

**CUE197 - IS THE INVESTMENT RISK REDUCED BY CONSERVATIVE
PRACTICES?****AUTORIA**

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Resumo

Accounting conservatism was estimated through a model that corrects the assumption of cost asymmetry in these models, and then empirically test whether those companies that adopt conservative practices have lower idiosyncratic risk. The survey sample comprised 265 companies listed on B3 that had all the data required for the survey in the period between 2012 to 2017. The results indicate that accounting conservatism has an inverse relation with idiosyncratic risk, and that companies adopting conservative practices decrease investment risks, thus having a better view of investment. This result confirms that the conservative practice as a mechanism of governance that reduces information asymmetry, controlling the excess recognition of uncertain financial performance and consequently reduces the opportunism of management, implying a lower investment risk. It should be emphasized that, in the possession of the present results, shareholders will be better aware of their exposure to risk, so that they may opt for their investments better and also position themselves efficiently regarding conservative company management and their specific investment risk. Since volatility, risks, and influences on stock returns are of great importance, we find in the present study relevance for the financial area and its users.

IS THE INVESTMENT RISK REDUCED BY CONSERVATIVE PRACTICES?

ABSTRACT

Accounting conservatism was estimated through a model that corrects the assumption of cost asymmetry in these models, and then empirically test whether those companies that adopt conservative practices have lower idiosyncratic risk. The survey sample comprised 265 companies listed on B3 that had all the data required for the survey in the period between 2012 to 2017. The results indicate that accounting conservatism has an inverse relation with idiosyncratic risk, and that companies adopting conservative practices decrease investment risks, thus having a better view of investment. This result confirms that the conservative practice as a mechanism of governance that reduces information asymmetry, controlling the excess recognition of uncertain financial performance and consequently reduces the opportunism of management, implying a lower investment risk. It should be emphasized that, in the possession of the present results, shareholders will be better aware of their exposure to risk, so that they may opt for their investments better and also position themselves efficiently regarding conservative company management and their specific investment risk. Since volatility, risks, and influences on stock returns are of great importance, we find in the present study relevance for the financial area and its users.

Key-words: Idiosyncratic Risk; Investment Risk; Accounting Conservatism.

1 INTRODUCTION

Research on idiosyncratic risk has increased over time, it happens because we do not have the full understanding of its explanation as well as it is of great importance in predicting future returns and consequently in the capital market. The idiosyncratic risk had the initiate of its study after the beginning of the investigations on the relationship between risk and returns of Markowitz's work (1952).

The sequence of Markowitz's work was mainly due to the creation of the Capital Asset Pricing Model (CAPM), which replaces the variances of Markowitz's work (1952) with known indexes of market. The model above has two main parts, the systematic part corresponding to each parameter of the regression associated with its variable or factor and the stochastic part that is the random part of the regressive model (Fu, 2009; Nguyen, 2011). The idiosyncratic risk in turn is measured by the variation of the stochastic part of the model.

This risk, therefore, refers to phenomena not related to the capital market as a whole, being derived from intrinsic and particular factors to each asset or organization. These idiosyncratic components each impact the stock price (Freitas, 2011). Thus, the studies on idiosyncratic risk mostly concentrate on finding explanatory variables and relationships to idiosyncratic risk, since this risk counts on informative effects and thus the results found can be used to improve the prediction of future stock returns (Campbell et al., 2001, Goyal & Santa-Clara, 2003, Fu, 2009). Proof of the imposition of important information through idiosyncratic risk can improve the allocation of efficient resources (Ferreira & Laux, 2007).

As show in Malagon, Moreno and Rodrigues (2015) the idiosyncratic risk is influenced by the decisions taken by the organizations' management, which varies according to the ownership structure of the companies, and thus the asymmetry of information is related to the risk while it is influenced by incomplete information between agent and principal in this relation of agency (Bernardo, 2014; Ganz, 2017). Information asymmetry is still caused first and foremost when one has problems as an extension of incomplete information, which can be measured as to the degree of opportunism according to the monitoring (Steinle, Schiele & Ernst, 2014).

The highlighted asymmetry in the principal relationship and agent comprises the fact that the principal is directly immersed in the daily and internal decision-making environment of the organization, since the agent is the receiver of such information, which can be omitted and modified (Rocha et al., 2012), characterizing this information as incomplete (Nascimento & Reginato, 2008). Thus, information asymmetry can be considered as the difference between the information that both sides of a bilateral relationship have (Ganz, 2017).

As the context has been exposed so far, it has been shown that idiosyncratic risk is influenced by the asymmetry of information, both derived from particularities of each company, and related by the transparency that one must have in relation to the accounting information. The transparency of accounting information is still linked to the quality of the information passed to the stakeholders, being measured by how much of what happened was even foreseen and reported in the accounting reports.

One of the measures of information quality more research is the accounting conservatism, divided into conditional and unconditional conservatism. Unconditional conservatism is scarcely researched for lack of efficient estimates, so we will work in this article with conditional conservatism, which is the accounting tendency to recognize financial losses faster than gains (Ball & Shivakumar, 2005).

The generally known concept of accounting conservatism is the choice of less optimistic options (Bliss, 1924), specifically the principle of anticipation of losses and non-anticipation of profits (Bliss, 1924). In short, bad news is reported while the good news is not until they are confirmed. Often the bad news is a proxies of negative returns, assumed faster in the result than the good news, estimated by positive returns (Basu, 1997; Banker et al., 2016). To be sure, the reporting of both types of news should be symmetrical, but this does not happen in conservative companies, which adopt conservative measures contrary to opportunism.

Conservatism has the particular feature of diminishing information asymmetry, since it plays the role of a corporate governance mechanism, imposing limits on the over recognition of financial performance (Lafond & Watts, 2008). One of the most widely disseminated models that measures conservatism is the Basu model (1997), however, Banker et al. (2016) proposed a modification to Basu's model (1997), due to the asymmetry of costs, which attributes an error of approximately 25% to studies of conservatism that do not consider the asymmetry of costs in their model. Therefore, we will use the Banker's model (2016) in this present article.

In this context, it is considered that conservative practices, which can be estimated by Banker et al. (2016), can influence the asymmetry of information between the company and the external users of the information, which would characterize modification in idiosyncratic risk. Some of recent findings indicate that companies with greater idiosyncratic uncertainty and greater informational asymmetry are more conservative (Khan & Watts, 2009), but this relationship has not yet been tested, at least the authors did not find evidence in the literature. The research is even more relevant in the emerging market, since related research that has obtained evidence of the relationship has all occurred in the developed market environment.

Thus, this article has a guiding question: do the investment risk reduced by conservative practices? In addition, the objective is to analyze the relationship between accounting conservatism and the idiosyncratic risk of Brazilian companies.

If the expected relationship of the research topics is proven, the shareholders will be greater knowledge of their real exposure to risk (Ferreira & Laux, 2007), where will be evidenciated that in emerging markets conservative companies have a lower idiosyncratic risk. This becomes all the more important if you consider that the investor needs to know how much risk is exposed, so you can know how much diversification is needed in your portfolio to nullify the specific risks of your entire portfolio. The choice of investment that compose the portfolio is related to the risk incurred and the desired premium, this being in short the highest return,

and thus Campbell et al. (2001) already stated that volatilities investigations are of great importance, idiosyncratic risk specifically, since these are elements of the return of actions.

Based on the context explained it is understood that different agencies are present in the companies, due to the main agent relations, but more clearly between the management and the external users of the accounting information, in this way it is assumed that the management of Different companies deal in different ways to reduce information asymmetry. Thus, what we intend to investigate as a way to contribute to the literature to better understand and explain the idiosyncratic risk and consequently to contribute to the financial area, while generating information that may help future returns, is whether the different approaches to management, which reduces or increases information asymmetry, and consequently adopt conservative practices more arduously or more subtly influence the level of idiosyncratic risk of organizations.

2 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Conservatism can be defined as the accounting tendency to demand a higher level of security and verification when recognizing good news than bad news when it comes to financial performance (Basu, 1997). Clearly, conservatism is the practice of divulge bad news more quickly than good news (Ball & Shivakumar, 2005), in other words, is the anticipating losses rather than profits (Bliss, 1924).

Conservatism can be interpreted as a governance mechanism that limits managerial bonuses and optimistic attitudes toward accounting numbers (Watts, 2003). LaFond and Watts (2008) still comment that the information asymmetry generated by the agency relationship between the internal managers of the corporations and the external investors engender the conservatism in financial statements, after analyzing the demand for conservatism in the capital market. This is because conservatism reduces information asymmetry, reducing incentives, opportunities, and the ability to overestimate the yields and values of net assets (Kim & Zhang, 2016).

According to their arguments, the authors find evidence that bid-ask spreads reduce after the imposition of conservative practices by firms (LaFond & Watts, 2008). Thus, conservatism is encouraged by the debt market and by corporate governance mechanisms (Ball, Kothari & Robin, 2000; LaFond & Watts, 2008).

According to Demonier, Almeida and Bortolon (2015) the recognition of bad news increases the creditor's confidence in the reality of the financial statements and consequently of the business. Even for the authors, conservative practices reduce the cost of stakeholder monitoring, reducing contractual requirements for greater transparency. In accordance with Wittenberg-Moerman (2008), the use of conservatism quickly reveals changes and credit, thereby increasing transparency and improving the monitoring of the contractual relationship.

In the above-mentioned agency relationship between internal managers and external users of accounting information, there is still another perspective impacted by the possible informational asymmetry between agent and principal. In this perspective are the shareholders and the general environment of the capital market, since the pricing of assets and economic indicators used by investors rely on the accounting information disclosed by the company. In this context is the idiosyncratic risk, priced at the return of the shares, and of great importance in the financial area, since its knowledge provides greater accuracy in the forecast of future returns and this in turn assists the investors in the decision making.

The idiosyncratic risk is influenced by information asymmetry and, thus, practices that aim for greater transparency between shareholders and management are taken to be related to this risk. In this paper, we will focus on the mechanisms of corporate governance (Shleife & Vishny 1997; Gompers, Ishii & Metrick, 2003; Durnev, Morck & Yeung, 2004; Cremers & Nair, 2005; Ferreira & Laux, 2007; Rogers, Ribeiro & Souza, 2007; Nguyen, 2011; Wu, 2013;

Cazzari, Fávero & Takamatsu, 2015; Abu-Ghunmia, Bino & Tayeh, 2015), comprovado by the literature with significative relation.

In this context, both issues are interlinked by informational asymmetry, and this is dependent on management incentives to be clearer or not about their financial situation. In conformity with Kim and Zhang (2016) managers have strong incentives to overestimate financial performance, hoping that a good future result masks the current low performance. The major incentives for this attitude on the part of the management are derivatives of performance compensation, career's preoccupation and its ascension (Ball 2009; Graham, Harvey & Rajgopal 2005; Kothari, Shu & Wysocki 2009). However, if the bearish situation continues for a long time, the casualties will be accumulated and released at once, leading to a shock in the share price (Jin & Myers, 2006, Hutton, Marcus & Tehranian, 2009, Kim & Zhang, 2016).

Kim and Zhang (2016) in their study examine conservatism with the risk of stock price shock, and they expect that the larger the conservative policy of the corporation, the lower the likelihood of accumulating bad news and stock price shock. The authors use three models for estimating conservatism (Basu, 1997; Ball and Shivakumar, 2005; Khan & Watts, 2009) in 43 years of research, and find that the degree of conservatism has a negative and significant association with the probability of organizations future stock price shocks. Therefore, the greater the use of conservatism, the less chance of bad news will impact the return of corporate stock. Corroborating with these, Balakrishnan, Watts and Zuo (2016) also find that even during a financial crisis conservatism helped in financial frictions and increased investment.

In addition to this view, it is still necessary to explore that managers by choosing to be conservative and always recognize losses faster than gains, do not invest in risky projects that initially would lead to loss but in the long run would be highly profitable (Yildiza, Karana & Ozkan, 2019). This view, even if less propitious, if true, will also imply in stock returns, since profit will be hampered by the lack of profitable initiatives out of concern that these are viewed as bad at first.

In view of all of the above, it is verified that accounting conservatism contributes to the reduction of idiosyncratic risk by acting as a governance mechanism that provides greater transparency between managers and external users of information. Since the relationship of idiosyncratic risk is proven in terms of governance mechanisms and their connection to information asymmetry and how accounting conservatism is a kind of practice that fits these criteria, the following research hypothesis has been developed:

H₁: the investment risk is reduced by conservative practices.

3 METHOD

This research has the objective of analyzing the relationship between accounting conservatism and the idiosyncratic risk of Brazilian companies. For this, our population is the B3's listed companies, from which were excluded the companies that did not present all the necessary data for the research, in this way the sample of the research is composed by 265 companies. The research comprises the analysis of information in the period 2012 to 2017, using some data from previous years when necessary, the data collected were monthly and annual according to the variable.

Financial information such as accounting conservatism, idiosyncratic risk, and organizational variables such as company size (SIZE), liquidity (LIQ), indebtedness (IND), among others required to calculate the models were collected in the Thomson database @. Accounting conservatism can be measured by several models according to the literature (Basu, 1997; Ball & Shivakumar, 2005; Khann & Watts, 2009; Banker et al., 2016), but in this paper we chose to use the model of Khan and Watts (2009) that adds explanatory variables to the

Basu model (1997) is a widely diffused model in the area. Equation 1 presents the model for calculating the conservatism of Khan and Watts (2009).

$$X_i = \beta_0 + \beta_1 D_{it} + \beta_2 R_{it} (\mu_1 + \mu_2 Size_i + \mu_3 M/B_i + \mu_4 Lev_i) + \beta_3 D_i R_i (\lambda_1 + \lambda_2 Size_i + \lambda_3 M/B_i + \lambda_4 Lev_i) + (\delta_1 Size_i + \delta_2 M/B_i + \delta_3 Lev_i + \delta_4 D_i Size_i + \delta_5 D_i M/B_i + \delta_6 D_i Lev_i) + \varepsilon_{it} \quad (1)$$

Where:

X_{it} : is the accounting result per share of company i in year t divided by the share price in year t-1;

R_{it} : is the return of the stock of company i in year t;

D_{it} : is a dummy variable for which 1 the company has negative return and 0 otherwise;

$D_{it} * R_{it}$: is the quotient between positive and negative returns;

$Size_i$: is the size of the company;

M/B_i : is the *market-to-book*;

Lev_i : represents leverage.

The model of Khan and Watts (2009) allows the estimation of conservatism for each year and company by means of its general model, calculating the G_Score and C_Score of each company using the size, market-to-book and leverage information of the companies. with the estimators of the general model. The estimators μ_i and λ_i are obtained by means of annual cross-sections of the general model presented by Equation 1. The G_Score and C_Score estimates, which represent the anticipation of good and bad news, are presented by equations 2 and 3.

$$G_Score = \beta_3 = \mu_1 + \mu_2 Size_i + \mu_3 M/B_i + \mu_4 Lev_i \quad (2)$$

$$C_Score = \beta_4 = \lambda_1 + \lambda_2 Size_i + \lambda_3 M/B_i + \lambda_4 Lev_i \quad (3)$$

In addition to the models already mentioned, Banker et al. (2016) argues that traditional models of conservatism can price an asymmetry of costs in their estimation, which would result in a pet bias. Therefore, Banker et al. (2016) presents the model of Equation 4 that corrects the possible asymmetry of costs.

$$X_i = \beta_0 + \beta_1 R_{it} + \beta_2 D_{it} + \beta_3 D_{it} * R_{it} + \beta_4 DS_{it} + \beta_5 \Delta S_{it}/P_{it-1} + \beta_6 DS_{it} X \Delta S_{it}/P_{it-1} v_{it} \quad (4)$$

In which:

DS_{it} : it is a dummy variable that assumes 1 occur sales drop from the previous year to the current year and 0 otherwise;

$\Delta S_{it}/P_{it-1}$: represents the sales variation;

$DS_{it} X \Delta S_{it}/P_{it-1}$: is the product between DS_{it} and $\Delta S_{it}/P_{t-1}$, indicating the level of cost asymmetry of companies.

In order to obtain the best estimation of conservatism, based on size, market-to-book and leverage, and without the possible asymmetry of costs, this article used a conservative model of Khan and Watts (2009) corrected for cost asymmetry according to Bhaner et al.

(2016), the adaptation was first used by Silva et al. (2019) and verified the improvement of the correction of the cost asymmetry in the model. The adapted model is expressed by Equation 4.

$$X_i = \beta_0 + \beta_1 D_{it} + R_{it}(\mu_1 + \mu_2 Size_i + \mu_3 M/B_i + \mu_4 Lev_i) + D_i R_i(\lambda_1 + \lambda_2 Size_i + \lambda_3 M/B_i + \lambda_4 Lev_i) + (\delta_1 Size_i + \delta_2 M/B_i + \delta_3 Lev_i + \delta_4 D_i Size_i + \delta_5 D_i M/B_i + \delta_6 D_i Lev_i) + DS_{it}(\rho_1 + \rho_2 Size_i + \rho_3 M/B_i + \rho_4 Lev_i) + \Delta S_{it}/P_{it-1}(\tau_1 + \tau_2 Size_i + \tau_3 M/B_i + \tau_4 Lev_i) + DS_{it} * \Delta S_{it}/P_{it-1} v_{it}(\varphi_1 + \varphi_2 Size_i + \varphi_3 M/B_i + \varphi_4 Lev_i) + \varepsilon_{it} \quad (4)$$

Being estimated the coefficients μ_i and λ_i of equation 4 these are substituted in equations 2 and 3 to obtain the G_Score and C_Score of the companies of the sample, of which C_Score will be the proxy used in the present study for accounting conservatism. The idiosyncratic risk was then calculated from accounting conservatism. The idiosyncratic risk can be calculated in different ways; the most usual form is by the variance of the residuals (errors) of the pricing models of financial assets. The traditional Capital Asset Pricing Model (CAPM), the most widely appreciated and commonly used asset pricing model in the financial area, is expressed by equation 5.

$$R_{it} - R_{ft} = \beta_0 + \beta_1(R_{mt} - R_{ft}) + \varepsilon \quad (5)$$

At where:

R_{it} : expresses the return of asset i in period t;

R_{ft} : is the risk-free rate in period t;

R_{mt} : it is the return of the market in the same period;

β_0 and β_1 : are the coefficients of the regression;

ε : is a random error of the regression.

The CAPM model since its desenvolved has been widely used and for this reason several adaptations have been made over time, one of the most successful, proving an additional explanation to the original model, is that of Fama and French (1993), which complements the traditional model of CAPM with two other explanatory factors, relative to size and book-to-market, which is known as the three-factor model of Fama and French (1993) and is expressed by Equation 6.

$$R_{it} - R_{ft} = \beta_0 + \beta_1(R_{mt} - R_{ft}) + \beta_2(SMB_t) + \beta_3(HML_t) + \varepsilon \quad (6)$$

Where:

SMB (*Small minus Big*): weights the size effect;

HML (*High minus Low*): weights the effect of Book-to-Market.

The methodology for factor estimation is complex and can be found in the literature (Fama & French, 1993; Rogers & Securato, 2008; Ganz, 2017). The authors of the three-factor model continued to investigate the variables to better price the assets, and in 2017 proposed the well-known five-factor model of Fama de French (2015), which adds weighing factors of profitability and investment in the model of three factors. The five-factor model is expressed by Equation 7.

$$R_{it} - R_{ft} = \beta_0 + \beta_1(R_{mt} - R_{ft}) + \beta_2(SMB_t) + \beta_3(HML_t) + \beta_4(RMW_t) + \beta_5(CMA_t) + \varepsilon \quad (7)$$

In which:

RMW (*Robust minus Weak*): weighs the profitability;

CMA (*Conservative minus Aggressive*): weights investments.

The explanation of the factors of profitability and investment lack the same logic of the weighting factors of size and book-to-market. Then, the five-factor model for the companies in the sample was estimated based on monthly data, the annual variance, for which 1590 regressions were required, these being annual and per company, from which the residuals and the coefficient β_i were saved. Finally, the idiosyncratic risk was then obtained by means of the square root of the quotient between the residue and the degree of freedom of the observations, that is, the regression residue variance, being this annual and individual for each company.

Finally, to explain the relationship proposed in the article, four control variables were used, according to Ganz's methodology (2017), to burden the relationship between accounting conservatism (AC) and idiosyncratic risk (IR), among which are the size (SIZE), liquidity (LIQ), indebtedness (IND) and systemic risk (SR). Table 1 presents the research construct with all variables used.

Table 1 - Research Construct

Variable	Description	Formula	Authors
Idiosyncratic Risk (IR)	$Var(\varepsilon)_t$ estimated by Equation 7	$IR = \sqrt{\frac{Residue}{n-1}}$	Fama & French (2015); Zhou & Michou (2016); Ganz (2017)
Accounting Conservatism (AC _{kw})	C_Score of the model of Khan and Watts (2009)	$AC_{kw} = C_ScoreKW$	Khan & Watts (2009)
Accounting Conservatism (AC _{kwa})	C_Score of the model adapted from Banker et al. (2016) and Khan and Watts (2009)	$AC_{kwa} = C_ScoreKWA$	Banker et al. (2016); Khan & Watts (2009); Silva et al. (2019)
Systemic Risk (SR)	Angular coefficient associated with market return	$SR = \beta_{it}$	Ganz (2017)
General Liquidity (LIQ)	General Liquidity presented by the company during the period of analysis	$LIQ = \frac{CA + nCA}{TL}$	Futema, Basso & Kayo (2009); Ganz (2017)
Indebtedness (IND)	Indebtedness presented by the company in the period of analysis	$IND = \frac{TL}{TA}$	Martin, Cia & Kayo (2010); Ganz (2017)
Size (SIZE)	Company size according to total assets	$SIZE = \ln(TA)$	Nguyen (2011); Ganz (2017)

Subtitle: CA: Current assets; NCA: Non-current assets; TL: Total Liabilities; TA: Total Assets.

Source: Research Data

Having then presented all dependent and independent research variables, equations 8 and 9 were then developed which indicated whether the investment risk increases for a given firm to be conservative.

$$IR = \beta_0 + \beta_1 AC_{kw_{it}} + \beta_2 LIQ_{it} + \beta_3 IND_{it} + \beta_4 SR_{it} + \beta_5 SIZE_{it} + \varepsilon_{it} \quad (8)$$

$$IR = \beta_0 + \beta_1 AC_{kwa_{it}} + \beta_2 LIQ_{it} + \beta_3 IND_{it} + \beta_4 SR_{it} + \beta_5 SIZE_{it} + \varepsilon_{it} \quad (9)$$

The data were processed using STATA® software (Statistics / Data Analysis), with descriptive statistics, correlation and multiple linear regression. As a robustness test, the regressions were performed according to the 10th, 50th and 90th quantiles, representing low, medium and high idiosyncratic risk.

4 RESULTS AND DISCUSSION

In this section we present the results of the research as well as the discussions about them. Table 2 presents the descriptive statistics referring to the variables of the research. The idiosyncratic risk presents low indicators, this is due to the pricing model used to fit the market well and consequently to produce a low residue. The average idiosyncratic risk is lower than that observed by Ganz (2017) and Bernardo (2014), this can occur due to the longer period of observation and larger sample. The minima and maxima are similar to those of Ganz (2017), analyzing in a general way.

Table 2 – Descriptive statistics

Variable	Minimum	Maximum	Average	Standard deviation
IR – Idiosyncratic Risk	0,0000014	0,2514	0,0099	0,0208
$AC_{kw_{it}}$ – C_Score of the model of Khan and Watts (2009)	-13,6763	3,3242	-0,0936	0,6630
$AC_{kwa_{it}}$ – C_Score of the model adapted from Banker et al. (2016) and Khan and Watts (2009)	-71,3541	4,4538	-0,2361	2,2267
$SIZE_{it}$ – Company size	-0,6675	14,1775	2,1535	2,1535
SR_{it} – Systemic Risk	0,0012	0,5014	0,0798	0,0594
LIQ_{it} – Liquidity	0,0142	152,0984	2,5183	8,6540
IND_{it} – Indebtedness	0,0066	70,3680	1,0201	3,6017

Source: Research Data

It can also be observed that the mean of the conservatism of the Khan and Watts (2009) model adapted is smaller than the original model of the same authors, which corroborate with the findings of Silva et al. (2019). The results of the descriptive statistics for conservative models follow the same parameters found by Silva et al. (2019), but with different values. The variables of liquidity and indebtedness were the ones with the highest standard deviation, both of which have an increase in relation to Ganz (2017), but the indebtedness closely resembles those found by Bernardo (2014). The size of the company and the systemic risk are lower than those found in the studies cited above. Table 3 shows the correlation between the variables of the study with the intention of verifying the bivariate relation between these variables.

Table 3 – Correlation

Variable	IR_{it}	$AC_{kw_{it}}$	$AC_{kwa_{it}}$	$SIZE_{it}$	SR_{it}	LIQ_{it}	IND_{it}
IR_{it}	1,0000						

$ACkw_{it}$	-0,195	1,0000					
$ACkwa_{it}$	-0,106	0,515	1,0000				
$SIZE_{it}$	-0,224	0,099	0,055	1,0000			
SR_{it}	0,912	-0,191	-0,098	-0,245	1,0000		
LIQ_{it}	-0,049	0,028	0,021	-0,056	-0,073	1,0000	
IND_{it}	0,094	-0,111	-0,080	-0,287	0,108	-0,053	1,0000

Source: Research Data

Idiosyncratic risk is negatively related to most of the variables, such as the coefficients of conservatism, size and liquidity, indicating that when these variables increase the risk of individual investment is diminished, it is inferred that larger and more liquid companies own greater stability and, therefore, the risk of investment in these is less because of its structure. Systemic risk and indebtedness are positively related to idiosyncratic risk, indicating that, logically, when a company has larger debts, the risk of investing in these increases, because of the possibility of default on its obligations and thus lower return for investors, and the risk systemic because it is complementary to the idiosyncratic risk in the pricing model, it makes sense to both move in the same direction.

Both conservatives have the same relationships, being these positive with size and liquidity, and inversely with the systemic and idiosyncratic risks and with the indebtedness, which corroborates the relationships of the idiosyncratic risk above, being these equivalents of the same analysis. The results of idiosyncratic risk relationships corroborate Ganz's findings (2017) with the exception of the systemic risk that has a divergent relation to that found in the study. Table 4 presents the regressions proposed in the study and which responded to the research gap.

Table 4 – Regression

Variable	IR_{it}		IR_{it}	
	Coefficient	p-value	Coefficient	p-value
$\beta_{1AC_kw_{it}}$	-0,0007011	0,034	-	-
$\beta_{1AC_kwa_{it}}$	-	-	-0,0001635	0,092
$\beta_{2SIZE_{it}}$	-0,00000509	0,962	-0,00000974	0,928
$\beta_{3SR_{it}}$	0,318287	0,000	0,3191116	0,000
$\beta_{4LIQ_{it}}$	0,0000422	0,091	0,0000421	0,092
$\beta_{5IND_{it}}$	-0,0000332	0,595	-0,0000293	0,639
R ²	0,8319		0,8317	
Prob > F	0,0000*		0,0000*	
Year Effect	Yes		Yes	
Sector Effect	Yes		Yes	
N	1590		1590	

Source: Research Data

Table 4 shows a good explanation of the model for the dependent variable, burdening explanation and thus increasing the explanatory power when compared to the other studies (Nguyen, 2011; Bernardo, 2014; Ganz, 2017). The two models tested showed significance ($Prob > F = 0,000$) indicating a good explanation of the independent variables with the dependent variable, evidenced that conservatism explains in some way the idiosyncratic risk of the companies.

In the models tested (Equation 8 and 9), the variables of conservatism, systemic risk and liquidity presented significance, being that the coefficient of conservatism has an inverse relation and both other variables have positive relation with the idiosyncratic risk. The systemic risk proves the correlation found in the correlation, indicating that the systemic and idiosyncratic risks tend to go together, these results go against the results found by Ganz (2017) who found an inverse relationship between the variables for the sample of IBrX companies 100.

In addition, liquidity presented a positive relation with the dependent variable differently from what happened in the correlation, this indicates that the more liquid the company the greater the idiosyncratic risk of the same.

The variables of size and indebtedness did not present significant significance, but these results are in agreement with the previous findings (Nguyen, 2011; Bernardo, 2014; Ganz, 2017). Accounting conservatism became significant and in inverse relation to idiosyncratic risk, indicating that the more conservative the company the lower its idiosyncratic risk. These results corroborate Laffond & Watts (2008), who asserts that conservatism has the particularity of reducing information asymmetry, since it plays the role of a corporate governance mechanism, imposing limits on the over recognition of performance financial. Khan and Watts (2009) find in their study that possibly conservative companies have greater idiosyncratic uncertainty and greater information asymmetry, however, this assumption was not confirmed by the findings of the research.

For a robustness analysis and complementation of results, the quantiles regression of equations 8 and 9 was performed in three different quantiles (10, 50, 90), these results are expressed in Table 5.

Table 5 – Quantile Regression

Quantil	Quantile Regression					
	10°		50°		90°	
	kw	kwa	kw	kwa	kw	kwa
AC_{it}	-0,019*	-0,004*	-0,003	-0,004	-0,002*	-0,001
$SIZE_{it}$	-0,001	0,000	-0,002	-0,03*	-0,005*	-0,04*
SR_{it}	0,160*	0,161*	0,180*	0,182*	0,0288*	0,290*
LIQ_{it}	-0,002	0,002	0,007	0,007	0,002	0,002
IND_{it}	-0,006	-0,008	-0,002	-0,002	-0,002	-0,002
R ²	0,6274	0,6275	0,6006	0,6004	0,6749	0,6741
N	1590					

Legend: * The correlation is significant at 0,05.

Source: Research Data

In general, the relationships are verified in the quantitative regression, being that the conservatism is significant in the quantiles of low and high idiosyncratic risk and not in median levels. The relationship of conservatism is always proven to be in line with previous results. In addition to conservatism, the systemic risk was significant at all levels of risk and always with a positive relation. The size, independent of the model, is validated from high idiosyncratic risk analysis.

In view of the results found, it is inferred that conservatism can be treated as a mechanism of governance, as proposed by Watts (2003), since its decrease in informational asymmetry also reduces the idiosyncratic risk or specific risk of investment. Thus, the hypothesis of research developed in section 2 of this article is accepted that "H₁: the investment risk is reduced by conservative practices".

The idiosyncratic risk is reduced by conservatism because it reduces information asymmetry by reducing managers' incentives, opportunities and ability to overestimate the organization's income (Kim & Zhang, 2016). The results still corroborate with the studies by Kim and Zhang (2016) and Balakrishnan, Watts and Zuo (2016) that the uses of conservative practices reduce the risk of stock price shock and helps in the financial aspects of the company, since the risk of specific investment of companies is diminished. The findings still differ from the view expressed by Yildiza, Karana and Ozkan (2019) that returns would be negatively affected by the risk aversion of conservative practice.

The fact that idiosyncratic risk is diminished by conservatism leads to greater security on the part of investors towards conservative firms, which corroborates with the idea of

Demonier, Almeida and Bortolon (2015) that the recognition of bad news increases the confidence of creditors in reality and fidelity of the financial statements and consequently of the business.

It was verified, therefore, that accounting conservatism contributes to the reduction of idiosyncratic risk, by acting as a governance mechanism that provides greater transparency between managers and external users of information. The study also contributes to the identification of another variable that adds the explanatory power of the idiosyncratic risk, thus helping to predict future returns of actions more accurately and to allocate resources more efficiently (Campbell et al., 2001; Goyal & Santa-Clara, 2003; Ferreira & Laux, 2007; Fu, 2009).

The influence of the company's management decisions on idiosyncratic risk is also verified (Malagon, Moreno & Rodrigues, 2015), since conservatism is at its core a management option. In addition to these, it is confirmed that the conservative practices, estimated by the model of Khan and Watts (2009) adapted with the model of Banker et al. (2016) reduces the information asymmetry between the company and the external users of the information, which presents a lower idiosyncratic risk. These diverge from the findings of Khan and Watts (2009) that firms with greater idiosyncratic uncertainty and greater informational asymmetry have greater conservatism.

Finally, the study has as limitations the use of only one country as a sample, and only the two models of conservatism estimation used, since there are several others in the literature. However, the present research addresses a research area not explored in the literature, combining information quality with the idiosyncratic risk that a variable coming from asset pricing models, more specific thematic area of the financial area, and thus opens the way to more research than investigate similar relationships.

5 CONCLUSION

Accounting conservatism was estimated by the model that corrects the asymmetry of costs, for then empirically test if companies that adopting conservative practices have lower idiosyncratic risk, this because the diffuse anticipation of bad news reducing future uncertainties, reducing information asymmetry and, as a consequence the idiosyncratic risk.

The results indicate that accounting conservatism has an inverse relationship with idiosyncratic risk, and companies adopting conservative practices reduce their specific investment risks, thus having a better investment vision. This result confirms that conservative practice as a mechanism of governance that reduces information asymmetry, controlling over-recognition of uncertain financial performance and thereby reducing management opportunism, implies a lower investment risk and, therefore, stakeholders should take this information into account.

Even though there was evidence that the opposite relationship could be observed, the proposed relationship remained. The idiosyncratic risk, as it is influenced by managerial decisions, and thus by the asymmetry that can be caused by the transfer of incomplete information to the stakeholders, was lower for companies that adopt accounting conservatism and consequently management practices that aim for greater transparency between principal and agent.

The results found on the systemic risk are significant and mostly positive, indicating a joint trend of these two risks, as well as a total risk of investment, if considered the prices in the market models as discussed here. Liquidity in turn also presented the same relation of systemic risk, indicating that more liquid companies have a higher investment risk in this context, this may be due to the fact that these companies have greater market and financial movement, this can interfere quickly in the return of their actions. For the purposes of this study, the correction

of cost asymmetry in the conservative model did not significantly affect the results of the proposed model.

It should be emphasized that, in the possession of the present results, shareholders will be better aware of their exposure to risk, which may better opt for their investments and also better position themselves regarding the management of a conservative company and its specific investment risk. Since volatility, risks, and influences on stock returns are of paramount importance, we find in the present study more relevant information on the financial area and its users.

We conclude that investment risk can be reduced by conservative practices that act as a mechanism of governance and decrease the asymmetry of information between management and external users of information. Several other investigations may also complement the present findings by analyzing other forms of information quality, other risks and other forms of measurement to complement and prove the results found here.

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