ARTICLES

BAD (GOOD) NEWS AND DELAY (ANTICIPATION) OF FINANCIAL STATEMENTS' DISCLOSURE

Más (boas) notícias e postergação (antecipação) de divulgação de demonstrações financeiras

Malas (buenas) noticias y postergación (anticipación) de divulgación de estados financeiros

ABSTRACT

Managers have discretion over the timing of accounting information disclosure; existing literature has investigated the potential determinants regarding this choice. Thus, this study aimed to evaluate whether the type of accounting information is a factor that influences the anticipation of its disclosure to external users. The dataset comprises information provided by Brazilian companies listed on the Brasil Bolsa Balcão (B3) between 2010 and 2016. The research employed linear regression and the logistic regression model to evaluate whether type of news is a determinant for the timing of financial disclosures. Empirical evidence indicates that the nature of information (i.e., good or bad news) is related to the time taken (i.e., postponement or anticipation) in disclosing quarterly accounting figures of companies. Overall, our results contribute to the disclosure literature in Brazil and indicate that postponements are associated with the disclosure of negative news.

KEYWORDS | Disclosure, type of news, timeliness, disclosure date, discretion.

RESUMO

Gestores de companhias possuem discricionariedade sobre o momento de divulgação dos resultados contábeis das companhias, levando a literatura a investigar potenciais determinantes da tempestividade da evidenciação. Nesse sentido, o objetivo deste estudo foi o de avaliar se o tipo de notícia a ser divulgada é fator que influencia a antecipação ou postergação da divulgação de informações ao mercado. Com base em dados de companhias abertas brasileiras listadas na Brasil Bolsa Balcão (B3), entre 2010 e 2016, foi implementada uma estratégia de se avaliar, por meio de regressão linear e logística, se o tipo de notícia está relacionado com a decisão do momento da publicação das demonstrações contábeis. As evidências encontradas indicam que as más (boas) estão relacionadas com a postergação (antecipação) da divulgação dos resultados contábeis trimestrais das companhias. Os resultados, portanto, contribuem com a literatura de evidenciação no Brasil e indicam que postergações estão associadas à divulgação de notícias negativas.

PALAVRAS-CHAVE | *Evidenciação, tipo de notícia, tempestividade, data de divulgação, dicricionariedade.*

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RESUMEN

Los gerentes tienen la facultad de decidir el momento oportuno de la divulgación de los resultados contables de las compañías, lo que lleva a la literatura a investigar los determinantes potenciales del momento de la divulgación. En ese sentido, el objetivo de este estudio fue evaluar si el tipo de noticias que se divulgarán es un factor que influye en la anticipación o el aplazamiento de la divulgación de información al mercado. Con base en datos de empresas brasileñas que cotizan en la Brasil Bolsa Balcão B3 entre 2010 y 2016, se implementó una estrategia para evaluar, a través de regresión logística y lineal, si el tipo de noticias se relaciona con la decisión del momento de la publicación de los estados financieros. La evidencia indica que las malas (buenas) noticias están relacionadas con el aplazamiento (anticipación) de la divulgación de los resultados contables trimestrales de las compañías. Los resultados, por lo tanto, contribuyen a la literatura de divulgación en Brasil e indican que los aplazamientos están asociados con la divulgación de noticias negativas.

PALABRAS CLAVE | *Divulgación, tipo de noticias, momento oportuno, fecha de divulgación, dicreción.*

INTRODUCTION

According to Beyer, Cohen, Lys, and, Walther (2010), accounting information plays two roles in market economies: allowing capital providers to assess the potential return of investment opportunities and to monitor the use of their own capital. For Bagnoli, Kross, and Watts (2002), the usefulness of accounting information is not only related to its nature and content but also to the time at which it is disclosed, that is, whether it is timely. Information relevant for market participants may not be useful if it is not disclosed to the public on time. Therefore, to assess the quality of the information disclosed, one must take into account the time at which it is made available to the users.

The international literature has explored the timing of information disclosure, focusing on its determinants. Bagnoli et al. (2002) and Haw, Qi, and Wu, (2000) suggest that when the disclosure of information is delayed in relation to the date expected by the market, it is likely that the report released will contain bad news. This topic has not yet been explored in Brazil since the national literature has not considered timeliness in relation to the disclosure date expected by the market but rather in relation to the number of calendar days between the baseline date of the financial statements and the date of disclosure (Barcellos, Costa, & Laurence, 2014; Kirch, Lima, & Terra, 2012; Paixão, Avelino, & Takamatsu, 2017).

The methodology applied in this study is different in several ways from the approaches used in previous studies focusing on the Brazilian market, especially regarding the analysis of delaying/advancing the delivery of information and the delay in the delivery of financial statements. It is reasonable to believe that companies maintain a standard of disclosure for their financial statements and that they respect this standard under normal conditions of disclosure. This behavior is explored in several research studies based on naive models (Begley & Ficher, 1998; Boulland & Dessaint, 2017; Givoly & Palmon, 1982). In addition, when the delay or earliness in the delivery of accounting information is analyzed, it is possible to examine and understand managers' decisions regarding the time of disclosure and how the results presented may influence this decision.

Based on the foregoing paragraphs, the purpose of this study is to investigate, for Brazilian companies listed on *Brasil Bolsa Balcão* (B3), whether the type of news (good or bad) is one of the determinants of the delay or earliness of their financial statement delivery, in relation to the expected date of disclosure (based on a naive model).

Because the delay/earliness in the delivery of financial statements to the market is a subject poorly addressed in academic research on the Brazilian stock market, the relevance of the subject increases, and the subject has been debated by the participants of this market. Further, based on the development process of the Brazilian capital market, it is necessary to create models that allow the prediction of the types of news to be disclosed by publicly traded companies.

The sample consisted of 5,356 quarterly and annual disclosures of companies listed on B3, between 2010 and 2016. The companies' disclosure dates were collected manually. Quarters in which financial statements were restated, as well as the estimated date of disclosure for the following year, were disregarded in the analysis. The expected date for disclosure of financial information to the market was considered to be the same day of the week used for the disclosure in the corresponding period of the immediately preceding year. This was the same approach used in other studies in the international literature (Bagnoli et al., 2002; Boulland & Dessaint, 2017). For the typification of the news, companies that showed a net profit higher (lower) than the net result of the same period in the previous year were considered to be presenting good news (bad news). This goal was indicated by executives as the most important one for quarterly profit (Graham, Harvey, & Rajgopal, 2005).

The results suggest that companies with bad news (good news) delay (advance) the disclosure of financial information in relation to its expected date. Additionally, empirical evidence has also shown that the size of the company, its indebtedness, and the fact that the company delayed the delivery of the financial information in the previous period also influence the disclosure of financial statements.

This study contributes to the advancement of the literature on evidence and dissemination in Brazil, more specifically, regarding the relationship between the delay or advance of this information delivery when compared to the date expected by market participants and the type of news released. In practice, the study's contribution is that it can help market participants (investors, managers, market analysts, etc.) to understand the relationship between the delay or earliness in the delivery of financial statements and companies' performance. In addition, it allows a better understanding of the disclosure mechanisms used by companies in Brazil.

DEVELOPMENT OF HYPOTHESES

According to Dantas, Zendersky, Santos, and Niyama (2008), the purpose of accounting is to provide relevant information to investors and creditors. For the financial statements to be relevant for their users, they must include all the disclosures necessary to

accurately convey to the reader the current economic and financial status of the company analyzed.

According to Healy and Palepu (2001), disclosure is crucial for the efficient operation of a capital market. Companies conduct disclosure through regulated financial reports, including financial statements, explanatory notes, management discussion and analysis, and other records required by regulations. In addition, some companies conduct voluntary disclosures, which may include, without limitations, management forecasts, analyst presentations, audio conferences, press releases, and websites.

Verrecchia (2001) and Dye (2001) argue that one of the important factors appearing in disclosure theory may be linked to endogenous issues, that is, to the company's/manager's decision whether or not to disclose information. This disclosure or lack thereof, which is based on the company's/manager's judgment, may indicate which factors influence the company's/manager's decision regarding the company's disclosure strategy. Givoly and Palmon (1982) is one of the precursor studies on the determinants of the timing of accounting information disclosure; they find evidence that, in the American context, companies tend to delay the disclosure of bad news.

Kross and Schroeder (1984) analyzed the association between the type of news reported and the date of disclosure of quarterly accounting information in the North American market, as well as the impact of the disclosure date on abnormal returns on stock values. The abnormal returns of companies with early disclosures were significantly higher than the returns of companies with delayed disclosures.

Bagnoli et al. (2002) analyzed the performance of companies in which the management discloses accounting information after the company's expected date of disclosure (based on information captured by a specialized company). The results indicate that the report published contained bad news and that the longer the delay, the worse the news was. In 91% of the cases with a delay, the market analysts did not update the stock price estimate after the delay in disclosure. However, the average returns in the trading days following the expected report date were negative.

Trueman (1990) analyzed two alternative explanations for the change in the stock price when the disclosure report is delayed or early. Both analyses were based on the premise that some companies with unfavorable earnings increase their reported revenue through earnings management. In one case, earnings management caused a delay in releasing the report while in the other case a delay was caused by the manager's desire to first observe the earnings of other companies. Both cases analyzed led to positive market reactions when reports were advanced and negative when delayed, in accordance with previous empirical findings.

Chen, Cheng, and Gao (2005) evaluated the date of announcement of results in the Chinese market, one of the few markets globally with a four-month disclosure period. The results indicated that companies with early disclosures tend to lead to greater market reactions, as indicated by the volume of trades and the corresponding stock prices. On the other hand, later announcements are more predictable, as indicated by the weaker reactions based on trading volume and stock prices.

Further, regarding the Chinese market, Haw et al. (2000) concluded that companies with good news report their results before companies with bad news. Consistent with previous research, they also concluded that companies accelerate or delay the disclosure of results relative to their disclosure pattern, depending on the type of news to be disclosed.

Sengupta (2004) investigated the factors that led companies to choose to release their quarterly results relatively earlier compared to other companies. The results were based on data from the North American market from 1995 to 2000 and indicated that the nature of the investor base, litigation costs, accounting complexity, and type of news were directly related to the reported delay, which was defined as the number of calendar days after the end of the quarter.

In the Brazilian market, Kirch et al. (2012) investigated the factors determining the lag (period elapsed between the year-end closing and the results disclosure date) in the disclosure of the financial statements. The results show that companies with consolidated financial statements and/or with losses exhibit a greater lag in the delivery of their financial information to market participants, that is, they disclose the information more calendar days after the baseline date compared to other companies.

Based on the previous discussion and in line with Haw et al. (2000), a study on the emerging Chinese market, the present study presents the following research hypothesis:

> H1: Companies with bad (good) news delay (advance) the disclosure of financial information in relation to their expected release dates.

RESEARCH DESIGN AND SAMPLE

For this study, all open stock companies listed on B3 were used, and the mandatory disclosure of their financial statements was analyzed. Quarterly information and annual financial statements disclosed from 2010 to 2016 were examined.

In this study, the disclosure date was considered to be the one recorded for each company in the active financial statements on the Securities and Exchange Commission website

(CVM; Comissão de Valores Mobiliários, www.cvm.gov.br). Data on the date of delivery of the financial information were collected manually, and the remaining data used were extracted from the Economática® database.

Periods in which companies restated their financial statements were removed from the data, since the restatement may have changed the type of news contained in the original statements. If a financial statement is restated in a given period, it becomes unfeasible to estimate the date of disclosure of the statement in subsequent periods. In addition, the funds, finance, and insurance sectors were also excluded because they had different accounting treatment than that of other sectors (e.g., classification of earnings accounts). The breakdown of the sample used in this study is shown in Table 1.

Table 1. **Sample**

Number of observations (firm–quarter)	13,691
No comparative data (2009 or first year listed)	(-) 2,026
Exclusion of restatements	(-) 3,149
Exclusion of periods following restatements	(-) 2,038
Exclusion of funds, finance, and insurance industries	(-) 595
Missing data	(-) 527
Number of observations used in the analysis (firm-quarter)	5,356

Several methods can be used to classify the type of news disclosed by companies as "good news" or "bad news," such as meeting or exceeding the consensus of the analysts' forecasts or meeting or exceeding the profit of the same quarter in the previous year. In this study, due to the small number of analysts covering Brazilian companies and the difficulty of obtaining historical forecasts of Brazilian market analysts, a disclosure was deemed as containing good (bad) news if a company exhibited higher (lower) net earnings than those in the compared period. This method is in line with Graham et al. (2005), who identify that increasing quarterly profits is the most important objective (goal) for companies, based on a study involving several executives.

Comparisons among models for expected disclosure dates undertaken by Bagnoli et al. (2002) suggest that market participants can forecast disclosure dates better than estimated models (naive models). Further, forecasting the disclosure date to be the same day of the week as the previous year's disclosure date is more accurate when compared with forecasting the disclosure to be the same day as the previous year's disclosure date.

In this study, considering the lack of historical data on the disclosure dates of Brazilian companies expected by market participants, and in line with the efficacy test by Bagnoli et al. (2002), the expected disclosure date is taken to be the same day of the week and the same week of the month as those of the disclosure date in the previous year. For example, if the disclosure of a given year occurred on March 12, 2015—a Thursday—the expected disclosure date for the following year would be March 10, 2016, also a Thursday, in the same week of the month. If a company discloses its results after the expected date, then this is considered a delay in the delivery of financial information to market participants. If the information is released before the expected date, this is considered an early disclosure.

Table 2 shows the distribution of the number of days of delay or earliness in the delivery of financial information relative to the expected date.

Based on Table 2, there is a significant trend in the aforementioned distribution over the last few years. In 2010, 20.2% (18/89) of the companies delivered the financial statements on their expected dates. On the other hand, in 2016, the percentage of deliveries on their expected dates was 28.4% (315/1109). In the total sample, 21.1% of the companies delivered their statements on the expected dates.

Graphic 1 shows, for recent years, the trend in the percentage of companies delivering their financial statements on the expected date.

In 2016, the Brazilian market behaved very similar to the findings of Bagnoli et al. (2002); this evidence suggests that a disclosure on the same day of the same week in the corresponding quarter of the previous year is a rule used by a sizeable portion of Brazilian companies (28.4%), as well as by American ones (33.4%). One possible explanation for this phenomenon is that companies tend to meet a pre-established standard in previous periods, to reveal a future commitment to agents, hence reducing the level of information asymmetry.

Even if we consider a three-day window around the expected date in the delay/earliness analysis, the significant trend persists in the percentage of companies delivering their statements on the expected date. In 2010, 21.34% of the companies delivered their financial statements around the expected date (interval of 3 days, -1 to +1 days relative to the expected date) while, in 2016, the corresponding percentage of deliveries was 48.7%. In the total sample, the percentage of companies that delivered their statements within this interval was 43.9%. Graphic 2 shows an apparently normal distribution of companies' delay or earliness in the disclosure of their financial statements. Such evidence suggests that in the Brazilian market, there is a pattern in the number of days of delay/earliness in the delivery of financial information to the market.

Table 2. Distribution of delay and earliness cases

Number of days early (-) or delayed (+)	2010	2011	2012	2013	2014	2015	2016	sample	%
-10 or more	29	63	74	68	86	52	80	452	8.4%
-9	0	2	6	8	6	3	4	20	0.4%
-8	1	5	13	10	15	8	11	55	1.0%
-7	1	9	25	18	23	30	16	115	2.1%
-6	1	3	14	11	15	18	13	69	1.3%
-5	0	3	15	28	8	12	14	75	1.4%
-4	0	9	16	17	13	15	15	81	1.5%
-3	1	3	20	9	19	22	22	93	1.7%
-2	2	9	41	27	29	21	46	173	3.2%
-1	5	8	40	49	58	70	79	308	5.8%
0	18	36	94	178	224	265	315	1,130	21.1%
1	6	24	86	216	231	210	139	913	17.0%
2	1	18	56	65	77	73	52	344	6.4%
3	5	11	29	32	51	46	61	238	4.4%
4	4	4	67	20	26	30	25	180	3.4%
5	0	1	60	33	27	31	32	189	3.5%
6	1	9	38	28	15	32	27	156	2.9%
7	2	6	20	36	45	42	56	214	4.0%
8	1	0	10	14	6	19	15	73	1.4%
9	0	0	2	17	11	13	6	58	1.1%
+10 or more	11	22	57	95	63	91	81	420	7.8%
Total	**89**	**245**	**783**	**979**	**1,048**	**1,103**	**1,109**	**5,356**	100.0

Graphic 1. **Percentage of Companies with Disclosures on the Expected Date**
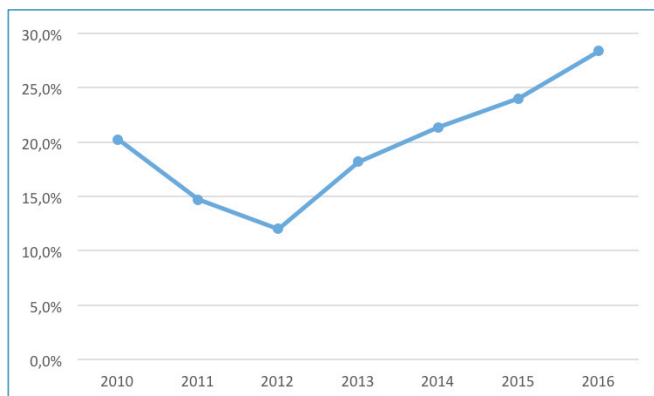
Graphic 2. **Distribution number of days of delay or earliness**
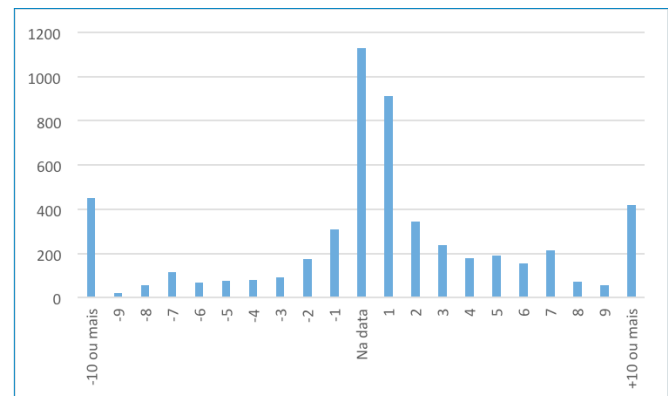
To test the research hypothesis, an ordinary least squares model was used in the main analysis and a Logit model in a sensitivity analysis, considering the dependent variable in binary form.

Equation 1 (ordinary least squares):

$$POSTERGAÇÃO_{it}$$
$$= \beta_o + \beta_1 SURPRESA_{it} + \beta_2 ROA_{it} + \beta_3 PREJ_{it} + \beta_4 LAG\_POSTERGAÇÃO_{it}$$
$$+ \beta_5 DEFASAGEM_{it} + \beta_6 TAM_{it} + \beta_7 END_{it} + \beta_8 GOV_{it} + \beta_9 TRI4_{it} + \varepsilon_{it}$$

Equation 2 (Logit — Logistic model):

$$D\_POSTERGAÇÃO_{it}$$
$$= \beta_o + \beta_1 SURPRESA_{it} + \beta_2 ROA_{it} + \beta_3 PREJ_{it} + \beta_4 LAG\_POSTERGAÇÃO_{it}$$
$$+ \beta_5 DEFASAGEM_{it} + \beta_6 TAM_{it} + \beta_7 END_{it} + \beta_8 GOV_{it} + \beta_9 TRI4_{it} + \varepsilon_{it}$$

The only difference between these two models is the dependent variable, delay. The dependent variable in model 1, $POSTERGAÇÃO_{it}$ is the difference in days between the disclosure date and the expected disclosure date. The dependent variable in model 2, $D\_POSTERGAÇÃO_{it}$, is a binary variable, which assumes a value of 1 when the delivery of the financial statement is delayed in relation to the expected date and a value of 0 if it is not. Since the dependent variable in model 2 is binary, the most suitable model for this context is a Logit model.

$SURPRESA_{i,t}$ represents the type of news disclosed to the market (good or bad). This variable is calculated by subtracting the earnings in year *t* from the earnings in year *t-4*, with the result divided by the company's assets in period *t*. We divide by the assets to avoid possible distortions in the analysis, considering that larger companies are expected to present larger values in their accounting reports. Additionally, we also run the same models replacing type of news with a binary variable $SURPRESA\_POS_{i,t}$ equal to 1 when the news is good, and equal to 0, otherwise.

Based on the literature on the timing of the delivery of financial information, we added control variables to the models used. Some of these variables have already been used in previous studies conducted on the lag in the delivery of information in the Brazilian market (Barcellos et al., 2014; Kirch et al., 2012; Paixão et al., 2017) and have been demonstrated to be related to the delivery date of financial statements.

The control variable $PREJ_{it}$ is a binary variable that assumes a value of 1 if the company had a loss in period *t*, and a value of 0, otherwise. It was used in the model due to the higher level of reluctance to disclose losses to the market, given the greater need for the management to explain the negative results (Moreira,

Ramos, Kozak-Rogo, & Rogo, 2016). To control for companies' complexity, since there is significant heterogeneity among them, we controlled for company size through the variable TAM_{it}, the natural logarithm of the company's total asset in period *t*.

In addition, the variables ROA_{it}, END_{it}, GOV_{it}, $LAG\_POSTERGAÇÃO_{it}$, $DEFASAGEM_{it}$ and TRI_{it} were used. ROA_{it} was used to control the profitability of the company and was calculated by dividing the earnings presented in period *t* by the total assets in period *t*. To control for the level of indebtedness of each company, the variable END_{it} was used, calculated by dividing the gross onerous debts by the total assets. The companies' level of governance may affect their likelihood of avoiding a delay in information disclosure, since monitoring tools may inhibit the manager's discretionary practices, such as the decision about the time of disclosure. Therefore, the variable GOV_{it} was used, which is a binary variable that assumes a value of 1 if the company has adhered to some special level of corporate governance (Novo Mercado, Levels 1 and 2; Bovespa Mais and Bovespa Mais level 2) and a value of 0, otherwise. The past behavior of the company may partially explain its current behavior; thus, the variable $LAG\_POSTERGAÇÃO_{it}$ was included, which assumes a value of 1 if the company delayed the delivery of its financial statement in the previous period and 0 if it did not. In turn, the variable $DEFASAGEM_{it}$ was calculated as the number of calendar days from the baseline date of the financial statements to their disclosure date. It was used as a control because it is believed that companies exhibiting a greater lag (number of calendar days between the baseline date of the financial statements and the disclosure date) are more likely to delay the delivery of information to market participants. The variable $TRI4_{it}$ which assumes a value of 1 if the information is for the fourth quarter and a value of 0, otherwise, has been added to control for potential differences between the delivery of quarterly and annual information.

To control for the fixed effects of year and sector, indicator variables for each year and sector were included in both models. In addition, both models were run by using a robust error matrix for better statistical quality.

ANALYSIS OF RESULTS

Table 3 shows the descriptive statistics for the variables used in the two models. All continuous variables were *winsorized* at levels 1% and 99% to address possible outliers in the sample, which could affect the results of statistical analyses if they are not removed.

Table 3. **Descriptive Statistics**

Variables	Observations	Mean	Standard Deviation	Minimum	Maximum
POSTERGAÇÃO	5,356	-2,666	31,132	-243,000	84,000
D_POSTERGAÇÃO	5,356	0.512	0.500	0.000	1,000
DEFASAGEM	5,356	52,377	30,111	23,000	245,000
SURPRESA	5,356	0.006	0.319	-1,429	2,188
SUPRESA_POS	5,356	0.479	0.500	0.000	1,000
ROA	5,356	-0.168	0.834	-0.643	0.215
PREJ	5,356	0.597	0.491	0.000	1,000
TAM	5,356	13,497	3,134	2,887	18,443
END	5,356	1,444	4,720	0.001	39,333
GOV	5,356	0.409	0.492	0.000	1,000
TRI4	5,356	0.229	0.420	0.000	1,000

POSTERÇÃO is the difference in days between the disclosure date and the expected disclosure date. D_POSTERGAÇÃO is a binary variable that assumes a value of 1 when the delivery of the financial statements is delayed in relation to the expected date, and a value of 0, otherwise. DEFASAGEM is the logarithm of the number of calendar days from the baseline date of the financial statements until the date of disclosure. SURPRESA represents the type of news and is calculated by subtracting the earnings in period t from those in period t-1, divided by the assets in period t. SURPRESA_POS is a dummy variable that assumes a value of 1 when the news is positive and a value of 0, otherwise. ROA is the company's net profit in period t, divided by the total assets in period t. PREJ is a dummy variable that assumes a value of 1 if the company has reported losses in period t, and a value of 0, otherwise. TAM is the natural logarithm of the company's total assets in period t. END is the total gross debt of company t, divided by the total assets in period t. GOV is a dummy variable equal to 1 if the company has a special level of corporate governance, and equal to 0, otherwise. TRI4 is a dummy variable equal to 1 for the 4th quarter, and equal to 0, otherwise. All continuous variables were winsorized at the 1% and 99% levels.

Based on Table 3, on average, companies disclose their financial statements approximately two to three days before the expected date and the average lag in the disclosure of these statements is approximately 52 days. This lag is affected by both the maximum disclosure deadline of quarterly information (45 calendar days after the baseline date), and by the maximum disclosure deadline of the annual financial statements (90 calendar days after the baseline date), as defined by the CVM through CVM Instruction No. 480/2009. Approximately 52% of the companies in the sample delay the disclosure of their financial information. Although this number is relevant, it should be noted that this does not mean that companies deliver their statements outside of the period required by CVM. In the last five years, an increasing percentage of companies that deliver their financial information by the expected date has been observed: in 2012, this percentage was 45% and in 2016, 55%.

Approximately 48% of companies present good news in their disclosures. Table 3 also shows that the mean of the variable $PREJ_{it}$ is approximately 0.38. As it is a binary variable, it is concluded that approximately 38% of the observations in the sample are from companies that reported losses, and the remaining 62% are from companies with earnings greater than or equal to zero. Based on the binary variable GOV_{it}, approximately 40% of the companies in the sample exhibit the aforementioned special levels of corporate governance.

Table 4 shows the correlations between the variables used in the two models.

Table 4. Correlation Matrix

	POSTERGAÇÃO	D_POSTERGAÇÃO	DEFASAGEM	SURPRESA	SURPRESA_POS	ROA	PREJ	TAM	END	GOV	TRI4
POSTERGAÇÃO	1.000										
D_POSTERGAÇÃO	**0.321**	1.000									
DEFASAGEM	-0.008	**0.130**	1.000								
SURPRESA	**-0.051**	**-0.034**	**0.025**	1.000							
SURPRESA_POS	**-0.036**	**-0.059**	**-0.034**	**0.310**	1.000						
ROA	-0.012	**-0.027**	**-0.087**	**0.076**	**0.084**	1.000					
PREJ	**0.039**	**-0.065**	**-0.189**	**0.048**	**0.279**	**0.307**	1.000				
TAM	**0.038**	**-0.050**	**-0.142**	**-0.053**	**0.012**	**0.551**	**0.371**	1.000			
END	**-0.044**	0.011	**0.068**	**0.036**	**-0.023**	**-0.067**	-0.108	0.087	1.000		
GOV	0.017	**-0.063**	**-0.217**	0.006	0.022	**0.158**	**0.181**	**0.432**	-0.001	1.000	
TRI4	**0.025**	**-0.037**	**0.620**	0.004	0.013	**-0.047**	0.017	-0.015	-0.001	**-0.024**	1.000

POSTERÇÃO is the difference in days between the disclosure date and the expected disclosure date. D_POSTERGAÇÃO is a binary variable that assumes a value of 1 when the delivery of the financial statements is delayed in relation to the expected date, and a value of 0, otherwise. DEFASAGEM is the logarithm of the number of calendar days from the baseline date of the financial statements until the date of disclosure. SURPRESA represents the type of news and is calculated by subtracting the earnings in period t from those in period t-1, divided by the assets in period t. SURPRESA_POS is a dummy variable that assumes a value of 1 when the news is positive, and a value of 0, otherwise. ROA is the company's net profit in period t, divided by the total assets in period t. PREJ is a dummy variable that assumes a value of 1 if the company has reported losses in period t, and a value of 0, otherwise. TAM is the natural logarithm of the company's total assets in period t. END is the total gross debt of company t, divided by the total assets in period t. GOV is a dummy variable equal to 1 if the company has a special level of corporate governance, and equal to 0, otherwise. TRI4 is a dummy variable equal to 1 for the 4th quarter, and equal to 0, otherwise. All continuous variables were winsorized at the 1% and 99% levels. Numbers in bold represent statistically significant coefficients at a level of 10% or lower.

Based on the correlation analysis, there is a negative association between the delay variables (*POSTERGAÇÃO* and *D_POSTERGAÇÃO*) and the type of news variables (*SURPRESA* and *SURPRESA_POS*), indicating that good news are related to the earliness of financial information disclosure. This evidence is in line with the research hypothesis presented above; however, the correlation is only a preliminary association analysis between the two variables, without considering the control variables.

Table 5 shows the results on the relationships between the delay/earliness in the delivery of financial statements and the type of news. In the first two columns, the statistical coefficients for model 1 are presented; those for type of news in a continuous form (*SURPRESA*) are in the first column and those for type of news in a binary form (*SURPRESA_POS*) are in the second column. In the third and fourth columns, the results for model 2 are presented; as in model 1, the third column corresponds to *SURPRESA* and the fourth column to *SURPRESA_POS*.

Table 5. Relationship between type of news and delay in the delivery date

Independent Variable	[a] POSTERGAÇÃO			[a] POSTERGAÇÃO			[b] D_POSTERGAÇÃO			[b] D_POSTERGAÇÃO		
	Coefficient	t-statistic		Coefficient	t-statistic		Coefficient	z-statistic		Coefficient	z-statistic	
SURPRESA	-4,239	-2,350	**				-0.221	-2,240	**			
SUPRESA_POS				-2,174	-2,510	**				-0.157	-2,600	***
ROA	-1,957	-4,300	***	-2,131	-4,780	***	0.005	0.110		-0.002	-0.050	
PREJ	3,620	3,850	***	4,081	4,320	***	-0.022	-0.340		0.016	0.230	
LAG_POSTERGAÇÃO	9,099	10,160	***	9,143	10,160	***	0.537	9,320	***	0.537	9,310	***
DEFASAGEM	0.866	0.200		0.733	0.170		1,656	9,220	***	1,647	9,170	***
TAM	0.573	3,220	***	0.616	3,500	***	-0.003	-0.230		-0.002	-0.140	
END	-3,137	-1,940	*	-3,295	-2,060	**	-0.047	-0.700		-0.055	-0.830	
GOV	0.096	0.090		-0.036	-0.030		0.003	0.040		-0.003	-0.050	
TRI4	3,192	1,140		3,247	1,150		-1,103	-8,340	***	-1,099	-8,300	***
Intercept	-40,900	-2,240	**	-39,785	-2,160	**	-7,619	-8,870	***	-7,523	-8,740	***
Year fixed effects	Yes			Yes			Yes			Yes		
Industry fixed effects	Yes			Yes			Yes			Yes		
Observations	5,356			5,356			5,356			5,356		
R2 or Pseudo R2	0.079			0.078			0.062			0.062		

POSTERGAÇÃO is the difference in days between the disclosure date and the expected disclosure date. D_POSTERGAÇÃO is a binary variable that assumes a value of 1 when the delivery of the financial statements is delayed in relation to the expected date, and 0, a value of otherwise. DEFASAGEM is the logarithm of the number of calendar days from the baseline date of the financial statements until the date of disclosure. SURPRESA represents the type of news and is calculated by subtracting the earnings in period t from those in period t-1, divided by the assets in period t. SURPRESA_POS is a dummy variable that assumes a value of 1 when the news is positive, and a value of 0, otherwise. ROA is the company's net profit in period t, divided by the total assets in period t. PREJ is a dummy variable that assumes a value of 1 if the company has reported losses in period t, and a value of 0, otherwise. TAM is the natural logarithm of the company's total assets in period t. END is the total gross debt of company t, divided by the total assets in period t. GOV is a dummy variable equal to 1 if the company has a special level of corporate governance, and equal to 0, otherwise. TRI4 is a dummy variable equal to 1 for the 4th quarter, and equal to 0, otherwise. All continuous variables were winsorized at the 1% and 99% levels. ***, **, and * represent statistically significant coefficients at the 1%, 5%, and 10% levels, respectively.

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To evaluate our research hypothesis that companies with bad news delay the disclosure of their financial information in relation to the expected dates, we analyzed the variable *SURPRESA*, which represents the type of news given to the market. The results in Table 5 indicate that in both models, the coefficient of this variable is negative and statistically significant at the 5% level. The results from model 1, whether for the continuous or binary form of type of news, shows evidence that, on average, companies release good news two to four days early. The results from model 2 show evidence in the same direction, that is, if the news to be announced to the market is good, it decreases the likelihood the company will delay the delivery of the information.

Such evidence is in line with the results of Bagnoli et al. (2002), who analyzed the performance of companies in which the management releases statements after their own expected date of disclosure.

Additionally, based on our results, there is evidence that if a company delayed the delivery of financial information in the previous period, the likelihood it will delay the delivery in the current period increases. Such a relationship suggests that when the company breaks the pattern expected by the market, the chances that it repeats the same behavior increase. Regarding the other performance measures, the results from model 1 provide evidence that companies with losses are more likely to postpone the delivery of financial statements; conversely, the higher the returns on assets, the earlier financial statements are released. Such evidence is in line with the idea that good news is more likely to be released early and bad news more likely to be delayed.

Company size, according to the results from model 1, also influences the delivery time of the financial information: the larger the company, the longer the delay in the delivery. It is likely that such evidence is related to the complexity of the company, which may influence the time when the financial information is ready to be disclosed to the market. In model 2, company size was not statistically significant.

The company's level of indebtedness also exhibits a statistically significant influence on the time a company delivers its financial statement. Based on model 1, the more indebted the company is, the faster it releases its statement. This may be related to the fact that market participants already know the company's level of indebtedness, since the variation from one quarter to another tends to be low, so the company opts to advance the release of its statement, assuming that the market already has its indebtedness information. In model 2, no statistically significant evidence of such a relationship was found.

Both the lag, that is, the time it takes the company to deliver its financial information after the end of the financial year, and whether the information is an annual financial statement also influence the likelihood of the company delaying the release of the report. Based on the results of model 2, the greater the lag, the greater is the likelihood of delaying the delivery of financial information. It is reasonable to expect such behavior since the larger the number of calendar days the company takes to deliver the information, the greater is the chance that the delivery will occur after the expected date of disclosure. Regarding the fourth quarter, the results of model 2 suggest that it is less likely that companies will delay the delivery of financial information when compared to the delivery of annual information. Such evidence is also reasonable since the annual information tends to be more important and more eagerly expected by market participants, and delaying such information could likely have an even more negative impact on the company.

Regarding corporate governance, no statistically significant evidence was found that this variable influences the delay of financial information disclosure. A higher level of monitoring was expected to influence the timing of disclosure of financial information. However, no evidence for this relationship was found; this may be related to the fragility of the proxy used to capture companies' true levels of corporate governance.

ADDITIONAL ANALYSES

To verify the results above, two additional analyses were performed. For the first, the sample was restricted to annual information only, since this information can be seen as more important than quarterly information, and thus may demonstrate a different behavior of the company. The results remained unchanged, as can be observed in Table 6 (Panel A). In other words, good news is, on average, released between four and five days before the expected date of disclosure.

In the second analysis, the binary variable of delay (*D_POSTERGAÇÃO*) and, consequently, that of the recurrence of delay (*LAG_POSTERGAÇÃO*) were replaced by the binary variables D_POSTERGAÇÃO (2) and LAG_POSTERGAÇÃO (2). These were defined to assume a value of 1 when a company delivered the information on the expected date (0) or with up to one day of delay (+1) and a value of 0, otherwise. Thus, we expanded the expected delivery deadline by one day, that is, we indirectly reduced the number of companies with a delay in the delivery of financial information. The results, presented in Table 6 (Panel B), remained largely unchanged, corroborating the evidence above that when the type of news to be disseminated is good news (bad news), this leads to an early (delayed) disclosure of financial statements.

Table 6. Relationship between disclosure time and type of news (robustness tests)

Panel A: Robustness Test: Annual

Independent Variables	[a] POSTERGAÇÃO		[a] POSTERGAÇÃO		[b] D_POSTERGAÇÃO		[b] D_POSTERGAÇÃO	
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	z-statistic	Coefficient	z-statistic
SURPRESA	-4,172	-3,090 ***			-0.304	-1,890 *		
SUPRESA_POS			-5,686	-3,660 ***			-0.473	-3,630 ***
Controls	Yes		Yes		Yes		Yes	
Year fixed effects	Yes		Yes		Yes		Yes	
Industry fixed effects	Yes		Yes		Yes		Yes	
Number of observations	1,225		1,225		1217		1,217	
R2 or Pseudo R2	0.057		0.064		0.067		0.073	

Panel B: Robustness Test: Alternative proxy

Independent Variables	[a] POSTERGAÇÃO		[a] POSTERGAÇÃO		[b] D_POSTERGAÇÃO (2)		[b] D_POSTERGAÇÃO (2)	
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	z-statistic	Coefficient	z-statistic
SURPRESA	-4,458	-2,460 **			-0.164	-1,550		
SUPRESA_POS			-2,253	-2,590 **			-0.189	-2,970 ***
LAG_POSTERGAÇÃO (2)	8,293	10,080 ***	8,321	10,060 ***	0.587	9,410 ***	0.584	9,360 ***
Controls	Yes		Yes		Yes		Yes	
Year fixed effects	Yes		Yes		Yes		Yes	
Industry fixed effects	Yes		Yes		Yes		Yes	
Number of observations	5,356		5,356		5,356		5,356	
R2 or Pseudo R2	0.074		0.073		0.061		0.062	

POSTERGAÇÃO is the difference in days between the disclosure date and the expected disclosure date. D_POSTERGAÇÃO is a binary variable that assumes a value of 1 when the delivery of the financial statements is delayed in relation to the expected date, and a value of 0, otherwise. SURPRESA represents the type of news and is calculated by subtracting the earnings in period t by those in period t-1, divided by the assets in period t. SURPRESA_POS is a dummy variable that assumes a value of 1 when the news is positive and a value of 0, otherwise. LAG_POSTERGAÇÃO (2) is a binary variable that assumes a value of 1 when the delivery of the financial statements in the previous quarter is delayed in relation to the expected date and a value of 0, otherwise. All continuous variables were winsorized at the 1% and 99% levels. ***, **, and * represent statistically significant coefficients at 1%, 5%, and 10% levels, respectively.

CONCLUSION

The present study analyzed the relationship between the earliness/delay in the release of accounting information and the type of news disclosed to the market. Generally, the results suggest that when the company has bad (good) news to communicate to the market, there is a greater likelihood that the company will delay (advance) such a disclosure.

The evidence found has important implications for the literature on national evidence, as well as for the Brazilian capital market. Regarding the national literature, it was possible to diagnose that, as in the American market, Brazilian companies follow a pattern of expected dates of disclosure of financial information that can be captured by an estimation model (naive model). Thus, it contributes empirical evidence related to the disclosure theory about companies' behavior in relation to the timing of the delivery of their financial statements in the Brazilian market.

Regarding the capital markets, this study contributes to the evidence that companies, on average, meet CVM's requirements regarding the maximum deadline for the delivery of financial statements. However, approximately half of the Brazilian companies are not timely in the delivery of financial information compared to the release date expected by the market. Apparently, in recent years, companies have been more concerned about releasing their financial information on time, respecting the expected disclosure pattern, probably as a way to meet the expectations of market agents. This indicates a possible improvement in the Brazilian capital market.

The limitations of this research are mainly related to the proxies used to calculate the earliness/delay in the release of financial information, as well as to the definition of good or bad news, despite both proxies being based on studies from the international literature. The lack of a historical basis of market participants' forecasts for the date of disclosure is also a limitation, and only the application of an estimation model (naive model) is possible. Additionally, the results of this study are limited to the behavior of the Brazilian capital market from 2010 to 2016.

For future research, we suggest that the effects of other potential determinants in the delay of the delivery of financial statements are studied, such as earnings management and monitoring mechanisms. We also recommend different models of estimation of disclosure dates or market forecasts are used, such as those based on corporate events calendars. Finally, new studies on the consequences of the delay in the delivery of financial information would also be interesting, as well as studies on market reactions to the timing of disclosure of financial statements.

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AUTHORS' CONTRIBUTIONS

Anderson Brito Vivas contributed to all parts of the article, including the theoretical review, data collection, and analysis, as well as the writing. Felipe Ramos Ferreira worked on the conception of the research idea, methodological design, data analysis, and the writing. Fábio Moraes da Costa worked on the additional analysis with the robustness tests, the writing, and finally, final review.