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RESEARCH ARTICLE

ANALYSIS OF DETERMINANTS OF BOOK-TAX DIFFERENCES: EVIDENCE FROM FRENCH LISTED COMPANIES

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Abstract

The key objective of our research paper consists of consulting the set of explicative factors relative to book-tax differences within the French context especially after the mandatory adoption of international accounting standards, IAS/IFRS, by listed companies. Attributing several regulatory and empirical arguments in a special framework, the focus was on factors linked with non-discretionary (or regulatory) book-tax differences (goodwill and other intangibles assets, income or loss associated to the equity method as well as to the minority interest and deferred tax) and factors linked with discretionary book-tax differences (earnings management and/or tax management). Considering a panel of 1120 observations, the analysis of regression showed that tax management through downward earning management apprehended by discretionary accruals positively affects discretionary book-tax differences. Besides, tax management practices combined with earnings management via institutional ownership negatively affected discretionary differences. Moreover, the tax management policy practiced by companies measured by the effective tax rate reduced the level of discretionary book-tax differences. The current study shed light on whether various factors could affect book-tax differences via a multi-theory framework. Indeed, book-tax differences play a remarkable role in informing not only fiscal authorities but also external investors in the real financial situation of the company. To my mind, this study represented the first analysis aiming to explore determinants of book-tax differences in the French context particularly in the consolidated accounts of listed companies.

Introduction:-

The debate over the relationship between accounting and taxation has spilt a lot of ink as it has been a major characteristic in analyzing the company relationship with its different stakeholders. This relationship has drawn the attention of both researchers and practitioners in accounting and taxation, especially after revealing the accounting and tax fraud, in the early 2000's, with spectacular and unexpected bankruptcies of big firms such as Enron and Worldcom in the Unites States, Swissair in Switzerland or the important losses already registered by Vivendi Universal or France Telecom in 2002. These practical cases have been conducive to a number of interrogations over the potential causes of the increasing gap between book income and taxable income or book-tax differences (Frank et al., 2009; Tang and Firth, 2011, 2012; Wisanggeni and Murwaningsari, 2021).

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Many scientific studies argue that book-tax differences can be base on a regulatory justification. If so, any cost resulting from having two separate figures is susceptible to be compensated by disclosing appropriate information to different actors. If the gap is not based on a regulatory reason, but rather on a certain form of manipulation, it is compulsory to determine the causes of that gap (Freedman, 2008). Thus, the major concern of most stakeholders, mainly of investors, auditors as well as tax authorities, is to know whether such a gap between book income and that tax one is regulatory or not (Hanlon, 2005; Hanlon et al., 2008; Atwood and al., 2010, Tang and Firth, 2011,2012, etc.).

The book-tax literature identifies two levels of determinants of book-tax differences; one is regulatory-based while the other is opportunistic. Regulatory differences can be explained by the different rules which govern the calculation of earnings because the two measurements are intended for different purposes. Opportunistic differences can be explain by earnings management and/or tax management (Hanlon, 2005; Hanlon et al., 2008; Atwood et al., 2010, Damayanti, 2019, etc.).

A great deal of literature indicates that, on the one hand, managers have great incentives so as to commit themselves in the earnings management. For example, they manage earnings to fill out the requirements of remuneration contracts, debt clauses and assessment regulations over the stock exchange market (Healy and Wahlen, 1999). On the other hand, they have powerful incentives to get committed in the tax management. For example, they manage taxes to maximize the shareholders' performances and satisfy tax-based contract incentives such as remuneration plans after taxes (Phillips, 2003) and to reduce the risk of tax scrutiny and political costs (Watts and Zimmerman 1986). As well, the literature determines that earnings management and tax management can simultaneously exist and interact with one another (Desai and Dharmapala, 2006; Frank and al., 2009; Tang and Firth, 2011) aiming at managing downward accounting earnings and reducing the current value of taxes paid.

Companies have considerable discretionary power when it comes to information disclosed in accounting and tax accounts. Thus, beyond the different objectives of accounting and tax regulators, the motivations of managers probably differ with regard to the information disclosed in accounting and tax matters. More specifically, corporate executives may have an incentive to make choices that increase reported earnings to shareholders while at the same time making choices that minimize revealed taxable income.

Our main objective is to identify factors that are the most susceptible to act on the extent of book-tax differences in listed French companies. Our study offers several contributions. First, the aim of the present research consists of highlighting the determinants of book-tax differences both discretionary and non-discretionary. Second, the choice of France as the target population is mainly justified by the fact that listed French companies have experienced an upheaval at the level of their accounting regulations, following the obligatory adoption of international accounting standards in their consolidated accounts. On the tax side, we have equally named the companies that opted for the tax integration in order to pay taxes over the general result. In this framework, companies establish their consolidated accounts based on the accounting for income taxes of the IAS 12 standard which presents the only connection between accounting and taxation (Graham et al., 2012). To the best of our knowledge, this is the first study that examines, within this framework French, the determinants of book-tax differences. Third, this paper adds to the literature of book-tax differences based on the United States or China through providing the European evidence, mainly French, over the sources of regulatory and opportunistic book-tax differences within the context of normative change.

To respond to the research question, this article is proceeding in the following way. The first part introduces the general theoretical framework of book-tax differences while the second part presents a literature review and the development of hypotheses relative to the discretionary book-tax differences. In the third part, we present the sample as well as the research context. In the fourth part, we introduce the model of the determinants of book-tax differences in full, as well as the related results. The fifth part presents the model of determinants of discretionary book-tax differences, as well as the empirical results found and their interpretations. Finally, the sixth part draws a conclusion and a discussion of obtained results.

Theoretical framework

The research over determinants of book-tax differences stems primarily from the United States (Manzon and Plesko, 2002; Frank and al., 2009, etc.) and appears towards other countries such as China (Tang and Firth, 2011; 2012), Tunisia (Bouaziz and Omri, 2013; koubaa and Jarboui, 2015) and Indonesia (Wisanggeni and Murwaningsari,

2021). In the majority of world countries, listed companies face two types of systems: one for the deposit of tax declarations and the other one to provide financial information for interested third parties. Tax declarations reveal to the tax authorities and are not accessible to the public, while the accounting earnings disclose to financial markets differently. Provided that tax and accounting accounts follow two distinct sets of rules, tax earnings are different from accounting earnings. The positive or negative difference between both types of earnings represents the book-tax differences.

A broad empirical literature explores the interaction between accountability and tax (Graham et al., 2012; Shackelford and Shevlin, 2001). The divergence between the accounting earnings and the taxable earnings can be attributed to many factors, such as the different treatments of capital asset amortization, foreign operations, acquisition variances and the other intangible assets and the delay of net business losses (Manzon and Plesko, 2002 ; Frank and al., 2009, Tang and Firth, 2011).

Besides the regulatory-based book-tax differences, another potential source of differences, at least a suspicious source is the aggressive information for accounting or tax purposes. The users of financial statements and users of tax declaration consider the book-tax differences as considerable because such differences, if not determine in a mechanistic way by standards and laws, can indicate a disclosure of aggressive information one way or another (Frank, Lynch and Rego, 2009).

In sum, the book-tax differences can be modeled in terms of two sources: The first is the result of a different application of rules. Since taxation and accounting have different objectives, identical transactions can be dealt with differently: These are the non-discretionary book-tax differences (or regulatory). The second source makes the discretionary book-tax differences; the latter may be caused by earnings management and/or tax management. Both discretionary and non-discretionary sources of book-tax differences are illustrated in figure 1.

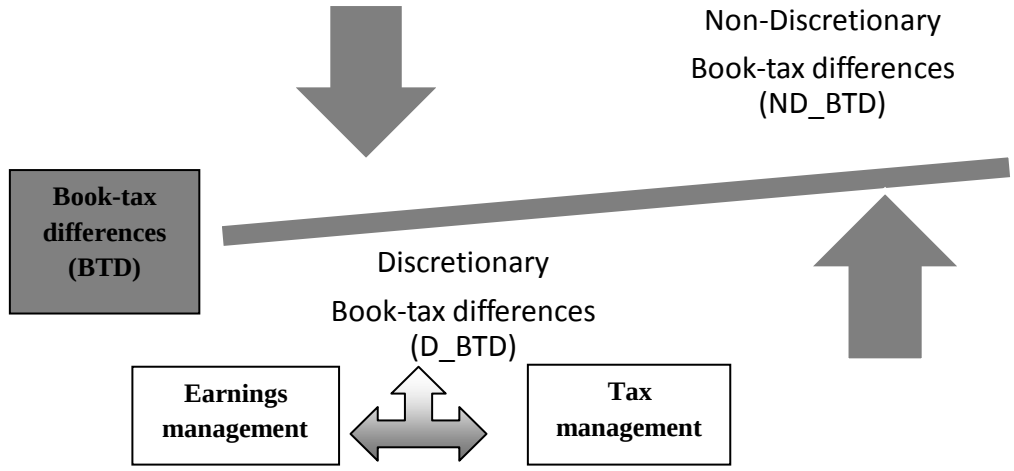

Figure 1:- Determinants of book-tax differences.
Source: Elaborated by the authors

1. Literature review and hypothesis development

The hypotheses tested within the framework of this research relate to the impact of earnings management and tax management practices on discretionary book-tax differences. We recall that the divergences between the accounting earning and tax earning provide information not only on the magnitude of the mechanical gap between the accounting rules and the tax rules, but also on managers strategies or the behaviors related to the earnings management and tax management.

Some factors of discretionary book-tax differences are susceptible to lead the company to practice tax management through earnings management, on the one hand, using institutional property based on agency theory and on the other hand, with downward earning management referring to the political costs. Some factors are directly linked to tax management referring to the tax hypothesis while others are related to earnings management with reference to the size hypothesis.

1.1. Tax management practices combined with earnings management

Previous literature determines that earnings management and tax management can exist simultaneously and interact with each other. Frank and al., (2009) show that companies committed to aggressive financial reporting can equally get involved in aggressive tax reporting. Tang and Firth (2011) assert that the tendency of adopting opportunistic behaviors is based on tax and non-tax costs considerations as well as on managers' incentives. Desai and Dharmapala (2006) contend that complex structures necessary for tax shelters provide managers with the opportunity to manipulate earnings.

Drawing inspiration from the agency theory and politico-contractual theory as well as the results of various empirical researches, we identify two factors linking tax management with earnings management, which can have an impact on discretionary book-tax differences: downward earnings management and institutional property.

1.1.1. Tax management through downward earnings management

Accounting standards and tax laws allow flexibility in financial reporting decisions. This flexibility means that book-tax differences can be deemed as potential indicators of earnings management practices or tax management. Indeed, the temptation of managers is to reduce tax income expense (Desai and Dharmapala, 2006; Frank and al., 2009). Based on the political costs hypothesis which stems from the regulation theory, Watts and Zimmermann (1978) argue that the companies exposed to political pressure are encouraged to lower their earnings so as to limit political costs.

Empirical studies relative to book-tax differences are little, but unanimous on the positive impact of discretionary accruals on discretionary book-tax differences. In fact, Frank and al., (2009) find, in an American context, a strong positive relationship between tax aggressiveness measured by the permanent discretionary book-tax differences and financial aggressiveness measured by discretionary accruals. Their results suggest insufficient costs exist to offset basic financial and tax reporting incentives, such that nonconformity between financial accounting standards and tax law allows firms to manage book income upward and taxable income downward in the same reporting period. In the same context, Seidman (2010) finds that earnings management, measured by the discretionary accruals increases the gap between the accounting income and the taxable income. Chen et al., (2012) find that high earnings management firms have both less informative book income and less informative taxable income relative to low earnings management firms, controlling for tax planning. Through the examination of factors that can affect the discretionary book-tax differences, Bouaziz and Omri (2013), in a Tunisian context, predict and find that tax-motivated earnings management, through the discretionary accruals positively affects the discretionary divergences. Also, in the same context, Koubaa and Jarboui (2015) find, that discretionary accruals have a positive impact on the level of book-tax differences.

In this framework, we suppose that listed French companies applying at the same time the accounting consolidation as well as the tax integration may be incited to lower their earnings in order to diminish political costs resulting mainly from new tax and accounting regulations. A firm generally manages downward earnings in an attempt to reduce income tax. Hence, we mention our hypothesis:

H1*:* There is a positive relationship between discretionary accruals and discretionary book-tax differences.

1.1.2. Tax management through institutional ownership

Previous works have discussed the impact of ownership structure on the performance of firms. However, the relationship between ownership structure and book-tax differences wasn't explored until recently by some researchers such as Tang and Firth, 2011; Armstrong et al., 2012; Moore, 2012, Koubaa and Jarboui, 2015. Thus, insofar as book-tax differences have both positive and negative consequences on the various information on the market (Lev and Nissim, 2004; Ayers et al, 2010; Crabtree and Maher, 2009; Dhaliwal et al, 2008; Comprix et al, 2011, Ahnan and Murwaningsari, 2019), this has direct or indirect repercussions on the decisions made by shareholders. Since the participation of institutional investors in the company is more important than that of individual shareholders, they are expected to invest in controlling it via investing in research and data processing in order to protect their investments and mitigate the opportunism of managers. Managers make decisions, related to the set of information in terms of accounting and taxation, which are subject to a lot of ambiguity. Consequently, discretionary book-tax differences deserve special attention to examine the impact exerted by institutional investors on management decisions.

Institutional investors represent the great companies intervening over financial markets, such as banks, insurance companies, pension funds and mutual funds. These investors suppose to play an active role in corporate governance. They consider as influential partners for the company as their financial means are important and it enables them to become active investors in controlling the management of the firm (Mtanios and Paquerot, 1999). Sahut and Gharbi (2010) notice, through an exploratory study of companies of the SBF 120 index between 2006 and 2008, an evolution of French and foreign institutions with a more accrued presence of foreign institutions. Their findings also show that American and British institutional investors constitute the majority of foreign institutional shareholding present on the French market.

Findings of empirical studies that generally examine the link between ownership structure related to the specificities of the context studied and the book-tax differences, are varied. Tang and Firth (2011) examine a distinctive characteristic of Chinese capital markets: It is the state-owned enterprise affiliated to the local government. So, they find that firms controlled by the local government, present larger discretionary book-tax differences than their counter-parts as they have greater motivations not only for earnings management but also for tax management.

Besides, Armstrong et al. (2012), focusing on the motivations of tax planning, determine that large listed companies explicitly encourage their tax managers to undertake the necessary measures so as to reduce the company's tax burden. Moore (2012) through examining a sample consisting of 7070 observations of 1161 US companies for a period from 1998 to 2009 finds that companies with high levels of institutional ownership have lower and less volatile levels of book-tax differences. Also, he detecte, as predicted, there is a negative relationship between components of book-tax differences permanent and temporary, and institutional ownership. In a Tunisian context, Koubaa and Jarboui (2015) find that institutional ownership has a positive, but not significant effect on the level of book-tax differences. So, the presence of institutional investors in the Tunisian companies doesn't affect the level of divergences.

Jensen and Meckling (1976) suggest that the activism of the institutional investor results from conflicts of interests between shareholders and managers. This activism seems to be more intense when the property is concentrated between the hands of institutional investors. Drawing inspiration from the agency theory and consequences of empirical studies, we can deduce that institutional property influences considerably the managerial decision for mitigate the intensity of earnings management and tax management, which can lead to lower levels of discretionary divergences between book income and taxable income. Hence, we state our hypothesis:
H2*:* There is a negative relationship between institutional property and discretionary book-tax differences.

1.2. Tax management practices through effective tax rate

The main objective of tax management is to reduce the tax burden of the company. According to ElAissi (2009), tax management is « a legal process, practiced through benefiting from the advantages contained in the legislation and by systematically taking into account the tax effects in the decision-making processes with the aim of managing the activities of the firm, so as to minimize the effective tax rate without damaging the company's economic development of the company. ».

The detection of tax management is important in the assessment of the quality of earnings and the study of management behaviors. Some studies proclaim that book-tax differences are linked with tax management [Tang and Firth (2011); Frank, Lynch and Rego (2009); Wilson (2009); Bouaziz and Omri (2013), Wisanggeni and Murwaningsari (2021)]. So, the discretionary book-tax differences may arise from tax management practices. In order to explain this relationship, we rely on the concurrent theory such as the tax hypothesis which provides a structure to link the discretionary divergences to tax management.

The tax hypothesis advances that accounting choices arise solely from their effect on tax by considering accounting information as a source among others. Raffournier (1990) provides that « in countries where the methods used in accounting condition the tax income, companies are interested in choosing those that minimize the profit». Thus, in accordance with this hypothesis, we predict that managers of French companies will choose the methods reducing the earning, since the tax burden is determined on the basis of accounting earning. In effect, the accounting-tax relationship is marked by an increased dependence even after the mandatory adoption of international standards.

According to Chadefaux and Rossignol (2006), the company's tax policy can have a sustainable positive effect on its effective tax rate and cash management. In this respect, the management of this rate creates value and is part of the

entity's tax performance. First, the effective tax rate is a financial indicator that measures the company's ability to optimize its tax burden. Then, its management as a tool reflecting the tax impact of the company's decisions is fully part of a tax performance monitoring approach. Finally, the effective tax rate is a vector of tax communication.

Effective corporate tax rates are often used by policy makers and interest groups as a tool to draw similarities between corporate tax systems, because they provide a good statistical summary of the cumulative effect of various tax incentives and changes in the tax rate (Richardson and Lanis, 2007). Some authors believe that the effective tax rate is a good indicator of tax management (Rego, (2003); Mills (1998) and Richardson and Lanis (2007)). Frank et al., (2009) find that the effective tax rate has a negative, but not significant impact on tax shelter activity. They unexpectedly find that this measure is unable to predict tax shelter activity. But they find book-tax differences to be a good indicator of tax shelters.

Looking at Indonesian industrial firms, Wisanggeni and Murwaningsari (2021) find as expected, that tax management has a negative impact on total book-tax differences. They consider that tax management provides inputs to companies to carry out tax planning in accordance with tax regulations in order to avoid tax sanctions and make tax payments efficient by using tax avoidance.

Based on the tax hypothesis as well as on empirical research, we seek to determine to what extent the practice of tax management apprehended by the effective tax rate affects discretionary book-tax differences. Under these conditions, the sign of the relationship between the effective tax rate and discretionary book-tax differences is not clear. Hence, our hypothesis is the following:
H 3*:* There is a relationship between the effective tax rate and the discretionary book-tax differences.

1.3. Earnings management practices through the firm size

The book-tax differences may be due to factors other than tax management. They can equally reflect earnings management (For example, over assessment of accounting earning). Some studies express that book-tax differences reflect earnings management and earnings quality [Phillips et al., 2003); Hanlon (2005)]. In order to explain the relationship linking the discretionary book-tax differencesand earnings management practices, we focus on the size hypothesis that provides a structure to link discretionary differences to earnings management.

The size hypothesis is derived from the political costs hypothesis. Raffournier (1990) stipulates that « Big-sized companies prefer methods reducing the earning ». Casta (2009) underscore that big companies seek the most neutral profile in their reports with the public aiming at reducing their political visibility. In this framework, Dumontier and Raffournier (1999) states that large companies belonging to a regulatory sector are more monitored by the political class and the media among others. These companies interest in minimizing their earnings in order to avoid political costs. So, we expect large French companies to practice earnings management by promoting accounting methods that reduce accounting earnings. This can mitigate the tax burden, as well as the political costs, and positively affect discretionary book-tax differences. Referring to the literature, we opt for firm size, which is considered as a proxy for political costs (Jeanjean, 2001), to control earnings management practices.

Empirically, Bouaziz and Omri (2013), in a Tunisian context, find that earnings management in large companies positively affects the discretionary divergences.

Based on the size hypothesis as well as on the empirical research, we aim at determining to what extent earnings management practices apprehended by the size of the company positively affects the discretionary book-tax differences. Hence, our hypothesis:
H 4*:* There is positive relationship between the company size and the discretionary book-tax differences.

2. Sampling

2.1. The institutional context in France

France belongs to a continental European conception where accounting information must respond in priority to the needs of bankers and the State. In the accounting French system, macro-economic orientations of the State are primed more than micro-economic decisions. Tax regulations have a great impact on the accounting of companies that must satisfy the interests of the tax administration (Porcano and Tran, 1998).
Just like many other countries with the continental model, accounting and tax, in France, have never been two separate and isolated disciplines even after the mandatory adoption of IFRS by listed firms in their consolidated

accounts. Despite the evolution of two disciplines since many years, their relationship remains strong. In fact, outcomes of the study conducted by Nobes (2011) lead to the same categorization of 1980: two-group classification (Anglo versus continental European). He find that this classification, which was established before the emergence of the directives of the European Union (EU) concerning accounting and before the adoption of IFRS by European companies, remains valid in the practices of very large companies.

The adoption of IFRS by the EU is one of the biggest changes in financial information in Europe. As well, there is a pressing need for managers, investors and regulatory institutions involved in the harmonization process to know the effect of this change. This concern is legitimate for European countries with code law since the Anglo model is leaning towards the common law. Common Law countries have comparatively and relatively profound markets where shareholder rights, audit professionals and other monitoring systems largely develop. This should form the basis of high-quality financial disclosures by firms (Ball, 2006).

Through the obligatory application of IFRS standards, French listed firms move from a French accounting model based on a partnership vision to an Anglo-Saxon model rather based on a shareholding vision (Disle and Noël, 2007). This provoke a lot of criticism at the French level compared to other European countries. Among the deep-rooted reasons of this « French exception», it is necessary to highlight that the French accounting system differs from IFRS in terms of the importance given to the law whose accounting influence on tax (Raffournier, 2007).

According to Barbe et al., (2014), following the adoption of IFRS in 2005, three accounting systems coexist: a PCG[1] for the annual accounts of all companies; IFRS for the consolidated accounts of listed firms and unlisted firms which opted for IFRS for their consolidated accounts; and French consolidation rules (Settlement 99-02) of the CRC[2] of consolidated accounts of non-listed firms which didn't opt for IFRS.

The listed French companies applying the IFRS in their consolidated accounts announce at least two separate measures of the annual earning: the consolidated accounting earning and the total taxable earning. The two outcome measures reflect economic gains and losses of the group, but they draw from two different systems. The financial accounting standards produce instructions in order to disclose financial information to investors, creditors and other interested parties, while the General Tax Code leads to the calculation of the corporate income tax.

2.2. Sample and data collection

The empirical study deals with a sample characterized by its homogeneous population. In fact, only non-financial French firms took into account. The sample encompassed 160 listed French firms, over a period of exercises of 7 years (2006-2012). Our sample was a cylinder panel, whose total number of observations was equal to 1120.

Our initial sample is composed of the set of listed French firms to NYSE Euronext in the CAC ALL-tradable index. The choice of France provided us with the opportunity to study consolidated financial statements established in accordance to a common language, from January, 1st2005. We have removed firms in the financial sector and to the Oil and Gaz sector because they had specific characteristics and faced a different set of accounting and tax regulations than other companies. We have also deleted firms without consolidated accounts as well as subsidiaries since we only focused on consolidated accounts to undertake opportunistic statistics. In fact, French firms must prepare their consolidated accounts conforming to IFRS, starting from January, 1st2005 following the CE settlement n° 1606/2002 of July, 19th2002.

Furthermore, to constitute our final sample, we have discarded the set of companies whose closing date of the fiscal year is another date other than December 31st, to harmonize to the maximum the study sample. In fact, the tax integration regime imposed the coincidence in the duration of the accounting exercises of the parent company and its subsidiaries, which is in principle 12 months. Also, we have excluded firms that were admitted to listing only during the sampling period. Finally, we have excluded companies which do not apply the tax integration regime so as to homogenize the sample of the study because in this regime it is the parent company that pays corporate tax over the set of integrated group via using statutory tax rate. The definition process of the population of listed non-financial firms is based on the reconciliation between the Thomson ONE Banker database and the list of listed French companies to NYSE Euronext according to the sequence described in the table n°1:

[1]Plan ComptableGénéral (General chart of accounts)
[2]Comité de la Règlementation Comptable (accounting regulation committee)

Table 1:- Process of sample determination.

Reason of exclusion	Number of observations
Total observations at start (listed French firms to NYSE Euronext in the CAC ALL-tradable index: ex SBF 250)	337
Financial ; Oil and Gaz companies	(41)
Companies without consolidated accounts and subsidiaries	(07)
Companies whose closing date of the exercise except the 31/12	(62)
Companies introduced to the stock exchange during the period of sampling	(10)
Companies not applying the tax integration regime	(35)
Non-classified companies on theThomson ONE Banker database	(15)
Sub-total	167
Data unavailable to recut observations (company-year)	(7)
Final sample	160

Treated data are extracted from Thomson database and financial statements. We collected data related to exercises ranging from 2006 up to 2012, after the mandatory adoption of IFRS standards by French firms in their consolidated accounts.

Table n°2 presented the classification of the sample by activity sector. We used the categorization tackled by the Thomson ONE Banker database: it is the ICB « Industry Classification Benchmark » industry classification. This ICB distinguished 10 industries: basic Materials ; Industrials ; consumer goods; Health care; Consumer Services; Telecommunications ; Utilities ; financial ; Technology ; Oil and Gaz.

Table2:- Distribution of the sample by activity sector.

Activity Sector	Number of companies
Basic Materials	9
Industrials	37
Consumer goods	23
Healthcare	12
Consumer services	28
Telecommunications	1
Utilities	18
Technology	32
Total of companies of the sample	160

3. Book–tax differences

The book-tax differences are dependent on the differences of treatment between accounting regulation and tax legislation, known as non-discretionary differences, and tax management and earnings management practices, known as discretionary differences. In fact, the primary objective of this study is to delimit the determinants of book-tax differences.

Drawing inspiration primarily from some empirical studies conducted by Frank et al., (2009), Tang and Firth, (2011) and Martinez and al., (2014) and taking into account the different specificities of French companies, we developed the explicative model of book-tax differences as follows:

$$\mathbf{BTD_{it} = \beta_0 + \beta_1 \Delta INTANG_{it} + \beta_2 EM_{it} + \beta_3 MI_{it} + \beta_4 DT_{it} + \beta_5 BTD_{t\text{-}1it} + \varepsilon_{it}} \textit{ (Model 1)}$$

Book-tax differences = f {regulatory differences; discretionary differences (the residue)}

First, we defined the variable to be explained representing the total of book-tax differences. Then, we presented the measures of the selected variables. Finally, we exhibited the outcomes for the first model.

3.1. Total book-tax differences

The measurement of the dependent variable related to the difference between the accounting earning and the taxable earning was taken into account to assess the explanatory factors of book-tax differences in sum. Based on previous studies (Hanlon et al., (2005), Frank et al., (2009) and Tang and Firth (2011), the measure of book-tax differences, that constitutes the sum of permanent and temporary differences, is represented as follows:

BTD = book income- taxable income

In other words,

BTD= Net Income to common shareholders – [(Current tax expense/ statutory corporate tax rate) × (1 - statutory corporate tax rate)]

$BTD_{it} = BI_{it} – [(CTE_{it} /STR) × (1 - STR)]$

$BTD_{it} = BI_{it} – [(CDTE_{it} + CFTE_{it})/STR] × (1 - STR)]$

With, BTD = Total of book-tax differences for firm i in year t

BI = Net Income to common shareholders for firm i in year t

CTE = Current tax expense for firm i in year t: Current tax expense = Current Domestic tax expense (CDTE) + Current Foreign tax expense (CFTE)

STR = statutory corporate tax rate: normal rate of 33, 1/3 %.

Thereby, to measure this variable, we first explained book income and then taxable income.

3.1.1. The book income

The starting point in the calculation of income tax is book income. The challenge to conciliate the book income with the taxable one starts by the identification of «book income ". The consolidation rules differ for accounting and tax objectives, which poses a problem when we want to compare a financial statement with a tax declaration without knowing which entities are included in every report. For accounting objectives, firms suppose to submit the consolidated financial statements for the set of operations in which the parent company has at least a participation of 50 % (majority of voting rights of the company). For tax objectives, consolidation is voluntary. In fact, there are certain conditions for opting for the tax integration regime, the subsidiaries of which must be owned at least 95%, directly or indirectly. Consequently, an observed set of consolidated financial statements is likely to include a number of distinctly subjected entities. Our book income measure was the net Income to common shareholders.

3.1.2. The Taxable income

We used financial statements to estimate taxable income as it is not accessible to the public. « Due to their legal character, accounting numbers can be privileged compared with other sources of information by investors; especially since these other sources may not be accessible » (Disle and Noël, 2007). Although there are estimation errors associated with the use of financial statements for the determination of taxable income, information in the financial statements is much more appropriate than the real taxable income (i.e. obtained from data extracted from the tax declaration, if these data are accessible) because the market can only use the publicly available measure in valuing securities.

Taxable income = (Current tax expense/ statutory corporate tax rate) × (1 - statutory corporate tax rate

Current tax expense is divided by the statutory corporate tax rate. Then, the total is multiplied by (1 - t) so as to make it comparable to book income that is measured after taxes.

3.2. Measures of explanatory variables

The accounting standards and tax laws frequently provide specific, and often different, rules over the way in which to declare an earning for tax and accounting objectives, even if both earnings are based on the same underlying fundamental operations. These book-tax differences can be considered as regulatory (or mechanical) because they relate to clear differences on rules. We can signal that explanatory factors of regulatory divergences differ from one context to another, in the light of the legal differences between accounting and tax. Based on the theoretical and empirical literature review such as the studies of Frank et al., (2009) and Martinez and al., (2014) while taking into account the specificities of French firms, we identified a set of variables that can explain the divergences between financial consolidation and tax consolidation. These are: the goodwill and the other intangible assets, Income (loss) reported under the equity method, Income (loss) attributable to minority interest, differed tax and book-tax differences of the previous year. These variables explained non-discretionary book-tax differences in listed French companies.

Δ INTANG: We controled through changes of the goodwill and the other intangible assets to capture the effect of investment growth on non-discretionary book-tax differences. This relates to mechanical amortization and

depreciations. Differences between the accounting and tax regulations for the goodwill and the other intangible assets create permanent differences unrelated to the tax management.

EM - MI: We also controled the income or loss reported to the method of the equity method and minority interests due to the differences between accounting and tax regulations concerning participations of less than 100% in firms.

DI: We controled through the differed tax because this variable is composed of temporal differences between consolidated accounting earnings and tax earnings and will be moderated by future taxes.

BTD $_{t-1}$: This variable is used to control the impact of structural changes in French accounting and tax regulations over time on the non-discretionary book-tax differences.

In what follows, we presented a summary table (table 3) of the variables used in our first model related to determinants of book-tax differences.

Table 3:- Definition of variables and their measures.

Factors	Symbols	Measures
Total Book-tax differences	**BTD**	Net Income to common shareholders – [(Current tax expense/ statutory corporate tax rate) × (1 - statutory corporate tax rate)]
Regulatory differences	**Δ INTANG**	Variation of Goodwill and other intangibles for firm i in year t ($Gl\&AAI_t$ - $Gl\& AAI_{t-1}$)
	EM	Income (loss) reported under the equity method for firm i in year t
	MI	Income (loss) attributable to minority interest for firm i in year t
	DT	Deferred taxes for firm i in year t
	BTD_{t-1}	Total of Book-tax differences in year t-1 for firm i in year t

3.3. Results of the first model

In order to test the validity of our primary hypothesis related to the impact of regulatory differences on the total of book-tax differences, we started with a descriptive analysis followed by a double univaried and multivaried analysis.

3.3.1. Descriptive Analysis

The results of the descriptive analysis related to the dependent variable (BTD) and independent variables (Δ INTANG; EM; MI, DT, BTD_{t-1}) are found in table 4.

Table 4:- Variables' descriptive statistics of determinants of BTD.

Variables	N	Mean	Std deviation	Min	Median	Max
BTD	1120	-0,002	0,051	-0,356	0,000	0,706
Δ INTANG	1120	0,024	0,079	-0,298	0,005	0,915
EM	1120	0,000	0,004	-0,062	0,000	0,033
MI	1120	0,001	0,004	-0,030	0,000	0,052
DT	1120	0,000	0,009	-0,078	0,000	0,080
BTD_{t-1}	1120	-0,001	0,050	-0,356	0,001	0,706

Table 4 shows that BTD varied between -0,356 and 0,706 with a mean (median) -0,002 (0,000). These values attested to the diversity in the total of book-tax differences. Also, we concluded that the firms in the sample represent divergences which ranged from negative divergences (-0,356) indicating that the taxable income was slightly larger compared with the book income and important positive divergences (0,706) indicating that book income was greater compared with the taxable income. The existing gap between minimal and maximum values was considerably high, indicating a great heterogeneity at the level of divergences revealed by firms. The standard deviation (0,051) was relatively small indicating that different observations were located close t the mean.

The average of the goodwill and intangible assets' growth was up to 2, 4% of the total assets. The standard deviation related to the income or loss reported to the equity method (EM) and minority interests (MI), as well as the differed tax (ID) were too small, signaling that observations were near mean.

3.3.2. Correlation Analysis

Before testing the regression model, it is necessary to check the absence of all problems related to correlation between variables, by means of Pearson's correlation. The examination of table (5) indicates that various explanatory variables showed no correlation superior to 0,8 (the limit drawn by Kennedy (1985)). Thus, all correlations were relatively low.

Table 5:- Pearson Correlations analysis.

	BTD	**Δ INTANG**	**EM**	**MI**	**DT**	**BTD_{t-1}**	**VIF**
BTD	1						-
Δ INTANG	0.190	1					1.01
EM	0.057	0.026	1				1.01
MI	0.070	0.040	0.102	1			1.01
DT	0.113	0.0007	-0.042	-0.005	1		1.00
BTD_{t-1}	0.216	0.072	-0.005	0.040	0.015	1	1.01

Moreover, we found that tolerance levels, for all the variables, are close to 1. Thus, the multi-colinearity did not pose any preoccupations in this model, the fact that enabled us to keep all these variables retained.

3.3.3. Regression Analysis

Based on the advanced regulatory arguments successively put forward by international standards and French tax rules and by conclusions of some empirical studies (Tang and Firth, 2011, 2012; Frank et al., 2009 ; Martinez and al., 2014), We identified the explanatory factors of the total book-tax differences: Variation of Goodwill and other intangibles, the profit (or loss) reported to the equity method, the profit (loss) attributable to minority interests, deferred taxes as well as book-tax differences lagged. The linear regression results of model 1 are shown in table 6:

Table 6:- Regression results of model 1.

Model1 (BTD)	**Expected sign**	**Coefficients**	**Z statistic**	**P>|z|**
Δ INTANG	+	0.059***	6.86	0.000
EM	+	1.060***	8.01	0.000
MI	+	0.154*	1.08	0.080
DT	+	1.249***	14.05	0.000
BTD_{t-1}	+	0.187***	6.33	0.000
Constant		-0.002***	-3.73	0.000
N	1120			
Wald Chie-2	375.51			
Prob> Chie-2	0.000			
Adj R-squared	0.2716			
Notes: Significance at: *0.10 and * * *0.01 levels; Variables are defined in Table 3				

The results are in conformity with what we had theoretically predicted. In fact, the variables were considered explanatory of the total book-tax differences. The variables positively as well as significantly explained the total book-tax divergences. Consequently, we canned confirm our general hypothesis that there was a positive and significative relationship between the explanatory factors of regulatory divergences and the total of book-tax differences.

4. Discretionary book – tax differences

We developed the multiple-regression model in which the estimated discretionary book-tax differences were regressed over a set of proxy variables for the different motivations of earnings management, of tax management and the interaction between them. If the discretionary book-tax differences were indicative of potential managerial

manipulations, firms with stronger incentives and opportunities for earnings management and tax management should have high levels of D_BTD.

$\mathbf{D\_BTD}_{it} = \alpha_0 + \alpha_1 \boldsymbol{DISC\text{-}AC}_{it} + \alpha_2 \boldsymbol{InstOwn}_{it} + \alpha_3 \boldsymbol{ETR}_{it} + \alpha_4 \boldsymbol{Size}_{it} + \alpha_5 \boldsymbol{INDUS}_{it} + + \boldsymbol{\varepsilon_{it}}$ *(Model 2)*

In the light of theoretical and empirical literature review, we have identified a set of variables divided into three categories which can explain the discretionary book-tax differences (D_BTD). These are: variables relative to the interaction between earnings management and tax management: discretionary accruals (DISC-AC) and institutional ownership (InstOwn); the variable relative to tax management: effective tax rate (ETR); the variable relative to the earnings management: the company size (Size) and a control variable: the activity sector (INDUS).

First, we defined the variable to be explained representing the total of discretionary book-tax differences. Then, we exposed the measures of retained variables. Finally, we exhibited the results found in the second model.

4.1. The measure of discretionary book-tax differences (D_BTD)

The calculation of discretionary book-tax differences was conducted by going through three steps:

The first step consisted of determining the total of book-tax differences.

BTD: the total of book-tax differences: it was the gap between the book income and the taxable income

BTD = ND_BTD + D_BTD

With: ND_BTD = represented the total non-discretionary or regulatory book-tax differences; and D_BTD = represented the total discretionary book-tax differences

The second step consisted of estimating the first model and the ND-BTD.

$BTD_{it} = \beta_0 + \beta_1 \Delta\ INTANG_{it} + \beta_2\ EM_{it} + \beta_3\ MI_{it} + \beta_4\ DT_{it} + \beta_5\ BTD_{t\text{-}1it} + \varepsilon_{it}$ *(equation 1)*

ε : Error term. It constituted the non-explained part representing the discretionary component of book-tax differences (D-BTD). Also, the estimation of the first equation (1) enabled us to come up with the following equation (2) relative to the non-discretionary differences (ND_BTD):

$ND\_BTD = ß_0 + ß_1\ \Delta\ INTANG_{it} + ß_2\ EM_{it} + ß_3\ MI_{it} + ß_4 DT_{it} + ß_5\ BTD_{t\text{-}1it}$ (equation 2)

Where; $ß_0$, $ß_1$ $ß_2$, $ß_3$, $ß_4$ and $ß_5$ represented respectively the estimation of β_0, β_1, β_2, β_3, β_4 and β_5 by the OLS estimator.

The third step consisted of determining D_BTD which represented the residual obtained by the difference between BTD (equation 1) and ND _BTD estimated by ß estimators of the equation 2.

$D\_BTD_{it} = BTD_{it} - ND\_BTD_{it}$

Hence, our variable to be explained:

$D\_BTD_{it} = BTD_{it} – (ß0 + ß1\ \Delta INTANG_{it} + ß2\ EM_{it} + ß3\ MI_{it} + ß4\ DT_{it} + ß5\ BTD_{t\text{-}1it})$ (equation 3)

4.2. Independent variables

4.2.1. DISC-AC (discretionary accruals)

The calculation of discretionary accruals went through three steps (Chen and al., 2012). The first step was to calculate the total of accruals. The second step consisted on the estimation of accruals' model. The third step was allocated to the determination of discretionary accruals by extracting from these accruals the not discretionary part "NDISC-AC".

DISC-AC = TA – NDISC-AC

First of all, we defined total of accruals (TA) as follows: is the difference between net income before extraordinary items and operating cash flow. So, we calculated first of all for each company «i» and for every year «t» the total accruals according to the direct approach.

Then, we estimated the model of Jones modified with ROA (Kothari et al., 2005) that is written as follows:

$TA_{it}/A_{it-1} = \alpha_0 (1/A_{it-1}) + \alpha_1 ((\Delta REV_{it} – \Delta REC_{it})/A_{it-1}) + \alpha_2 (PPE_{it}/A_{it-1}) + \alpha_3 ROA_{it} + \varepsilon_{it}$ *(equation 1)*

Where,

TA_{it}: total accruals for firm i in year t;

A_{it-1}: Total assets for firm i in year t-1;

ΔREV_{it}: Variation in net sales for firm i between t and t-1;

ΔREC_{it}: Variation in net receivables for firm i between t and t-1;

PPE_{it}: Property, plant and equipement of firm i in year t;

ROA_{it}: represents the return on assets, of firm i in year t;

This is the control variable of regulation of performances: it is the net income before extraordinary items for year t divided by the total of assets at the beginning of the year.

ε: term error for firm i in year t : is an estimation of discretionary accruals

Also, using the estimated coefficients, we calculated the non-discretionary part (NDISC-AC) for each observation *(i, t)* of the sample.

The Model of Kothari et al. 2005 appears as follows:

$TA_{it}/A_{it-1} = \hat{a}_0 (1/A_{it-1}) + \hat{a}_1 ((\Delta REV_{it} - \Delta REC_{it})/A_{it-1}) + \hat{a}_2 (PPE_{it}/A_{it-1}) + \hat{a}_3 ROA_{it} + \varepsilon_{it}$ (equation 2)

Where; $\hat{a}_0$, $\hat{a}_1$, $\hat{a}_2$ and $\hat{a}_3$ represented respectively the estimation of α_0, α_1, α_2 and α_3 by the OLS estimator

Finally, the last step consisted of determining the discretionary accruals (DISC-AC) which are obtained by the difference between the total of accruals (TA) and non-discretionary accruals (NDISC-AC), we obtained:

$DISC\text{-}AC_{it} = TA_{it} - NDISC\text{-}AC_{it}$

$DISC\text{-}AC_{it} = TA_{it} - [\hat{a}_0 (1/A_{it-1}) + \hat{a}_1 ((\Delta REV_{it} - \Delta REC_{it})/A_{it-1}) + \hat{a}_2 (PPE_{it}/A_{it-1}) + \hat{a}_3 ROA_{it} + \varepsilon_{it}]$ *(equation 3)*

4.2.2. InstOwn (institutional ownership)

The institutional ownership « InstOwn » is measured by percentage of stock owned by institutional shareholders. This measure is close to that one used by Moore (2012).

4.2.3. ETR (the Effective tax rate)

The effective tax rate is determined as the ratio between of total income tax expenses "ITE" (the sum of current and deferred taxes) to pre-tax book income "PTI" of an entity (Chadefaux and Rossignol, 2006). Higher ETR reflect less tax management. The ETR for a given firm i in year t can be written as follows: $ETR_{it} = ITE_{it}/PTI_{it}$

4.2.4. SIZE (Size of the company)

The company size can call for four measures: total assets, Turnover, market capitalization and the number of employees/staff (Oliveira et al, 2006). We measured the company size via the natural logarithm of total assets through estimating that discretionary differences are positively linked with the size of the company.

4.2.5. INDUS (Industry)

The activity sector variable was a dummy variable that taked 1 if the company belongs to the industrial sector and 0 if not. Categorization industries of ICB that taked 1 value were: Basic Materials; Industries; Consumer goods.

In order to test the validity of hypotheses relative to determinants of discretionary book-tax differences, we proceeded with a descriptive analysis followed by a double unvaried and multi-varied analysis.

4.3. Results and interpretations of the second model

4.3.1. Descriptive Analysis

Table 7 summarizes the descriptive statistics of the dependant variable and the independent variables of our model relating to the determinants of discretionary book-tax differences. Table 7 shows that D_BTD varied between -0,334 and 0,707 with a mean (median) of -0,000 (0,003). These values attested the diversity in the importance of discretionary book-tax differences of listed French firms. The discretionary accruals were negative (mean = -0, 00004). So, some French companies managed earnings downwards. The maximum and minimum recorded by this variable were respectively about -0,555 and 0,320. So, for French firms, discretionary accruals had different impacts on the discretionary book-tax differences. Besides, the InstOwn variable indicated that about 30% of sample firms' stock was owned by institutional investors at the mean. This proportion varied between 19,3% and 89% ; which also implied the existence of a remarkable disparity in institutional ownership. In addition, the mean French effective tax rate was 27.3 percent, but this variable varied between -16.73 (reflect more tax management) and 20.66 (reflect less or moderate tax management). The mean size of the sample, as measured by the natural logarithm of total assets, was 20.852.

Table 7:- Descriptive statistics.

Panel A : descriptive statistics of continuous variables (n=1120)					
Variables	**Mean**	**Stddev**	**Minimum**	**Median**	**Maximum**
DCFD	-0,000000001	0,051	-0,334	0,003	0,707
DISC-AC	-0,0000456	0,068	-0,555	0,003	0,320
InstOwn	0,278	0,237	0	0,193	0,89
ETR	0,273	1,221	-16,734	0,296	20,66
Size	20,852	2,191	15,820	20,572	26,231

Panel B : descriptive statistics of dummy variable (n=1120)			
Variable	**Dummy**	**n**	**%**
Industry	1 industrial sector	519	46,3%
	0 other sectors	601	53,8%

In the light of statistics, we concluded, that the two activity sectors were well-represented in the sample. In fact, companies belonging to the industrial sector or to the service and trade sectors, each represented almost half.

4.3.2. Correlation analysis

The matrix of correlation coefficients of Pearson between the different explanatory variables did not show any correlation superior to 0, 8. So, there was no problem related to the bi-varied multi-colinearity. Moreover, we discovered that the level of tolerance relative to all variables seems to be closer to 1, with a testimony that no hypothesis of collinearity is well-confirmed. Apart from the calculation of VIF values, numbers were revealed being inferior to the threshold of 2 for all variables. These results enabled us to confirm the absence of multi-colinearity problem concerning the multi-regression models.

Table 8:- Pearson Correlations analysis.

	BTD-D	DISC-AC	InstOwn	ETR	Size	Indus	VIF
BTD-D	1						-
DISC-AC	0.062	1					1.00
InstOwn	-0.042	0.029	1				1.02
ETR	-0.009	-0.026	-0.036	1			1.00
Size	-0.048	0.021	0.130	0.035	1		1.04
INDUS	0.052	0.033	0.037	-0.005	0.149	1	1.02

4.3.3. Regression analysis

The results found were fairly consistent to what we had theoretically predicted. In fact, four out of the five variables chosen were deemed explanatory of the discretionary book-tax differences.

Table 9:- Regression results of model 2.

Model2 (D_BTD)	Expected sign	Coefficients	Z statistic	P>|z|
DISC-AC	+	0.0506***	4.17	0.000
InstOwn	-	-0.0055**	-2.05	0.040
ETR	+/-	-0.0018***	-3.10	0.002
Size	+	-0.0007**	-2.29	0.022
INDUS	?	0.0001	0.10	0.924
Constant		0.0223***	2.92	0.004
N	1120			
Wald Chie-2	36.43			
Prob> Chie-2	0.000			
Adj R-squared	0.0726			
Notes: Significance at: *0.10, * *0.05, and * * *0.01 levels; Variables are defined above				

Conforming to the theoretical and empirical framework, outcomes revealed that discretionary book-tax differences were primarily tributary of discretionary accruals. The positive and significant sign of coefficient relative to the DISC-AC variable constituted a validation of the first hypothesis (H1). In fact, these results highly confirmed results found by [Tang and Firth (2011), koubaa and Jarboui, (2015) and Wisanggeni and Murwaningsari (2021)] in the measure where the studies of these authors, revealed that companies having included some accounting manipulations within their earnings presented remarkable dissemblance in the book-tax differences. The second factor, considered as explanatory combined tax management with earnings management, was the institutional ownership (InstOwn). Thereby, the level of discretionary book-tax differences weakened with the capacity of institutional investors to influence managerial decisions so as to mitigate the intensity of earnings management and tax management .The coefficient relative to the InstOwn variable was negative and significant, so it constituted a validation of the hypothesis H2. This result was conforming to the conclusions of Moore (2012), indicating the predominance of the significantly negative relationship between the rate of institutional investors and the total of book-tax differences. As for the ETR variable, the results illustrated the significance of its regression coefficient. This highlights the negative relationship between the ETR and discretionary book-tax differences. In fact, the tax management policy practiced by firms measured by ETR reduced the level of discretionary book-tax differences.

This enabled us to validate our third hypothesis H3. This result conformed to the conclusions of Chadefaux and Rossignol (2006) who stipulate that the management of this rate creates value and is part of tax performance of the entity. Thus, tax management can leaded to the reduction of the company's tax burden without violating applicable tax regulations. This result is also similar to the work of Wisanggeni and Murwaningsari (2021) who found that tax management had a negative impact on the total book-tax differences.

The results showed, however, contrary to our expectations, a negative and significant regression coefficient of variable SIZE, revealing that the level of discretionary divergences gets weaker with the increase of the company size. In other words, earnings management practice apprehended by the size of French firms negatively affected the discretionary book-tax differences. This result constituted invalidation of the hypothesis H4. This confirms that smaller firms are more likely to use aggressive accounting measures to increase reported earnings than larger firms. This finding seems to be consistent with Moore (2012). Concerning the INDUS variable, the results were highlighted the non-significance of its regression coefficient, thus proving that the level of discretionary book-tax differences did not depend on the activity sector of the company.

5. Discussion and Conclusion:-

The gap between accounting and taxation generally leads to differences in reported earnings for investors as well for tax authorities. A part from the regulatory concern for these book-tax differences, the recent high-profile cases of companies that reporte billions in earnings to shareholders while simultaneously reporting little or no profit on their tax declarations raise several questions. The non-conformity between both disciplines (accounting and taxation) can constitute an unfavorable area for value creation and for the concretization of reliability owing to the continual accounting and tax possible manipulations.

The current study deal on listed French companies, which have experienced an upheaval in their accounting regulations from 2005, following the mandatory adoption of IFRS in their consolidated accounts. This has indeed repercussions on the tax rules.

In order to identify the determinants of book-tax differences in their totality, we primarily rely on the regulatory arguments as well as on results of empirical studies, we identify as explanatory variables: the goodwill and other intangible assets; the income (loss) reported under the equity method and attributable to minority interests; deferred tax and lagged book-tax differences. Our results validate our general hypothesis that these variables positively explain the total book-tax differences.

Besides the regulatory or non-discretionary differences, the total of book-tax differences also explains, by the discretionary differences which are mainly due to managers' opportunistic practices.

Drawing inspiration from the politico-contractual theory, the agency theory and the concurrent theory (the tax hypothesis), situated in the French context, we manage to identify a certain number of factors that can encourage firms or their managers to get involved in discretionary practices. These factors groupe into three categories: factors essentially relating to earnings management practices, while others relating to tax management practices and factors relating to the interaction between the two practices. Results of the multi-varied analysis show that tax management through downward earnings management apprehended by discretionary accruals positively affects the discretionary book-tax differences, thus highlighting that accounting manipulations contribute to the increase of these differences. Besides, tax management through the institutional ownership negatively affects the discretionary differences. Thus, the level of discretionary book-tax differences weakens with the capacity of institutional investors to influence managerial decisions so as to mitigate the intensity of earnings management and tax management. Moreover, the tax management policy practiced by firms measured by the effective tax rate reduces the level of discretionary book-tax differences. Therefore, tax management can lead to reduce the tax burden of the firm without violating applicable tax regulations.

The results of this study seem to be relevant in many regards. First, the current study constitutes, to our knowledge, the first experimentation aiming to explore determinants of book-tax differences in the French context and particularly in consolidated accounts of listed firms. Afterwards, this research can serve investors insofar as they have interest in assessing earnings as well as the extent of tax management and earnings management when they make investment decisions. Then, results can prove to be influential as they might have important implications for the accounting standard-setters whose main objective is to reduce the magnitude of information asymmetry. Finally,

this research paper must be useful for tax accountants, as an assessment tool to better determine a customer status. Thus, a good customer assessment will certainly facilitate the preparation of financial reports focused on tax in order to minimize the risk of tax penalties. Indeed, the book-tax differences play a remarkable role in informing not only tax authorities but also external investors about the real financial situation of the company.

However, some limits can be mentioned against this research. The first, which is empirical, concerns the measurement of taxable income. In fact, due to the lack of data relating to tax information, we are constrained to make an estimation of taxable income. The second limit relates to the determinants of book-tax differences, other factors could have been added in order to better control these differences such as debt. These different limits, which we have already mentioned, can be improved in the context of other future work. The importance of such a topic can stems from the fact that, it increasingly incites researchers to study susceptible factors to deepen the gap between the book income and taxable one, by understanding it for other populations. Besides, our study allow us to open up new research perspectives on the theme of book-tax differences whose reaction of the financial market regarding the informative content of these differences.

References:-

1. Ahnan Z.M., and Murwaningsari E., (2019), « The Effect of Book-Tax Differences, and Executive Compensation on Earnings Persistence with Real Earnings Management as Moderating Variable », Research Journal of Finance and Accounting, Vol. 10, No. 5, pp.54-63.
2. Armstrong C.S., Blouin J. and Larcker D., (2012), « The Incentives for Tax Planning », Journal of Accounting and Economics, 53, pp. 391-411.
3. Atwood T.J., Drake M. and Myers L., (2010), «Book-tax conformity, earnings persistence and the association between earnings and future cash flows», Journal of Accounting and Economics, 50, pp. 111–125.
4. Ayers B.C., Laplante S. K. and Mcguire S.T. (2010), « Credit ratings and taxes: The effect of book-tax differences on ratings changes », Contemporary Accounting Research, Vol. 27, No. 2, pp. 359-402.
5. Ball R. (2006), « International Financial Reporting Standards (IFRS): pros and cons for investors », Accounting and Business Research, International Accounting Policy Forum, pp.5-27.
6. Barbe O., Didelot L. and Ashta A., (2014), « From disconnected to integrated tax and financial systems: A post-IFRS evaluation of evolution tax and financial reporting relationships based on the French case », Research in Accounting Regulation, Vol. 26, pp. 242-256.
7. Bouaziz I. and Omri M.L. (2013), « Les divergences comptabilité-fiscalité en Tunisie :quelsfacteursexplicatifs ? », La Revue des Sciences de Gestion, Direction et Gestion n° 263-264 – Comptabilité, pp.179-195.
8. Casta, J. F., (2009), « Théorie positive de la comptabilité », In Encyclopédie de la Comptabilité, du Contrôle de gestion et de l'audit, dirigée par B. Colasse, Ed. Economica, 2ème édition, pp. 1393-1402.
9. CGI « Code Général des Impôts », Traitementréalisé par StéphaneHabett Roux pour le compte de droit.org. France.
10. Chadefaux M. and Rossignol J.L. (2006), « Le tauxeffectifd'imposition », Revue Française de Comptabilité, 386, pp. 8-9.
11. Chen L.H., Dhaliwal D.S. and Trombley M.A., (2012), « Consistency of book-tax differences and the information content of earnings », Journal of the American Taxation Association, Vol. 34, No. 2, pp. 93-116.
12. Comprix J., Graham R.C. and Moore J.A., (2011), « Empirical evidence on the impact of book-tax differences on divergence of opinion among investors », Journal of the American Taxation Association, Vol. 33, No. 1, pp. 51-78.
13. Crabtree A. and Maher J.J., (2009), « The influence of differences in taxable income and book income on the bond credit market », The Journal of the American Taxation Association, Vol. 31, No. 1, pp. 75-99.
14. Damayanti T.W., (2019), « The effect of IFRS adoption and law enforcement on book tax aggressiveness: Evidence from Asean countries », Business: Theory and Practice, 20, 284-292.
15. Desai M.A. etDharmapala D. (2006), « Corporate tax avoidance and high-powered incentives », Journal of Financial Economics, 79, pp. 145-179.
16. Dhaliwal D.S., Huber R.E., Lee H.S.G. and Pincus M., (2008), « Book-tax differences, uncertainty about fundamentals and information quality, and cost of capital », working paper, in SSRN eLibrary.
17. Disle Ch. and Noël Ch., (2007), « Larévolution des normes IFRS : une convergence de la comptabilitévers la finance ? », La Revue des Sciences de Gestion, Direction et Gestion, No 224-225, pp.17-27.
18. Dumontier P. and Raffournier B. (1999), « Vingtans de recherche positive en comptabilitéfinancière », ComptabilitéContrôle Audit, Les vingtans de l'AFC, pp. 179-197.

19. El Aissi, I., (2009), « Pratiques de gestionfiscale : déterminants et impacts sur la valeur des entreprisestunisiennes», Thèse de Doctorat en sciences de Gestions, InstitutSupérieur de Gestion de l'Université de Tunis.
20. Frank M.M., Lynch L.J., and Rego S.O., (2009), « Tax reporting aggressiveness and its relation to aggressive financial reporting », The Accounting Review, Vol. 84, No. 2, pp. 467-496.
21. Freedman J. (2008), « Financial and Tax Accounting: Transparency and 'Truth'», working paper, pp.1-28.
22. Graham J.R., Raedy J.S. and Shackelford D. A., (2012), « Research in accounting for income taxes », Journal of Accounting and Economics, 53, pp.412-434.
23. Hanlon M., (2005), « The persistence and pricing of earnings, accruals and cash flows when firms have large book-tax differences », working paper, pp.1-54.
24. Hanlon M., Kelley S. and Shevlin, T., (2005), « Evidence on the Possible Information Loss of Conforming Book Income and Taxable Income», working paper, pp.1-57.
25. Hanlon M., Maydew, E. L., and Shevlin, T. (2008), « An unintended consequence of book-tax conformity: A loss of earnings informativeness», Journal of Accounting and Economics, 46 (2–3), pp. 294-311.
26. Healy P.M. and Wahlen J.M., (1999), « A review of the earnings management literature and its implications for standard setting », Accounting Horizons, Vol. 13, No. 4, pp. 365-383.
27. IAS 12 « Income taxes », International Accounting Standard Board.www.ifrs.org
28. Jeanjean T., (2001), « Incitations et contraintes à la gestion du résultat », ComptabilitéContrôle Audit, Tome 7, Vol. 1, pp.61-76.
29. Jensen, M.C. and Meckling, W. H. (1976), « Theory of the firm: Managerial Behavior, Agency costs and Ownership Structure », Journal of Financial Economics, 3, 4, pp. 305-360.
30. Kothari S.P., Leone A.J. and Wasley C.E., (2005), « Performance matched discretionary accrual measures », Journal of Accounting and Economics, Vol. 39, pp.163-197.
31. Koubaa R. and Jarboui A., (2015), « Book-tax differences: relevant explantory factors », International Journal of Accounting and Economics Studies, 3, 2, pp.95-104.
32. Lev B. and Nissim, D. (2004), « Taxable income, future earnings, and equity values », The Accounting Review, 79, pp. 1039–1074.
33. Martinez A.L., Passamani R. and Teixeira A., (2014), « The value relevance of book-tax differences in Brazil», Australian Journal of Basic and Applied Sciences, 8 (1), pp. 479-489.
34. Manzon G.J. and Plesko G., (2002), « The relation between financial and tax reporting measures of income », Tax Law Review, Vol. 55, pp. 175-214.
35. Mills L. F., (1998), « Book-tax differences and internal revenue service adjustments », Journal of Accounting Research, Vol. 36, No. 2, pp. 343-356.
36. Moore J.A., (2012), « Empirical evidence on the impact of external monitoring on book-tax difference », Advances in Accounting incorporating Advances in International Accounting, 28, pp. 254-269.
37. Mtanios, R. and Paquerot, M. (1999), « Structure de propriété et sous-performance des firmes : une étude empirique sur le marché au comptant, le règlement mensuel et le second marché », Finance ContrôleStratégie, 2, 4, pp.157-179.
38. Nobes CH. (2011), « IFRS practices and the persistence of accounting system classification », Abacus, Vol. 47, No. 3, pp. 267-283.
39. Oliveira, L., Rodrigues, L.L. and Craig, R. (2006), « Firm-specific determinants of intangibles reporting: evidence from the Portuguese stock market », Journal of Human Resource Costing & Accounting, 10, 1, pp. 11-33.
40. Phillips J.D., (2003), « Corporate tax-planning effectiveness: The role of compensation-based incentives », The Accounting Review, 78, 3, pp. 847-874.
41. Phillips J., Pincus M. and Rego S. O., (2003), « Earnings management: New evidence based on deferred tax expense », The Accounting Review, Vol. 78, No. 2, pp. 491-521.
42. Porcano Th. and Tran A., (1998), « Relationship of tax and financial accounting rules in Anglo-Saxon countries », The International Journal of Accounting, Vol. 33, No 4, pp.433-454.
43. Raffournier, B., (1990), « La théorie positive de la comptabilité, une revue de la littérature », ÉconomiesetSociétés, Série sciences de gestion N. 16.
44. Raffournier B., (2007), « Les oppositions françaises à l'adoption des IFRS : examen critique et tentative d'explication », ComptabilitéContrôle Audit, Numérothématique, pp. 21-41.
45. Rego S.O., (2003), « Tax-avoidance activities of U.S. multinational corporations », Contemporary Accounting Research, Vol. 20, No. 4, pp. 805-833.

46. Richardson G. and Lanis R. (2007), « Determinants of the variability in corporate effective tax rates and tax reform: Evidence from Australia », Journal of Accounting and Public Policy, 26, pp. 689-704
47. Sahut M. and Gharbi H. (2010), « Activisme des investisseurs institutionnels : cadre général et facteursd'influence », La Revue des Sciences de Gestion, 3, n°243-244, pp. 25-33.
48. Seidman, J., (2010), «Interpreting the book-tax income gap as earnings management or tax sheltering», Working Paper, University of Texas, pp.1-47.
49. Shackelford D. A. and Shevlin T., (2001), « Empirical tax research in accounting », Journal of Accounting and Economics, 31, pp. 321-387.
50. Tang T., and Firth M., (2011), « Can book-tax differences capture earnings management and tax management? Empirical evidence from China », The International Journal of Accounting, 46, pp. 175-204.
51. Tang T., and Firth M., (2012), « Earnings Persistence and stock market reactions to the different information in book-tax differences: Evidence from China », The International Journal of Accounting, 47, pp. 369-397.
52. Watts, R.L., and Zimmerman, J.L., (1978), « Towards a Positive Theory of the Determination of Accounting Standards», The Accounting Review, 53, pp. 112-134.
53. Wilson, R. (2009), «An examination of corporate tax shelter participants », The Accounting Review, 84 (3), pp. 969-1000.
54. Wisanggeni, I. and Murwaningsari, E. (2021), «Factors Affecting Book-Tax Differences in Indonesian Manufacturing Industries», Journal of Accounting, Business and Finance Research, 2021, vol. 11, issue 1, 21-28.