

# The Tax Reduction and Information Quality in Tunisian Companies

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## Abstract

This study examines how the reduction of statutory tax rate affects corporate transparency. The financial and accounting environment is motivated to study the impact of control and transparency of information. We study a sample of 19 companies between 2013 and 2017, the result shows that the deductions are related to tax incentives especially investment incentives in the Tunisian context, which is influenced by a good information quality.

This study shows that the manipulation of the results in Tunisian companies may have decreased with a reduction of the statutory tax rate.

**Keywords:** Statutory tax rate, Corporate transparency, Audit quality, Information quality

## 1. Introduction

The Review of Tunisia's tax system published in oxford business group shows that The standard CIT (Note 1) rate is 25% (30% for profits realised before 2014). A reduced rate of 10% applies primarily to companies engaged in agriculture and fishing, as well as profits coming from exportations realised effective January 1, 2014 for companies for which the 10-year tax holiday has expired. A CIT rate of 35% is applicable essentially to companies in the hydrocarbons, financial (banking, leasing and insurance) and telecommunications sectors. (Note 2)

To reduce expected tax liabilities companies use various forms of income management transparency issues may arise. It has been shown that the lack of transparency is influenced by this tax aggression which could also the quality of the financial information.

The tax is the main source of financing of the State and the essential instrument of the economic and social policy in Tunisia, it presents a source of income for the state it allows him to follow the activities of each society. Taxation establishes a balance at the level of different economic sectors.

The recent studies suggest that changes in the statutory tax rate affect firms with higher accounting compliance. However, overall profit management is more attributed to companies located in countries with low compliance, (Dennis Sundvik, 2017). Revenue management is generally applied to minimize corporate tax, Tax is known to be one of the largest contributors to state income worldwide. With the high tax contribution, the government could adjust the income tax rate to increase tax revenues.

However, the high rate of income tax would affect the investment decision as this tax would reduce the net revenue. Usually, the taxpayer will apply a revenue management to avoid paying high taxes. Several previous searches analyzed the determinants of earnings management and the correlation between changes in the corporate tax rate and revenue management. This research will focus on Tunisian companies and businesses and on the other hand, the corporate income tax.

The main purpose of this study is to examine the effect of statutory tax reduction on information quality measured by accruals in Tunisian companies, our problematic is does tax reduction have an effect on quality information?

The rest of his papers are organized like this. In the next section, we present the theoretical context. Then, the method used for the empirical test. Then we report the results and the discussion. In the end we conclude the document.

## **2. Theoretical Background**

Tax is essential for a country as for a society. They have the same tax interest because it represents the source of income for a country and the reduction of net income of companies. Therefore, to control their income, companies sometimes resort to the practice of earnings management.

Raafat R. Roubi and William Richardson, 1986 they prove with their US study that earnings management results from changes in the income tax rate.

The rationale for this study stems from previous researchers' attempts to identify situations in which there are incentives to manage revenues when the state reduces its tax rates (Healy 1985, DeAngelo 1986, Liberty and Zimmerman 1986, McNichols and Wilson 1988, Jones 1991, Cahan 1992). Companies that are expected to reduce revenue from financial statements to realize tax savings. Although the reduction in corporate tax rates has prompted executives to reduce the result of their financial statements in the year before. For this reason, many companies may choose to forego a current tax saving in order to avoid reducing the net income of the financial statements.

The results of empirical tests by (David A. Guenther, 1994) indicate that the management of financial statement revenues is a consequence of a sharp decline in the statutory corporate income tax rate.

The most fundamental measure of a corporate tax is the tax rate provided for by law (statutory tax rate) this measure is widely used. However, there is a recent US study on the effects of Tax on earnings Management decisions, examining the United States, Canada, Hong Kong, Japanese, Korean and Taiwanese. Companies find that the tax status of companies could have a countervailing effect on this management and that higher tax rates are more likely to use earnings management (Namryoung Lee, Charles Swenson, 2011). The statutory tax rate changes provide an excellent opportunity to save tax by shifting income from high tax periods to lower tax periods (Dennis Sundvik, 2017).

On the basis of this literature review on the tax reduction and information quality we retain the following hypotheses :

*H1: the statutory tax reduction has a positive effect on information quality*

Previous research shows that independent auditor can better detect material misstatements caused by less reliable accruals. When companies are verified by the big 4 (Pricewaterhouse Coopers House (PWC), Ernst and Young, KPMG and Deloitte) ones which shows who have experience greater implies better information quality.

Dang (2004) finds a clear association between audit quality and reliability in the financial statements have been documented in the same way Doyle and al (2007) as well as by Drake and al (2008) demonstrated a strong association with weak internal control systems and low quality of information. Several researchers find that the existence of a quality auditor who belongs to an international network can constrain the reduction of results management operations such as (Becker and al., 1998), since "BIG" firms are the most competent and independent in providing a better way of controlling results management operations. We admit the following hypotheses :

*H2: The existence of a Big 4 auditor has a positive effect on information quality*

Moreover, we include control factors that may influence information quality with specialized research shows that a link can be made between the debt policy and the accounting policy if one takes into account the desire of the company to justify its financial strategy ex post. This imperative of justification would exist in particular for firms with a strong variation of indebtedness (Thomas Jeanjean , 2001).

Debt can influence the management of results. In addition, the debt assumption is that highly leveraged firms are more likely to manage earnings upward to avoid debt overhangs (Mark L , Defond and Jiambalvo, 1994). The literature shows that the leader of the firm identifies and achieves all these objectives in a firm with low profitability it resorts to managing the results upward for the purpose of mitigating this poor performance (Kothari and al., 2005).

*H3: The high level of debt has a negative effect on information quality*

*H4: The company's performance has a positive effect on information quality*

Than, we include the organizational factor that may influence information quality with specialized research shows that the size of the firm has often been used as an indicator of the importance of the company's internal control systems (Mark L, Defond and Jiambalvo, 1994). In fact, some studies have found a positive relationship between the size of the business and the financial reliability statement (Béland and al, 2004). In addition, large companies generally produce more information of better quality than small.

On the other hand, a specialized literature review shows a significant negative association between firm size and profit management, (Ali, Noor, Khurshid and Mahmood, 2015). other studies have found a positive relationship between the age of the company and the management of the results (Pranesh Debnath, 2017).

*H5: The size of firm has a positive effect on information quality*

*H6: The age of firm has a positive effect on information quality*

### **3. Research Method**

In order to test our hypotheses, we chose our sample of 19 Tunisian companies and companies, some of which is available on the Thomson one database and the other part from the reference documents and reports. annual reports on the website [www.cmf.tn](http://www.cmf.tn) and the websites of the companies themselves. These companies have been observed over a period of 5 years from 2013 to the year 2017. Our research requires an empirical approach by following the econometrics of the panel data. For this it is essential that all types of analysis start with some basic statistics by calling it descriptive statistics.

On the other hand, we use an analysis with a regression on panel data since it represents one of the statistical techniques making it possible to establish a relation between a variable to be explained and explanatory variables, carrying out the modeling in the presence of individual effects (model fixed effect and random effect model and ending with the application of Hausman) with the STATA 15.

$$INFQ_{it} = \beta_0 + \beta_1 STR_{it} + \beta_2 BIG_{it} + \beta_3 DEBT_{it} + \beta_4 ROA_{it} + \beta_5 SEIZE_{it} + \beta_6 AGE_{it} + \epsilon_{it}$$

*The variable to explain*

INFQ: information quality measured by accruals

*The explanatory variable*

STR: the statutory tax rate in tunisia of firm i in year t

BIG: auditor Big four

DEBT: debt in the firm

ROA: return on assets,

SIZE: size of firm

AGE: age of firm

#### 4. Finding and Discussion

At this stage, we go from an analysis that describes in detail our variables via a description technique with another exploratory analysis of the effectiveness of the results obtained on the information quality.

Table 1. Variables definitions

<b>Variables</b>	<b>definitions</b>	<b>Measures</b>
INFQ	information quality	measured by accruals : Income- cash flows
STR	the statutory tax rate	the statutory tax rate in tunisia of firm i in year t
BIG	Big 4	1 if the firm is audited by a Big Four company and 0 otherwise
DEBT	Debt	Total debt divided by total asset
ROA	Return on asset	net income (NI) divided by total assets (TA).
SIZE	Size	natural logarithm of total assets (TA).
AGE	Age	Logarithm of number of years since the constitution.

Table 2. Descriptive statistics

<b>Variable</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev</b>
<b>INFQ</b>	-0.886	0.647	-0.039	0.167
<b>STR</b>	0.25	0.30	0.26	0.385
<b>BIG</b>	0	1	0.473	0.501
<b>DEBT</b>	-3.712	9.422	0.767	1.697
<b>ROA</b>	-22.368	21.862	4.387	7.498
<b>SIZE</b>	1.071	2.970	2.029	0.485
<b>AGE</b>	0.698	1.924	1.488	0.243

From Table 2, we found that in our sample, the average of (INFQ) measured by accruals total was -3.9%. This percentage indicates that Tunisian companies display good quality of their accounting results the quality of the information measured by total accruals is better varies between -0.886 and 0.647, the level that more the standard deviation of the residual terms is low more the quality of the information is higher.

The Tunisian statutory tax rate (which varies between 30% in 2014 and 25% for the next four years). In fact, we have considered that there has been a reduction in tax rates in recent years.

Regarding the debt, we found that it was an average of 76.7% this showed that Tunisian companies had significant levels of debts for the average performance is 43.87 which shows that almost half of the companies have a good level of performance. The size generated an average of 20% and the age with an average of 15% which indicates that the Tunisian companies, selected in our sample, were of average age and age; have an important role in the transparency of financial information.

Table 3. Frequency table

Variables	Frequency
Audit quality	
Big	47.37%
Non Big	52.63%

According to Table 3, our sample shows a frequency of 47.37%. This result explains that almost half of companies have not been audited by the BIG 4 this posed the problem of the relationship between audit quality and information quality.

The results of the Hausman specification test indicate that the portability is greater than 5%. We take the random effect and neglect the fixed effect because it is the most efficient.

Table 4. Result of estimation

Explanatory Variable	Expected Sign	Coefficients	t	P
STR	(+)	4.792	1.48	0.140**
BIG	(-)	-14.645	-3.05	0.002*
DEBT	(+)	0.270	3.6	0.000*
ROA	(-)	-0.620	-2.02	0.045*
SIZE	(-)	-11.92	-2.22	0.027*
Age	(-)	-31.581	-3.74	0.000*
Constant		14.255	3.83	0.000*
Prob > F = 0.000				
Significant at Respectively of 5%* and 10%**				

Our research allows us to conclude that there is a significant impact between changes in the corporate tax rate and the earning management, hence the reduction in statutory tax rates over the last few years has a positive and significant impact on the reduction of accruals.

According to the estimates of changes in the corporate tax rate and the quality of information in Table 4, it is indicated that this reduction is an incentive for reinvestment that is influenced by a better quality of information, (Namryoung Lee, Charles Swenson, 2011).

According to hypothesis H2, Table 4 shows a significant influence of Big 4 auditors on the reduction of accruals. Following this table, the BIG coefficient is negative and significant at the 5% level ( $p = 0.002$ ). This finding is similar to previous research (Becker and al., 1998, Drake and al, 2008).

Moreover, the coefficient of the DEBT variable is positive and statistically significant at the 5% level ( $p = 0.000$ ), which means that highly indebted companies in Tunisia make are associated with greater probability of using real earnings management, (Mark L , Defond and Jiambalvo, 1994), in the same sense by explaining the financial situation of the firm, table 4 shows the coefficient of ROA variable is negative and significant at the level 5% ( $p = 0.045$ ), This finding is similar to previous research, (Kothari and al., 2005).

The hypothesis H5 and H6 about organizational factors are also confirmed from where there is a negative and significant relationship of the AGE and SIZE variables, which proves that more than the companies are older and larger than they resort to manipulate their results, (Pranesh Debnath, 2017) ; (Mark L , Defond and Jiambalvo, 1994, Ali, Noor, Khurshid and Mahmood, 2015).

## 5. Conclusion

The statutory tax rate applied to Tunisian commercial and industrial firms has been drastically reduced over the last five years. This reduction has attracted the attention of studying its consequences on the transparency of the financial and accounting information which influences the incentives for investment in Tunisia.

However, this study also examines the impact of this change on corporate transparency. The results showed that there is a positive relationship between the reduction of statutory tax rates and the good quality of information by measuring certain control variables. The results show that the auditor's membership has an international network, the size and age of the company are positively affect the quality of the information and the variables that explain the financial situation have a significant impact on the information quality.

The limits of our research can be explained by the lack of data on companies to increase the sample size.

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## Notes

Note 1. CIT: corporate income tax.

Note 2. Review of Tunisia's tax system:  
<https://oxfordbusinessgroup.com/overview/need-know-national-tax-system-glance>

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