

Relationship between Specific Accruals and Disclosed Accounting Results of Companies in Financial Failure

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Received: 12 December 2017 Accepted: 4 January 2018 Published: 15 January 2018

Abstract

The display of net counter-performance (explained by the existence and persistence of negative accruals) can help leaders to convince partners of the need to renegotiate contracts. The importance of the measurement of the earnings management lies, for the most part, in the suspicion of undervaluation of debts and losses. This suspicion is so persistent that this risk of undervaluation must be taken into account in the valuation of any business. Nevertheless, we have tried through this article to test the approach of the models of specific accruals in order to identify them and to measure their impacts on the modification of the published result. Indeed, three models were tested, that is, that of receivables, inventories and amortization and provisions, which allowed us to validate the hypothesis according to which the managers of financially failing companies tend to exploit the Discretionary Accruals in an upward management goal to circumvent the costs of financial distress and change the perception of risk by its partners, especially donors. Based on this approach by the specific accruals, we have developed the model (4) which incorporates the specific discretionary accruals as explanatory variables of the formation of the published net result.

Index terms— earnings management, specific accruals, financial failure.

1 Introduction

he informative content of the accounting figures has always been the traditional tool for the evaluation of the financial situation of the company especially when it comes to granting loans, creditors require, through restrictive clauses in debt contracts, compliance with certain ratios (liquidity ratio or solvency ratio ...) to protect against any form of wealth transfer from the firm to the shareholders (K.V. Peasnell, P.F. Pope and S. Young, 2000). In this aspect, debt contracts have prompted researchers to ask about the effectiveness in reducing conflicts of interest between shareholders, creditors and managers (Joseph Gerakos, 2012), it is obvious that in the face of pressure Restrictive clauses, managers use the maneuvers given to them by the accounting standards and therefore they manage the results in order to avoid the violation of these restrictive clauses that would be costly in the opposite case. It is therefore interesting to study the earnings management in a particular context of debt (Hawariah Dalnial et al., 2014). Indeed, most of the research on this subject has been conducted in an Anglo-American socio-economic framework and few of them have been interested in the Euro-continent or in emerging countries such as Tunisia. Nevertheless, despite the fact that Tunisia had a new accounting system in 1997, breaking with the French model and aligning with the Anglo-American model, it remained strongly influenced by the Euro-continental socioeconomic framework. In other words, on the one hand, accounting practices remain attached to the tax rules, despite the fact that accounting has been empowered by the enactment of the accounting law on companies, and the financing of companies still remains attached to bank loans (especially national banks such as BNA, STB, BH). On the other hand, it is unlikely, even if the current trend of the Tunisian state aims to give greater priority to local and foreign investors especially, that the financing method of Tunisian firms will be similar to that of Anglo-American firms as long as the shareholding culture is not widespread in the public and share ownership remains family-based in most companies in today's market. In this context, the socio-economic context of the Tunisia's case makes it perfectly legitimate and well-argued to study the earnings management in

a context of indebtedness, especially since the leaders have an interest in benefiting from the continuity of the support. Credit institutions, to avoid increasing the cost of capital, they would be encouraged to manage profits upward (Mark Myring, 2006). In this regard, an abundant literature has developed to explain the motivations and incentives for managing the result (Patricia M. Dechow, Amy P. Sweeney, Richard G. Sloan, 1995). A large number of testable hypotheses have been developed by researchers based on contractual theories (Watts and Zimmerman, 1983), The validation of this approach is based on the assumption that it is possible to measure the earnings management. Compared to the existing literature on this subject (Xiaoan Cheng, 2012), we present in a first time the three models constructed on three discretionary accruals to measure «earning management». In a second time we adopt the approach of specific discretionary accruals by testing the empirical validity of three specific discretionary adjustment measurement models (applied to receivables, inventories and amortization and impairment provisions Assets) applied to a sample of Tunisian companies listed on the Tunis Stock Exchange over the period 1998-2014. Then we used the residuals of these three estimates as explanatory variables of the earnings management and check them.

2 II.

3 Informative Content of Discretionary Accruals: Empirical

Validation on A Sample of Tunisian Companies

Accruals-based models are today the most adopted methodology for measuring results management. The purpose of this section is to detect the practices of earnings management by using a modelization based on the specific accruals, making it possible to measure the discretionary component specific to each of the accounting variables constituting the accruals. Our results confirm that, in the Tunisian context, the change in inventory and receivables play a major role, along with depreciation and impairment provisions for assets, in the earnings management process. The predominant weight of the change in customer receivables and inventories is mainly due to the variability of working capital requirements.

Our study will focus on a sample of 19 companies listed on the Tunis Stock Exchange (BVMT) and over a period of sixteen years (1999) (2000) (2001) (2002) (2003) (2004) (2005) (2006) (2007) (2008) (2009) (2010) (2011) (2012) (2013) (2014). The selection of our sample was made on the basis of two criterias: -A listing period of at least 17 years over the period 1998-2014 on the Tunis Stock Exchange; -A set of financial information such as income statements and balance sheet are available in the database that has been collected. To conduct our empirical study, we adopted the approach based on specific discretionary accruals to assess the earning management in the selected sample. Indeed, based on Jones' models and especially the generalized modified Jones model, regression derived models have been proposed to calculate the specific discretionary adjustments of the accounting variables as being the residual resulting from the estimation of each component of the specific accruals.

In this case, the discretion of the leader varies according to whether he or she is interested in any of the components of the accruals. From this perspective, we constructed three regression models to estimate:

4 ? First Model

This model expresses the change in the receivables according to the change in turnover for the same period.

(1)

5 With:

= The variation of the customer item of the company i to the period t; = The change in turnover of company i at period t;

= The residual that corresponds to the discretionary accruals for the client item.

6 ? Second Model

This model expresses the change in inventories according to the turnover of the same period.

(2) With:

=The change in the company's inventories item i to period t; =The residual corresponding to the discretionary accruals relating to the inventory item.

7 ? Third Model

This model expresses the change in depreciation and impairment provisions for assets based on the value of fixed assets and sales for the same period.

(

With:

=The change in amortization and provisions for depreciation of the assets of company i at period t; =The value of the total capital assets of enterprise i at period t; =The residual corresponding to the discretionary adjustments relating to the item depreciation allowances and provisions for depreciation of the assets of company i at period t.

The estimation of these three models allows us to reconstruct Total Discretionary Accruals (DTA) by summing the three types of specific discretionary Accruals as follows:

(4)

This approach allowed us to identify the specific discretionary accruals relating to customer accounts, inventory, amortization and asset write-down provisions, respectively, as a significant source of managerial discretionary adjustments to manage net income (especially to cash and cash equivalents rise). Another objective has been achieved thanks to this approach, namely that of distinguishing the companies in the sample that manage the result from the abnormal increase of those that have discretionarily manipulated the result downwards, which will constitute a procedure prior to the constitution of a sample of audit firms with respect to the financial default criteria. All the more we have managed to note the extent of the discretionary manipulations in terms of observations (without taking into account the identity of the company) and also in terms of the identification of the manipulative firm of the discretionary accounting variables. This model expresses the change in the receivables according to the change in turnover for the same period. The regression results of the model are formulated in Table 1. it it CA Cr 1 2 1 ? ? ? ? ? ? ? ? it Cr ? it CA it ? it it CA ST 2 2 1 ? ? ? ? ? ? ? ? ? ? it ST it ? it it it CA IMMO APDA D 3 3 2 1 ? ? ? ? ? ? ? ? ? ? it APDA D it IMMO it ? ? ? ? ? ? ? ?

i. Interpretation of the Significance of the Model (1) The significance of the model (??) is analyzed in relation to the significance of the coefficients of the regression and by the Fisher statistic expressed as a function of the coefficient of determination R. At the level of the estimation of the coefficients, one notes that it is very significant with the risk of 1% and consequently the exogenous variable conveys well the explanations on the endogenous variable and the constant is significant with the risk of 10%.

8 ii. Variance analysis table: statistical inference1-Overall significance test of the model (1)

To answer this question, we extend the study of the variance decomposition by integrating the dl2 (degree of freedom) in the analysis table of the variance. Indeed, the coefficient of determination R is not a good indicator of the regression's significance since it has the disadvantage of getting close to the unit in whenever the number of exogenous increases, it indicates also the proportion of variance of the endogenous explained by the model.

We have: (6) It is easy to demonstrate that: (7) And, (8) The ordinary least squares principle is to have , for a perfect model. For other models (other than perfect) what is a meaningful model?

Or from what value of the SCR can we say that the regression is bad?

In the econometric literature (Applied regression analysis -2nd edition Yadolah Dodge, Valentin Rousson - Dunod edition) it is a question of comparing the value of the SCR with a reference value to answer the previous question. Indeed, the decomposition of the variance (equation 2-27) is extended to the notion of mean squares as shown in the following table 2:

The coefficient of determination indicated, as previously reported, the proportion of variance of the endogen explained by the model. However, he does not answer the question: is the regression globally significant or not? Or does the exogenous one (variation of the turnover between t and t-1) lead significantly to the information on the variation of the receivables ? Representative of a real linear relation in the population studied. In the econometric literature (Francophone), the fact of considering the significance of a linear model studied, through the coefficient of determination R is only one point of view. Indeed, we find another point of view (Anglo-Saxon) more reticent vis-à-vis the first since this indicator is not a parameter of the population estimated on the sample3. The null hypothesis relating to the test of global significance of the model would therefore be:

To test this global significance of the model (1), we use the F-statistic, which is a statistic to test the equality of two variances and is defined as follows:

Where we define the mean square CM, as being the sum of squared deviations related to its degree of freedom,

9 Here

= 304 the number of observations The interpretation of this statistic would indicate whether the explained variance is significantly higher than the residual variance. According to Bourbonnais, the model is significant when the explained variance is significantly greater than the residual variance. In Table 2, the calculation of this statistic is explained and its value (12.15267) is obtained using the Excel spreadsheet which is almost the value (12.13761) provided by the results of the EViews regression (table 1). We express this statistic according to the coefficient of determination we obtain:

1 In statistical inference, it is desired to estimate population parameters using observed sample data. 2 The most accessible definition is to understand them as the number of terms involved in the sums (the number of observations) minus the number of parameters estimated in that sum. (df). 1 2 1 it it CA Cr ? ? ? ? ? ? ? ? = ? (?) ; = ? (?) = ? (?) = + = 1 ? it Cr y ? ? = 0 it Cr ? it CA ? it Cr ? 2 2 2 ? = ? ? = 1 ? 2 = (? 2) ? = = 1 ?

From where, we can write:

F is distributed (under the hypothesis H0) according to a Fisher law at (1, n-2) degree of freedom.

The critical region of the Fisher test, corresponding to the rejection of H0, at the risk of is defined for the abnormally high values of F, in other words.

The decision is made on the basis of the p-value = and is provided directly by the econometrics software.

For our model (1) Excel obtained almost the same results for this Fisher test.

Indeed, the table 2 gives the results obtained under Excel, for the Fisher statistic, Then,

The conclusion is that the model (??) is globally significant at the risk of 5%. All the more, these results are provided almost identically by the table 1 generated by EViews software.

iii

10 . Test of significance of the model regression parameters (1)

The tests relating to the individual significance of the estimated parameters of the regression are verified.

11 iv. Residue Interpretation of the Estimation Model (1)

The residual of the estimation corresponds to the discretionary manipulations relating to the accounting variable of the Receivables. It seems to be of a rather important scale (the R is relatively weak 3.9%). Therefore, we consider, based on the results of the estimation of the model of specific accruals (1), that the earnings management through the turnover is normal up to 3.9% considering the turnover as the only explanatory variable needed. However, the existence of other discretionary accruals, whether they are normal or abnormal, suggests that an explanation of outcome management can be provided by the study of other specific accruals.

Tests enabled us to verify the distribution of the residue according to the standard normal distribution (graph. 1). Therefore, the studied sample induces well the properties of the population studied in terms of mean and variance,) To better understand the role of discretionary accruals managed through turnover in order to modify the receivables that themselves affect the published net result, we have made a classification of companies (through observations) according to the direction of variation of average residues observed at each company. The results of this approach have been summarized in Table 3. ? = (1 ?) (? 2) = 1 (1 ?) ? 2 = (? 2) (? 2)

is distributed according to a law to a degree of freedom. And ? = 0.0005628 < 5%. it it CA Cr 1 2 1 ? ? ? ? ? ? ?

This classification (Table 6) shows that of the 304 observations in the sample, there are 144 (47.37%) relative observations, in terms of average, having negative residues and 160 (52.63%) other observations, have positive residues (total observations 304 and overall average of residues being zero: 4.75E-17). In other words, the 160 observations are related to discretionary turnover manipulations towards the rise of this one, this is corroborated by the work of Peasnell, PF Pope and S. Young, (2000) who consider the manipulation of turnover (by increasing it) in exchange for an increase in receivables constitutes a form of specific earnings management. The model (1) for measuring discretionary management at the level of specific accruals receivables is significant.

12 b) Estimation of the model of specific accruals: Stocks

The model to estimate is as follows:

(2)

13 With,

The change in the company's inventories item i to period t;

The residual corresponding to the discretionary adjustments relating to the inventory item.

This model expresses the change in inventories according to the turnover of the same period. The table 4 displays the results of the simple linear regression of the model (2), which show that the exogenous variable is positively correlated to the endogenous with p-value =0%, in other words, the regression coefficient for this variable is very significant. The constant is also positively correlated to the endogenous variable and is significant with the risk of 0.35% (p-value of Student = 0.0035).

14 i. Interpretation of the Significance of the Model (2)

The interpretation of the significance of the model will be treated in the same way as with the model (1), in other words we will use the Fisher statistic expressed as a function of the coefficient of determination R . Indeed, the analysis table of variance integrating the average squares as seen previously, allows us to better appreciate the significance of the model by comparing the value of the SCE sum with that of SCR standardized respectively by their respective degrees of freedom. Table (2)(3)(4)(5)(6)(7)(8)(9)(10)(11)(12) summarizes the results of this analysis:

The same result is obtained, ie the null hypothesis is rejected and therefore.

The model (2) is globally significant at the risk of 5%: the explained variance is clearly greater than the residual one.

ii. Residue Interpretation of the Estimation Model (2) The residual of the estimation corresponds to the discretionary manipulation of the accounting variable "Stock", it seems to be of a rather important significance too. Like the variable "Accounts receivable", inventories have been subject to a very large discretionary manipulation (since the coefficient of determination $R^2 = 32.75\%$ is relatively low). However, we must consider

that in this model as in the previous one, the endogenous is explained by a single explanatory variable, which despite its significance, remains insufficient to convey all the information on the variability of the endogenous.

The specification of the residual's variation makes it possible to identify the discretionary manipulations that tend to increase the accounting variable "Stock" of those that tend to minimize it. Indeed, in a context of financial difficulty, managers tend to manage their results upward.

The results of the residue quality tests (graph 2-3 and table 2-13) illustrate the normality of this residue.

The classification of enterprises according to the sign of discretionary accruals is given in Table (2)(3)(4)(5)(6)(7)(8)(9)(10)(11)(12)(13)(14), which shows that out of the 304 observations collected, 166 (or 55%) are relative to means of discretionary accruals of positive sign, in other words, discretionary manipulations tend to increase the value of inventories upwards, against 138 (or 45%) other observations relating to means of discretionary accruals of negative sign. These findings align perfectly with the postulates of the positive theory of accounting (Watts and Zimmerman, 1986; Zimmerman, 1990). Indeed, in this logic, the leaders of financially failing companies instrumentalised the accounting in an objective of concealment (fraud) of these difficulties. As a result we will consider that the model (2) for measuring discretionary management at the level of the specific accruals "Stocks" is also significant, like the previous model of specific accruals (1).

To conclude this empirical study on the specific accruals, we start a third and fourth regressions, those of the model (3) relating to the specific accruals "Depreciation and provisions for depreciation of assets" whose their significant results and regression coefficients are provided by the table 9, and the model (4) relating to the relationship between published net income and discretionary accruals formulated by model estimation residuals (2-22), (2) and (3). Our last regression is of the equation (??): $2.21 \text{ it it it CA ST } \dots \text{ it ST } \dots \text{ it CA } \dots \text{ it ST } \dots \text{ ST } \dots = 0.051633 \text{ F-statist} = (\dots) (\dots) = 147.0997 = + \dots + \dots + \dots + \dots + 3.32$

1 it it it it CA IMMO APDA D ? ? ? ? ? ? ? ? ? ?
= Amortization and depreciation allowance for the company's assets at period . = The change in turnover of the company to period .

= The change in turnover of the company to period .

= The residuals of the estimate corresponding to the discretionary adjustments relating to depreciation and impairment provisions of the company's assets at period .

This model expresses the change in depreciation and provisions (endogenous) based on both fixed assets and sales (exogenous) for the period.

i

15 . The Model Estimation Results (3)

The results of the estimation model (3) are formulated in Table ??, where we find that the exogenous variable IMMOit is very significant with a t-Student = 6.602014 (p-value = 0.000). However, the constant and the other exogenous ($\hat{I}^n \text{CAit}$) are not significant. There is also a weak explanatory power of the model (3), which is due to the existence of other explanatory exogenous ones not included in the model. However, the model remains globally significant because of the F-statistic (21.79471) which means that the explained variance is significantly higher than the residual variance. Indeed Fisher's statistic is equal to:

16 ii. Residue Interpretation of the Estimation Model (3)

At the level of the residual's estimation, which corresponds to the discretionary part of the accounting manipulations of the variable, we proceed as with other models of specific accruals (2-22 and 2-23), in other words we analyze its impact through the sign. The classification of observations by firm and following the sign of the mean of the residual terms is given in Table 5. These results reveal that 172 observations (57%) relate to discretionary positive sign adjustments versus 132 (43%) negative sign observations. In other words, the negative discretionary manipulations contribute to the decrease of the accounting variable and consequently to the abnormal increase of the net 11 results, unlike the other positive discretionary manipulations which contribute to the increase of the amortizations and the provisions for depreciation of the assets and consequently the downward management of the net results displayed.

In summary, these three empirical studies conducted through specific accruals, have highlighted the individual importance of each of the three specific accruals () on the earnings management which allowed us to appreciate the discretionary manipulations specific to the accounting headings subject to the adjustments of specific discretionary accruals (Table 5). Indeed, we formulate the synthesis of the magnitude of specific accruals in the following table 6:

The table 6 highlights the managers' choice focused on the "sales" specific accruals as the preferred target of discretionary adjustments to manage the accounting result towards the abnormal increase with an observation rate (estimated residual) reaching 55%, then the second target that relating to the item "trade receivables" with a rate of observation of residues (positive discretionary accruals) of 53% and finally the item "depreciation and provisions for depreciation of assets" with a rate of 43%. It seems that companies in financial difficulty (positive discretionary accruals) use these three accounting headings to conduct their policy of handling the accounting result in order to hide their financial failure.

iii. Model Estimation of Specific Accruals (??) Finally, to estimate the relationship between the formulation of the net result and the residual that explains one of the three linear regressions realized (1), (2) and (3), we built the model (??): (4) This last regression of the equation (??) lets us testing whether the specific discretionary accruals conveyed information about the published net result? (the endogenous variable to explain) with, = the net result of company i at year t; = the change in inventories from company i to year t; = the change in the receivables from company i to year t; = the change in amortization and provisions for depreciation of assets of enterprise i to year t;

= the residue of the model estimate of specific accruals (1), (2) and (3); = the residue of the estimate of equation (??). Before beginning the regression of equation (??), we carried out a correlation test between these explanatory variables and the endogenous variable whose results are given by the table 7.

-The accounting variable "customer receivable" is perfectly correlated with "turnover" (pvalue = 0.0006), therefore, it is maintained in the model (??); -The accounting variable "stock" is positively correlated with "net profit" (p-value = 0.000) and also correlates to "turnover" (p-value = 0.000) and "trade receivables" (p-value = 0.090) -The accounting variable "amortization and provisions for depreciation of assets" is highly negatively correlated (p-value = 0.050) to "net -The variable "Tangible fixed assets", its correlation with the variable "net result" is not significant. On the other hand, it is perfectly correlated with "depreciation and provisions"; -The discretionary accruals () of the "accounts receivable" item, their correlation with the "net result", are low, but perfectly correlated with the "receivables", "depreciation and provisions" items with respectively (p -value = 0.000 and p-value = 0.087); -The discretionary accruals () of the "inventories" item are perfectly correlated with the "net result", (p-value = 0.029), and also with the items "inventories" and "depreciation and provisions", (p-value = 0.000 and p-value = 0.0001); -Finally, the discretionary accruals () of the "amortization and provisions" item are correlated with the "net result" (p-value = 0.025), as well as with the "inventories" items, (p -value = 0.0001), "amortization and provisions", (p-value = 0.000).

The regression results of the model (??) showed important significance for each of the explanatory variables of the model as well as an overall significance through the Fisher statistic as shown in the following table ??:

The low explanatory power of the model (R = 15.23%) is explained by the fact that there are other explanatory variables not incorporated in the model in question, since the objective of this chapter is devoted to the study of the informative content of discretionary accruals in the formation of the net result as well as their identification in the headings most suspected of being handled discreetly, namely those of the current assets (receivables, inventories, provisions for depreciation of the assets) and calculated expenses (the allocations depreciation of property, plant and equipment).

iii.

17 Conclusion

In this article, we have tried to expose a different method of measurement of the earning management based on specific discretionary accruals. The first research that looked at earnings management tried to explain the impact of choosing a particular accounting method, or even an entire accounting policy, on the published result. This approach, of course, does not reflect all of the accounting decisions made by managers. Indeed, ??ealy (1985) proposed the notion of accruals as a more comprehensive variable serving as a basis for the evaluation of earnings management. Also called Adjustment of Total Regularization Accounting Variables: AVCRT, accruals are defined as the difference between accrual accounting and cash accounting. The accounting adjustments consist mainly of the income and expenses taken into account in the determination of the result and which did not give rise to any cash flow during the year. These are calculated expenses and income (such as amortization and provisions and reversals of provisions for depreciation of assets, or charges) and offsetting charges and income (such as the components of the change in need for funds). To account for these elements, the managers have certain latitude because of the flexibility of their registration. Several studies (DeAngelo 1994, J. Jones 1991, Dichev and Skinner 2001, Beneish et al., 2002, Andreas and Neophitos 2003) have shown that predictions show that executives make accounting choices to improve the reported outcome. Either to maintain their position, to avoid the controls of capital providers, regulatory bodies or guardianship. As they can also increase the result to avoid breaching contractual clauses related to indebtedness. However, displaying net counterperformance (explained by the existence and persistence of negative accruals) can help leaders to convince partners of the need to renegotiate contracts. The importance of the measurement of the earnings management lies, for the most part, in the suspicion of undervaluation of debts and losses. This suspicion is so persistent that this risk of undervaluation must be taken into account in the valuation of any business. Nevertheless, we have tried through this article to test the approach of the models of specific accruals in order to identify them and to measure their impacts on the modification of the published result. Indeed, three models were tested, that is, that of receivables, inventories and amortization and provisions, which allowed us to validate the hypothesis according to which the managers of financially failing companies tend to exploit the Discretionary Accounting headings in an upward management goal to circumvent the costs of financial distress and change the perception of risk by its partners, especially donors. Thanks to this approach of the specific accruals, we have developed the model (4) which incorporates the specific discretionary accruals as explanatory variables of the formation of the published net result. Indeed, the purpose of this article is devoted to the study of the informative content of the discretionary accruals in the formation of the net result as well as their identification in the headings most suspected of being

337 handled discreetly namely those of the current assets (receivables, inventories, provisions for depreciation of
 338 assets) and calculated expenses (amortization of property, plant and equipment). Hence the research perspective
 339 is to explain the existence and measurement of discretionary accruals in a context of financial difficulty and leave
 340 the question of the relationship between earning management through discretionary accruals and the beginning
 of Fraud that = (? ?) = = (? ?) = (? ? ?) = /2^{1 2 3 4}

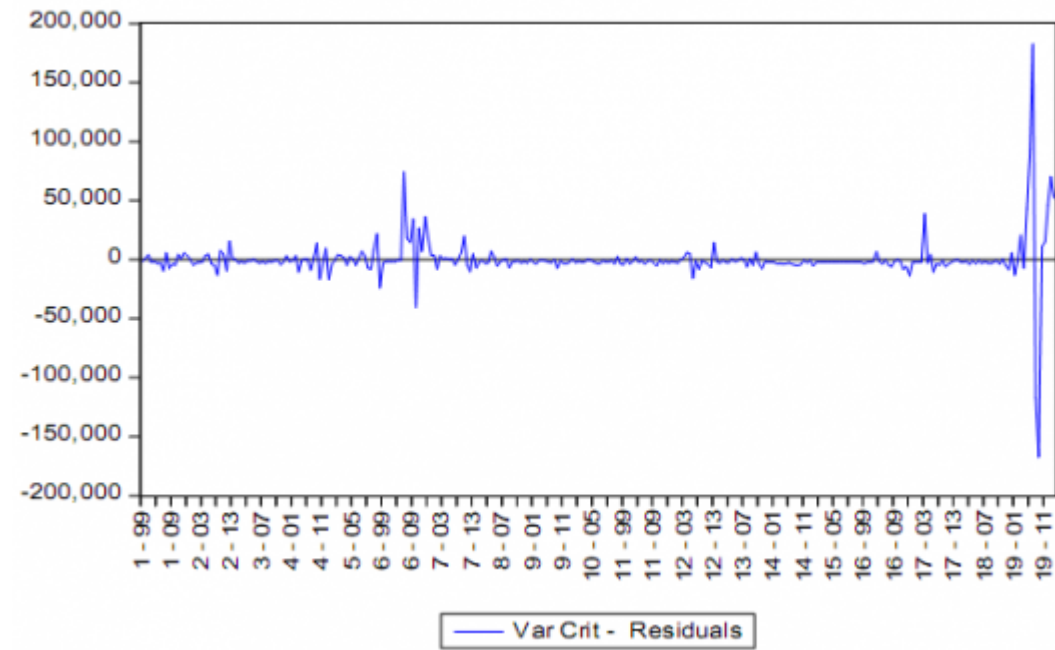


Figure 1: D

1

Figure 2: Table 1 :

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¹D. Garson, Multiple Regression, <http://faculty.chass.ncsu.edu/garson/PA765/regress.htm#significance> _"...The F test is used to test the significance of R, which is the same as testing the significance of R2, which is the same as testing the significance of the regression model as a whole... ; ouencore D. Mc Lane, Hyper Stat Online Contents, <http://davidmlane.com/hyperstat/B142546.html> _...The following formula (le test F) is used to test whether an R2 calculated in a sample is significantly different from zero...

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³Specific discretionary accruals () conveyed information on the published net result (the endogenous variable to be explained RN).

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2

Variable /	Coefficient	Std. Error	t-Statistic
it CA ?	0.050167	0.014400	3.483907
C / 1 ?	2151.691	1139.342	1.888538
Effects Specification			S.D.
Cross-section random			0.000000
Period random			555.2315
Idiosyncratic random			19679.20
Weighted Statistics			
R-squared	0.038638	Mean dependent var	
Adjusted R-squared	0.035455	S.D. dependent var	
Yearly S.E. of regression	19580.85	Sum squared resid	
F-statistic	12.13761	Durbin-Watson stat	
Prob(F-statistic)	0.000567		
Unweighted Statistics			
R-squared	0.038684	Mean dependent var	
Sum squared resid	1.16E+11	Durbin-Watson stat	
Average of the observations of the variable	Average of the observations of the variable		
	?		
)			
(			

Figure 3: Table 2 :

3

and Firm Ei -Sample: 1999 2014 -

Figure 4: Table 3 :

4

Variable / Coefficient	Coefficient	Std. Error	t-Statistic	Prob.
it C / 1 CA ? ?	0.051633	0.009288	5.558891	0.0000
	1982.709	672.7223	2.947291	0.0035
Effects Specification				
R-squared	0.327544	Mean dependent var		2461.212
Adjusted R-squared	0.242549	S.D. dependent var		13366.28
S.E. of regression	11632.90	Akaike info criterion		21.66901
Sum squared resid	3.64E+10	Schwarz criterion		22.09696
Log likelihood	-3258.689	Hannan-Quinn criter.		21.84020
F-statistic	3.853703	Durbin-Watson stat		2.625300
Prob(F-statistic)	0.000000			

Figure 5: Table 4 :

5

Figure 6: Table 5 :

6

40

Figure 7: Table 6 :

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Volume XVIII Issue I Version I
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Global Journal of Management and Business Research

Figure 8: Table 7 :

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- 342 [Zimmerman ()] , Jerold L Zimmerman . « *Conjectures Regarding Empirical Managerial Accounting Research* ».
343 *Journal of Accounting and Economics* 2001. 32 p. M41. (JEL classification)
- 344 [Abarbanell and Lehavy ()] *Biased Forecasts or Biased Earnings? The Role of Reported Earnings in Explaining*
345 *Apparent Bias and Over/Under reaction in Analysts' Earnings Forecasts*, Jeffery Abarbanell , Reuven Lehavy
346 . 2003. 27599. NC. Flagler Business School University of North Carolina Chapel Hill
- 347 [Peasnell et al. ()] *Board monitoring and earnings management: Do outside directors influence abnormal*
348 *accruals?*, K V Peasnell , P F Pope , S Young . 2000. p. G34. Lancaster University. JEL Classification
- 349 [Dalnial ()] Hawariah Dalnial . *Accountability in financial reporting: detecting fraudulent firms*, 2014. 145 p. .
350 (ICGSM 2014)
- 351 [Dechow et al. ()] Patricia M Dechow , Amy P Sweeney , Richard G Sloan . « *Detecting Earning Management*,
352 1995. 70 p. .
- 353 [Dechow and Sloan ()] Patricia M Dechow , Richard G Sloan . *Predicting Material Accounting Misstatements*,
354 2011. Spring 2011. 28 p. .
- 355 [Gerakos ()] Joseph Gerakos . *Discussion of "Detecting Earnings Management: A New Approach"* », 2012. Booth
356 School of Business University of Chicago
- 357 [Hayne et al. ()] E Hayne , David H Leland , Pyle . *Informational Asymmetries, Financial Structure, and*
358 *Financial Intermediation*, 1997. XXXII.
- 359 [Hennes ()] Karen M Hennes . *Auditor Dismissals After Accounting Restatements*, 2012. University of Oklahoma
- 360 [Hirschey et al. ()] Mark Hirschey , Zoe-Vonna Palmrose , Susan Schulz . *Long-term Market Under reaction to*
361 *Accounting Restatements* ». *JEL Categories: M41, G14*, 2005.
- 362 [Cheng ()] 'Managing specific accruals vs. structuring transactions: Evidence from banking industry'. Xiaolan
363 Cheng . ADIAC-00144. *Advances in Accounting, incorporating Advances in International Accounting*, 2012.
364 ELSEVIER. (No of Pages 16)
- 365 [Perols and Lougee ()] Johan L Perols , Barbara A Lougee . *Advances in Accounting, incorporating Advances*
366 *in International Accounting*, (United States) 2011. 27 p. . University of San Diego (The Relation between
367 Earnings Management and Financial Statement Fraud)
- 368 [Scott and Richardson ()] A Scott , Richardson . *Accrual Reliability, Earnings Persistence and Stock Prices*,
369 2005. 39 p. .
- 370 [The relationship between returns and unexpected earnings: A global analysis by accounting regimes » Journal of International A
371 'The relationship between returns and unexpected earnings: A global analysis by accounting regimes »'.
372 *Journal of International Accounting, Auditing and Taxation* 2006. 15 p. . Mark Myring
- 373 [Kamel ()] *Thèse de Doctorat-Accounting Data Management A Precursor Sign of Financial Failure Versus Fraud*
374 *Case of Tunisia*, Fekiri Kamel . 2016.
- 375 [Zimmerman ()] Jerold L Zimmerman . *Taxes and Firm Size*, (Rochester, NY 14627, USA) 1983. Elsevier Science
376 Publishers B.V (North-Holland. University of Rochester