# Book-Tax Differences and the Persistence of Earnings and Accruals: Tunisian Evidence

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# Abstract

This study aims to investigate whether the persistence of earnings, accruals and cash flows are influenced by the difference between accounting and taxable income (book-tax differences; BTD). This investigation helps in two research lines. First we have expanded the literature that interprets the BTD. We used the discretionary part of the BTD to estimate managerial manipulation. Our contribution is to use a different method to estimate the BTD through the residual of a multiple regression. Secondly, we attempted to investigate whether discretionary BTD appear to serve as a useful signal of earnings persistence. We test the model with a sample of 21 listed Tunisian firms in the period from 2003 to 2012. The results illustrate the importance of BTD in indicating the persistence of earnings and accruals.

Keywords: book-tax differences, discretionary differences, earnings persistence, accruals

# 1. Introduction

The relationship between accounting and taxation has been widely discussed in the literature for several reasons, in particular after accounting and financial scandals such as Enron, WorldCom and Xerox. Researchers began to focus on the different earnings manipulations that allow speculating corporate income according to their requirements. Among this research, several studies are devoted to the difference between accounting results and tax results (hereinafter BTD) (Blaylock et al., 2012; Hanlon & Heitzman, 2010; Formigoni et al., 2009; Hanlon, 2005; Kvaal & Nobes, 2012; Manzon & Plesko 2002; Mills et al., 2002; Watrin et al., 2012; Plesko, 2004; Frank et al., 2004; Tang & Firth, 2011; Desai, 2002; ...)

BTD come from a permanent and a temporary difference. This difference provides useful incremental information about the quality of earnings and future income of the company (Hanlon, 2005; Jackson, 2009; Lev & Nissim, 2004; Manzon & Plesko, 2002; Passamani et al., 2012; Guenther, 2011; Noor & Mastuki, 2009). Several studies attribute the BTD to the earnings management (Blaylock et al., 2012; Formigoni et al., 2009) or tax management (Plesko 2004; Desai & Dharmapala, 2006, 2009). Other studies have linked the BTD with both earnings and tax management (Tang and Firth, 2011) and with the cost of capital (Dhaliwal et al., 2009).

Mills and Newberry (2001) found that the indebted companies have significant differences between accounting income and taxable income. In this regard, the BTD has an informational value, which can reflect the existence of managerial manipulation. This information can conduct the perception and assessment of several information users such as investors, shareholders, managers and creditors. Kvaal and Nobles (2012) point out that the relationship between financial statements and taxation can be considered as one of the features that distinguish one country to another. Similarly, Haller (1992) finds that the tax affects the functioning of the financial statements and its one of the main reasons preventing the European accounting harmonization. In this context, the BTD can be attributed to the differences between the accounting system and tax rules (Lamb et al., 1998; Hoogendoorn, 1996; Nobes & Schwenke, 2006). Other studies focused on the influence of BTD in detecting discretionary practices of accounting and tax management (Desai, 2002; Mills et al., 1998; Wilson, 2009; Tang & Firth, 2011; Hanlon 2005; Kvaal & Nobes, 2012). Recent research has confirmed that this divergence can inform on managerial manipulations, it can be an effective attribute of the quality of the earnings (Hanlon, 2005; Blaylock et al., 2012).

This study aims to examine whether the persistence of earnings, accruals and cash flows are influenced by the extent of the BTD. This examination helps in two research lines. First, we have expanded the literature that interprets the BTD. We used the discretionary part of the BTD to estimate managerial manipulation. Our contribution is to use a different method of calculating the BTD through the residual of a multiple regression model expressing the BTD according to the variables that represent non-discretionary differences. Thus, this study is a continuation of the research of Hanlon (2005) who estimated the BTD through the calculation of the deferred tax expense.

Hanlon (2005) use temporary divergence admitting that permanent differences generally result as a simple difference between the accounting and tax rules and are not good indicators of earnings quality. This proxy of BTD is not available in all countries, particularly for Tunisian companies that do not require the publication of this information in their financial statements. Our second contribution is to examine the influence of BTD on the persistence of earnings in emerging countries. According to our knowledge no study has addressed this problem in such market. The Tunisian context is characterized by a financial system dominated by banks and the concentration of the owners. Despite the attempts of companies' privatization of the 90s, the size of public companies remains high. The Tunisian sector is dominated by micro, small and medium companies (83% of a total of 84,500 firms are micro-enterprises). The Tunisian capital market can be characterized by a concentrated ownership structure. Until 2009, the Tunisian stock exchange has only 52 companies of which 23 companies are financial institutions (a number that reflects the attitude of Tunisian investors in financing from financial institutions). Most shareholders are important monitoring blocks. The relation of BTD with managerial manipulations is little explored in the Tunisian context as it has been studied in various contexts. This relation gives additional information about the earnings quality and the behavior of companies with regard to tax avoidance. The divergence between the accounting system and the tax system has resulted in more choices and options in the rules and laws of the two systems. These choices can increase the discretion of the manager. In Tunisia, the BTD derived from the difference between the accounting and tax system may result in the rejection by the taxation of certain expenses that are accepted for accounting, the exemption of certain outcomes, not taken into account by the taxation about accounting treatment. Similarly, the difference may result from a rule that causes a time lag between its inclusion in accounting and taxation (Yaich, 2004). In this sense, Dridi and Boubaker (2015) provide the main factors that explain the differences between accounting and taxable income, ie the amortization of goodwill, depreciation of fixed assets, the change in the securities portfolio, the foreign operations and the growth of revenues.

Our contribution is first in explaining the relationship between BTD and tax and accounting practices. Second, we used the taxable income based on earnings before tax and income adjustments in order to measure the persistence of pre-tax income for the sample that have a large BTD. The remainder of this article is as follows: section 2 presents the literature review and research hypotheses; Section 3 describes the research methodology; Section 4 presents the results and Section 5 concludes the paper.

## 2. Literature Review and Research Hypotheses

Several studies have examined the association between BTD and earnings quality through several attributes. Hanlon (2005) found that investors use BTD as a means of earnings quality assessment. This author has studied the relationship between temporary BTD and earnings persistence of and found a negative relationship between the extent of this differences and persistence. Hanlon (2005) found that BTD are a powerful means to indicate the persistence of earnings, accruals and cash flows for a one year ahead. Phillips et al. (2003) show that the deferred tax expense (proxy of BTD) is useful in detecting earnings management. Lev and Nissim (2004) show that BTD can predict subsequent earnings growth. Hanlon et al. (2008) suggest that increased compliance between accounting and taxable income reduced the informative quality of earnings. Moreover, Atwood et al. (2010) show that increased compliance between accounting and taxable income reduced the relationship between the quality of earnings in most East Asian countries (their sample consists of 33 countries). Joos et al. (2000) find evidence that a large BTD weakened the relationship between earnings and stock returns. they concluded that the market considers companies that have large BTD have the most manipulated results. Thus, the market gives marginal weight to the value of their income.

Tang (2006) shows that companies with strong incentives and earnings management perspectives have high levels of abnormal BTD. Tang and Firth (2012) argue that BTD is a good indicator earnings and tax management and conclude that BTD influence the earnings persistence and the stock returns and incomes correlation. Moreover, they confirm that BTD (with its two components: normal and abnormal) contributes to a better understanding and evaluation of earnings quality. Ayers et al. (2011) find that BTD can be an indicator used in the valuation of stock returns but the interpretation of the information included in the BTD is complicated by

investors. Raedy et al. (2010) suggest that the use of information included in the BTD by investors as a way to assess the quality of pre-tax book income.

Ayers et al. (2010, p. 9) argue that analysts of credits may hold additional information on the performance of the company through the BTD. They assume that there is a negative relationship between changes in BTD and changes in credit scores. They conclude that the negative and positive changes in BTD cause less favorable ranking changes.

Jackson (2009) finds that temporary BTD (measured by deferred tax expense) are negatively associated with earnings growth while the permanent differences are positively correlated with earnings growth.

Some research shows that a large BTD is associated with a greater probability of accounting audit proposed by the tax authorities following a tax audit (Ochoa & Angueira, 2012). Similarly, Mills and Sansing (2000) find that the probability that the government will audit a transaction is higher if the transaction generates a positive BTD. Hanlon et al. (2012) prove that audit firms require additional fees when their customers have relatively large BTD. Indeed, a large BTD may cause additional efforts for the auditors. Hanlon and Krishnan (2006) attempted to examine the informational value of the BTD for the auditors. They concluded that a large BTD is associated with increased auditors' fees. They show that BTD reflect information of a higher risk of earnings management.

We use BTD to detect the earnings quality. We analyze BTD through its decomposition into normal and abnormal differences (or discretionary and non-discretionary). Abnormal or discretionary differences are those that explain the managerial manipulations. Indeed, non-discretionary differences arise from the different treatments between accounting and taxation and therefore they have no connection with the aggressive practices of managers.

The determination of non-discretionary differences allows the discretionary differences measurement. Abnormal differences are estimates through the residue of a regression model expressing the BTD according to the explanatory variables. This residue shows the part of the BTD which is not explained by differences in treatment between accounting and taxation. Therefore we used the BTD discretionary part (DBTD) in the rest of our study.

To analyze the impact of the DBTD on the earnings persistence we divided our sample into three subsamples. The first consists of observations (firm/year) in the highest quintile of the DBTD (divided by total assets) for all companies, for each year. This group is named LPDBTD (large positive discretionary BTD). The second consists of the observations (firm/year) in the lowest quintile of the DBTD (divided by total assets) for all companies, for each year. This group is named LNDBTD (large negative discretionary BTD). The second consists of the observations (firm/year) in the lowest quintile of the DBTD (divided by total assets) for all companies, for each year. This group is named LNDBTD (large negative discretionary BTD). The last group includes the remaining observations and reflects a relatively reduced or small DBTD. This group is called small\_DBTD. Using these three subsamples, we test (1) if the two sub-samples of observations that have a large BTD have earnings persistent less than the group with small\_DBTD, and (2) if the earnings persistence is the same for the first two subsamples. Thus, our first hypothesis is:

# H1: Discretionary BTD contains additional information on the persistence of earnings.

As we mentioned the DBTD may reflect low earnings quality. The perception of investors and other stakeholders is based on the accounting result which contain information about the company's performance. However, the income can be overvalued or undervalued following the managerial accounting discretion and manipulation. Managers manipulate results through accruals as a reaction to the difference between profit before manipulation and objectives they estimate (Li, 2009). Therefore, accruals are the best proxy to the earnings management. We can assume that the persistence of accruals of companies that have a large DBTD will be lower than companies that have small\_DBTD.

Consequently our second hypothesis:

# H2: Discretionary BTD contains additional information on the accruals of the company.

# 3. Research Method

#### 3.1 Estimating DBTD

In order to estimate DBTD, we divide the BTD into two sets: a set of variables represents the differences between accounting and tax treatments. These variables reflect the normal difference which is not related to managerial manipulations. The remaining gap (residual) is the abnormal difference part which reflects earnings manipulation. In equation (1) BTD is regressed on variables related to the difference between accounting and tax treatment. The residual of this regression is the discretionary part of BTD (DBTD)

$$BTD_{i,t} = \gamma_0 + \gamma_1 \ GW_{i,t} + \gamma_2 \ \Delta PPE_{i,t} + \gamma_3 \ \Delta REV_{i,t} + \gamma_4 \ FO_{i,t} + \gamma_5 \ \Delta SP_{i,t} + \varepsilon_i$$
(1)

Where: BTD<sub>i,t</sub>: book-tax differences of firm i in year t, this variable is equal to income before tax minus taxable income scaled by total assets;  $GW_{i,t}$ : goodwill of firm i in year t, this variable is equal to the gross value of goodwill scaled by total assets, which is used to control the difference in treatment between the accounting and tax rules of goodwill depreciation;  $\Delta INV_{i,t}$ : change in investment in gross property, plants and equipment from year t-1 to year t, this variable is equal to the gross value of tangible assets in year t minus the gross value of tangible assets in year t-1, This variable is used to detect the effect of investment scale on mechanical differences related to nondiscretionary depreciation, amortization and provisions for impairments.;  $\Delta REV_{i,t}$ : changes in revenues, this variable is equal to the revenue in year t minus the revenue in year t-1, which is used to capture the effect of economic growth; FO<sub>i,t</sub>: the foreign operations of firm i in year t, this variable is measured by a binary value which takes 1 if the firm has make foreign operations in year t in 0 otherwise, this variable is introduced to control the difference in treatment of changes in foreign currencies;  $\Delta SP_{i,t}$ : change in stock portfolio from year t-1 to year t, this variable is equal to the value of stock portfolio in year t minus the value of stock portfolio in year t-1 scaled by total assets. This variable is used to control the growth of listed securities.

#### 3.2 Earnings Persistence Tests

To estimate the persistence of income we used equation (2). Previous studies (Hanlon, 2005; Blaylock et al., 2012) used equation where persistence is estimated through pre-tax book income for one year- ahead. In this study we have adjusted this equation in order to measure the persistence of earnings but also the persistence of adjustments (ie the difference between accounting and taxable income). Indeed, this variable allows detecting the managerial manipulations since it comprises various deductions and reinstatements carried out by the company and which may reflect some shelters activities. We made a model where the taxable income is estimated based on their components that are pre-tax book income and all reinstatements and deductions (all adjustments) as well:

$$TI_{t+1} = \gamma_0 + \gamma_1 PTBI_t + \gamma_2 ADJUS_t + \varepsilon_{1 i,t}$$
(2)

In this equation  $TI_{t+1}$  is the taxable income scaled by average total assets,  $PTBI_t$  is the income before tax scaled by total assets and  $ADJUS_t$  is the difference between accounting and taxable income scaled by total assets. This variable represents the part of the adjustments to yield taxable income.

We subsequently followed the same approach of Hanlon (2005) by introducing the variables to test our hypotheses. Equation (3) which permits the coefficient on earnings to vary depending on the level of the book-tax differences by introducing an indicator variable for each of the large DBTD subsamples

$$TI_{t+1} = \gamma_0 + \gamma_1 LNDBTD_t + \gamma_2 LPDBTD_t + \gamma_3 PTBI_t + \gamma_4 ADJUS_t + \gamma_5 LNDBTD_t \times PTBI_t + \gamma_6 LPDBTD_t \times PTBI_t + \gamma_7 LNDBTD_t \times ADJUS_t + \gamma_8 LPDBTD_t \times ADJUS_t + \varepsilon_{1 i,t}$$
(3)

Equation (2),  $TI_{t+1}$  taxable income scaled by average total assets. LNDBTD<sub>t</sub> is a dummy variable equal to 1 for DBTD<sub>t</sub> in the lowest quintile of firm-years, and 0 otherwise. LPDBTD<sub>t</sub> is a dummy variable equal to 1 for DBTD<sub>t</sub> in the highest quintile of firm-years, and 0 otherwise. The DBTD<sub>t</sub> is estimated through the residual in equation (1) which puts the total divergence based on non-discretionary differences are due to the difference of both accounting and tax systems.

In equation (3)  $\gamma_3$  reflects the persistence of earnings for the group of observations with small\_DBTD and  $\gamma_5$  ( $\gamma_6$ ) reflects the persistence of earnings for subsamples with a large negative (positive) DBTD. A large DBTD contains additional information on the persistence of earnings When  $\gamma_5$  and  $\gamma_6$  coefficients are negative ( $\gamma_5 < 0$  and  $\gamma_6 < 0$ ). This sign reflects lower persistence in pre-tax earnings.

According to Hanlon (2005), we also decompose the income into two parts. The first is the company's cash flows and the second represents accruals. This allows us to examine whether the persistence of cash flows and accruals vary depending on the level of the DBTD. We divided the income in cash flows and accruals and we estimated the following equation:

$$TI_{t+1} = \gamma_0 + \gamma_1 LNDBTD_t + \gamma_2 LPDBTD_t + \gamma_3 CF_t + \gamma_4 LNDBTD_t \times CF_t + \gamma_5 LPDBTD_t \times CF_t + \gamma_6 ACC_t + \gamma_7 LNDBTD_t \times ACC_t + \gamma_8 LPDBTD_t \times ACC_t + \gamma_9 ADJUS_t + \gamma_{10} LNDBTD_t \times ADJUS_t + \gamma_{11} LPDBTD_t \times ADJUS_t + \varepsilon_{1,i,t}$$
(4)

In this equation, the CF<sub>t</sub> variable represents the cash flows of the company and  $ACC_t$  are total accruals for firm i in year t measured as follows: ACCT = book income minus Cash flows from operations. The  $\gamma_3$  and  $\gamma_6$ coefficients represent the persistence of cash flows and the persistence of accruals for the group that has a small\_DBTD.  $\gamma_7$  and  $\gamma_8$  reflect the persistence of groups with a large DBTD. A lower persistence of accruals for these groups resulted in negative coefficients ( $\gamma_7 < 0$  and  $\gamma_8 < 0$ ).

## 4. Empirical Results and Discussion

#### 4.1 Sample and Database

This study is developed for the case of Tunisia. The sample includes companies belongs to the Tunisian stock exchange (TSE), covering 65 companies. We excluded companies inside the financial sector (banking, financial services and insurance), which are governed by specific standards in their activities. We also excluded firms with missing data. The final sample is a cylinder panel over 10 years (2003-2012) and has 21 listed companies, ie 210 observations (firm-year). The scope of this survey covers industrial and commercial activities, transport companies, communication and others. These classifications are defined on the basis of the TSE directory. Data on these companies are obtained from the Official Bulletin of the Financial Market Council. Accounting and financial information is drawn from the annual reports which are composed of financial statements that include a balance sheet, income statement, the cash flow statement and notes to financial statements. All these components are essential to our study.

#### 4.2 Descriptive Statistics

Panel A of Table 1 presents descriptive statistics of the variables used in our model. The mean of the ADJUS<sub>t</sub> variable is (0.021) explains that on average this variable is positive. This result is consistent with the US (Plesko, 2004; Hanlon and Shevlin, 2005) and opposed to the results found in the context of Chinese enterprises (Tang and Firth, 2012). However, this table shows that the mean of DBTD variable is negative. We can also notice that the discretionary accruals have a positive (mean = 0.65). The observations that have large negative DBTD have total accruals that are positive. In fact, total accruals can be explained by the fact that the average of the Tunisian enterprises (PTBI) and the mean of cash flow (CF<sub>t</sub>) are positive. In fact, the accruals have a positive sign explained by the fact that companies that have positive incomes recognize more provisions (for tax and management purposes).

In panel B, results show that the majority of the variables were significantly correlated with the endogenous variable. Similarly, the correlation matrix returns a significant correlation of accruals (ACC<sub>t</sub>) with the variable related to cash flow ( $CF_t$ ).

Panel A: Descriptive statistics for BTD model							
Variable	Ν	Mean	Std. D	ev.	Min	Max	
$BI_{t+1}$	210	0.049	0.108		-0.010	0.946	
$PTBI_t$	210	0.069	0.189		-0.251	1.737	
$ACC_t$	210	0.655	2.379		-0.022	29.11	
$CF_t$	210	0.077	0.167		-0.383	1.212	
$DBTD_t$	210	-0.00006	0.087		-0.586	0.343	
$ADJUS_t$	210	0.021	0.141		-0.329	1.441	
Panel B: Pearson correlation coefficients.							
	$TI_{t+1}$	$PTBI_t$	$ACC_t$	$CF_t$	$DBTD_t$	$ADJUS_t$	
$TI_{t+1}$	1.000						
$PTBI_t$	0.611***	1.000					
$ACC_t$	0.253***	0.658***	1.000				
$CF_t$	0.235***	0.657***	0.942***	1.000			
$DBTD_t$	0.025	0.440***	0.008	-0.037	1.000		
$ADJUS_t$	0.250***	0.829***	0.708***	0.723***	0.618***	1.000	

# Table 1. Descriptive statistics and correlations

Where:  $TI_{t+1}$  is the taxable income scaled by average total assets;  $PTBI_t$  is the income before tax scaled by total assets;  $ADJUS_t$  is the difference between accounting and taxable income scaled by total assets;  $CF_t$  is the cash flows of the company;  $ACC_t$  is the total accruals;  $DBTD_t$  is the discretionary Book-Tax Differences

\*/\*\*/\*\*\* represent significance at the 10/5/1% level, respectively.

Table 2 presents the descriptive statistics for the three subsamples observations (firm / year). This table reveals a number of characteristics of subsamples. The discretionary BTD have the same sign as the result of the company ( $PTBI_t$ ) in all sub-samples. Similarly, accruals have a medium with a positive sign in all cases.

	LNDBTD			
	n=42			
Variables	Mean	Std. Dev.	Min	Max
$TI_{t+1}$	0.048	0.146	0.001	5.287
$PTBI_t$	-0.025	0.189	0.251	1.026
$ACC_t$	0.687	2.516	0.015	0.188
$CF_t$	0.059	0.122	0.002	1.048
$DBTD_t$	-0.114	0.094	-0.586	-0.041
	Small_DBTD			
	n=126			
Variables	Mean	Std. Dev.	Min	Max
$TI_{t+1}$	0.050	0.107	-0.010	0.946
$PTBI_t$	0.065	0.141	-0.064	1.546
$ACC_t$	0.545	0.890	-0.022	9.798
$CF_t$	0.036	0.066	-0.028	0.675
$DBTD_t$	0.004	0.024	-0.040	0.047
	LPDBTD			
	n=42			
Variables	Mean	Std. Dev.	Min	Max
$TI_{t+1}$	0.048	0.053	0.000	0.287
$PTBI_t$	0.178	0.254	0.026	1.737
$ACC_t$	0.947	4.456	0.014	29.11
$CF_t$	0.055	0.195	-0.131	1.284
$DBTD_t$	0.103	0.052	0.035	0.343

Where:  $TI_{t+1}$  is the taxable income scaled by average total assets;  $PTBI_t$  is the income before tax scaled by total assets;  $CF_t$  is the cash flows of the company;  $ACC_t$  is the total accruals;  $DBTD_t$  is the discretionary Book-Tax Differences

#### 4.3 Regression Results

Our estimation of the relationship between discretionary BTD and earnings persistent, made by the generalized least square, is presented in the table (3). This table shows that the majority of the independent variables are individually significant in explaining the dependent variable. We can conclude that the model has good explanatory power.

Regression (1) of Table 3 shows the result of the estimation of equation (1). The result of this regression shows a significant positive coefficient on  $(PTBI_t)$  and negative coefficient on  $(ADJUS_t)$  which shows that the taxable incomes of firms in our sample back to the pre-tax book income. The same table shows the results of the estimation of equation (2). Regression (2) indicates that the subsample of observations that have a large positive DBTD (PTBI<sub>t</sub> \*LPDBTD<sub>t</sub>) has the same level of persistence of earnings than the observation group with small\_DBTD (PTBI<sub>t</sub>). the group of observations with large nagative DBTD shows a lower persistence than the two groups (-0.180) reflecting significantly lower persistence than other groups. We can conclude that the DBTD

contains additional information on the persistence of the earnings this brings us to confirm our hypothesis H1.

		Regression (1)		Regression (2)	
Variables	Predicted sign	Coefficient	Probability	Coefficient	Probability
Constant	+/-	0.011	0.000***	0.010	0.000***
PTBI <sub>t</sub>	+/-	0.743	0.000***	0.850	0.000***
ADJUS <sub>t</sub>	+/-	-0.613	0.000***	-0.632	0.960
LPDBTD <sub>t</sub>	+/-	-	-	-0.000	0.124
LNDBTD <sub>t</sub>	+/-	-	-	-0.007	0.001***
PTBI <sub>t</sub> *LNDBTD <sub>t</sub>	-	-	-	-0.180	0.029***
PTBI <sub>t</sub> *LPDBTD <sub>t</sub>	-	-	-	0.829	0.569
ADJUS <sub>t</sub> *LNDBTD <sub>t</sub>	+/-	-	-	-0.056	0.010***
ADJUS <sub>t</sub> *LPDBTD <sub>t</sub>	+/-	-	-	-1.194	0.000***

Table 3. Results of the regression of the equation (2) and (3)

Following Hanlon (2005), we decomposed the profit of the company into two components; the accruals and cash flows in order to verify our hypothesis H2. Table 4 shows the results of the regression of equation (4). We can notice that the coefficients (ACC<sub>t</sub> \*LNDBTD<sub>t</sub>) and (ACC<sub>t</sub> \*LNDBTD<sub>t</sub>) are significantly negative indicating a lower persistence for this group of observations. We can conclude that the groups of observations with large DBTD have less persistent of accruals than the group with small\_DBTD. We can conclude that the DBTD contains additional information on the persistence of the components of earnings this brings us to confirm our hypothesis H2.

Variables	Predicted sign	Coefficient	Probability
Constant	+/-	0.012	0.013***
$ACC_t$	+/-	0.067	0.000***
$CF_t$	+/-	0.116	0.365
$ADJUS_t$	+/-	-0.216	0.096*
$LNDBTD_t$	+/-	0.012	0.408
$LPDBTD_t$	+/-	0.003	0.863
$ACC_t$ *LNDBTD <sub>t</sub>	-	-0.040	0.024***
$ACC_t * LNDBTD_t$	-	-0.066	0.005***
$CF_t$ *LNDBTD <sub>t</sub>	-	-0.602	0.003***
$CF_t$ *LPDBTD <sub>t</sub>	-	-0.313	0.495
$ADJUS_t * LNDBTD_t$	+/-	-0.093	0.567
$ADJUS_t * LPDBTD_t$	+/-	0.470	0.146

Table 4. Results of the regression of the equation (4)

#### 5. Conclusion

The purpose of this study was to investigate the informational value of the DBTD in detecting the persistence of earnings and accruals. Thus, the regression model was performed on data taken as a panel to 2003-2012. The results showed that the DBTD contains additional information. Both assumptions are accepted. Based on a sample of 21 Tunisian companies listed on the stock exchange, we achieved the following results: we found that the observations of the group with large negative DBTD show a lower persistence than the groups that have a positive DBTD and small DBTD, reflecting significantly lower persistence than other groups. We also found

that groups of observations with large DBTD have less persistent accruals than that with small\_DBTD. Our study raises questions on other areas of research. We measured the extent of the BTD to detect the persistence of earnings as an attribute of the quality of the earnings. However, there are other attributes that qualify the income released by the company. We cite as an example the relevance and the smooth of earnings. We propose to extend this research by studying the impact of BTD on the quality of the information disclosed. This study is a new stream of research on tax-accounting divergence in Tunisia. Our results are important for normalizing and legislators who want to improve the quality and credibility of the financial reporting and tax reporting.

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