

The Quality of Information on Brazilian Listed Companies and the Decision Between Buying or Leasing Assets

A Qualidade da Informação das Companhias Abertas Brasileiras e a Decisão entre Comprar ou Arrendar Ativos

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Gabriella Silva Melo

Uberlândia-MG

Master's Degree in Financial Accounting from UFU¹

gabriellasmelos@gmail.com

Sirlei Lemes

Uberlândia-MG

PhD in Controllershship and Accounting from USP²

sirlei@ufu.br

ABSTRACT

The objective of this research is to identify the association between the quality of accounting information and the propensity between leasing rather than buying assets. The study sample includes publicly traded by non-financial firms listed on the Bolsa Brasil Balcão (B3) exchange. This study extends previous research on the relationship between information quality and the choice between leasing and buying assets, in an environment with weak legal protections. The research assumption, based on the literature, is that companies that present accounting information with worse quality of accounting information, when obtaining financing, may choose to lease due to financing restrictions. Additionally, the association between the change in the practice of recognizing operating leases arising from IFRS16 and the companies' choice to lease rather than buy assets was verified. With the application of this study, it was evidenced that the quality of accounting information does not significantly affect the choice of leases. However, it presented negative and significant relationships between leases and the variables that measure financing constraints, thus indicating that companies with financial constraints may choose to lease as an alternative source of financing. Furthermore, it is possible to infer that even after the changes in the recognition of leases introduced by IFRS 16, leases continue to be negatively and significantly related to the financing constraint.

Keywords: Accounting quality, debt restriction, leases.

RESUMO

O objetivo desta pesquisa é identificar a associação entre a qualidade da informação contábil e a propensão em arrendar em vez de comprar ativos. A amostra do estudo contempla 80 empresas, não financeiras, de capital aberto, listadas na bolsa de valores brasileira, Brasil, Bolsa e Balcão (B3), como recorte temporal os dados se referem ao período de 2010 a 2019. Este estudo estende pesquisas anteriores sobre a relação entre a qualidade da informação e a propensão entre arrendar e comprar ativos em um ambiente com fracas proteções legais. O pressuposto da pesquisa, com base na literatura, é que empresas que apresentam informações contábeis com pior qualidade da informação contábil, ao obterem financiamentos, podem optar por arrendar devido as restrições de financiamento. Adicionalmente, foi verificado a associação entre a mudança de prática de reconhecimento de arrendamento operacional advinda da IFRS16 e a propensão das empresas por arrendar em vez de comprar ativos. Evidenciou-se com a aplicação deste estudo, que a qualidade da informação contábil não afeta de forma significativa a propensão de arrendar. Entretanto, as empresas apresentaram relações negativas e significativas entre arrendamentos e as variáveis que medem restrições de financiamento, assim, indicando que empresas com restrições financeiras podem optar por arrendar como uma fonte alternativa de financiamento. Ainda é possível auferir que, mesmo após as mudanças no reconhecimento de arrendamentos instituídas pela IFRS 16, arrendamentos continuam relacionados de forma negativa e significativa a restrição de financiamento.

Palavras-chave: Qualidade da informação contábil, restrição de financiamento, arrendamentos.

1 INTRODUCTION

A growing body of accounting research has shown that one way to reduce the negative effects of financing restrictions and have more resources available is through the disclosure of accounting information with higher quality, in order to mitigate information asymmetry (AKINS, 2018; BALAKRISHNAN; CORE; VERDI, 2014; KIM; TSUI; YI, 2011; GRAHAM; LI; QIU, 2008). Studies that focus on the association between the quality of financial reports and the financing of asset purchases, without considering alternative mechanisms, such as in the case of leases. The failure to consider the choice between leasing and purchasing assets possibly affects the evidence of studies on the relationship between the quality of financial reports and financing (BEATTY; LIAO; WEBER, 2010).

Leases represent a significant portion of the financings. According to research conducted by the International Accounting Standards Board (IASB), based on a sample of 30,000 listed companies using IFRS or US GAAP, it was estimated that companies had around

¹ UFU – Universidade Federal de Uberlândia, MG, CEP. 38408-100.

² USP – Universidade de São Paulo, SP, CEP. 05508-900.

\$3.3 trillion in lease commitments and (around) more than 85% did not appear on their balance sheets. More than 14,000 companies disclosed information on off-balance sheet lease in their 2014 annual reports (IASB - 2016b, 2016).

Operating leases, for companies with financial restrictions, represented an effective alternative to overcome problems due to adverse selection and moral hazard that arise from information asymmetry, and can increase the power in debt contracting (EISFELDT et al., 2008). Beatty et al. (2010), with a sample of US companies in the industrial sector, evidenced that financially restricted companies with poorer quality financial reports are more likely to use leased assets as a substitute for the purchase of assets. Therefore, this research uses leases to analyze the propensity of companies to resort to alternative sources of financing due to financial restrictions, possibly due to poorer quality of information.

In addition, according to Francis, Hasan and Song (2012), restrictions and terms for contracting financing differ according to the particularities of each country and can be influenced by the protection of creditors' rights and the efficiency of the legal execution mechanisms established. So, the gap that this research seeks to fill is whether, in a context of weak legal protection, poorer quality accounting information is a condition for companies to have a greater propensity to lease rather than buy assets.

Brazil has an institutional environment characterized by weak protections for creditors and little legal fiscalization (HONG; HUNG; ZHANG, 2016). These factors increase the risk of creditors and, consequently, they can increase financial restrictions and lead to the contracting of more costly debts. Thus, it is reasonable to expect that debt agreements are well drafted to avoid legal disputes (KONRAHT; SOARES, 2020). Therefore, Brazil is a relevant institutional environment for empirical analysis of the relationship between leasing and information quality, so the following research problem is presented: What is the association between companies with poorer accounting information quality and the propensity to lease instead of buying assets in an institutional environment with weak protections for creditors and little legal oversight?

Based on the work of Beatty, Liao and Weber (2010), the quality of accounting information was measured using accruals to represent the influence of discretion in accounting choices. Accruals with abnormal values indicate unexpected deviations between profit and operating cash flow, which would make it more difficult for creditors to reliably estimate companies' operating cash flows, thus indicating a poorer quality of information.

In order to respond to the problem presented, the general objective of this research is to identify the association between the quality of accounting information and the propensity to lease rather than buy assets. Based on the general objective, the specific objectives are:

- a) To verify the propensity of companies to resort to alternative sources of financing when they have poorer quality information.
- b) To verify the influence of the IAS 17 standard's permission to recognize off-balance sheet leases on the propensity to lease rather than buy assets.

This research contributes to the evaluation of the relationship between the quality of accounting information and the propensity to lease or buy assets, considering an environment with greater risks and weak legal protections for creditors, which makes it possible to understand the motivation of companies in presenting reports with better quality information. In a practical sense, it allows users to analyze the financial situation of companies and the possible associated risks, as well as to identify the aspects capable of influencing the relationship between the quality of information and the choice of financing.

For the proposed study on the association between poorer quality accounting information and the company's preference between leasing and buying assets, it was used as a model the techniques

applied in the research by Beatty, Liao and Weber, (2010). The present research complements that of Beatty, Liao and Weber, (2010) by testing the association in a context in which the institutional environment has weaker legal protection and little fiscalization, Brazil. Brazil has investment projects financed by the National Bank for Economic and Social Development (BNDES) which even trying to overcome credit restrictions, still offers financial support at high interest rates, which limits the contracting of debts by companies (SOUSA et al., 2017). Thus, it is expected that in such environments there will be more financial restrictions and, as a result, alternative sources will be relevant.

2 THEORETICAL BACKGROUND AND HYPOTHESES

2.1 Funding restrictions and the quality of information

The role of financial intermediaries is to bridge the gap between the economic agents with a capital surplus and those with a capital deficit. However, asymmetric information can affect the availability of financing for companies (ALLEN; QIAN; XIE, 2019). In order to reduce this asymmetry, the external financial reporting has as one of its main purposes to facilitate the availability of information regarding the company's conditions, which enables the offer of capital (SHROFF et al., 2017).

For the safety of users of accounting information, when examining the company, quality accounting information is a fundamental condition (MOURA; FRANZ; CUNHA, 2015). The quality of accounting information can be defined as the measurement to which the information in the financial statements reflects the company's economic situation (CHEN et al., 2010) and allows the necessary understanding of the information presented (MOURA; FRANZ; CUNHA, 2015). Companies with better quality information would have fewer financing restrictions (BALAKRISHNAN; CORE; VERDI, 2014).

Studies show that certain factors, when associated with the quality of information, can affect companies' financing capacity. One of them is the adoption of internationally standardized accounting regulations, such as IFRS, which, among other things, aim to improve the quality of reports (AKINS, 2018). Ball, Li and Shivakumar (2015) point out that international accounting standard allows for greater discretion among accounting rules, which can negatively affect debt contracting. However, according to Akins (2018), the implementation of IFRS has led to fewer disagreements between rating agencies and reduced uncertainty when establishing debt contracts.

Besides the aspects regarding the quality of information that can affect the willingness to contract debt, one of the ways to mitigate financial restrictions is through debt guarantees (BALAKRISHNAN; CORE; VERDI, 2014). In the presence of financing restrictions, companies can use debt guarantees consisting of pledgeable assets as collateral, offering external investors the option of liquidating the pledged assets if necessary. In this way, debt guarantees play a key role in determining a company's debt capacity (CHANEY; SRAER; THESMAR, 2012).

As the traditional sources of debt and equity financing often become more expensive or more difficult to access during periods of financial restrictions, companies look for alternative sources of funds. Edwards, Schwab and Shevlin (2016) investigated the association between financial restrictions and cash savings generated by tax planning. The authors found that companies facing increases in financial restrictions exhibit increases in cash tax planning, reducing reported current taxable income or increasing tax credits, thus decreasing taxes paid in cash.

Since different factors have the potential to interfere with the availability of debt contracting, companies may have less access to resources through financing and thus resort to alternative sources. Thus, it is expected that companies in a situation of financing restriction will reduce costs and evaluate alternative sources to finance their projects (FRANÇA et al., 2017; EDWARDS; SCHWAB; SHEVLIN, 2016). Beatty, Liao and Weber, (2010), using US manufacturing companies as a sample, observed that financially restricted companies and with poor quality financial reports are more likely to use leased assets as a substitute for asset purchases, raising additional external capital.

Therefore, based on the research by Beatty, Liao and Weber, (2010), in order to investigate the relationship between the propensity of companies to opt for alternative sources instead of improving the quality of information, the first hypothesis of the study is:

H₁: There is an association between poorer quality accounting information and the company's propensity to lease rather than buy assets.

The scenario for this research is Brazil, as already mentioned, the country offers financial support through investment projects financed by the National Bank for Economic and Social Development (BNDES), even trying to overcome credit restrictions can still present limitations in contracting debts, due to high interest rates (SOUSA et al., 2017). Thus, it is expected that the poorer quality of information influences the availability of financing, encouraging companies to choose to lease instead of buying assets.

2.2 LEASE ACCOUNTING TREATMENT

Leasing is defined by IAS 17 as the right to use an asset for an agreed period and is done through an agreement whereby the lessor transmits the right to the lessee in exchange for a payment or series of payments (IAS 17, §4). IAS 17 was adopted by the IASB and was effective until December 31, 2018 (IASB - 2016b, 2016). Leasing, according to the Board, is classified between two possible registers, as operating or financial, based on the extent to which the risks and rewards incidental to ownership of a leased asset belong to the lessor or to the lessee (IAS 17, §7).

A lease is classified as a finance lease when all the risks and rewards incidental to ownership are substantially transferred (IAS 17, §8). In this case, it would be recognized as assets and liabilities in the balance sheet at amounts equal to the fair value of the leased property or, if lower, at the present value of the minimum lease payments, determined at the beginning (IAS 17, §20). When the lease contract does not substantially transfer all the risks and rewards incidental to ownership of the asset, the lease is classified as operating, in accordance with IAS 17, and consequently the lease payments will only be capitalized as an expense over the term of the contract and not presented in the balance sheet (IAS 17, §20).

Companies have enjoyed the benefits of operational leases for decades, thus avoiding recognizing the event on the balance sheet, resulting in the concealment of assets and liabilities arising from leases (WRIGHT, 1993; DUKE; HSIEH; SU, 2009; TAI, 2013). As an effort to reduce off-balance sheet lease accounting and to promote the international convergence of accounting standards, the FASB (Financial Accounting Standards Board) and the IASB proposed a joint project in July 2006. The aim of this project was to develop new accounting standards for leases, thus ensuring complete and transparent recognition of assets and liabilities arising from lease contracts in the financial statements (DUKE; HSIEH; SU, 2009). In January 2016, the IASB issued IFRS 16 Leases, which replaces IAS 17, establishing the principles for the recognition, measurement, presentation and disclosure of leases (IASB - 2016a, 2016). As disclosed by the IASB, IFRS 16 came into force on January 1, 2019 (IASB - 2016b, 2016).

IFRS 16 abolishes the distinction regarding the classification of leases and eliminates recognition as operating or finance leases for a lessee (IASB - 2016b, 2016). Leases are now recognized at the present value of the lease payments and must be recognized as lease assets (right to use assets) or as an item of property, plant and equipment (PP&E). If lease payments are made over time, a company also recognizes a financial liability, which represents its obligation to make future lease payments (IASB - 2016b, 2016).

In order to ascertain whether the propensity to lease not only reflects companies' desire to recognize off-balance sheet accounting, but also replaces the need for better quality accounting information for the availability of financing, this study investigated how the classification of leases before and after the adoption of IFRS 16 affects the relationship between information quality and leases. This leads to the study's second hypothesis:

H₂: There is an association between the change in the practice of recognizing of operating leases that came about as a result of IFRS16 and the propensity of companies to lease rather than buy assets.

Based on Beatty, Liao and Weber, (2010), financially restricted companies with financial reports of poorer quality are more likely to use leased assets as a substitute for financing for asset purchases, raising additional external capital. Thus, it is expected that even after the adoption of IFRS 16, which makes it mandatory to recognize operational leases on the balance sheet, companies will continue to choose to lease assets.

3 METHODOLOGICAL PROCEDURES

3.1 Sample selection and data collection

This study seeks to identify the association between accounting information with poorer quality and the propensity to lease as an alternative form of financing. The research sample consisted of publicly traded companies listed on B3. The sample consisted of data from 2010 to 2019. To test the first hypothesis, considering that the full adoption of IFRS in Brazil occurred in 2010 for publicly traded companies (BEIRUTH et al., 2017) and that the IAS 17 standard was in force until December 31, 2018, the sample consists of a database for the period from 2010 to 2018. In addition, since IFRS 16 became mandatory on January 1, 2019 (IASB - 2016b, 2016) and it is necessary to present information on operational leases with the new regulation only for the first quarter of 2019, the data for the variables to test the second hypothesis refer to the first quarter of 2018 and the first quarter of 2019.

A total of 166 companies in the financial sector were excluded from the sample, since companies in this sector follow different laws and regulations from others, and their financial statements are poorly comparable to those of other companies (LEE; BYUN; PARK, 2018). In addition, 316 companies, which do not have operational leasing operations in any year of the sample, were excluded for not meeting the necessary assumption for applying the regressions. The final sample, after exclusions (Table 1), consists of 80 companies. The data for the study was collected from the Thomson Reuters® database and the models were processed in the software Stata®.

3.2 STATISTICAL MODELS

Initially, the normality of the variables in this study was tested for hypotheses one and two. The dummy variables on dividend payments or not, and the period of adoption or not of IFRS 16 were not included, as they are binary variables (measured by 0 or 1) and will always have a normal distribution. Using a 95% confidence level, the

variables showed a p-value of less than 0.05, thus rejecting H0 and concluding that they have a non-normal distribution.

Since the variables have a non-normal distribution, panel data regressions technique was used to test the hypotheses of this study. In panel data, the same unit is followed over time and the data has a spatial and temporal dimension, providing more informative data, with greater variability and more efficiency, being able to better detect and measure effects that simply cannot be observed at one point in time (GUJARATI; PORTER, 2006). According to Guia et al. (2017), this method seeks to find the best fit for a set of data, trying to minimize the sum of the squares of the differences between the estimated value and the analyzed data, allowing regressions to be estimated considering several units (cross section) for a given period (time series).

To analyze the most appropriate model for the first hypothesis, the relationship between the dependent variable Lease and the independent variables QL, RC, IMP, RAT and DIV was tested. Tests were conducted to choose the most appropriate model for the data in this study. The Hausman test was applied to check whether the database has fixed or random effects. The result of the test established the database with random effects. To confirm the best model, the Breush-Pagan test was applied, assessing whether the database has random or pooled effects. The result of the test confirms the random effects database. Following the same tests for hypothesis two, we find that the data shows random effects just as in hypothesis one.

Gujarati and Porter (2006) point out that for random effects data, the most appropriate method for estimating the model is regression applied to the dynamic panel technique with generalized moments (GMM), as it allows for the mitigation of endogeneity and problems encountered in regressions, as well as there is the insertion of the lagged dependent variable, an important issue for this study. In the random effects model, the unobservable characteristic is incorporated into the error term of the equation. In static panel, the lagged variable can lead to limitations in the estimations. The significance of the model is obtained by the Wald statistic and the significance of the coefficients by the Z-test.

Therefore, according to the first hypothesis, it is expected that accounting information with poorer quality will have a negative relationship with the company's preference to lease instead of buying assets. Thus, the model in Equation 5 was used in the test:

$$lease = \alpha_0 + \beta_1 QL + \beta_2 DIV + \beta_3 RAT + \beta_4 RC + \beta_5 IMP + \epsilon_i, (5)$$

Where:

lease = Operating lease expenses, per year;

QL = The information quality variable is constructed from three common measures of information quality determined by the models of Dechow and Dichev (2002), Dechow, Sloan and Sweeney (1995) and Teoh et al. (1998), models that estimate the values of discretionary accruals;

DIV = Variable equal to one if the company did not pay dividends in the year and zero otherwise;

RAT = Based on Beatty, Liao and Weber, (2010), the variable measured by the rating evaluation, indicator equal to 1 when classified between AAA and A2, indicator equal to 2 if the classification is between BBB+ and BBB-, indicator equal to 4 if classified between BB+ and D, when not classified will be represented by 0, recognized per year;

RC = Annual Sales Income;

IMP = Annual tax provisions.

The decision to lease rather than buy assets will be affected, in addition to the variable information quality described at the beginning of this topic, by the variables presented in Equation 1. It is expected that leasing is related to the fact that the company faces financing restrictions. According to Farre-Mensa and Ljungqvist (2016), since the financial restrictions faced by companies are not directly observab-

le, research relies on indirect proxies, such as having a credit rating or dividend payment. To capture financing restrictions, two variables were chosen: dividend payout (DIV) and rating (RAT).

Regarding the variable of dividends, according to Beatty, Liao and Weber (2010), a negative relationship with leases is expected, considering that companies that do not pay dividends are more financially restricted and are therefore more inclined to lease. These companies with financial restrictions would not have sufficient cash flow to pay dividends (Fazzari; Hubbard; Petersen, 1988). It is also expected that companies with worse ratings will have a negative relationship with leases. Companies with worse ratings find it more difficult to raise capital, as they are considered riskier and, therefore, have more restricted financing and, as a result, would choose to lease.

With regard to the variable sales revenue, it is estimated that companies with higher sales revenue are likely to be less financially restricted and are therefore expected to have a negative relationship with leasing (BEATTY; LIAO; WEBER, 2010). In addition, companies in a situation of financial restrictions are expected to reduce costs to meet the need for greater availability of resources and thus have a greater incentive to reduce taxes on profits (FRANÇA et al., 2018; EDWARDS; SCHWAB; SHEVLIN, 2016).

The expected relationships between the dependent variable, Lease, and the independent variables, information quality, dividend payments, rating, sales revenue and tax payments, are shown in Table 1.

The second hypothesis states that the association between poorer quality accounting information and a company's preference for leasing rather than buying assets remains, even after the adoption of IFRS 16. Thus, it is expected that even after the adoption of IFRS 16, which now prevents the recognition of off-balance sheet leases, companies will continue to choose to lease. To test hypothesis H2, panel data regression was used according to the model described in Equation 6:

$$lease = \alpha_0 + \beta_1 QL + \beta_2 DIV + \beta_3 RAT + \beta_4 RC + \beta_5 IMP + \epsilon_i, (6)$$

Where:

lease = Expenses of operational leases, data for the 1st quarter of 2018 and the 1st quarter of 2019;

QL = The variable information quality is constructed from three common measures of information quality determined by the models of Dechow and Dichev (2002), Dechow, Sloan and Sweeney (1995) and Teoh et al. (1998), models that estimate the values of discretionary accruals;

IFRS = Variable indicator equal to one for the mandatory period of IFRS 16 in Brazil and zero when IFRS 16 is not mandatory;

DIV = Variable indicator equal to one if the company did not pay dividends in the study period and zero otherwise, data from the 1st quarter of 2018 and 1st quarter of 2019;

RAT = Based on Beatty, Liao and Weber, (2010), the variable measured by the rating evaluation, indicator equal to 1 when classified between AAA and A2, indicator equal to 2 if the classification is between BBB+ and BBB-, indicator equal to 4 if classified between BB+ and D, when not classified will be represented by 0, recognized in the 1st quarter of 2018 and 2019;

RC = Sales revenue, data for 1st quarter 2018 and 1st quarter 2019;

IMP = Annual tax provisions, data for the 1st quarter of 2018 and the 1st quarter of 2019.

The variables QL, DIV, RAT, TAM and IMP are the same as in hypothesis one and follow the same relationship with leasing as defined in Equation 5. In addition, there is the variable IFRS with which a positive relationship with leasing is expected. Therefore, even after the implementation of the new leasing standard, companies continue to opt for leasing as an alternative source. The expected relationships for hypothesis two are shown in Table 1.

Table 1 – Expected relationship between dependent variable and independent variables

VARIABLE	EXPECTED RELATIONSHIP	FRAMEWORK
QL	-	The poorer quality of information restricts the ability to finance and so more companies choose to rent (BEATTY; LIAO; WEBER, 2010).
DIV	-	Companies that present financial restrictions would not have sufficient cash flow to pay dividends (FAZZARI; HUBBARD; PETERSEN, 1988). Companies with financial restrictions and which do not pay dividends are more inclined to lease.
RAT	-	Companies with poorer ratings have greater difficulty in raising capital, as they are considered riskier, so they may be more inclined to lease (BEATTY; LIAO; WEBER, 2010).
RC	-	Companies with higher revenues are less financially restricted, so they lease less (BEATTY; LIAO; WEBER, 2010).
IMP	-	Companies with financial restrictions have a greater incentive to reduce taxes on profits (EDWARDS; SCHWAB; SHEVLIN, 2016).
IFRS	+	After the implementation of the new leasing standard, companies continue to opt for leasing as an alternative source.

Source: Elaborated by the author. | **Table caption:** QL: quality of accounting information, DIV: dividend payment, RAT: rating assessment, RC: sales revenue, IMP: tax provision, IFRS: recognition in accordance with IFRS 16.

4 RESULTS AND ANALYSES

Analyzing the descriptive statistics in general, there are 720 observations, 80 companies and 9 years for the first hypothesis. For the second hypothesis, there is 150 pieces of information, 80 companies and 2 years. The variable information quality was calculated annually and by sector, used as a constant for all companies in the same sector per year. In addition, the variables dividend distribution (DIV), rating classification (RAT) and IFRS are dummies, where 1 and 0 are considered for the occurrence or non-occurrence of these variables.

For both samples, sales revenue shows the highest standard deviation when compared between the years, and a high value when compared to the other variables, but this may be due to the characteristics of the account and the long period analyzed. It can also be seen that the variable IMP (Provision for Taxes), for both H1 and H2, has a standard deviation at the same level for the overall sample, as well as when compared over the period in the same company and if compared for all companies in the same year, which means that the variable does not vary much within the sample for the period. The average for the rating classification (RAT) is 0.64 and 0.68, which shows, on a scale where the best ratings are represented by 1 and the worst by 4 based on Beatty, Liao and Weber, (2010), that there may be more companies with the worst ratings.

To analyze the first hypothesis, the relationship between the dependent variable Lease and the independent variables QL, REC, IMP, RAT and DIV was tested. Table 7 shows the results of applying generalized least squares regression.

Table 7 – Application of the GMM test to H1

VARIABLES	COEFFICIENTS	ERROR DEVIATION	T
QL	-2.26	2.12	
RC	-0.002	0.001	0.019*
IMP	-0.235	0.08	0.009*
DIV	-7.56	2.98	0.011*
RAT	-2.70	1.06	0.011*

_cons	1.17	4.68	0.013*
Dependent Variable	Lease		
Independent Variables	QL, REC, IMP, RAT and DIV		
J-statistic	4.9		
P-value (Prob.)	0.0115		
Number of observations	720		

Source: Elaborated by the author. Note: Significant at 5% *; there is no significancens.

The variable information quality (QL) is not significant and therefore has no influence on the propensity to lease rather than buy assets when financing is restricted. A possible justification for this result could be that, even presenting better quality information, companies are still considered risky and more transparent information only serves to demonstrate the risk associated with the company's financial situation.

The variables REC, IMP, DIV and RAT are significant at 5%. With regard to sales revenue (REC), the variable has a negative relationship with leasing, as expected, since it is possible that companies with higher revenues are less financially restricted and choose less to lease. In addition, for the variable Taxes (IMP), companies with financial restrictions are expected to pay less tax, which justifies the negative relationship with leases, shown in Table 7.

As expected, the relationship between the variable on dividend distribution (DIV) and leasing is negative, given that companies that do not pay dividends may have more financial restrictions and are therefore more inclined to lease. Furthermore, the variable that measures the rating classification (RAT) has a negative relationship with leasing, which is explained by the fact that the better the companies are rated, the fewer financing restrictions they will have and, consequently, the less they will choose to lease.

The second hypothesis establishes that the association between poorer quality accounting information and the company's preference for leasing rather than buying assets remains, even after the adoption

of IFRS 16. In order to identify the predicted relationship, the relationship between the dependent variable, Lease, and the independent variables DIV (dividends were paid or not), RAT (*rating classification over the period*), RC (*net sales revenue*), IMP (*tax provisions*) and IFRS (*year in which IFRS 16 is mandatory or not*) was tested using panel data regression, as already mentioned.

Table 8 – Application of the GMM test to H2

VARIABLES	COEFFICIENTS	ERROR DEVIATION	T
QL	-2.87	2.12	
RC	-4.50	0.00	0.00*
IMP	7.45	0.08	0.00*
DIV	-1.26	2.98	0.017*
RAT	-1.45	1.06	0.017*
IFRS	4.24	2.10	0.044*
_cons	1.4	5.66	0.05*
Dependent Variable	Lease		
Independent Variables	QL, REC, IMP, RAT, IFRS AND DIV		
J-statistic	0.49		
P-value (Prob.)	0.000		
Number of observations	150		

Source: Elaborated by the author. Note: Significant at 5%*.

In Table 8, the variable information quality (QL) is non-significant, indicating a lack of influence on the propensity to lease or buy assets due to financing restrictions. As with the first hypothesis, this result can be explained by the fact that companies, even showing a higher quality of information could also be considered risky, since a poor financial situation would be even more evident.

The variables that represent financing restrictions shown in Table 3, IMP, DIV, RAT, are significant at 5%. The variable tax payments (IMP) has a negative relationship with leases, which can be explained by the fact that companies with financial restrictions have a greater incentive to pay less tax and thus reduce costs. As expected, the relationship between the variable on dividend distribution (DIV) and leasing is negative, considering that companies that do not pay dividends may have more financial restrictions and are therefore more inclined to lease. In addition, the variable that measures the *rating classification* (RAT) has a negative relationship with leasing, which

can be explained by the fact that the better the companies are rated, the fewer financing restrictions they will have and, consequently, the less they will choose to lease.

Regarding Sales Revenue (SR), the variable has a significant and negative relationship with leases, as expected, where it is possible that companies with higher revenues are less financially restricted and choose to lease less. The variable to measure the period when IFRS 16 (IFRS) became mandatory has a positive and significant relationship, as expected, confirming that even after the implementation of the new leasing standard, companies that are supposedly present financing restrictions continue to choose to lease as an alternative source.

5 FINAL CONSIDERATIONS

This study extends previous research on the relationship between the quality of information and the propensity to lease or buy assets in an environment with weak legal protections. The assumption of the research, based on the literature, is that companies that present accounting disclosure with poorer quality of accounting information, when obtaining financing, may choose to lease due to financing restrictions. It is expected that the relationship between the quality of accounting information and leasing will continue even after changes in the recognition of leases stipulated by the new standard, IFRS 16.

This research showed that the quality of accounting disclosure does not significantly affect the propensity to lease. However, the study showed negative and significant relationships between leases and the variables that measure financial restrictions, thus indicating that companies with financial restrictions may choose to lease as an alternative source of financing. It is also possible to conclude that, even after the changes in the recognition of leases instituted by IFRS 16, with off-balance sheet recognition no longer being allowed, leases are still negatively and significantly related to financing restrictions, i.e. in a context of financing restrictions, companies resort to alternative sources of financing and may choose more to lease.

The research results indicate that, in an environment with greater risks and weak legal protections for creditors, the quality of accounting information may not be relevant to mitigating financial restrictions, since improving the quality of disclosure was not relevant to mitigating credit restrictions in the sample studied. Based on these results, it is possible to assume that risky companies may not dedicate themselves to improving their accounting disclosure, making it necessary for external users to analyze other variables.

A limitation of the research is the composition of the sample, in which companies that have filed for bankruptcy were excluded, as they are automatically suspended from trading on B3 and consequently were not part of this study's sample either. As financial restrictions were most likely a problem faced by these companies, further qualitative or quantitative research on them could provide additional information on the relationship between purchasing and leasing decisions and the quality of disclosure.

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