejection rates.

$$EXCESS_{it} = Y_{f\,it} - \hat{Y}_{f\,it} \tag{2}$$

The pay-performance sensitivity variable can be calculated in several ways. Given the lack of detailed data for Brazilian companies, this study used the Hall and Knox (2004) methodology, which is based on and adapted from Jensen and Murphy (1990) and is portrayed in Equation 3 as the monetary change in the total executive compensation in a year over the change in shareholder's wealth during the same period.

$$Pay - performance\ Sensitivity_{it} = \frac{\Delta\ total\ executive\ compensation_{i,t,t-1}}{\Delta\ market\ value\ of\ shares_{i,t,t-1}} \tag{3}$$

Finally, the control variables are related to the size of the firm and its indebtedness. International studies indicate that large companies and companies with higher indebtedness attract more attention from activist shareholders (Ertimur et al., 2013; Conyon & Sadler, 2010; Thomas & Cotter, 2007).

3.3 Model specifications

We have adopted two econometric approaches, because there are two voting outcome formats. Rejection is a binary variable equal to 1 when there is some level of rejection and 0 if the proposal was approved unanimously in 2015 and 2016. Equation 4 portrays the logistic model applied to this dependent variable. The models were estimated with panel data with fixed or random effects, as suggested by the Haumann tests, and all were corrected for heteroscedasticity with robust standard errors. The variables described in the Appendix A represent the model's constructs.

$$Rejection_{it} = ln\frac{p_{it}}{1-p_{it}} = \alpha + \beta_1 Performance_{i,t-1} + \beta_2 Compensation_{i,t-1} + \beta_3\ CG_{i,t-1} +$$
$$\beta_4 Size_{i,t-1} + \beta_5 Indebtedness_{i,t-1} + u_i + e_{it} \tag{4}$$

It was possible to observe the rejection percentage for the ballot reports in 2017 and 2018. Thus, the Maximum Likelihood (ML) method was used for these years because the ordinary least squares method may result in probabilities outside of the 0-1 range (Conyon, 2016). Bernoulli's method of quasi-likelihood is then applied to observe values along the entire 0-1 range with no need to adjust the data at the extremes. This method is best applied to balanced panel data, which is the case in this study (Papke & Wooldridge, 1996). The specification of the model is similar to Equation 4, with *Rejection%$_i$* as the dependent variable.

Several studies with the dependent variable in the form of a proportion (ranging from 0 to 1) and panel data use generalized least squares through quasi-likelihood considering a balanced panel and robust standard errors. The coefficients of this regression can be seen as an estimate of the probability of rejection votes (Papke & Wooldridge, 2008). The data to estimate the two models was set up as a strongly balanced panel and the estimation used heteroscedasticity with robust errors.

Rejection for the 2017-2018 period was subject to sensitivity tests where two alternative definitions were used. The first considered abstentions as part of the rejection, and the second identified rejection as the upper quartile of rejection percentages.

4 RESULTS

4.1 Descriptive statistics and correlations

Table 1 shows an average of 7% rejection over the full period and this percentage reaches 8.2% in 2018.

These values are close to the 10% average observed in Conyon (2016) in the US. When rejection is calculated as votes against plus abstentions over total votes, it reaches 16% in 2018. With this approach, Conyon and Sadler (2010) observed an average of 7.61% in the period 2002-2007 and Ferri and Maber (2012) 10.9% in 2004, both in the UK. The distribution of the votes shows that 79% of the sample registered less than 10% against votes and 1.3% of the sample recorded more than 30% against votes. Conyon (2016) shows that about 70% of the observations recorded less than 10% against votes. Denis et al. (2019), for the Russel 3000 firms in 2011 and 2012, show a mean vote support of almost 90%. In other words, these figures suggest that the rejection of proposals in Brazil is as low as in developed countries.

There was also a modest increase in the number of rejected proposals from 1 in 2015 and 2016 to 4 in 2017 and 2018. The four rejections observed in 2018 represent 2.2% of the companies in the sample in that year. International studies also observed low levels of rejection. Conyon (2016), for example, reported that less than 3% of companies had their compensation proposals rejected.

The compensation amounts display a large amount of dispersion. Equity-based compensation is more common for the management team, because it was observed in 49% of the sample and only in 11% of the BODs. Excess compensation was identified in approximately 62% of the observations. On average, the companies in the sample presented compensation higher than the industry average around 16% of the time. Pay-performance sensitivity had a negative average. In 55% of the firm-years, compensation change was in tandem with the stock market value change. However, this was not the case for the remaining 45% of the firm-years. Total compensation in relation to EBITDA presents a negative average, because 18% of the sample had a negative EBITDA.

The CG variables reflect characteristics already found in the literature on Brazilian companies, showing concentration of control and BODs when there are few independent members. There is a controlling shareholder in 74% of the sample and the average participation in the voting equity capital of the largest shareholder is 54%. The BODs have an average size of 7.63 members, which is within the 5 to 11 range recommended by the Brazilian directors' institute. The sample shows 9% of the observations had less than 5 members and 7% had more than 11, which means that most BODs have the recommended number of members. In contrast, 22% of the sample had no independent BOD members.

Table 1. Descriptive statistics

Variable	N	Mean	SD	Min	Max
Dependent variables					
Rejection % (2016 through 2018)	391	0.07	0.13	0.00	1.00
Rejection % (2016)	84	0.06	0.13	0.00	0.77
Rejection % (2017)	131	0.04	0.08	0.00	0.41
Rejection % (2018)	176	0.08	0.15	0.00	1.00
Alternative rejection % (2016 through 2018)	391	0.14	0.21	0.00	1.00
Alternative rejection % (2016)	84	0.14	0.22	0.00	0.97
Alternative rejection % (2017)	131	0.13	0.21	0.00	0.96
Alternative rejection % (2018)	176	0.16	0.22	0.00	1.00
Rejection (2015 and 2016)	663	0.62	0.22	0.00	1.00

Table 1. Descriptive statistics

Variable	N	Mean	SD	Min	Max
Variables of interest					
Performance					
ROA	854	0.28	13.20	-49.79	26.09
ROE	854	6.13	46.92	-162.10	154.33
Net revenue growth	659	0.04	0.93	-1.33	15.75
Stock liquidity	848	1.15	0.81	0.16	3.62
Compensation					
Total compensation proposal*	701	22.22	39.54	0.01	350.00
CEO compensation*	819	6.90	31.13	0.01	610.00
Equity-based executive compensation*	860	3.98	16.66	-10.00	270.00
Bonus executive compensation*	860	2.29	4.93	0.00	44.00
Excess compensation	503	0.62	0.24	0.00	1.00
Pay-performance sensitivity	709	-0.01	0.68	-17.28	3.36
Total compensation over EBITDA	811	-0.01	0.49	-9.29	3.41
Total compensation over industry average	716	1.16	2.26	0.00	33.50
CG					
# of BOD members	895	7.63	3.34	3.00	30.00
# of executive officers	849	6.54	7.35	1.00	90.00
# of independent BOD members	889	2.13	1.70	0.00	9.00
Proportion of independent BOD members	895	0.28	0.24	0.00	1.00
% of voting shares of the largest shareholder	895	54.47	19.99	8.45	100.00
Proportion of premium listing	895	0.71	0.21	0.00	1.00
Proportion with a controlling shareholder	738	0.74	0.19	0.00	1.00
Control variables					
Size	893	22.05	2.16	6.91	27.99
Leverage	760	2.35	14.31	-10.38	350.31

Note: all variables defined in the Appendix A. * indicates that the data is in millions of Brazilian *reais*.

Source: elaborated by the authors.

The correlations are not shown herein to save space. Only the correlation between company size and the number of independent BOD members was above 0.6. These two variables will not be used simultaneously in the multivariate models. The correlations between the qualitative and quantitative variables were obtained through the point-biserial correlation coefficient. Among the coefficients that showed statistical significance, only the variable for the participation of the largest shareholder of the voting equity capital presented a correlation above 0.6 at a 1% level of significance with the dummy indicating the presence of a controlling shareholder.

4.2 Univariate tests

Table 2 portrays the univariate mean difference tests for several variables. Panel A of Table 2 shows the results for the rejections of proposals that were either approved by a majority or effectively rejected in 2015 and 2016. Panel B of Table 2 shows the results for the data obtained from the voting tables of 2016. In Panel B, the rejection classification criterion was the median of the rejection percentage in the sample. Voting results with a rejection percentage above the sample median are classified as a rejection and those below otherwise.

Table 2. Tests of differences in means and proportions

	Panel A: 2015 and 2016					Panel B: 2016 through 2018				
	Rejection = 0		Rejection = 1		Diff. (t or z)	Rejection = 0		Rejection = 1		Diff. (t or z)
	N	Mean	N	Mean		N	Mean	N	Mean	
Performance										
ROA[1]	197	-2.46	431	1.38	-3.84** (3.38)	191	-1.27	191	1.07	-0.15* (-1.83)
ROE[1]	197	8.91	431	4.81	4.10 (1.03)	191	1.80	191	5.80	-3.89 (-0.85)
Net revenue growth	196	0.05	415	0.02	0.03 (0.36)	182	0.06	182	0.01	0.05 (0.55)
Stock liquidity	202	1.25	437	1.23	0.02 (0.27)	186	1.27	194	1.34	-0.15 (-1.34)
Compensation										
Total compensation proposal[2]	216	15.71	442	16.21	-0.49** (-3.90)	195	16.04	195	16.49	-0.45** (-3.20)
CEO compensation[2]	204	14.63	432	14.93	-0.30** (-2.68)	192	14.75	193	14.97	-0.22 (-1.52)
Equity-based exec. compensation[2]	84	14.41	227	14.78	-0.37* (-1.71)	76	14.44	101	15.09	-0.65** (-2.54)
Bonus executive compensation[3]	204	1.55	432	2.77	-1.21** (-2.79)	182	1.60	185	3.15	-1.55** (-2.83)
Excess compensation[4]	128	0.54	295	0.63	-0.09* -1.83	131	0.52	127	0.62	-0.10* (-1.67)
Pay-performance sensitivity[1]	212	-0.00	445	0.00	-0.01* (-1.80)	193	0.01	195	0.00	0.00 (0.70)
Total compensation over EBITDA	184	-0.03	411	0.01	-0.00 (-1.48)	175	-0.02	179	0.01	-0.03 (-0.85)
Total compensation over industry average	217	0.90	446	1.35	-0.45** (-2.35)	196	1.33	195	142	-0.09 (-0.30)
CG										
# of BOD Members	217	6.95	446	7.98	-1.04** (-3.84)	196	7.15	195	8.09	-0.94** (-2.83)

Table 2. Tests of differences in means and proportions

	Panel A: 2015 and 2016					Panel B: 2016 through 2018				
	Rejection = 0		Rejection = 1		Diff. (t or z)	Rejection = 0		Rejection = 1		Diff. (t or z)
	N	Mean	N	Mean		N	Mean	N	Mean	
# of Executive Officers	200	5.89	425	6.63	-0.75 (-1.31)	185	5.88	184	7.16	-1.276 (-1.59)
# of Independent BOD members	214	1.70	443	2.48	-0.78** (-5.76)	196	1.99	192	2.61	-0.62** (-3.56)
% of Independent BOD members	217	0.23	446	0.33	-0.10** (-4.91)	196	0.28	195	0.34	-0.05** (-2.2)
% of voting shares held by largest shareholder	217	56.45	446	52.64	3.80** (2.37)	196	54.99	195	54.53	0.47 (0.22)
Premium listing[4]	217	0.57	446	0.80	-0.23** (-6.31)	196	0.67	195	0.76	-0.09** (-1.98)
Presence of a controlling shareholder[4]	197	0.77	385	0.69	0.08** (2.11)	166	0.82	152	0.72	0.10** (2.16)
Control variables										
Size	216	21.66	445	22.15	-0.49** (-2.73)	195	21.60	195	22.13	-0.53** (-2.35)
Leverage	169	4.86	405	1.84	3.02** (2.01)	166	2.39	176	2.40	2.99 (1.30)

Note: in Panel A "Rejection" is equal to 1 if approved by a majority or rejected. In Panel B "Rejection" is equal to 1 if the percentage of votes against is greater than the sample median (0.8% of votes against). The tests for differences in means assume different variances. 1 indicates variables winsorized at 2.5%. 2 indicates logarithms of the amounts. 3 indicates amounts in millions of Brazilian reais. 4 indicates tests for differences in proportions with proportions in decimal form and statistics as a z-test. All variables defined in Table 1. * and ** indicate statistical significance at the 10% and 5% levels, respectively.
Source: elaborated by the authors.

In general, the two panels in Table 2 show similar results. ROA is the only performance variable displaying significance and is larger in the rejection group. This contrasts with the literature and does not support H1. Fisch et al. (2018), Conyon (2016), and Krause et al. (2014) enlist performance as a motivator of activist initiatives leading to votes against executive compensation proposals.

Table 2 also shows that the amounts proposed for both the management team as a whole as well as for the CEO are larger in the rejection group. The same is observed for equity-based and bonus compensation levels. Excess compensation is more frequent in the rejection group displaying a marginally significant difference. The pay-performance sensitivity and compensation relative to the industry average are significant only in Panel A. The results lend preliminary support for H_{2a} and weak support for the other hypotheses that address the relationship between compensation characteristics and proposal rejections.

The results in Table 2 show larger BODs in the rejection group. Cai and Walkling (2011) find a positive relationship between BOD size and support for compensation proposals in the US, where SOP is not binding. The number of independent BOD members and their proportions are higher in the rejection group, which is in line with Larker et al. (2015). This evidence, therefore, contradicts H_{3b} and supports H_{3c}.

The results for the concentration of control in Table 2 are in line with the findings of Conyon and Sadler (2010) and Conyon (2016) and lend preliminary support for H_{3d} with less rejection in companies with a large concentration of control. The participation in the voting equity capital of the largest shareholder is smaller in the rejection group. This may indicate either confidence that monitoring by the major shareholder is effective or a lack of motivation on the part of minority shareholders to manifest dissent given the small likelihood of success. Rejection was more frequent in companies listed in premium listing segments that proxies for the quality of their CG. This result did not lend support to H_{3a}.

Finally, the results for the control variables are similar to those frequently observed in the literature.

Larger companies seem to attract more activism. Leverage only displayed a difference in Panel A with a higher value for the group without rejection.

4.3 Multivariate models

Panel A of Table 3 refers to 2015 and 2016 in which the outcome of the vote in the minutes was classified as rejection if it was either rejected or approved by a majority. The logit method was employed for this panel data with treatment for random effects. Panel B of Table 3 uses the rejection percentages reported in the voting tables from 2016. Details about the model estimations appear in the notes for Table 3. There are eight models in Table 3, four for each panel, using the proxies for performance, compensation, and CG separately and simultaneously, always including the control variables.

The models with the CG proxies seem to fit better than those with the performance or compensation proxies. Only models 3 and 7 are significant overall in addition to the complete models 4 and 8. This is evidence in favor of the importance of the characteristics of CG in the analysis of the rejection of compensation proposals.

The coefficients in Panel B of Table 3 suggest that revenue growth and stock liquidity are positively related to the rejection percentages. As stated before, a large concentration of control coupled with mechanisms that allow deviations between control and cash flow rights and little minority shareholder protection are characteristics of the Brazilian market. It is possible that, in this context, a better performance would catch the attention of shareholders and motivate them to vote against what they may regard as a potential opportunity for abuse. This is, however, only a conjecture and its confirmation would require in-depth analysis of data that is not available in this study.

There were significant coefficients for the variables representing equity-based, bonus, and excess compensation as well as for compensation relative to performance. Variable and excess compensation are positively related to rejection. Pay-performance sensitivity maintains a negative coefficient in relation to rejection. These findings support H_{2a} for the levels of variable compensation (shares and bonuses), H_{2b} (excess compensation), and H_{2d} (pay-performance sensitivity). H_{2c} (the industry average), on the other hand, was not confirmed. These results are consistent with Alissa (2015) for excess compensation and Van der Elst and Lafarre (2017) and Conyon and Sadler (2010) for the relevance of the compensation policy, in particular variable compensation.

With respect to CG, the univariate tests showed that companies with rejected proposals have larger boards with more independent members, better CG, and lower concentration of control. In Table 3, the percentage of independent members is marginally significant only in one model. The presence of a controlling shareholder is also marginally significant and has conflicting signs in two models, which could be a problem caused by samples of limited size and low rejection percentages (the dependent variable). The number of executive officers presents a negative correlation with rejection. The results for the size of the BOD, a premium listing, and concentration of control are significant and in line with the previous tests. Lower concentrations of control and more independent members support, respectively, H_{3d} and H_{3c}. Good CG practices and BOD size present positive coefficients, contrary to those established in hypotheses H_{3a} and H_{3b}. It is possible that in an environment with little legal protection and greater concentration of control, better governance encourages shareholders to manifest their opinions against compensation proposals. When analyzing cases of activism in Brazil, Duarte and Leal (2021) suggest that being listed in special segments of governance in Brazil does not guarantee immunity to activist initiatives.

To understand the relative importance of the model's explanatory variables, we analyzed its semi-elasticity. The results show a greater impact for equity-based compensation (positive) followed by the concentration of control and the number of board members (negative).

Only the size of the company showed a positive and statistically significant correlation with rejection. Larger companies attract activist shareholders and the positive correlation found is in line with the literature (Ertimur et al., 2013; Conyon & Sadler, 2010; Thomas & Cotter, 2007).

Table 3. Multivariate analysis models

	Panel A: 2015 and 2016				Panel B: 2016 through 2018			
	1	2	3	4	5	6	7	8
Performance								
ROA[1]	<0,01* (<0.01)	–	–	<-0.01 (<0.01)	-0.01 (0.01)	–	–	0.02 (0.02)
ROE[1]	<0.01 (<0.01)	–	–	<0.01 (<0.01	<0.01 (<0.01)	–	–	<-0.01 (<0.01)
Net revenue growth	-0.03* (0.02)	–	–	0.20 (0.19)	-0.34 (0.40)	–	–	2.96** (1.33)
Stock liquidity	-0,01 (0.02)	–	–	0.06 0.05	0.10 (0.09)	–	–	0.39* (0.22)
Compensation								
Total compensation proposal[2]	–	-0.02 (0.24)	–	0.01 (0.04)	–	0,12 (0.30)	–	-0.02 (0.22)
CEO compensation[2]	–	-0.87 (0.74)	–	-0.07 (0.07)	–	-0.11 (0.19)	–	-0.04 (0.18)
Equity-based exec. compensation[2]	–	0.09 (0.33)	–	-0.01 (0.04)	–	0.09 (0.11)	–	0.37** (0.19)
Bonus executive compensation[2]	–	0.58* (0.31)	–	0.11** (0.04)	–	0.26 (0.19)	–	0.21 (0.21)
Excess compensation	–	0.73 (0.68)	–	0.22** (0.11)	–	-0.09 (0.46)	–	1.04** (0.52)
Pay-performance sensitivity[1]	–	-0.09 (2.59)	–	-0.56 (0.57)	–	1.02 (1.69)	–	-5.33** (2.00)
Total compensation over EBITDA	–	-0.21 (0.59)	–	-0.05 (0.21)	–	0.06 (0.49)	–	1,12 (0.77)
Total compensation over industry average	–	0.12 (0.11)	–	0.01 (0.01)	–	-0.14 (0.09)	–	-0.06 (0.05)
CG								
# of BOD members	–	–	0.11** (0.05)	-0.01 (0.02)	–	–	0.04 (0.05)	-0.14 (0.12)
# of executive officers	–	–	0.05 (0.05)	-0.01 (0.02)	–	–	-0.01 (0.01)	-0.17** (0.07)
% of independent BOD members	–	–	0.68 (0.72)	0.45* (0.27)	–	–	0.55 (0.59)	0.70 (1.23)
% of voting shares largest shareholder	–	–	-0.01 (0.01)	<-0.01 (<0.01)	–	–	0.01 (0.01)	-0.03** (0.01)
Premium listing	–	–	1.21** (0.41)	0.36 (0.27)	–	–	0.20 (0.41)	1.04* (0.63)
Presence of a control-ling shareholder[4]	–	–	-0.20 (0.31)	0.14* (0.08)	–	–	-0.55* (0.29)	-0.21 (0.30)
Control variables								
Size	0.03** (0.01)	0.10 (0.23)	0.06 (0.10)	0.04 (0.04)	0.06 (0.06)	0.02 (0.21)	0.08 (0.10)	0.53* (0.22)

Table 3. Multivariate analysis models

	Panel A: 2015 and 2016				Panel B: 2016 through 2018			
	1	2	3	4	5	6	7	8
Leverage[1]	0.01 (0.01)	0.95 (0.73)	0.08 (0.10)	0.04 (0.03)	0.11* (0.06)	-0.02 (0.13)	0.11 (0.08)	0.18 (0.12)
Constant	0.05 (0.30)	1.13 (8.00)	-1.78 (1.93)	-1.18 (0.91)	-4.32** (1.49)	-8.40 (5.42)	-5.41** (2.16)	-21.64** (5.12)
Observations	554	102	469	101	335	55	259	55
chi[2]	10.52	11.31	33.60	79.94	8.29	15.68	21.31	74.42
P	0.11	0.33	0.00	0.00	0.22	0.11	0.01	0.00

Note: the dependent variable rejection equals 1 in Panel A if approved by a majority or rejected, and in Panel B it is the percentage of votes against a proposal. The models in Panel A used logit estimates considering random effects panel data in accordance with the Hausman test. The models in Panel B were estimated with Bernoulli's method of quasi-likelihood, appropriate for the percentage amounts between 0 and 1. All models were estimated with heteroscedasticity with robust standard errors. The degree of multicollinearity was tested in all specifications without observing factors above 5 for the variables individually. 1 indicates variables winsorized at 2.5%. 2 indicates logarithms of the amounts. * and ** indicate statistical significance at the 10% and 5% levels, respectively.
Source: elaborated by the authors.

4.4 Sensitivity analyses

We performed two sensitivity analyses, with alternative specifications for our dependent variables: the rejection rate and the dummy variable that indicates rejection of the proposals. The results, though they reveal some occasional differences, point to the same conclusions as the initial analyses. The table with these results is not presented to save space, however, it will be made available by the authors whenever requested.

The alternative specification of the rejection rate, based on the sum of rejection and abstention votes, shows fewer statistically significant coefficients. This may be a sign that the original measure, which consists only of against votes, better captures the rejection construct.

The second sensitivity analysis stresses the identification of observations with rejection by identifying those that are in the highest quartile of rejection rates. The estimated logit models do not substantially differ from the one adopted for the years 2015 and 2016. The results are consistent with the original ones for performance, excess remuneration and listing in the premium segment: the BOD variables lose significance and the presence of the controlling shareholder becomes more significant.

5 CONCLUSIONS

This paper analyzes how performance, compensation, and CG are related to the rejection of executive compensation proposals in 179 Brazilian listed companies. It contributes to the SOP literature because it reports on its introduction in a large emerging market with weaker legal investor protection and CG than the US, UK, and a few other developed countries. Recent regulatory innovations have introduced a greater level of disclosure of compensation and have facilitated the manifestation of shareholder opinions through distance voting. Together, these innovations represented the research opportunity that has been explored in this paper.

The percentage of companies with rejected proposals is as low as that reported internationally, which is below 3%. Our study's performance coefficients contradict the literature and are positive relative to the rejection of compensation proposals (Fisch et al., 2018; Conyon, 2016). Maybe Brazilian investors see good performance as a possible indication of majority shareholder abuse and expect that these gains will not be properly shared.

The evidence in this study also suggests that specific characteristics of compensation are more important than the total amounts. Rejection rates displayed positive coefficients in relation to equity and bonus-based compensation as well as excess compensation, whereas the coefficient in terms of pay-performance sensitivity was negative. This conveys a certain ability to analyze aspects of compensation beyond the total amount, which is evidence contrary to that reported by Ertimur et al. (2013) who investigated "vote-no" campaigns in the US, and suggested that they display little investor sophistication because the total amounts, rather than excess or variable compensation, displayed a positive correlation with the choice of target companies. It should be noted that there are vote advisory companies in Brazil as well as large local and foreign institutional shareholders in this more

concentrated shareholding environment.

The concentration of control had a negative coefficient in relation to the rejection of compensation proposals. Premium listing, a proxy for the quality of CG practices, presented a positive coefficient in relation to rejection. Large shareholders are often a part of the management team or the most powerful person in the company. In this context, opposition voting is unlikely to succeed. Yet, it is possible that the shareholders perceive a greater opportunity to express their opinions in better-governed companies. It is also worth noting that the concentration of control is lower in companies trading in the premium listing segments.

The results that contrast with international evidence, especially the influence of performance and aspects of CG, lend support to the importance of investigating SOP in emerging economies. In emerging markets, changes in legislation are difficult and the solution of conflicts by legal means is a last resort (Duarte & Leal, 2021). The results show the importance of regulatory changes, such as SOP and distance voting, as alternatives that provide minority shareholders with a way to voice their opinions.

The results are also important for investors and companies in that they facilitate a better understanding of voting at a time when shareholders have easier access to meetings via distance voting. Guimarães et al. (2018) mention the growing relevance of institutional investors in the global market and the increasing pressure for them to engage investees. This reality makes mechanisms like distance voting important to facilitating the relationships among these actors. Regulation should always favor the manifestation of minority shareholder opinions. One step in this direction would be, for example, making companies facilitate in some manner communication among minority shareholders.

These results should be viewed with caution since our samples are of limited size, and there were just two years of observation under the new regulatory environment. The low percentages of rejection, characteristic of this type of problem, can also influence the identification of new approaches to this subject in future studies. The findings for some aspects of compensation and CG deserve further examination to understand which elements of these constructs better explain the obtained signs. For example, the influence of the concentration of control could be examined identifying different types of investors in the control group or how various control enhancing mechanisms (non-voting shares, pyramidal structures, BOD super-majority, and poison pills) can influence these outcomes.

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Appendix

Appendix A. Description of the variables

Variable	Description
Dependent	
Rejection %	Rejection rate (number of against votes/total votes) for executive compensation proposals in the years 2016 to 2018.
Alternative rejection %	Rejection rate (number of against votes plus abstentions over total votes) for executive compensation proposals in the years 2016 to 2018.
Rejection	Binary variable that takes on the value of 1 when there was rejection or approval by a majority and 0 otherwise in 2015 and 2016.
Variables of interest	
Performance	
ROA	Net profit over total assets.
ROE	Net profit over equity.
Net revenue growth	Percentage change of net revenue in relation to the previous year.
Q	Tobin's Q calculated as the ratio between the market value of the shares plus debts divided by the company's total assets.
SDROA	Operational risk measured by the ROA's standard deviation over the past five years.
Stock liquidity	Stock liquidity index computed by the stock exchange.
Compensation	
Total compensation proposal	Amount of the compensation proposal in Brazilian currency in the GSM minutes.
CEO compensation	Amount of the CEO's compensation.
Equity-based executive compensation	Amount of the compensation of executive officers in stocks.
Bonus executive compensation	Amount of the compensation of executive officers based on bonuses.
Excess compensation	Dummy variable equal to 1 if excess compensation is present and 0 otherwise according to the method used in Core et al. (2008) described in more detail in the body of the text.
Pay-performance sensitivity	Pay-performance sensitivity of the CEO's total compensation according to the method used in Core and Guay (2002).
Total compensation over EBITDA	Total compensation amount for the executive officers divided by EBITDA.
Total compensation over industry average	Total compensation amount divided by the industry's average compensation.
CG	
# of BOD members	Number of BOD members.
# of executive officers	Number of executive officers in top management.
# of independent BOD members	Number of independent members on the BOD.
% of independent BOD members	Percentage of independent members on the BOD.
% of voting shares of the largest shareholder	Percentage of the voting shares held by the largest shareholder.
Premium listing	Dummy variable equal to 1 if the company trades on the New Market or Level 2 lists and 0 otherwise.

Appendix A. Description of the variables

Variable	Description
Presence of a controlling shareholder	Dummy variable equal to 1 if the percentage of common shares of the controlling group is greater than or equal to 50% and 0 otherwise.
Control variables	
Size	Company size equal to the natural logarithm of total assets.
Leverage	Ratio between total liabilities and total assets.

Source: elaborated by the authors.