ISSN No: 2349-6762 (Print)
Peer Reviewed & Refereed Journal
National Research Journal

TAX-EFFECT VERSUS INCOME-EFFECT AND NON-DISCRETIONARY BOOK TO TAX DIFFERENCES: EVIDENCE FROM TUNISIA.

[*]Kasraoui Abdelkader, [**]Naoui Kamel

[*]Dr. in Finance, University of Manouba, High School of Business, 2010, La Manouba, Tunisia

[**]Professor of Finance, University of Manouba, High School of Business, 2010, La Manouba, Tunisia

Abstract

The difference between the accounting standards and the tax legislation generates a divergence in income calculation process. This study aims to investigate the non-discretionary book to tax differences in the Tunisian context. Using a panel data of 31 Tunisian listed companies on the Tunis Stock Exchange over a period of 2010-2016, we estimate the taxable income for each firm-year to calculate the difference between the book income before tax and the tax income named "Income-effect" and we determine the difference between the theoretical tax on book income before tax and the tax payable named "Tax-effect".Secondly, we model the book to tax differences by four explanatory variables (Change in Net Sales, Profitability, Change in intangible assets and Dividends received) . Our findings confirm that the "Tax-effect" is a powerful response variable used for the non-discretionary book to tax differences in Tunisia.

Keywords: Income-effect, Tax-effect, Book to tax differences

JEL Classification: [H20 ; G30 ; M40]

Introduction

In recent years, some theoretical and empirical papers has focused on clarifying the difference between accounting law, guided by standards and tax legislation through corporate tax, based on the Tax Code.

Empirical investigations around the world did not reveal a precise theoretical model for determining the mechanical differences, but they tried to present different computational technique(Hanlon and Heitzman 2010:142).

Porcano and Tran (1998:448–50) attributed the differences between accounting income and taxable income to the accounting rules and tax legislation positions in the Anglo-Saxon countries the United States, the United Kingdom, and Australia.

For Manzon and Plesko(2002:211) founded that the divergence between the two laws due to a huge discrepancy between the accounting income and the tax income observed in US firms can be explained by economic variables. Moreover, Tang and Firth(2010:12) show that the non-discretionary differences have been a result of difference in treatment between accounting and tax laws in the Chinese context. In addition, Dridi and Boubaker (2015:176) and Kasraoui & Naoui (2019:118) argued that there is a mechanical or non-discretionary divergence due to a difference in the treatment of accounting standards and tax articles in determining the accounting income and taxable income in the Tunisian context.

In this paper, we plan to address differences between accounting standards and tax legislation to highlight the mechanical differences between the book income and the taxable income in the Tunisian context.

The first claim of this paper is to quantify the mechanical differences based on two different approaches, one based on incomes (book income before tax less tax income) and the other based on taxes (theoretical tax on book income less tax payable). The second claim is to determine the explanatory factors for the non-discretionary or mechanical divergence.

ISSN No: 2349-6762 (Print)
Peer Reviewed & Refereed Journal
National Research Journal

Our approach is to distinguish between two dependent variables based on the income-effect and the tax-effect book to tax differences (Tang and Firth 2010:47–48) and (Tang 2015:443). The purpose is to highlight the measurement of the tax income on the basis of accounting figures published in the financial statements of the Tunisians listed companies and, on the other hand, the determinants that explain the permanent divergence in economic and financial factors.

This study investigates on a panel data of 31 Tunisian listed companies on the Tunis Stock Exchange over a period of 2010-2016. We estimate the tax income for each year-firm to calculate the book to tax differences named the "Income-effect" and the difference between the theoretical tax on the pre-tax accounting income and the tax for the fiscal year named the "Tax-effect". The empirical results show that the difference between the amounts of taxes is more powerful than using of the income-effect approach. The introduction of the tax-effect to determine the book to tax differences generates significant determinants to explain the non-discretionary divergence.

In the next Section we explore the literature review discussing the relationship between the book income and the tax income. In Section 3 we present the control variables for the regression models. In section 4 we detail the methodology to measure and to estimate the book to tax differences. In Section 5 we present the results. In Section 6 we discuss and conclude this study.

LITERATURE REVIEW

Book income versus tax income

Companies prepare their financial statements based on the accounting standards and the determination of the taxable income based on the tax legislation. Consequently, the existence of the book to tax differences persists over time and between firms. Each legislation has its clauses and standards for the development of information related to accounting income and tax income.

Manzon and Plesko(2002:193) provided many limitations of the book-tax income measure such as tax shelter activity, consolidation practices and loss carryforwards as potential sources of estimation's error.

The firm must assess the tax income with the objective of calculating the taxable base for corporate tax. The details of this calculation are not publicly information but only for the competent authorities. In this case, the tax authority is the only one on the other side to receive this type of information.

The multidisciplinary nature of tax research makes this area more difficult as this subject must continue the trend of other studies in accounting, finance, economics and legal sciences (Hanlon and Heitzman 2010:127).

In finance, taxes are considered only as part of the inefficient market, according to Miller and Modigliani. This point of view leads to several discussions, namely the impact of taxation on the value of the firm, its financial policy, its investment strategy...

Tax research in accounting science uses specific standards of financial accounting, fundamental concepts of accounting, and details in tax legislation.

For example, the book to tax differences lead to several empirical studies based on the theory of Trade-off with the tax cost borne by the firm and the net tax accounting income to be published to the financial market.

Another comparative advantage in the pursuit of taxation in the accounting context is the collection and estimation of tax information published in the financial statements and the auditors' reports with an absolute absence of tax data, since the process of determining tax income remains discretionary to the business only.

Corporate tax income in the Tunisian context

In the Tunisian context, the notes to the financial statement, disclosed with the balance sheet, the income statement and the cash-flow statement, provide more details about the corporate tax data. The tax administration relies heavily on the firms to report and to disclosure the tax data. The corporate

ISSN No: 2349-6762 (Print)
Peer Reviewed & Refereed Journal
National Research Journal

tax income must be estimated or calculated by the researchers using the data figured into the financial statements.

Tunisian Tax Code Article 11 provides a legal framework for determining net income, which is determined on the basis of the overall income of all transactions carried out by the firm. Similarly, Article 11-paragraph II- states that "the net income is the difference between the net asset value at the close and opening of the fiscal year". The book income is to be used as a basis for the taxable income and the inventories are valued at the historical cost. In contrast, a minimum corporate tax is eligible if the taxable income generates a loss. With two conditions to calculate the minimum tax:

- 0.2% of the gross domestic revenues
- 0.1% of revenues from exportation

Non-discretionary book to tax determinants

Change in Net sales

Many papers use change in net sales to explain this mechanical or non-discretionary discrepancy. The increase in sales can result in outstanding debts among the firm's customers and, as a precaution, the recognition of allowances for doubtful accounts is mandatory.

For example, credit sales can increase turnover but have negative consequences for pre-tax accounting and taxable income.

Several studies have introduced this explanatory factor of the book to tax differences in several econometric models to highlight the mechanical relationship between revenue variation and the gap between the incomes (Dridi and Boubaker 2015; Formigoni, Antunes, and Paulo 2009; Koubaa and Jarboui 2017; Manzon and Plesko 2002)

Similarly, Tang (2015:460) uses revenue variation to detect earning management and tax management in different stock markets around the world.

In addition, in the Tunisian context, part of the turnover is exempt from the corporate tax, especially for companies that carry out direct or indirect export operations such as sales abroad or to fully exporting companies of goods acquired locally, goods produced locally, services provided abroad and services performed in Tunisia intended for use abroad in this case this difference between the pre-tax accounting figure (the In the case of export cases, which are accounted for in revenue), the tax income (total deduction of export profit) remains remarkable in terms of the change in turnover.

For this reason, the introduction of the independent variable turnover change is crucial in order to explain the mechanical differences of the.

Specifically, the model includes revenue variation as explanatory variables to estimate the non-discretionary portion. For Manzon and Plesko (2002:195), these mechanical differences named "SPREAD" explained by the change in turnover realized by the firm. Tang and Firth(2010:20) show that this economic factor is measured by growth in turnover leading to additional accounting charges. For example, credit sales generate unpaid or even contentious customer claims. In applying the precautionary principle, the firm must make provision for the commercial risk. The provisions are totally acceptable charges but are taxed under substantive conditions for the Tunisian context.

Tunisian tax legislation lays down specific conditions to deduct these provisions, first, the initiation of legal proceedings and, second, the accumulation of provisions for doubtful accounts, provisions for the depreciation of stocks intended for sale and for the depreciation of shares listed on the stock exchange within the limit of 50 % of taxable profit. We anticipate a positive relation between this variable and the dependant variable

Profitability

In the context of the signal theory, the sign of the accounting income is important for investors as well as for managers who use the earnings as resources for future investments.

ISSN No: 2349-6762 (Print)
Peer Reviewed & Refereed Journal
National Research Journal

Mills et al. (2002:20) argue that the difference is explained by the sign of the pre-tax accounting profit or loss, i.e. a profit or loss combined with the residence of the firm and the business sector. The authors found that financial firms and recipient firms have a positive and significant effect on the book to tax differences.

The authors Manzon and Plesko (2002:194), in order to make this difference called SPREAD, use as explanatory variable the profitability of the company with an accounting income before tax.

To the contrary, Formigoni et al. (2009:44) and Tang and Firth (2010) use the accounting losses to explain the non-discretionary differences in the same way with the deductible loss carryforwords.

Intangible assets

Investment in intangible assets, especially R&D programs, is significantly sensitive to any tax policy and tax benefit. It identifies itself as an opportunity for scientific research in accounting that addresses incentives for investment in intangible assets.

From an accounting point of view, R&D-related expenses reduce the after-tax accounting income, which requires managers to reduce this type of investment, but with the presence of tax incentives by a total or partial deduction that generates a tax reduction or credit.

Manzon and Plesko (2002:197) use intangible assets as an important factor in explaining this divergence. For example, in the U.S. context, allowances on Goodwill are tax deductible for a period of 15 years. On the other hand, from an accounting point of view, they are depreciable over the period of use of that asset.

In addition, intangible assets are expenditures related to capitalized research and development. From this perspective, we can refer to the work of (Tang and Firth 2010) which introduces this variable to explain the non-discretionary difference between accounting and taxation. In this sense, several tax laws grant research and development-related tax benefits at the pre-investment level through tax credits, grants, deductions, etc.

In the Chinese context, (Lee, Vetter, and Williams 2015:58) use intangible assets as an independent variable that generates a difference between the pre-tax accounting income and the taxable tax income by this difference in treatment of the deductibility of depreciation allowances for this asset.

In Tunisia, the non-discretionary divergence between accounting rules and tax law introduced by many papers (Bouaziz Daoud and Ali Omri 2011; Dridi and Boubaker 2015; Koubaa and Jarboui 2017), based on the difference in accounting and tax treatment of amortization of these intangible assets. We expect a negative relation between this variable and the dependant variable

Dividends

For Gaertner et al.(2016), the determination of the positive difference between the two types of incomes is established by introducing the independent "dividend" variable to explain this difference.

(Jackson 2015:52) introduced the dividends, which are largely excluded from taxable income, received from other firms as a control variable for the permanent book to tax differences.

Mills et al.(2002:6) use the deduction of dividends from the taxable base, especially between related businesses (consolidated companies or group of companies) in the U.S. context as an explanatory factor to the book to tax differences: "*the tax return includes dividends from unconsolidated subsidiaries, reduced by the dividends received deduction for dividends from domestic corporations*".

Section No. 243 of Part VIII of Subchapter B of Chapter 1 of the U.S. Tax Code states that "in the case of a company collecting amounts in the form of dividends from another local enterprise, the deduction of such dividends from the taxable base shall be 70% or 100%, depending on the case and the status of independence between the entities".

In the Tunisian context, the taxation of dividends remains exempt for the amounts received by corporations in accordance with paragraph III of Article 48 of the Code of the Tax on Personal

ISSN No: 2349-6762 (Print)
Peer Reviewed & Refereed Journal
National Research Journal

Income and the Tax on Corporations, which stipulates that " all profits or incomes are distributed within the meaning of paragraph "a" of Article 29, paragraph II, of the Code". We expect a positive relation between this variable and the dependant variable.

Methodology

Income-effect

The estimation of the tax income is based on the data published in the financial statements of Tunisian companies without resorting to tax administration since the law prohibits the disclosure of this information.

Article 15 of the Tunisian Tax Code, paragraph II states: "Tax administration officials may only issue information or copies of records held by them to the taxpayer himself in respect of his tax situation, or to persons to whom the payment of tax could be claimed in place of the taxpayer".

For Manzon and Plesko (2001:199), unpublished tax information boosts the researchers to exploit the financial statements of U.S. companies.

In the same way, corporate tax data are important for quantifying the book to tax differences. Previous studies have used a tax-based approach for each fiscal year divided by the applicable tax rate (Manzon and Plesko, 2002; Tang and Firth, 2011).

The tax payable in the financial statements and the statutory tax rate mentioned in the Auditor's reports (Manzon and Plesko, 2002:192; Hanlon and Shevlin, 2005:105-112; Tang and Firth, 2011:15-20).

However, in the Tunisian context, the tax always payable with the minimum tax mechanism calculated on the basis of gross turnover may result in an overestimate, in the case of a fiscal year which is in deficit or in the case of an underestimate of the tax result, in the case of a total deduction of the realized income of the undertaking in question, the deduction of the income reinvested within the same undertaking or elsewhere and the deduction for the

In the absence of tax figures published by the companies or the tax administration, tax income is estimated by the following method:

$$\text{Tax income} = \frac{\text{Tax payable}}{\text{Statutory tax rate}} \quad (1)$$

The book to tax differences estimation became an important aggregate for the US Department of Finance in the 1990s to explain the impact of tax shelters on the corporate tax income (Mills et al., 2002).

Yin (2003) and Hanlon and Shevlin (2005:108) in the same U.S. context, calculate this difference by the effective tax rate that is equal to the amount of tax charge on the pre-tax accounting income. In this context, the imputation of the change in the deferred loss is transformed into tax assets (deferred tax) by the multiplication of the tax rate for each year, plus the amount to be paid, which is not the case in Tunisia. the Tunisian tax legislation does not allow the tax on the deferred deficit to be refunded or a deferred tax to be presented as balance sheet assets.

Based on the financial statements and tax borne by U.S. firms, Desai (2003) calculates this difference by a simulation of another pre-tax book income based on the tax income, adding the amount of deductible depreciation, foreign source income (tax deductible and generating deferred tax liability) and the amounts of stock options deductible.

For this raison we adopt the Income-effect book to tax differences as following:

$$\text{Income-effect} = \text{Book income before tax} - \text{Tax income} \quad (2)$$

ISSN No: 2349-6762 (Print)
Peer Reviewed & Refereed Journal
National Research Journal

Tax-effect

According to Tang and Firth (2011) and (Tang, 2014:13), the advantage to use the "tax-effect" for the book to tax differences estimation are based on several factors such as the presence of several tax rates, consolidation of tax incomes among corporate groups, imputation of loss carryforwards, tax credits granted by the government and any other tax incentives used. The authors use the data and figures published in the financial statements of the firms studied in the Chinese context. In the Tunisian case, the existence of an accounting or tax losses does not give the taxpayer the advantage of refunding tax on that deficit or non-payment of tax as in the American case. With a minimum tax payable by companies, calculated on the basis of gross turnover at a percentage of 0.1% or 0.2%, the tax remains payable.

The tax effect gives an arithmetic logic for the estimation of the book tax differences since the sign of this amount varies from year to year independently on the pre-tax accounting income achieved.

$$\text{Tax-effect}=(\text{Book income before tax}*\text{Statutory tax rate})-\text{Corporate Tax payable} \quad (3)$$

Corporate Tax payable is shown in the income statement, deductible under Tunisian accounting rules but non-deductible under tax legislation.

Estimating non-discretionary book to tax differences

Our sample consists of 217 firm-year observations from 31 listed companies in covering seven years over the period 2010-2016. We exclude banks, insurance and leasing companies and firms with missing data.
The data for this study were collected through the financial statements available on the Tunis Stock Exchange of Securities (known Bourse de Tunis- BVMT) web site[1]. The central claim of this work concerns the comparison between the income-effect and the tax-effect in the Tunisian context by the following models:

$$\text{Income-effect}_{it}=\beta_0+\beta_1\Delta\,\text{CHA}_{it}+\beta_2\text{RENT}_{it}+\beta_3\text{IMMOBINCO}_{it}+\beta_4\text{DIVIDENDS}_{it}+\varepsilon_{it} \quad (4)$$

$$\text{Tax-effect}_{it}=\beta_0+\beta_1\Delta\,\text{CHA}_{it}+\beta_2\text{RENT}_{it}+\beta_3\text{IMMOBINCO}_{it}+\beta_4\text{DIVIDENDS}_{it}+\varepsilon_{it} \quad (5)$$

Where

$\text{Income-effect}_{it}$	= the difference between the book income before tax and the taxable income scaled by total assets for the year t-1;
Tax-effect_{it}	= the difference between (book income before tax multiplied by the statutory tax rate and the tax payable scaled by total assets for the year t-1;
$\Delta\,\text{CHA}_{it}$	= the change in revenue from year t-1 to year t scaled by total assets for the year t-1;
RENT_{it}	= dummy variable that equals 1 when the book income has a profit in year t, and 0 otherwise;
IMMOBINCO_{it}	= investment in intangible assets scaled by total assets for the year t-1;
DIVIDENDS_{it}	= the amount of dividends collected or receivable for year t scaled by total assets for the year t-1;
ε_{it}	= error term in year t for firm i.

Using the cross-sectional data for the 7-year period and estimate Equations 4 and 5 using a pooling model (Tang and Firth, 2011).

[1] www.bvmt.com.tn

ISSN No: 2349-6762 (Print)
Peer Reviewed & Refereed Journal
National Research Journal

Descriptive Statistics

Figure 1 shows that the aggregated Income-effect book to tax differences varies across the sample period especially for the post fiscal year 2013. For the aggregated Tax-effect book to tax differences disclosures stability over the period. The relationship between the dependant variable and the independent variables remains stable over time.

Figure 1

Aggregated Income-effect and Tax-effect with balanced panel of 31 firms, 2010-2016

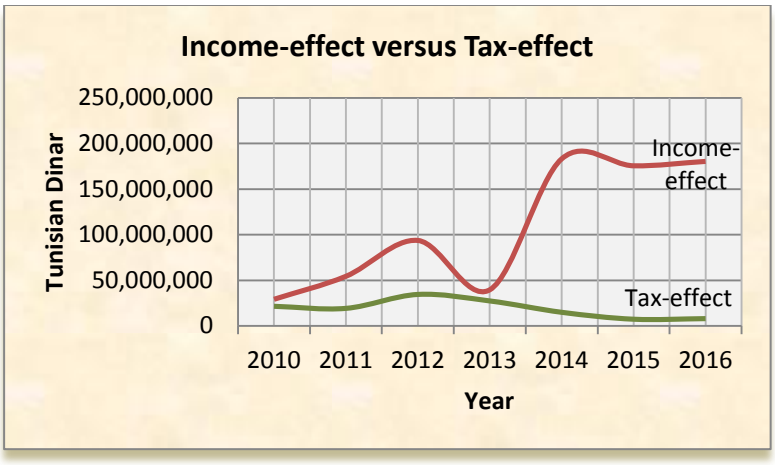

Table (1) presents descriptive statistics for dependent and independent variables in the book to differences models. We find that the average of the book to tax differences based on Income-effect and Tax-effect is positive of 0.050 and 0.002 respectively.

Similarly, the variability is very important for the Income-effect variable in relation to the Tax-effect: 20.87% versus 1.66%.

In addition, there is a maximum of Income-effect of 1.89, which makes it clear that this difference is greater than the total assets of a Tunisian company. On the other hand, a maximum of Tax-effect is 6.84% of the total assets.

Indeed, the difference between the minimum and maximum values for the two methods is plausible for the Tax-effect [-0.053, 0.068].On the other hand, there is a wider range for the Income-effect [-0.121, 1.898].

The average profitability of our sample is 76% shows that Tunisian companies achieve a positive accounting income with a variability of 42.78% depending on the situation of each company and each year separately.

We also note that the change in average turnover is 2.15% compared to the assets of the company. This may explain the sector of activity in which the company carries on its business, as well as the socio-economic incidents and the financial situation that may influence the sign of the accounting result in the Tunisian context.

Table 1: Descriptive statistics

Variables	Observations	Mean	Standard Deviation	Minimum	Maximum
Dependent variables					
Income – effect	217	0.050	0.208	-0.121	1.898
Tax – effect	217	0.002	0.016	-0.053	0.068
Independent variables					
ΔCHA	217	0.021	0.143	-0.707	0.605
RENT	217	0.760	0.427	0	1
ΔIMMOBINCO	217	0.020	0.033	0	0.208
DIVIDENDS	217	0.014	0.021	0	0.127

ISSN No: 2349-6762 (Print)
Peer Reviewed & Refereed Journal
National Research Journal

Results

Table 2 reports the correlation relationship between the dependent and the independent variables used in the book to tax differences models. A linear relationship exists if a change in one of the variables associated with a proportional change in the other variable.

Spearman's correlation is consistent between turnover variation and other independent variables with absolute significance. This significance is absent in the relationship between the two independent variables IMMOBINCO and RENT.

The existence of a linear relationship between the explanatory variables and the explained variable shows the importance of the tax-effect for book to tax differences explanation.

Similarly, Pearson's correlation evaluates the linear relationship between two continuous variables. For example, we can use Pearson's correlation to assess whether the difference between the Income-effect and Tax-effect book to differences are associated with the change in turnover, profitability, dividends received by the firm, and investment in intangible assets.

The analysis of the correlation between the dependent variable and the explanatory variables in our model shows a positive correlation between the book to tax differences and the first three variables (ΔCHA, RENT, DIVIDENDS) with significance linearity, but the negative correlation between the dependent variables and the explanatory variable IMMOBINCO is not significant.

Similarly, the three independent variables (ΔCHA, RENT, DIVIDENDS) have a statistically significant positive correlation between them.

The results found are relevant since the existence of this relationship is positive between the three explanatory variables (ΔCHA, RENT, DIVIDENDS) which have the same evolutionary meaning. Any increase in turnover generates a positive deviation of the income-effect differences of the same logic for the other two explanatory variables.

Another efficient result in our study, which refers to the positive correlation between variables.

Table 2: Pearson (bottom) and Spearman (top) Correlation coefficients with significance levels

	Income-effect	Tax-effect	VARCHA	RENT	DIVIDENDS	IMMOBINCO
Income – effect	1	-	0.15	0.33	0.25	0.34
	-	-	(0.025)	(0.000)	(0.000)	(0.000)
Tax – effect	-	1	0.30	0.70	0.41	0.15
	-	-	(0.000)	(0.000)	(0.000)	(0.028)
ΔSALES	-0.11	0.30	1	0.21	0.15	0.18
	(0.111)	(0.000)		(0.002)	(0.029)	(0.007)
RENT	-0.16	0.62	0.19	1	0.26	0.01
	(0.015)	(0.000)	(0.005)		(0.000)	(0.853)
DIVIDENDS	-0.01	0.56	0.11	0.25	1	0.38
	(0.934)	(0.000)	(0.098)	(0.000)		(0.000)
IMMOBINCO	0.28	-0.10	0.05	-0.01	-0.04	1
	(0.000)	(0.125)	(0.422)	(0.839)	(0.525)	

ISSN No: 2349-6762 (Print)
Peer Reviewed & Refereed Journal
National Research Journal

Income-effect versus tax-effect Measuring

Table 3 presents the regression results of the estimated book to tax differences on the explanatory variables. For comparison, the equations (4) and (5) are estimated by ordinary least square, the income-effect versus the tax-effect, the results show that the model (2) is more appropriate than the model (1), for several reasons:

- The coefficient of determination of the model (2) (R^2=58.82%) is wider than the coefficient of the model (1) (R^2=11.89%).The quality of the prediction for the tax-effect is powerful than the prediction for the income-effect.

- The significance of the estimation coefficients is more relevant in the model (2) than that of the model (1). The four probability variables of revenue, profitability, intangible assets and dividends are statistically significant for the model (2). For example, a Tunisian Dinar increase in dividends collected is predicted to large the Tax-effect book to tax differences by about 0.318 unit money.

- The signs of estimated coefficient of the explanatory variables in the model (2) are more suitable than those of the model (1). The coefficients of the three independent variables (ΔCHA, RENT and DIVIDENDS) are positive in the model (2) which is compatible with the literature review. On the other hand, model (1) shows a negative sign for the estimation coefficients of the two independent variables (ΔCHA, RENT).

- By examining the model (2), the change in turnover has a positive impact on the book to tax differences. This impact is statistically significant, an increase in turnover of 1% widens the dependent variable by 1.88%, confirming the results of(Dridi and Boubaker 2015; Kasraoui and Naoui 2019; Tang and Firth 2010).

Table 3: Regression results

	Model (1) : Income-effect regression result					
Variables	**Estimation**	**Ecart-Type**	**t-value**	**Pr(>|t|)**		
Constant	**0.065**	**0.029**	**2.248**	**0.025**	*	
Δ CHA	**-0.147**	**0.095**	**-1.541**	**0.124**		
RENT	**-0.075**	**0.032**	**-2.297**	**0.022**	*	
IMMOBINCO	**1.791**	**0.398**	**4.496**	**0.000**	***	
DIVIDENDS	**0.542**	**0.641**	**0.846**	**0.398**		
R^2=11.89% **R^2adjusted=10.23%** **Significance codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1 denote two-tailed statistical significance.**						
	Model (2) : Tax-effect regression result					
Variables	**Estimation**	**Ecart-Type**	**t-value**	**Pr(>|t|)**		
Constant	**-0.015**	**0.001**	**-9.895**	**0.000**	***	
Δ CHA	**0.018**	**0.005**	**3.603**	**0.000**	***	
RENT	**0.018**	**0.001**	**10.528**	**0.000**	***	
IMMOBINCO	**-0.043**	**0.021**	**-2.004**	**0.046**	*	
DIVIDENDS	**0.318**	**0.035**	**9.085**	**0.000**	***	
R^2=58.82% **R^2adjusted=57.42%** **Significance codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1 denote two-tailed statistical significance.**						

ISSN No: 2349-6762 (Print)
Peer Reviewed & Refereed Journal
National Research Journal

Discussion and conclusion

The results presented here provide two findings an empirical evidence for the non-discretionary or mechanical divergences in the Tunisian context. The literature review found it difficult to select the explanatory variables for the difference between the pre-tax accounting result and the tax result.

Our research has attempted to frame this set of variables based on previous studies in the American, Chinese and Tunisian contexts.

Our objective was to quantify this mechanical difference based on two different approaches, one based on incomes and the other based on taxes (Tang and Firth 2010).

From the above, it is possible to examine the literature that deals with non-discretionary differences between pre-tax accounting and tax income. In general, our approach consists primarily of distinguishing between two dependent variables based on income and tax effect (Hanlon and Heitzman 2010; Tang and Firth 2010).

Empirical investigations around the world did not reveal a precise theoretical model for determining the mechanical differences of the book to tax differences, but they tried to present different computational techniques.

Our methodology in this work is a part of this research theme and aims to highlight, on the one hand, the measurement of the tax income on the basis of accounting figures published in the financial statements of companies listed in Tunisia and, on the other hand, the determinants that explain the permanent divergence in economic and financial factors.

The economic model of the book to tax differences used in this study must be specified by other factors. The error term contains unobserved effects such as time or individual effects. This value may discrete earning and tax management strategies. The residual is used to detect the corporate tax avoidance (Hanlon and Heitzman 2010:142).

We suggest for future work that we have to include more independent variables reflecting other economic factors such as firm size, industry sector, withholding taxes. Further, the earnings reinvestment decision leads to increase the gap between the book income and the taxable income.

References

1. Bouaziz Daoud, Inès, and Mohamed Ali Omri. 2011. *Divergences Comptabilité - Fiscalité, Gestion Fiscale et Gestion Des Résultats En Tunisie: Les Nouveaux Défis*. *Post-Print*. HAL.
2. Dridi, Wiem, and Adel Boubaker. 2015. "The Difference between the Accounting Result and Taxable Income in Detecting Earnings Management and Tax Management: The Tunisian Case." *International Journal of Business and Management* 10(7):131.
3. Formigoni, Henrique, Maria Antunes, and Edilson Paulo. 2009. "Difference between Accounting Profit and Taxable Profit: An Analysis of Management of Accounting Results and Tax Management at Brazilian Public Companies." *Brazilian Business Review* 6:42–58. doi: 10.15728/bbr.2009.6.1.3.
4. Gaertner, Fabio B., Stacie Kelley Laplante, and Dan Lynch. 2016. "Trends in the Sources of Permanent and Temporary Book-Tax Differences during the Schedule M-3 Era." *National Tax Journal, Forthcoming*.
5. Hanlon, Michelle, and Shane Heitzman. 2010. "A Review of Tax Research." *Journal of Accounting and Economics* 50(2–3):127–78. doi: 10.1016/j.jacceco.2010.09.002.
6. Jackson, Mark. 2015. "Book-Tax Differences and Future Earnings Changes." *The Journal of the American Taxation Association* 37(2):49–73.
7. Kasraoui, Abdelkader, and Kamel Naoui. 2019. "Les Divergences Non Discrétionnaires Entre Le Résultat Comptable et Le Résultat Fiscal Vers Un 'Effet Impôt' : Cas Des Entreprises Tunisiennes." *Revue Du Contrôle de La Comptabilité Et de l'Audit*.
8. Koubaa, Rakia Riguen, and Anis Jarboui. 2017. "Normal, Abnormal Book-Tax Differences and Accounting Conservatism." *Asian Academy of Management Journal of Accounting & Finance* 13(1).
9. Lee, B. Brian, William Vetter, and Michael Williams. 2015. "Book-Tax Income Differences and Major Determining Factors." *Accounting and Finance Research* 4(3):p55. doi: 10.5430/afr.v4n3p55.
10. Manzon, Jr, and George A. Plesko. 2002. *The Relation between Financial and Tax Reporting Measures of Income*. *SSRN Scholarly Paper*. ID 312185. Rochester, NY: Social Science Research Network.
11. Mills, Lillian F., Kaye J. Newberry, and William B. Trautman. 2002. "Trends in Book-Tax Income and Balance Sheet Differences." *Available at SSRN 313040*.
12. Porcano, Thomas M., and Alfred V. Tran. 1998. "Relationship of Tax and Financial Accounting Rules in Anglo-Saxon Countries." *The International Journal of Accounting* 33(4):433–54. doi: 10.1016/S0020-7063(98)80003-4.
13. Tang, Tanya Y. H. 2015. "Does Book-Tax Conformity Deter Opportunistic Book and Tax Reporting? An International Analysis." *European Accounting Review* 24(3):441–69.
14. Tang, Tanya Y. H., and Michael Firth. 2010. *Can Book-Tax Differences Capture Earnings Management and Tax Management? Empirical Evidence from China*. *SSRN Scholarly Paper*. ID 1679190. Rochester, NY: Social Science Research Network.