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RESEARCH ARTICLE

THE RELATIONSHIP BETWEEN INCOME SMOOTHING AND CONDITIONAL ACCOUNTING CONSERVATISM: EMPIRICAL EVIDENCE FROM MOZAMBIQUE.

Tito Tomas Siueia amd Wang Jianling.
1. PhD student, of Xi`an Jiaotong University – P. R. China.
2. Professor Supervisor of Xi`an Jiaotong University – P. R. China.

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Abstract

As shown by Alarlooq et al. (2014), a vast group of researchers believes in a positive and important relationship between conservatism and earnings management, while others assert that there is no or a negative relationship between the two important determinants of disclosure decisions. However, there is no consensus on this. The present study examines the relationship between conditional conservatism and earnings management in the income smoothing modality. We empirically tested our hypotheses using Eckel's model (1981) to sort firms into smoothing firms and non-smoothing firms, and then we applied the Basu (1997) primary model and C_Score metric proposed by Khan and Watts (2009) to measure the level of conditional conservatism in each group. The scope of this paper runs from 1st January 2010 to 31st December 2016 and 483 firm-year observations were selected during the period. The results indicate that there is conditional conservatism in Mozambique since there is an anticipation of recognizing of losses in relation to gains. On the other hand, non-smoothing firms had greater opportunity to recognize future economic losses than firms that practice smoothing. This paper differs from previous because it will close the existing gap on the issue in, especially Mozambican context.

Introduction:-

Conservatism is a very important quality characteristic of accounting information. Coelho (2007) argue that accounting conservatism can be explored from tow viewpoints, conditional conservatism and unconditional conservatism (as cited in Almeida et al. 2012). In our study, we will focus only on conditional conservatism. Conservatism is characterized as a practice of requiring a higher degree of analysis to recognize gains than losses, thus reflecting more timely economic losses "bad news as losses" than economic gains "good news as gains" (Basu, 1997; Watts, 2003; Huijgen and Lubberink, 2005; Ryan, 2006; Givoly et al., 2007; LaFond and Watts, 2008). According to Khan and Watts, 2009 conservatism requires managers to recognize economic losses in a timelier fashion than economic gains and hence protects investors by limiting managers' ability to obtain excessive compensation based on exaggerated earnings. Khalifa et al. (2014) argue that the degree of conditional conservatism affected by the degree of leverage and litigation risk but taxation does not affect conditional conservatism in U.S. firms. Additional, according to Healy and Whalen (1999), earnings management occurs when the manager applies his

Corresponding Author:- Tito Tomas Siueia.
Address:- PhD student, Supervisor.

judgment on the financial statements in order to influence the interpretation of the stakeholders on the economic performance of the company as well as to change the results of contracts that depend on the accounting information. According to Martinez and Castro (2009b), income smoothing is one of the aspects of earnings management that has attracted significant attention from the finance and accounting literature dedicated to earnings management. Valipour et al. (2011) argued that investigating the relationship between income smoothing and conditional accounting conservatism is important because it can provide evidence of conservatism and ability to restrict managers of opportunistic behavior.

On the other hand, as indicated by Alarlooq et al. (2014), there is no consensus about the relationship between earnings management and conservatism accounting, so the first goal this paper is to investigate the relationship between conditional conservatism and income smoothing which is one of the earnings management modalities with the Mozambique evidence as the sample. The second goal is to compare the degree of conditional conservatism between smoothing and non-smoothing firms in Mozambique. Theoretically, this paper is consistent with Almeida et al. (2012) proposition, who argue that smoothing practices interfere in firms 'accruals by reducing the ability of accounting to reflect economic reality in business. In this context, it is relevant to understand how the practice of smoothing influences conditional conservatism.
In view of the situations described above this paper seeks answers to the following questions:

- Is there a significant relationship between conditional accounting conservatism and income smoothing?
- To what extent can income-smoothing practices affect the level of conditional conservatism?

Using Eckel's model (1981) to sort firms into smoothing firms and non-smoothing firms, and applying both Basu (1997) primary model and C_Score metric proposed by Khan and Watts (2009) to measure the level of conditional conservatism in each group, we find that there is a positive relationship between income smoothing and accounting conditional conservatism in Mozambican firms. Further, we find that Mozambican companies are conservative on average. Specifically, the degree of conditional conservatism is higher in non- smoothing firms than smoothing firms. The scoping period of this paper runs from 1st January 2010 to 31st December 2016 and 483 firm-year observations were selected.

This paper differs from previous research in several main aspects. Firstly, the example of the study of Valipour et al. (2011), that investigating the relationship between income smoothing and conditional accounting conservatism apply the model of Ball and Shivakumar (2005) to measure the conservatism; Almeida et al. (2012) apply the Basu (1997) primary model to measure the conservatism. In our study, we apply both the Basu (1997), primary model, and the C-Score, to measure the degree of conditional accounting of a firm-year specific proposed by Khan and Watts (2009) because we believe that this tow model allows the applications of Eckel's model (1981) to sort firms into smoothing and non-smoothing firms. Secondly this study (it) will close the existing gap, because several studies examine the relationship between conditional conservatism and income smoothing in the European context, American context, Asian context (such as Mohammadi and Dashtbayaz., 2015; Younes et al., 2012; Almeida et al., 2012**;** Valipour et al., 2011; Martinez and Castro, 2009; Bens et al., 2008; Gassen et al., 2006). By demonstrating that conditional accounting conservatism is higher pronounced in non-smoothing firms, this study confirms that these non-smoothing firms are higher conditionally conservative than smoothing firms, consistent with results previously documented by Almeida et al. (2012). Thirdly, In the Mozambican scenario, we believe that this article is the first, of the kind, to study the relationship between accounting conservatism and smoothing practices because in our literature review there was scanty evidence about the subject. Fourthly, few empirical types of researches have been conducted to promote understanding on how firms compete in emerging and nascent markets (Santos and Costa, 2008), in this case, we believe that paper provides implications for the corporate governance policy in Mozambique and other nascent markets. Finally, this study will contribute to a broader understanding of the issue of conditional conservatism and income smoothing in the African context on overall and in particular the Mozambican context.

After the motivation, objectives and the research problem exposed, the paper was structured in thematic sections. Following this introduction, in the next section (section two) the literature and then the hypotheses are formulated based on theoretical expectations. This is followed by the research design. In the fourth section, the results of the empirical analysis performed are presented and discussed. Finally, we synthesize the main conclusions and suggestions for future research.

Related Literature And Development Of Hypotheses:-

Beidleman (1973) defines income smoothing the damping of fluctuations in some level of results that is considered normal for a company. According to Imhoff (1981) income smoothing is a special case of inadequate disclosure of financial information and this technique involves some deliberate effort to disclose the financial information in order to artificially reduce the variation of the profit flows. According to Martinez and Castro (2009) the income smoothing is applied in situations where the previously determined result is high, by the reduction of the disclosed result; and when the result previously determined is low, by the increase of the disclosed result. Martinez and Castro (2009) also found that income smoothing companies are more likely to have lower third-party capital cost, the capital structure with greater weight for long-term indebtedness and received better ratings by rating agencies in the public offer of debentures.

According to Basu (1997, p.7) conservatism is "the tendency of the accountant to require a higher degree of verification in order to recognize good news as gains than to recognize bad news as losses". For LaFond and Watts (2008) conservatism requires managers to recognize economic losses in a timelier fashion than economic gains and hence protects investors by limiting managers' ability to obtain excessive compensation based on exaggerated earnings. According to the previous literature, many variables have been applied to capture variation in conservatism. In this paper we applied the four elements[i] suggested by Watts (2003a) because we believe that these four elements reflect cross-sectional variation in conservatism, the controlling variables are Leverage (LEVE)[ii] Size (SIZE)[iii] and market-to-book (MTB)[iv]. Additionally, we control the variable audit litigation risk[v] and firm age[vi]. All variables are defined in Appendix.

Several studies (Younes et al., 2012; Almeida et al., 2012; Valipour et al., 2011; Martinez and Castro, 2009b) examine the relationship between income smoothing and conditional conservatism and its impact in different countries, which highlighted different conclusions using different methodologies. However, both converged in affirming that conditional conservatism and the smoothing practices are two distinct concepts and are correlated. While smoothing practices reduces the variability of profits, conditional conservatism makes gains slightly biased against operating cash flow. On the other hand, Mohammadi and Dashtbayaz (2015) examine the relationship between conservatism and income smoothing. They document that there is no relationship between income smoothing by conservative managers in bankrupt companies. Younes et al. (2012) examine earnings management and accounting conservatism on a sample of 480 firms-years observations between years 2001 to 2008 in Teheran Stock Exchange for non-financial firms and document a negative relationship between earnings management and conservatism in Teheran Stock Exchange.

Gassen et al. (2006), applying Basu (1997) primary model and Fama and MacBeth regression examine the effect of conditional conservatism in income practice in code law vs common law countries. The evidence supports the theoretical framework that income smoothing interferes with the firm's ability to recognize bad news in a timely manner. Khalifa et al. (2014) examine conditional conservatism in between high and low technology U.S. firms. They document that conditional conservatism is less pronounced among the high-technology firms and the degree of conditional conservatism increases with the degree of leverage and litigation risk affects conditional conservatism only in low-technology firms but taxation does not affect conditional conservatism in technology degree of the U.S. firm.

Thus, this study compares the level of asymmetric recognition between "bad news" and "good news" from Basu's point of view (1997). Because according to Ryan (2006), the most influential and most widely applied definition of conditional conservatism in accounting literature is that of Basu (1997); further we applied C_Score metric to compare the degree of asymmetric recognition between "bad news" and "good news" proposed by Khan and Watts (2009). And segregating firms in smoothers firms and non-smoothers firms, taking into account the Eckel`s model (1981), according to Almeida et al. (2012), the Eckel`s model (1981), model best classifies firms in smoothing firms and non-smoothing firms, respectively.

Based on the theoretical arguments presented above the following research hypotheses were tested in this article: **H1:** *Ceteris paribus*, there is a positive relationship between income smoothing and accounting conditional conservatism in Mozambican firms. **H2:** *Ceteris paribus*, the smoothing firms recognize later the economic losses than the non-smoothing firms. **H2.1**: *Ceteris paribus*, the higher level of conditional conservatism in non-smoothing firms is driven by their higher level of leverage. **H2.2:** *Ceteris paribus*, the higher degree of conditional conservatism in non-smoothing firms is driven by the degree of auditor litigation risk. **H2.3**: *ceteris paribus*, their

taxable earnings drive the higher degree of conditional conservatism in non-smoothing firms. **H2.3***: Ceteris paribus,* the higher degree of conditional conservatism in non-smoothing firms is driven by their taxable earnings. **H2.4***: Ceteris paribus,* the higher level of conditional conservatism in non-smoothing firms is not driven by their firm age.

Research design:-

In this article, the authors used the same methodology employed by Almeida et al. (2012) with some modifications in relation to, particular aspects of Mozambique. Control variables were also introduced to make the tests more robust. Therefore, initially, the coefficient of variation, the method developed by Eckel (1981) to determine the presence of smoother firms and non-smoother was applied. Subsequently, both the Basu (1997) primary model and C_Score metric[vii]. To gauge the degree of conservatism was applied and, finally, the regression to test the hypothesis of the research were applied.

Data and sample selection:-

The sample employed in this study consists of the top 100 companies in Mozambique according to the KPMG - Mozambique index for the period 2010 to 2016. All financial reporting data were extracted from the KPMG – Mozambique database. We supplement these data with financial data from the BVM-Mozambique Stock Exchange and the National Institute of Statistics (INE) of Mozambique and/or manually collected from the financial statements on the company website respectively. The data were processed and were analyzed using SAS software. The sample is composed only of non-financial companies since financial and investment institutions have specific accounting standard and in agreement with the study of Leuz et al. (2003). The initial sample was reduced to 700 firm-year observations, before the classification in a first stage, as smoothing and non-smoothing firms, based on the Eckel (1981) criterion. First, the ratio is calculated for each company in the sample over a period of 7 years (study period corresponded to the years 2010 to 2016), if at least six years of data are available. In a second stage, the Basu (1997) primary model and C_Score metric to gauge the degree of Conservatism were applied.

Consistent with the studies of Almeida et al. (2012) and Valipour et al. (2011) required observations (net income and sales revenue) were obtained to sort the companies into smoothing firms and non-smoothing firms. Then, variables with extreme values based on Eckel`s model were eliminated, lowering the sample to 525 firm-year observations. In order, to minimize the effect of the outliers in the regressions, the upper and lower extreme values in each variable were disqualified (1% standard deviations in each tail). This treatment is in agreement with the works of Basu (1997), Ball et at. (2000), and different from Almeida et al. (2012), which disqualified from the sample 3% standard deviations of the upper and lower extremes in each variable applied to the models. In this way, the final database used to sort the firms in smoothing companies and non-smoothing companies in econometrics tests included 483 firm-year observations.

[Insert Table 1 about here]

Income smoothing measure:-

The Eckel`s model (1981) is applied in several studies to measure the existence of smoothing firms and non-smoothing firms, this model assumes that net income is related to sales by a linear function. According to Eckel`s model (1981), *Ceteris paribus,* the coefficient of variation of sales should be lower than the coefficient of variation of net income. If this is not the case, Eckel` model (1981), documented that the company is artificially smoothing its net income.

The model is represented by the following expression:

$$CV\Delta\%\ Net\ income \leq CV\Delta\%\ Sales \Rightarrow Smoothing \qquad (1)$$

Where: $CV\Delta\%\ Net\ income = Net\ income_{t} - Net\ income_{t-1} / Net\ income_{t-1}$; $CV\Delta\%\ Sales = Revenue_{t} - Revenue_{t-1} / Revenue_{t-1}$;

$CV(x) = \sigma(x)/\mu(x)$

Where: $CV(x)$ = coefficient of variation of a random variable; $\sigma(x)$ = the standard deviation of random variable and $\mu(x)$ = the mean of random variable.

After that, the Eckel`s Index Model (EI) was calculated using the following expression:

$$EI = \frac{CV\Delta\%\text{Net Income}}{CV\Delta\%\text{Sales}}$$

(2)

According to several authors such as Almeida et al. (2012), Valipour et al. (2011), Martinez and Castro (2009b) establishes a range between 0.9 and 1.1 as "gray area" where it is not possible to classify firms as smoothing firms and non-smoothing firms. This procedure reduces the sorting error, according to this method 228 observations was disqualified in this study. The following formula expresses the Eckel`s Model applied in the analysis:

$$0.9 \leq \left|\frac{\text{CV}\Delta\%\text{Net Income}}{\text{CV}\Delta\%\text{Sales}}\right| \leq 1.1 \qquad (3)$$

⇒ *smoothing ≤Gray area ≤ Non-Smoothing*

In equation 3 $\text{CV}\Delta\%\ \textit{Net Income} = \textit{Net Income}_{t} - \textit{Net Income}_{t-1} / \textit{Net Income}_{t-1}$. $\text{CV}\Delta\%\ \text{Sales} = \text{Revenue}_{t} - \text{Revenue}_{t-1} / \text{Revenue}_{t-1}$.

Conditional conservatism measure:-

In this sub-section, the Basu (1997) primary model was applied to assess the existence of conditional conservatism, consistent with previous studies such as Almeida et al., 2012; Younes et al., 2012; LaFond and Roychowdhury, 2008; Ball et al., 2000; Khan and Watts, 2009 and Lara et al., 2005, and represented by the following expression ***(Model 1 in equation 4)***:

$$\mathbf{Nini,t} = \boldsymbol{\beta 0} + \boldsymbol{\beta 1 Dumi,t} + \boldsymbol{\beta 2}\mathbf{Reti,t} + \boldsymbol{\beta 3 Dum} * \boldsymbol{Reti,t} + \boldsymbol{\varepsilon i,t} \qquad (\mathbf{4})$$

In equation 4, Nin_{it} = the scaled net income for firm i in year t; D_{it} = dummy variable will be 1 if the economic return is negative and zero in the otherwise for firm i in year t; Ret_{it} = annual stock return of the company i in year t; β_1 = reflects the accounting profit opportunity; β_2 = reflects the good economic news; β_3 reflects the incremental timeliness of bad economic news over the good economic news (conservatism); $\beta_2 + \beta_3$ reflect the total bad economic news timeliness; ε_{it} = White`s robust error regression coefficient.

According to Basu (1997), will be conservatism if the negative return (bad news) was recognized more quickly than the positive return (good news). Therefore, it is expected that the β_3 coefficient will be positive, significant and higher for non-smoothing firms subsample, that's means, the opportunity to recognize the future economic losses in profits disclosed is expected to be greater, relative to smoothing firms subsample.

Then, we applied Khan and Watts (2009) metric, to compare the degree of conditional conservatism between both subsamples. Represented by the following expressions:

$$\text{G\_Score} \equiv \beta_2 = \mu_0 + \mu_1 \text{Size}_{i,t} + \mu_2 \text{MTB}_{i,t} + \mu_3 \text{Leve}_{i,t} \qquad (5)$$

$$\text{C\_Score} \equiv \beta_3 = \lambda_0 + \lambda_1 \text{Size}_{i,t} + \lambda_2 \text{MTB}_{i,t} + \lambda_3 \text{Leve}_{i,t} \qquad (6)$$

Where *C_Score* reflects the incremental timeliness of bad news; *G_Score* reflects the timeliness of good news; *Size* is the natural logarithm of total assets; *MTB* is the market-to-book ratio; *Leve* is leverage, measured as total debt deflated by total assets. We predict that Mozambican firms are conservative on overall. Following Khan and Watts (2009) it`s expected that the mean of C_Score will be higher than the mean of G_Score. Therefore, we obtain annual cross-sectional regression model, equation (7) below, by replacing equations (5) and (6) in the regression model equation (4) including additional (*G_Score* + *C_Score*) terms in the last parenthesis to separately control the characteristics of the company[viii]:

$$\text{Nin}_{i,t} = \beta 0 + \beta 1 \text{Dun}_{i,t} + \text{Ret}_{i,t} (\mu 0 + \mu 1 \text{Size}_{i,t} + \mu_3 \text{MTB}_{i,t} + \mu 3 \text{Leve}_{i,t}) + \text{Dum}_{i,t} * \text{Ret}_{i,t} (\lambda 0 + \lambda 1 \text{Size}_{i,t} + \lambda 2 \text{MTB}_{i,t} + \lambda_4 \text{Leve}_{i,t}) + (\delta 0 \text{Size}_{i,t} + \delta 1 \text{MTB}_{i,t} + \delta 2 \text{Leve}_{i,t} + \delta 3 \text{Dum}_{i,t} * \text{Size}_{i,t} + \delta 4 \text{Dum}_{i,t} * \text{MTB}_{i,t} + \delta 5 \text{Dum}_{i} * \text{Leve}_{i,t}) + \varepsilon_{i,t} \qquad (7)$$

Following previous literature (Khan and Watts, 2009 and Khalifa et al., 2014), to make our analysis more robust, we have included four control variables in our model to respond the sub-hypothesis the H2.1: The effect of contracting. Sub-hypothesis H2.2: The effect of risk litigation. Sub-hypothesis H2.3: The effect of taxation. Finally sub-hypothesis H2.4: The effect of firm`s age on conditional conservatism. We estimate the impact of each of these four factors as follows:

$$\text{Nini,t} = \beta 0 + \beta 1 Dumi,t + \beta 2 \text{Reti,t} + \beta 3 Dumi,t * Reti,t + \beta 4 Contri,t + \beta 5 Contri,t * Dumi,t + \beta 6 Contri,t * Reti,t + \beta 7 Contri,t * Dumi,t * Reti,t + \varepsilon i,t \qquad (8)$$

In equation 8: $Nin_{i,t}$, $Dum_{i,t}$ and $Ret_{i,t}$ are defined in sub-section 3.3 above, $Contr_{i,t}$ represents each of these four factors of conditional conservatism: leverage, auditing litigation risk, taxation and firm age. The significant negative (positive) values of β_7 coefficient mean that lesser values of the identified factor lead to lower (higher) levels of earnings timeliness. Models 2, 3, 4, 5 and 6 are applied to test H2.1, H2.2, H2.3, and H2.4. We run the model separately for each subsample.

We test the effect of Leverage (Leve) on conservatism running the following regression (Model 2):

$$\text{Nini,t} = \beta 0 + \beta 1 Dumi,t + \beta 2 \text{Reti,t} + \beta 3 Dumi,t * Reti,t + \beta 4 Levei,t + \beta 5 Levei,t * Dumi,t + \beta 6 Levei,t * Reti,t + \beta 7 Levei,t * Dumi,t * Reti,t + \varepsilon i,t \quad \textbf{(Model 2)}$$

In other to investigate the impact of litigation risk on conservatism, we run the model 3 shown above.

$$\text{Nini,t} = \beta 0 + \beta 1 Dumi,t + \beta 2 \text{Reti,t} + \beta 3 Dumi,t * Reti,t + \beta 4 BigAuditi,t + \beta 5 BigAuditi,t * Dumi,t + \beta 6 BigAuditi,t * Reti,t + \beta 7 BigAuditi,t * Dumi,t * Reti,t + \varepsilon i,t \quad (\textbf{Model 3})$$

To study the effect of taxation on earnings timeliness, we run the model 4 shown above.

$$\text{Nini,t} = \beta 0 + \beta 1 Dumi,t + \beta 2 \text{Reti,t} + \beta 3 Dumi,t * Reti,t + \beta 4 TaxTi,t + \beta 5 TaxTi,t * Dumi,t + \beta 6 TaxTi,t * Reti,t + \beta 7 TaxTi,t * Dumi,t * Reti,t + \varepsilon i,t \quad \textbf{(Model 4)}$$

Finally, to test the impact of the age of the company (*FirmAge*) on earnings timeliness, we run the model 5 shown above.

$$\text{Nini,t} = \beta 0 + \beta 1 Dumi,t + \beta 2 \text{Reti,t} + \beta 3 Dumi,t * Reti,t + \beta 4 FirmAgei,t + \beta 5 FirmAgei,t * Dumi,t + \beta 6 FirmAgei,t * Reti,t + \beta 7 FirmAgei,t * Dumi,t * Reti,t + \varepsilon i,t \quad \textbf{(Model 5)}$$

Where $Nin_{i,t}$, $Dum_{i,t}$ and $Ret_{i,t}$ are defined in sub-section 3.3 above, $Leve_{i,t}$ represents a dummy variable equal to 1 if leverage is higher than the median sample, and zero otherwise. It is expected that the high values of leverage will induce the demand for conditional conservatism. BigAudit is a dummy variable that equals 1 if the firm is audited by Big4 and zero otherwise. We expect a positive association between the demand of conditional conservatism and the degree of auditor litigation risk. $TaxT_{i,t}$ represents a dummy variable equal to 1 if Taxable earnings are higher than the median sample, and zero otherwise. The tax cost drives incentives for earnings timeliness to decrease tax liabilities to the extent that taxable income and book income are associated. We predict a positive association between the demand of conditional conservatism and the taxable earnings. Finally, FirmAge represents the age of the firm i at the end of year t, measured as the number of year's firm have been listed in KPMG – Mozambique database. We predict a positive (negative) association between age of the firms and conditional conservatism.

Empirical Results:-

Figure 1 illustrates the results of the classification process performed to sort smoothing companies and non-smoothing companies using Eckel's model (1981). The results show that the number of non-smoothing companies was higher in relation to smoothing companies (343 vs 140), and finally, 35 firm-year observations correspond to the gray area.

[Insert Figure 1 about here]

Descriptive statistics:-

Table 2 summarizes the descriptive statistics of the main variables of interest for the object of the study. The descriptors are calculated for each of the two subsamples (483 firm-year observations) of smoothing and non-smoothing firms, respectively. Underlying the previous literature on income smoothing (e.g. Almeida et al., 2012; Valipour et al., 2011), Martinez and Castro (2009b), we observed that the mean and standard deviation of the Eckel index (EI) presented highest values (mean = 4.07 and standard error = 214.927), as expected. We can highlight some testing variables. The mean of *Earn* is higher on non-smoothing than smoothing firms (0.022 VS -0.012). But the standard error of *Earn* is also higher in smoothing relative to the non-smoothing firms (0.074 VS 0.191). On overall, the standard error of returns is greater than the standard error of earnings, consistent with the argument that net income is a function of past and present returns, (Ball et al. 2000). The mean *and the* standard error of the variable *Dum*Ret* is -0.259 VS 0.581 and 0.394 VS 0.458. This implies, that more than 25% of smoothing firms have reported negative returns and close to 60% of non-smoothing firms subsample have reported positive returns during the scope of our study.

In terms of control variables on firm characteristics, the mean of leverage (Leve) is higher on non-smoothing relative to the smoothing firms (0.192 VS 0.107), suggesting that in overall, the non-smoothing firms are higher leveraged relative to smoothing firms. The mean of *Size* is 3.201 VS 2.947 for smoothing and non-smoothing

firms' subsamples, with *the* standard error is 1.091 VS 0.007 respectively. For market-to-book (MTB), the mean and *the* standard error for smoothing (non-smoothing) is 1.251 and 2.094 (0.077 and 0.105).
[Insert Table 2 about here]

Correlation between variables:-
A Pearson (top triangle) and Spearman (bottom triangle) correlation matrix of the main variables of both samples during the scope period of study are shown in Table 3. We can observe the significantly positive Pearson correlation between the dependent variable Earn and the independent variable Return (Pearson correlation = 0.504, p <0.01). This evidence supports the argument of Almeida et al. (2012), that there is the greater expectation with the information contained in the profits before the disclosure of the financial statements. Also, can be observed the significant positive correlation between the dependent variable Earn and following independent variables Leve, Size, BigAudt, and firmAge for both Pearson and Spearman correlation, confirming the expectation based on the theory. On the other hand, we can observe negative and significant Pearson correlation and Spearman correlation between Earn, MTB, and FirmAge as expected.
[Insert Table 3 about here]

Analysis of the results of the regressions:-
In analyzing the regression of Panel A, Table 4, it was observed the degree of conditional conservatism in the full sample applying the Basu (1997), primary model. The coefficients β_0, β_1, β_2, and β_3 were statistically significant and on the other hand, the coefficients β_0 (β_0 = 0.035, P-value <0.01), showing the incorporation of unconditional conservatism into the model. Also, the coefficient β_2 (β_2 = 0.021, P-value <0.01) showing the effect of good news in this period, is very small, this is consistent with the previous study. On the other hand, the β_3 coefficient presents a positive sign (β_3 = 0.109, P-value <0.01), confirming the expectation based on the theory. This means that the Mozambican firms are conservative on overall, that is, they recognize timely the bad news embodied in the profits and the market identifies this information on the return of shares. The statistics t (26.01), with significant (P-value <0.01), indicates that the variable β_3 explains the profit behavior in the model. It is worth noting that the adjusted coefficient of determination (R^2 = 11.6%) represents the explanatory power of profit generation by the Basu (1997) primary model. According to Ball et al. (2000), the adjusted R^2 ranges from 4.2% to 12.6%, which can be observed in this research and is consistent with previous studies by Lara et al. (2005), Lopes et al. (2007).

Panel B of Table 4. shows the results applying Khan and Watts (2009) metric, the values of C_Score the incremental timeliness of bad news is higher than the average of G_Score, which reflects the timeliness of good news (mean = 0.198 vs 0.067 and median = 0.098 vs 0.055). As expected, this suggesting that our sample still conservative on overall, which still consistent with our first findings applying the Basu (1997) primary model. And Panel C Table 4 displays the respective correlations matrix (Pearson top triangle; Spearman bottom triangle). The correlations are similar to those reported in the prior literature (e.g. Khan and Watts, 2009).

These results jointly lend support our H1 that there is a positive relationship between income smoothing and accounting conditional conservatism.
[Insert Table 4 about here]

Thirdly, we rerun the Basu (1997) primary model to confirm our hypothesis. As shown in Table 5 Panel A, the coefficient β_3 (tow-way interaction term between variables Dum*Ret), that show the reflection of the asymmetric timeliness in the recognition of bad versus good news, is higher for the non-smoothing firms subsample comparative to the smoothing firms subsample (mean = 0.248 vs 0.195), as predicted. But, the bad news difference is insignificant (diff = 0.053). Additionally, the degree of unconditional conservatism is significantly lower in non-smoothing firms subsample compared to smoothing firms subsample (β_0 = 0.017 vs β_0 = 0.052), and this difference is significant (P-value < 0.01), as expected. Fourthly, we re-run the C_Score model. In Panel B Table 5, it's can observe that the mean of C_Score is higher in non-smoothing firms' subsamples relative to smoothing firms' subsamples (mean = 0.351 vs 0.058; P-value < 0.01). This result suggests that conditional conservatism is more important in non-smoothing firms' subsamples than smoothing firms' subsamples, as expected.

[Insert Table 5 about here]
Table 6 presents the results applying the regression model. In the first column, we can observe the results applying the generalized model for both subsamples (smoothing and non-smoothing), the coefficient β_2 which captures the

effect of economic gains, is significantly positive (β_2 = 0.042, P-value < 0.01), as expected. There is evidence that smoothing firms' subsample is interfering with the figures disclosed, distorting the economic reality of the business, thus making it impossible for the recognition of anticipated economic losses in profits. However, for non-smoothing firms' subsample the coefficient β_2 is significantly negative (β_2 = -0.076, P-value < 0.01). This means that good news is negatively associated with accounting earnings for non-smoothing firms' subsample, consistent with Khan and Watts (2009) study. When we analyze the coefficient β_3 (Dum*Ret), which captures the recognition of economic losses, it is observed that for both subsamples (smoothing and non-smoothing firms) is significantly positive (β_3 = 0.064, P-value < 0.01 and β_3 = 0.565 P-value < 0.01). This shows that our samples are conservative on average. In addition, this result indicates that the association between earnings and bad news is stronger than between earnings and good news. In another hand, the coefficient β_3 for smoothing firms' subsample was less significantly positive than the non-smoothing firms' subsample. This means that the degree of conditional conservatism in non-smoothing firms' subsample is more important relative to the smoothing firms' subsample. This suggests that non-smoothing firms' subsample is more conditionally conservative. These results jointly lend support our H2.

The second column, Table 6, is displayed the estimation results for Model 2. This model investigates the effects of leverage on conservatism for both subsamples (smoothing vs non-smoothing firms). When we analyze the coefficient β_3 (the two-way interaction between Dum*Ret) which captures the recognition of economic losses, it is observed that for both subsamples are still significantly positive (β_3 = 0.033, P-value < 0.01 vs β_3 = 0.069, P-value < 0.01). This means that less levered firms are conditionally conservative. Additionally, when we analyze the incremental effect of leverage on conditional conservatism, the coefficient β_7 (three-way interaction term between variables Leve*Dum*Ret), in our model 2. The results display that the coefficient β_7 are positive and significant for both subsamples (smoothing vs non-smoothing), as expected. However, the non-smoothing firms' subsample are more significant relative to the smoothing firms (β_7 = 0.056, P-value < 0.01 vs β_7 = 0.038, P-value < 0.01). Consistent also with prior studies (LaFond and Watts, 2008 Khan and Watts, 2009) that argue that more levered firms are more conservative relative to less levered firms, this means that the degree of leverage is a significant factor of earnings timeliness. These results jointly lend support our hypothesis *H2.1 a*nd indicate that the *level of leverage* of company has a great impact in conditional conservatism for non-smoothing firms.

Further, in respect of control variables in Model 3, our hypothesis *H2.2* predict that the higher degree of conditional conservatism in non-smoothing firms is driven by their level of auditor litigation risk, In Table 6 third column, are displayed the result of coefficient estimates and the respective P-values. We can observe that the coefficient β_7 (the three-way interaction term, BigAudt*Dum*Rete) the incremental effect of auditor litigation risk is marginally significant for the non-smoothing firms' subsample (β_7 = 0.254, P-value < 0.10), which offers evidence that a larger (greater) level of auditor litigation risk appears to induce additional conditional conservatism in non-smoothing firms. According to Khalifa et al. (2014), this happens when companies have more tangible assets; therefore, the risk of overvaluation of net assets is greater. Following St-Pierre and Anderson (1984), the risk of auditor litigation will be higher since companies are more expect to be sued when they overstate their assets than understate them. In this way, the auditors are motivated to be more conservative. Nevertheless, when we observe the coefficient β_7 is not statically significant for the smoothing firms' subsample (β_7 = 0.133, P-value > 0.10), suggesting that the level of audit litigation risk do not have an impact on conditional conservatism in smoothing firms. Thus, these results jointly provide evidence support our hypothesis H2.2.

Table 6 fourth column, are displayed the result of control variables in Model 4, and in order to test our Hypothesis H2.3, we can observe that the coefficient β_7 (the three-way interaction term, TaxT*Dum*Rete) is not significant in both subsample smoothing and non-smoothing firms (β_7= -0.001, P-value > 0.10 vs β_7= 0.019, P-value > 0.10). This means that conditional conservatism is less likely to be desirable in tax arrangement. Supporting the Qiang (2007) argue that taxation induces singly unconditional conservatism because the conditional conservatism is irrepressible, instability, and unnatural but undesirable in tax arrangement. Thus, we have not evidence to confirm our hypothesis H2.3.

In respect of control variables in Model 5, and in order to test our Hypothesis H2.4 that predicts that the demand of non-smoothing firms for conditional conservatism is not related to their firms' age, we analyzed our mode 5. In Table 6 fifth column, is displayed the result of coefficient estimates and the respective P-values. We can

observe that the coefficient β_7 (the three-way interaction between FirmAge*Dum*Rete) is not significant in both subsamples (smoothing and non-smoothing firms). For smoothing firms' subsample β_7= -0.008, P-value > 0.10 and for non-smoothing firms β_7= 0.025, P-value > 0.10 respectively. This means that conditional conservatism is less likely to be desirable in the age of the firm. Thus, these results jointly lend support our hypothesis H2.4 and indicate that the age of company does not interfere in conditional conservatism in our sample.

Finally, in Table 6, the last column, we re-run our model including the prior factors in the full model, for both subsamples (smoothing and non-smoothing firms) separately. We can observe that the coefficient β_2 which captures the effect of economic gains, is significantly positive only for smoothing firms' subsamples (β_2 = 0.34, P-value < 0.01 vs -0.207, P-value < 0.01), and the β_3 coefficient, which capture the conditional conservatism is significantly positive and higher for non-smoothing firms than the smoothing firms (β_3. = 0.293 vs 0.070), as expected. This result suggests that the non-smoothing firms are more conservatism than smoothing firms. In addition, leverage generate a demand for conditional conservatism in smoothing firms' subsample (β_7= 0.051, P-value < 0.01), however auditor litigation risk (β_7= 0.017, P-value > 0.10), taxation (β_7= 0.005, P-value > 0.10) and firm age (β_7= 0.009, P-value > 0.10) does not engine the earnings timeliness in smoothing firms' subsample. However, for non-smoothing firms, the results display that the leverage and auditor litigation risk generate a demand for earnings timeliness (β_7= 0.060, P-value < 0.01), and (β_7= 0.299, P-value < 0.10), however taxation (β_7= 0.028, P-value < 0.10) and firm age (β_7= 0.030, P-value < 0.10) have marginal positive effect on earnings timeliness. In summary, the β_3 coefficients in all six model, which capture the conditional conservatism is significantly positive and higher for non-smoothing firms than the smoothing firms (coeff. = 0.565 vs 0.064 for model 1; coeff. = 0.069 vs 0.033 for model 3; coeff. = 0.158 vs 0.109 for model 3; coeff. = 0.081 vs 0.031 for model 4; coeff. = 0.093 vs 0.065 for model 4 and coeff. = 0.293 vs 0.070 for model 6). These results suggest that our sample is conservatism on overall. These results jointly lend support our hypothesis H1, hypothesis H2, hypothesis H2.1, hypothesis H2.2 and hypothesis H2.4 but do not support our hypothesis H2.3.
[Insert Table 6 about here]

Robustness test:-
In this sub-section, we examine the distribution of ROA[ix] in C_Score decile presented in Table 8 and the results of the Variance Inflation Factor - VIF and Durbin-Watson tests applied to our model for the full sample are presented in Table 10, before segregation of the sample between income smoothing and non-smoothing firms.

Table 7 displays the results applying Basu (1997) primary model to measure the C-Score decile. The coefficient β_3, (Dum*Ret), which captures or recognizes economic losses, shows a tendency of a higher level of conservatism to higher deciles. However, β_3 for the eighth C-score decile is greater than the nineteenth C-score decile (0.221 > 0.209), which is in divergence with a measure of monotonicity. The rank correlation is significant and positive (β_3 = 0.627, P-value < 0.05) as expected. However, the coefficient β_2 which captures the effect of economic gains is negative as predicted although the same is insignificant (β_2 = -0.269). Thus, these results jointly provide the efficacy of C-score in capturing the conditional conservatism.

[Insert Table 7 about here]
With respect to our first robustness test, we can observe the results in Table 8; the standard deviation of ROA is decreasing up to C-score decile rank 6, which is in agreement with Khan and Watts (2009) study. However, it starts decreasing after decile rank 6, which is in abeyance with predicted relationship between C-score decile rank and Standard deviation. The bottom line shows the classification correlation between the C_Score decile and the moments of the ROA distribution. The rank correlation is significant, negative and more monotonically decreasing in non-smoothing firms than smoothing firms (-2 vs -0.009), which is in agreement with Khan and Watts (2009) study, who argues that most conservatism companies have the negative mean of ROA. According to Prencipe et al. (2001), this means the manager for non-smoothing firms do not have the incentive to practice income smoothing because they profitability is high enough to satisfy managers and investors. Additionally, we can observe that the mean of ROA is negative, more variable and more negatively skewed for the non-smoothing firm relative the smoothing firms, show the news driven conditional conservatism is still valid for our sample. The results in Table 8 are consistent with the results of the main tests in Table 6.

[Insert Table 8 about here]
Regarding verify the second robustness tests, were carried out to verify the existence of multicollinearity and autocorrelation tests in the residual terms related to the variables in the model. The result reported in Table 10, shows the maximum value of VIF was 2.412 so there is no evidence of multicollinearity problems in the variables of the model applied in the research. Additionally, the Durbin-Watson test was performed; the null hypothesis being tested is that the regression residuals are auto correlated. The values of the Durbin-Watson test show a maximum level of 2.321, as observed in Table 6. We can, therefore, reject the residual autocorrelation hypothesis, confirming the robustness of the models applied in the research.
[Insert Table 10 about here]

Conclusion:-

Starting from the hypotheses; an empirical study was developed, using Eckel's model (1981) to sort the level of smoothing practices in Mozambican firms and we found that the number of non-smoothing firms was large than smoothing firms. Second, applying both the Basu (1997) primary model and C_Score metric proposed by Khan and Watts (2009) to gauge the existence of conditional conservatism were applied. Our main findings can be summarized in two points. First, the coefficient β_3 that captured the existence of conditional conservatism was significantly positive, consistent with previous literature (e.g. Almeida et al., 2012), confirming the hypothesis one, H1: *Ceteris paribus,* there is a positive relationship between income smoothing and accounting conditional conservatism in Mozambican firms. Second, we find that Mozambican companies are conservative on average. Specifically, there is evidence that smoothing firms have greater opportunity to recognize future economic gains than non-smoothing firms, suggesting that the degree of conditional conservatism is higher in non-smoothing firms relative to smoothing firms. Confirming the hypothesis two, H2: *Ceteris paribus,* conditional conservatism in non-smoothing firms is higher compared to smoothing firms. Moreover, the degree of conditional conservatism increase with the level of leverage in our sample on overall. In addition, auditor litigation risk drives conditional conservatism singly in non-smoothing firms subsample. Finally, our study shows that taxation and company age do not encourage the conditional conservatism on our sample.

This study is subject to at least 2 important limitations: first, the fact that the study concentrates on a single country may limit the possibility of generalizing the results to other contexts. Finally, due to the feasibility of collecting data, the study includes the sample only the companies in KPMG – Mozambique database.

An important observation, according to the previous literature, this paper is the first empirical evidence on the subject regarding the income smoothing approach and conditional conservatism applying both the Basu (1997) primary metric and the C_Score metric proposed by Khan and Watts (2009) to measure the degree of conservatism. Previous studies (such as Younes et al., 2012; Almeida et al., 2012 and Valipour et al., 2011) examine the relationship between income smoothing and conditional conservatism using different methodologies. Secondly, In the Mozambican scenario, we believe that this article is the first, of the kind, to study the relationship between accounting conservatism and smoothing practices because in our literature review there was scanty evidence about the subject. The outcome of this study suggests the use of different models to explore the same issue in future studies. On another hand, the extension of the sample to financial firms; investment firms; and insurance firms. Make a comparative study between countries with different institutional arrangements or regulations.

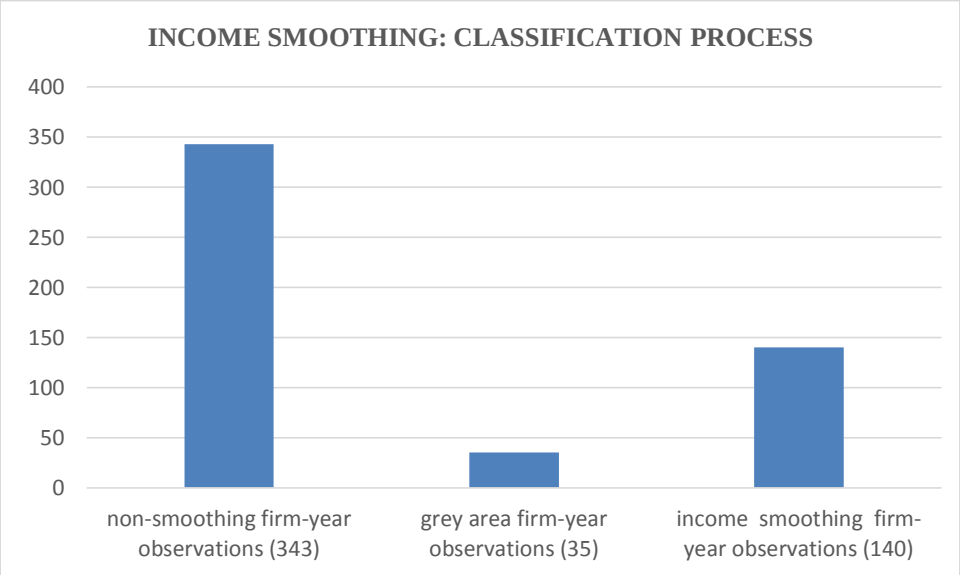
1. 207–221.

Appendix

Variable definition

Variable	Definition
$Earn_{i,t}$	Net income before extraordinary items of firm i in year t, scaled by the market value of equity at the beginning of year t.
$Ret_{i,t}$	Annual stock return of firm i in year t.
$Dum_{i,t}$	Indicator dummy variable equal to one if $Ret_{i,t} < 0$ and zero otherwise.
$Leve_{i,t}$	Total debt divided by total assets of firm i at the beginning of year t.
Sizeit	The natural logarithm of total assets.
$MTB_{i,t}$	Market-to-book ratio of firm i at the beginning of year t.
ROA	Profitability, measured as the ratio of operating income to lagged total assets.
$BigAudt_{i,t}$	Indicator a binary variable that equals 1 if the firm is audited by Big 4, and zero otherwise.
$TaxT_{i,t}$	Corresponds to the gross result obtained by the company before deduction of related taxes.
$FirmAge_{i,t}$	The age of the firm i at the end of year t, measured as the number of years firm i has been listed in KPMG – Mozambique database.
$C\_Score_{i,t}$	Conservatism score estimated using variables from equation 6 of Khan and Watts (2009) in the text.
$G\_Score_{i,t}$	Is the good news timeliness, as given by equation 5 of Khan and Watts (2009) in the text.
VIF	Is the Variance Inflation Factor.

Fig. 1:- Income smoothing classification process



Source: research data

Table 1:- Treatment of Data

Table 1:- Treatment of Data	
Description	**Firm-year Observations**
Initial observations – 100 firms per 7 year	700
(-) Observations with errors or incomplete observations based on Eckel's model and Basu's model	175
(=) Number of observations without errors	525
(-) Processing the outliers – exclusion of the observations above or below one standard deviation from the mean	7
(=) Subtotal of observations	518
(-) Exclusion of observations in Eckel's grey area	35
(=) Final sample of non-smoothing firms	343
(=) Final sample of income smoothing firms	140

Source: research data

Table 2:- *Descriptive statistics for all sample excluding the gray area.*

Variables	Obs.	Min	Max	Mean	Std. Dev.
Eckel Index	6254	-0.843	1.453	4.07	214.927
Earn	1846	-0.095	0.266	-0.012	0.191
	(4408)	(-0.072)	(0.297)	(0.022)	(0.074)
Return	1846	-0.513	2.037	0.196	0.691
	(4408)	(-0.481)	(1.058)	(0.105)	(0.324)
Leve	1846	0	0.487	0.107	0.092
	(4408)	(0)	(0.381)	(0.192)	(0.107)
Size	1846	0.043	5.018	3.201	1.091
	(4408)	(0.039)	(4.015)	(2.947)	(1.007)
MTB	1846	0.014	17.214	1.251	2.094
	(4408)	(0.107)	(20.115)	(0.077)	(0.105)
BigAudt	1846	0	1	0.748	0.021
	(4408)	(0)	(1)	(0.803)	(0.007)
Taxt	1846	0.018	8.003	0.726	0.157
	(4408)	(0.013)	(8.082)	(0.891)	(0.327)
FirmAge	1846	5	6	4.989	2.218
	(4408)	(5)	(6)	(4.601)	(2.086)

Note: This table shows descriptive statistics for 483 firm-years between 2010 and 2016. The coefficients for non-smoothing firms are shown inside parentheses. The mean, standard error (Std. error), minimum (Min), and Maximum (Max) are reported. EI is Eckel Index= CVΔ%Net Profit/CVΔ%Sales, Earn is net income before extraordinary items in year t, scaled by the market value of equity at the beginning of year t. Return is the annual stock return. Leve is leverage, defined as total debt scaled by total assets.
Size is the natural logarithm of total assets. MTB is the market-to-book ratio.
BigAudt is a binary variable that equals 1 if the firm is audited by Big 4, and 0 otherwise. $TaxT_{it}$ is the gross result obtained by the company before deduction of relative taxes. $FirmAge_{it}$ is the age of the firm is measured as its age since the company appears in KPMG – Mozambique database.

Table 3:- *Correlation Matrix (Pearson Top triangle; Spearman Bottom triangle)*

Variable	Earn	Return	Leve	Size	MTB	BigAudit	TaxT	FirmAge
Earn		0.504*	0.029*	0.098*	-0.099*	0.013*	-0.038*	0.127*
Return	0.131*		-0.031*	0.059*	0.175*	-0.016**	-0.067*	0.144*
Leve	0.107*	-0.011**		-0.028*	0.002	0.028*	-0.039	-0.162*
Size	0.106*	0.129*	-0.028*		0.185*	0.042*	-0.044*	0.129*
MTB	-0.121*	0.891*	0.151*	0.034		-0.011**	-0.051*	-0.122*
BigAudt	0.012*	-0.012**	0.018*	0.029*	-0.009*		0.048*	-0.157*
TaxT	-0.036*	-0.195*	0.010***	-0.034*	-0.041	0.010**		-0.032*
FirmAge	0.023*	0.117*	-0.139**	0.123*	-0.101*	-0.127*	-0.029*	

Note: The Top (Bottom) right triangle of the matrix shows Pearson (Spearman) correlations. The scope period run from 1st January 2010 to 31st December 2016 and 483 firm-year observations were selected during the period. A superscript of "***", "**" and "*" indicates two-tailed statistical significance at 0.01, 0.05 and 0.10. Earn is net income before extraordinary items in year t, scaled by the market value of equity at the beginning of year t. Return is the annual stock return. Leve is leverage, defined as total debt scaled by total assets. Size is the natural logarithm of total assets. MTB is the market-to-book ratio. BigAudt is a binary variable that equals 1 if the firm is audited by Big 4, and 0 otherwise. $TaxT_{it}$ is the gross result obtained by the company before deduction of relative taxes. $FirmAge_{it}$ is the age of the firm is measured as its age since the company appears in KPMG – Mozambique database. .

Table 4:- Mean coefficients from estimation regressions (Full sample)

***Panel A**: the Busu Primary Model*				
$\mathbf{Nini,t = \beta 0 + \beta 1 Dumi,t + \beta 2 Reti,t + \beta 3 Dum * Reti,t + \varepsilon i,t}$				
		Coeff.		**t-stat.**
Intercept - β0		0.035***		19.14
Dum - β1		-0.002**		-0.58
Rete - β2		0.021***		-4.53
Dum*Ret - β3		0.109***		26.01
Adjusted R^2				11.60%
F-statistic				7.0017
Prob. (F-statistic)				0.0000
VIF (Max. Value)				2.323
Durbin-Watson test				2.205
Observations				6254
***Panel B**: the C_Score metric*				
C_Score = β3 = λ0 + λ1 Sizei,t + λ2 MTBi,t + λ3 Levei,t				
G_Score = β2 = μ0 + μ1 Sizei,t + μ2 MTBi,t + μ3Levei,t				
		Mean		**Median**
C_Score		0.198		0.098
G_Score		0.067		0.055
***Panel C**: Correlations (Person Top Triangle; Spearman Bottom Triangle)*				
		C_Score		G_Score
C_Score				-0.231***
G_Score		-0.198***		

Note: Nin_{it} is net income before extraordinary items in year t, scaled by the market value of equity at the beginning of year t. Rete it is the annual stock return before fiscal year-end. Dum_{it} is a dummy variable = 1 if $Ret_{it} < 0$ and 0 otherwise. Dum*Ret is the interaction between Dum and Ret. $Size_{it}$ is the natural logarithm of total assets. MTB_{it} is the market-to-book ratio. $Leve_{it}$ is leverage, defined as total debt scaled by total assets. C_Score is the firm-year measure of conservatism. G_Score is a measure of the timeliness of good news. In Panel C the Top (Bottom) right triangle of the matrix shows Pearson (Spearman) correlations. A superscript of "***", "**" and "*" indicates two-tailed statistical significance at the 0.01, 0.05 and 0.10

Table 5: Mean coefficients from estimation regressions (Smoothing and Non-Smoothing firms)					
***Panel A**: the Busu Primary Model*					
$\mathbf{Nini,t = \beta 0 + \beta 1 Dumi,t + \beta 2 Reti,t + \beta 3 Dum * Reti,t + \varepsilon i,t}$					
		Pred.	Mean of yearly	Diff.	Obs.
		Sign	value		
Asymmetric timeliness coeff. - β3		+	0.195		1435
		+	(0.248)	0.05	(4.408)
the model intercept - β0			0.052		
			(0.016)	0.04*	
Adjusted R^2			0.119		(0.128)
Durbin-Watson test			2.227		(2.024)
***Panel B**: C Score metric*					
C_Score = β3 = λ0 + λ1 Sizei,t + λ2 MTBi,t + λ3 Levei,t					
G_Score = β2 = μ0 + μ1 Sizei,t + μ2 MTBi,t + μ3Levei,t					
		Mean	Diff.		
C_Score		0.058			
		(0.351)	0.29***		
G_Score		0.044			
		(0.099)	0.06***		

***Panel C**: Correlations (Person Top Triangle; Spearman Bottom Triangle)*					
		C_Score		G_Score	
C_Score				-0.207***	
G_Score		-0.164***			

Note: The coefficients for non-smoothing firms are shown inside parentheses. Nin_{it} is net income before extraordinary items in year t, scaled by the market value of equity at the beginning of year t. Rete it is the annual stock return before fiscal year-end. Dum_{it} is a dummy variable = 1 if $Ret_{it} < 0$ and 0 otherwise. Dum*Ret is the interaction between Dum and Ret. $Size_{it}$ is the natural logarithm of total assets. MTB_{it} is the market-to-book ratio. $Leve_{it}$ is leverage, defined as total debt scaled by total assets. C_Score is the firm-year measure of conservatism. G_Score is a measure of the timeliness of good news. A superscript of "***", "**" and "*" indicates two-tailed statistical significance at the 0.01, 0.05 and 0.10..

Table 6:- Result for all sample (Smoothing and non-smoothing firms)

Variables	Model 1	Model 2	Model 3	Model 4	Model 4	Model 6
		with Leverage	with BigAudit	with TaxT	with FirmAge	full model
	Coefficient	Coefficient	Coefficient	Coefficient	Coefficient	Coefficient
Intercept - β0	0.020***	0.014****	0.003	0.011***	0.017***	0.009
	0.063***)	(0.067***)	(-0.045)	(0.060***)	(0.068***)	(-0.298)
Dum - β1	-0.001	0.200*	-0.004	-0.009***	-0.89***	-0.019
	(0.005)	(0.006*)	(0.061)	(0.019**)	(0.028**)	(0.387)
Ret - β2	0.042***	0.004****	-0.005	0.048**	0.054***	0.034*
	(-0.076***)	(-0.022***)	(-0.204*)	(-0.514***)	(-0.781**)	(-0.207***)
Dum*Ret - β3	0.064	0.033***	0.109**	0.031***	0.065***	0.070***
	(0.565***)	(0.069***)	(0.158**)	0.081***)	(0.093***)	(0.293***)
Leve - β4		0.014***				0.015
		(-0.012***)				(-0.286)
Leve*Dum - β5		-0.001				0.0688***
		(-0.022**)				(-0.004)
Leve*Ret - β6		-0.002*				-0.019
		(-0.003**)				(-0.005)
Leve*Dum*Ret - β7		0.038***				0.051***
		(0.056***)				(0.060***)
BigAudit - β4			0.011**			0.781
			(0.021***)			(0.207**)
BigAudit*Dum - β5			0.002			0.0654
			(-0.051)			(-0.021)
BigAudit*Ret - β6			0.302			-0.005
			(0.013*)			(0.107**)
BigAudit*Dum*Ret - β7			0.133			0.017
			(0.2548*)			(0.299***)
Taxt - β4				-0.005***		-0.003**
				(0.009**)		(0.119*)
TaxT*Dum - β5				0.002		0.037***
				(-0.008)		(-0.045)
TaxT*Ret - β6				-0.002		0.007**
				(-0.847***)		(-0.029**)
TaxT*Dum*Ret - β7				-0.001		0.005
				(0.019)		(0.028)
FirmAget - β4					0.043**	-0.014*

					(0.073*)	(0.027**)
FirmAge*Dum - β5					0.002	0.201*
					(-0.062)	(-0.109)
FirmAge*Ret - β6					-0.066	0.153*
					(-0.325*)	(0.071*)
FirmAge*Dum*Ret - β7					-0.008	0.005
					(0.025)	(0.303**)
Industry indicators	Included	Included	Included	Included	Included	Included
Adjusted R^2	0.119	0.234	0.317	0.389	0.415	0.443
Adjusted R^2	(0.128)	(0.240)	(0.323)	(0.401)	(0.411)	(0.458)
Durbin-Watson test	2.227	2.062	2.132	2.165	2.127	2.321
Durbin-Watson test	(2.024)	(2.083)	(2.201)	(2.149)	(2.262)	(2.297)
F-Statistic	7.008	6.517	7.219	7.300	7.355	7.789
F-Statistic	(7.012)	(7.028)	(7.517)	(7.458)	(7.487)	(7.954)
Observations	1435	1435	1435	1435	1435	1435
Observations	(4408)	(4408)	(4408)	(4408)	(4408)	(4408)

Note: This table presents the results of the drivers of conditional conservatism in smoothing and non-smoothing firms between 2010 and 2016. The coefficients for non-smoothing firms are shown inside parentheses. Ret. is the annual stock return. Leve is leverage, defined as total debt scaled by total assets. Size is the natural logarithm of total assets. MTB is the market-to-book ratio. BigAudt is a binary variable that equals 1 if the firm is audited by Big 4, and 0 otherwise. $TaxT_{it}$ is the gross result obtained by the company before deduction of relative taxes. $FirmAge_{it}$ is the age of the firm is measured as its age since the company appears in KPMG – Mozambique database.

Table 7:- *Basus`s Regressions Coefficients by C_Score Decile*

C_Score Decile	Intercept	Dum	Ret.	Dum x Ret.
1 (Low)	0.074	-0.015	-0.019	0.133
2	0.077	-0.016	-0.018	0.119
3	0.082	-0.015	-0.013	0.131
4	0.086	-0.018	0.002	0.130
5	0.087	-0.019	-0.009	0.145
6	0.089	-0.02	-0.003	0.151
7	0.078	-0.007	0.008	0.187
8	0.079	-0.011	0.005	0.221
9	0.071	-0.022	0.003	0.209
10 (High)	0.053	-0.029	-0.011	0.226
Rank Correl.			-0.269	0.627**
High - Low			0.008	0.030**
Predicted Sign			-	+

Note: This Table displays basic Basu`s regressions coefficients estimated by C_Score decile. The sample consists of 483 firm-years between 2010 and 2016. Firms are sorted annually into Decile by C_Score, and then the following pooled regression is estimated for each decile:

$Nin_{i,t} = \beta_1 + \beta_2 D_{i,t} + \beta_3 R_{i,t} + \beta_4 D_{i,t} R_{i,t} + e_{i,t}$

Nin_{it} is net income before extraordinary items in year t, scaled by the market value of equity at the beginning of year t. Ret_{it} is the annual stock return before fiscal year-end. Dum_{it} is a dummy variable = 1 if $Ret_{it} < 0$ and 0 otherwise. The columns displays the intercept, the dummy (Dum), the good news timeliness (Ret) and the Basu asymmetric timeliness (Dum x Rete) coefficients. Conservatism is increasing in the C_Score. Rank Correl. is the rank correlation between the C_Score Decile and the coefficient ranking, and is a measure of the monotonicity of the ranking in the Table. Hi-Lo is the difference between the coefficients for the high and low C_Score Deciles A superscript of "***", "**" and "*" indicates two-tailed statistical Significance at 0.01, 0.05 and 0.10. .

Table 8:- *Distributions of ROA by C_Score Decile*

	Smoothing Firms				Non-smoothing firms		
C_Score Decile	Mean	Std. Dev.	Skew		Mean	Std. Dev.	Skew
1	0.079	0.168	-0.346		0.007	0.045	-0.288
2	0.067	0.134	-0.353		0.006	0.061	-0.332
3	0.059	0.157	-0.385		0.002	0.067	-0.369
4	0.048	0.162	-0.409		0.004	0.058	-0.442
5	0.035	0.158	-0.453		-0.001	0.055	-0.531
6	0.026	0.165	-0.496		-0.002	0.067	-0.587
7	0.017	0.161	-0.522		-0.019	0.064	-0.599
8	0.009	0.152	-0.517		-0.018	0.056	-0.661
9	-0.022	0.149	-0.643		-0.015	0.053	-0.675
10	-0.024	0.144	-0.651		-0.013	0.049	-0.681
Rank Correl.	-0.009*	0.257**	-0.041		-2*	-0.263**	-0.382
Predicted Sign	-	+	-		-	+	-

Note: This shows the mean, standard deviation (Stddev) and skewness (Skew) of ROA by C_Score decile. The sample consists of 483 firm-years between 2010 and 2016. Firms are sorted annually into deciles by C_Score, and then the first, second and third moments of ROA. ROA is return on assets, measured as the ratio of operating income to lagged total assets. Rank Correl. is the rank correlation between the C_Score decile and the column ranking, and is a measure of the monotonicity of the ranking in the table. A superscript of "***", "**" and "*" indicates two-tailed statistical significance at less than 0.01, 0.05 and 0.10.

Table 9:- *Means of selected characteristics of C_Score Decile*

C_Score Decile	C_Score	G_Score	Lev	Size	MTB	BigAudit	TaxT	FirmAge
1 (Lo)	-0.072	0.051	0.103	5.009	3.029	0.109	0.017	9.012
2	-0.094	0.047	0.195	4.982	2.068	0.117	0.018	8.771
3	-0.011	0.044	0.199	4.721	2.009	0.123	0.016	7.032
4	0.199	0.041	0.204	4.432	1.998	0.135	0.019	6.054
5	0.063	0.038	0.226	4.001	1.961	0.144	0.022	5.091
6	0.098	0.035	0.299	3.725	1.642	0.152	0.028	4.077
7	0.132	0.032	0.365	2.931	1.532	0.166	0.034	3.991
8	0.156	0.027	0.723	2.528	1.409	0.173	0.039	3.923
9	0.202	0.025	1.001	2.207	1.365	0.177	0.045	3.646
10 (Hi)	0.251	0.022	1.923	2.101	1.192	0.179	0.049	3.097
Rank Correl.		-0.620*	0.532*	-0.687	-0.600*	0.623*	0.611*	-0.573*
Hi - Lo	0.323*	-0.029*	1.821*	-2.908*	-1.837*	0.071*	0.032*	5.915*
Predicted Sign	+	-	+	-	+/-	+	+	-

Note: This displays means of selected characteristics of C_Score Deciles. The sample consists of 483 firm-years between 2010 and 2016. Firms are sorted annually into Decily by C_Score, and then the mean of the reported firm characteristics is calculated by Decile. Conservatism is increasing in the C_Score. G_Score is the good news timeliness, as given by equation (5) in the text. Leve is leverage, defined as total debt scaled by total assets. Size is the natural logarithm of total assets. MTB is the market-to-book ratio. BigAudt is a binary variable that equals 1 if the firm is audited by Big 4, and 0 otherwise. $TaxT_{it}$ is the gross result obtained by the company before deduction of relative taxes. $FirmAge_{it}$ is the age of the firm is measured as its age since the company appears in KPMG – Mozambique database. Rank Correl is the rank correlation between the C_Score decile and the sample mean of the variable, and is a measure of the monotonicity of the ranking in the table. Hi-Lo is the difference between the values of the variable for the high and low C_Score deciles. A superscript of "***", "**" and "*" indicates two-tailed statistical significance at less than 0.01, 0.05 and 0.10.

Table 10:- *VIF*.

	Full sample		Non-Smoothing		Smoothing	
	Collinearity Stat.		Collinearity Stat.		Collinearity Stat.	
Coeff.	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF
β1	0.412	2.116	0.615	1.331	0.498	2.201

β2	0.424	2.323	0.814	1.115	0.383	2.412
β3	0.537	1.906	0.629	1.347	0.481	2.268

Note: β_1 = reflects the accounting profit opportunity. β_2 = reflects the good economic news.
β_3 reflects the incremental timeliness of bad economic news over the good economic news (Conservatism) .

[i] For Watts (2003a) there are four main explanations for the use of conservatism in accounting practice: Contracts; litigation; taxation; Regulators and normalizers.

[ii] For Khan and Watts (2009) the leverage variable (LEVE) that controls the probability of bankruptcy.
[iii] According to Khan and Watts (2009) the size proxy represent the political cost and information asymmetries.
[iv] According to Khan and Watts (2009) MTB, reflects the extent to which the book value of equity understates market value.
[v] For Watts (2003) Audit litigation risk, is measured as a dummy variable that equals 1 if the firm is audited by Big 4, and 0 otherwise. Provides managers with incentives to practice conservatism.
[vi] FirmAge is measured as its age since the company appears in KPMG database.
[vii] Is conservatism measure proposed by Khan and Watts (2009).
[viii] Following Khan and Watts (2009), the conservatism score is a function of company-specific characteristics: the market-to-book ratio, firm size and leverage.
[ix] Following Dechow et al. (1995). ROA is a proxy for the firm`s profitability. A strong profitability reduces the need and the motivation to smooth income.

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