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**Book-tax conformity and earnings management: recent research**

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**Abstract**

Corporations use two different sets of financial statements which have mirror-image goals, firms want to maximize book income reported to investors, while minimizing the taxable income reported to the tax authorities. The dual nature of corporate profit reporting may be creating a lose-lose situation, less meaningful profit numbers for capital markets and lowered corporate tax revenue for the government. Defenders of the book-tax divide argue that a unified system cannot accommodate these differing objectives, while supporters of the book-tax conformity claim that a tax-based book income can restore the integrity of the financial accounting system. The study reviews the arguments of high vs. low book-tax conformity. It also reviews prior research that examines the association between book-tax conformity and earnings management.

**JEL Classification: H2, M4, M40, M41**

**Key words:** book-tax conformity, earnings management, book income, tax income, tax incentives

## 1 Introduction

There is an ongoing debate about the independency of accounting-book income and taxable income and if these two measures should conform into one common measure. Corporations use two different sets of financial statements: a financial statement that reports «book income» to the capital markets, investors and shareholders and a separate financial statement that reports «tax income» to the government and tax authorities. The differences between taxable income and accounting income (i.e., book-tax differences) are driven by various factors, the most prevalent of which is difference in objectives. More specifically,

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book-tax differences can arise due to i) legitimate differences in accounting standards versus tax rules, ii) managers exercising discretion in financial reporting to overstate book income and iii) managers taking advantage of the ambiguity in tax rules to understate taxable income (Chan et al. 2010).

A solution that has been proposed is to tax accounting earnings, or slightly adjusted accounting earnings. Another possibility for implementing book-tax conformity would be if countries, alongside with the adoption of International Accounting Standards (IAS)/ International Financial Reporting Standards (IFRS), also adopted book-tax conformity. The main advantage of coupling book-tax conformity to international accounting standards would be to have one set of accounting rules for both book and tax purposes and for all countries. The European Union (EU) has proposed to replace the existing separate accounting by an EU-wide tax system based on a Common Consolidated Corporate Tax Base (CCCTB), which is a single set of rules to calculate companies' taxable profits in the EU[i]. Non-European countries may also have an interest to use IAS/IFRS to compute the corporate tax base, as well. Martinez (2019) points out that the creation of an independent tax accounting framework is recommended, which should have as the primary purpose taxation, and taxpayers and governments as the users of the information. He also suggests that the IAS/IFRS should be a valuable toolbox of concepts that can be adjusted for a tax perspective and not as a starting point which will compromise the tax neutrality of the system.

The main purpose of this study is to conduct a detailed literature review of the proponents and opponents of high/low book-tax conformity. We also provide a review of the association between earnings management and book-tax conformity. Our aim is to identify gaps in the literature and provide suggestions for empirical examination of the association between book-tax conformity and earnings management.

The paper is organized as follows. In Section 2, we set the background, where reported book and tax income are analyzed. Section 3 focuses on the main arguments for and against of book-tax conformity. Subsequently, in Section 4 an extended analysis of the interaction of book-tax conformity and earnings management is presented. Section 5 summarizes the study and provides suggestions for future research.

## 2 Book and tax income

### 2.1 Book income

Corporations report both book and tax income. Book income is reported under Generally Accepted Accounting Principles (GAAP), formally designated in the United States, and vary

from country-to-country. Currently, no universally accepted accounting recording system exists. GAAP refers to a common set of accounting principles, standards, and procedures issued by the Financial Accounting Standards Board (FASB)[ii]. Public companies in the United States must follow GAAP when their accountants compile their financial statements. The international alternative to GAAP is IFRS[iii], which are set by the International Accounting Standards Board (IASB)[iv]. More than 144 countries around the world have adopted IFRS, which aim to establish a common global language for company accounting affairs. IFRS is adopted in the EU and many countries in Asia and South America, but not in the United States[v]. The IFRS Revised Conceptual Framework for Financial Reporting asserts that the objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions relating to providing resources to the entity[vi].

Atrill and McLaney (2013) state that the aim of financial information is to help those using this information to make more informed decisions and reduce uncertainty about the financial position and performance of an entity. The main users of financial information are employees and their representatives, managers and owners (inside the business) and community representatives, competitors, customers, government, investment analysts, lenders and suppliers (outside the business). Financial information must be relevant, i.e. its omission or misstatement would alter the economic decisions that users make, comparable, verifiable and understandable. It also needs to be represented faithfully and in time, in order to be useful to users. An analog interpretation is given by IAS 1. Particularly, it mentions that the general purpose of financial statements is to present fair and consistent information (information must be material[vii]) about the financial position and performance of an entity and to ensure comparability both with the entity's financial statements of previous periods and with the financial statements of other entities[viii].

### 2.2 Tax income

Tax revenue is the income that is gained by governments through taxation. Tax revenue is the result of the application of a tax rate to a tax base. Taxation is the primary source of government revenue. It is the process by which the government of a country obtains money from its people in order to pay for its expenses. Corporate income tax is a direct tax imposed by a jurisdiction on the income or capital of corporations or analogous legal entities. Tax on corporate profits is defined as taxes levied on the net profits (gross income minus allowable tax reliefs) of enterprises[ix].

Adam Smith (1776) set down four general canons regarding taxes in general. 1. The subjects of every state ought to contribute towards the support of the government, as nearly as possible, in proportion to their respective abilities (equality of taxation). 2. The tax which each individual is bound to pay, ought to be certain and not arbitrary (certainty of taxation). 3. Every tax ought to be levied at the time, or in the manner, in which it is most likely to be convenient for the contributor to pay it (convenience of taxation). 4. Every tax ought to be so contrived, as both to take out and to keep out of the pockets of the people as little as possible, over and above what it brings into the public treasury of the state (efficiency of taxation). Chittenden and Foster (2008)[x] try to define «fair taxation» by highlighting the factors that affect fairness in taxation. They argue that the more complex a tax system is, the greater opportunities there are for avoidance, evasion and other forms of abuse. Therefore, «simplicity» is an important indicator when assessing the fairness of tax systems. According to Chittenden and Foster (2008), another indicator is «transparency», which is measured by the extent to which the tax system is designed to be easily understood and accessed. Finally, «burden» refers to the extent to which certain groups, such as businesses, may pay disproportionately more tax (Chittenden and Foster, 2008).

## 3 Book-tax conformity

In the USA, taxes are paid based on consolidated financial statements (Hanlon and Heitzman 2010). Therefore, book-tax conformity is measured as the link between group-level financial accounting income and taxable income (Hanlon 2005; Atwood et al. 2010). In Chinese firms (Shevlin et al. 2012) and in most European countries, taxes are not paid based on consolidated financial statements. Usually, corporate income is taxed at the single-entity level, which means that every parent and subsidiary prepare separate tax statements and pay separate taxes. Income is generally not taxed based on a consolidated European or international income statement. Even under group taxation, taxable income is assessed at the single-entity level and then consolidated for the group (Watrin et al. 2014). The objective of taxation is to raise resources for government expenditure in a way that is administratively feasible, equitable and efficient (Burgess and Stern 1993).

Given their different objectives, and specifically the objective of accounting standards to provide a useful summary measure of performance and to provide financial information about the reporting entity, it is easy to forecast that book income is more useful to users than estimated taxable income. Although, simultaneously, the users of financial statements

may view taxable income as a benchmark by which to evaluate book income, in which case taxable income will have incremental information content (Hanlon et al. 2005).

Financial statements and tax statements have mirror-image goals: firms want to maximize the book income reported to investors and other users of financial statements inside and outside the business, while minimizing the taxable income reported to the tax authorities. The distinction between these two incomes allows managers the ability to mischaracterize profits to tax authorities and concurrently mischaracterize tax savings to capital markets (Desai 2005). Theoretically, tax footnotes in financial statements are meant to provide supplementary information on a firm's tax position, more specific to list the material differences between book and taxable income. In practice, investors and other users of financial statements ignore these disclosures mainly due to their complexity and the required knowledge in both financial accounting and taxation. Instead, tax authorities may find tax footnotes more informative (Raedy et al. 2011).

As long as the consequences of an upward shift in financial income remain isolated from the tax accounts and vice versa, these two objectives are not irreconcilable. As recent years have shown, however, corporations and managers - aided by the law and by accounting professionals who monitor and advise their corporate clients - are prone to over-measuring book income. Accounting is no longer a way to provide an accurate and unified view of a company's finances. Instead, it has become a means to an end. For the public books, the goal is to achieve smooth and steady earnings growth that will lift the value of the company's stock, and the value of executives' stock options. For the Internal Revenue Service (IRS), the goal is the exact opposite - keeping income, and thus taxes, to a minimum. The fact that accountants have become so good at serving both ends is the clearest evidence of the corruption of their profession[xi].

By contrast, managers generally prefer to aid both the shareholders and themselves by under-measuring taxable income, so that their companies will owe the government less tax (managers may increase loss recognition for tax purposes). The tax shelter phenomenon, where firms shelter income from tax authorities while inflating earnings in reports to investors (Whitaker 2005), and the corporate accounting scandals represent corporations going to the edges of the tax and financial accounting rules - and beyond. By linking the consequences of book and tax reporting, a unified and conformed system could be developed. Such a system, where the same amount of income is reported for both purposes - subject only to specified permissible causes of divergence, could make abusive accounting practices much more painful and much less attractive (Whitaker 2006 and Shaviro 2009).

Incentives would be reduced, and managers would lose their discretion (Whitaker 2006 and Shaviro 2009).

As mentioned earlier, book-tax differences can arise due to legitimate differences in accounting standards versus tax rules, and due to managers discretion. The potential advantage of shifting to a book income tax base with only intended deviations is to improve the transparency of the tax base (Yin 2001). Firms in countries with higher required book-tax conformity have fewer opportunities to avoid taxes without decreasing reported earnings, any significant shortage of taxable income below book income is likely to be treated by tax authorities as tax noncompliance (Chan et al. 2010). Moreover, tax authorities act as an additional monitor of reported earnings when higher conformity between earnings and taxable income is required. When tax enforcement is stronger, there is higher expected probability of being audited, and higher potential for imposition of penalties. These factors may discourage tax avoidance (Atwood et al. 2012, Chen and Gavious 2017).

In conclusion, the primary benefit of lower book-tax conformity is that it provides managers with the flexibility to convey information about firm performance without incurring tax penalties, whereas the primary costs are the additional compliance burden and the potential manager's opportunism (Atwood et al. 2010).

### 3.1 Proponents of book-tax conformity

Certain corporations, particularly those in different industries, have differing abilities to engage in earnings management. As Desai (2005) notes a system that allows managers to characterize income differently depending on the audience and interested parties legitimizes earnings manipulation. Atwood et al. (2012) find that firms avoid more taxes, when the home country has lower book-tax conformity and lower perceived strength of tax enforcement. Accordingly, firms in home countries with greater required book-tax conformity engage in significantly less tax avoidance. The planning, compliance and administration costs of low book-tax conformity are quite high. Moreover, a complexed tax system results in less accurate information transmission (Slemrod and Blumenthal 1996). Additionally, the dual nature of corporate profit reporting (book and tax income - profit) may be creating a lose-lose situation, i.e. less meaningful profit numbers for capital markets and lowered corporate tax revenue for the government.

Whitaker (2005) claims that the book-tax accounting gap, which is the difference between the book income reported by a corporation to its shareholders and the U.S. Securities and Exchange Commission SEC using GAAP, and the tax income reported to tax

authorities, allows corporations to minimize their earnings for tax purposes while maximizing them in reports to investors, all within the letter of the law. The asserted benefits of the book-tax accounting gap no longer justify its significant costs: augmented tax sheltering and accounting fraud.

The purpose of a conformed system would be to tax a base of true economic income; the only exceptions - a number of authorized adjustments - would be written into the tax code, not into the accounting system itself. Implementing a book-conformed system would be less aggressive in reporting profits to capital markets, would cut down uncontrollable corporate tax sheltering, reduce compliance costs (simplification) and tax avoidance and help restore the integrity of the financial accounting system (Whitaker 2005).

The other primary virtue of such a system would be the automatic constraint on opportunism by managers anxious to inflate earnings and legislators anxious to change the tax code frequently. Ultimately, lawmakers must bear in mind the ultimate goal of conformity: to reassert the primary goals of tax and corporate accounting—revenue collection and information reporting—through the accurate measurement of economic income in a way that provides the fewest opportunities and incentives for fraud or tricks. As a result, capital market participants and tax authorities would be monitoring the same income reports, allowing the tax authorities to rely on the assistance of capital market participants (Desai 2005).

According to the Treasury Department, a principal characteristic of corporate tax shelters is inconsistent treatment for financial accounting and tax purposes of the items resulting from the shelter. A shelter might be designed, for example, to produce a tax loss without any corresponding book loss. As Weisbach (2002) indicates, virtually no shelters reduce book income. Moreover, a high book-tax conformity system could also put a sharp brake on tax avoidance activities such tax shelters.

As we mentioned, a tax based book-conformed system, with a number of authorized adjustments, would help countries and tax authorities gain greater control over the corporate tax base. Tax results would not depend upon taxpayer intent, motive, or similar factors and corporations would report lower earnings simply to reduce their tax bill. Under low book-tax conformity, corporations obtain two different bites at the apple, Users of financial statements and tax authorities face a lose-lose situation: they take advantage of ambiguities in the financial accounting rules to overstate the amount of their financial earnings, and take advantage of similar ambiguities in the tax rules to understate the amount of their taxable earnings (Chan et al. 2010). Linking tax consequences more closely

to book consequences eliminates one of those opportunities. Although adoption of high book-tax conformity may ultimately result in lower reported earnings, it may be that such reports will represent more reliable assessments of the financial situations of the corporations than are currently provided (Yin 2001).

Harmonizing tax and financial accounting would reduce the damaging incentives built into the two separate systems. When the tax consequences of a transaction are severed from the economic consequences, the results can be destructive. Shaviro (2009) states that firms have opposing goals for their financial statements (book income - profit) and tax statements (tax income - profit): They want to maximize the income they report to investors and other users of financial statements while minimizing the taxable income they report to tax authorities. To the extent that they do, the government and citizens are the victims (Shaviro 2009). Desai (2005) argues that the managers' opportunism that is gained by the dual nature of corporate profit reporting has contributed to the simultaneous degradation of both measures. As long as the consequences of shifting financial income upward remain isolated from tax accounts and vice versa, companies can achieve both objectives. Chan et al. (2010) provide evidence that as the level of book-tax conformity decreases, tax non-compliance increases and book-tax differences become less predictive of tax aggressiveness based on a distinct set of listed firms that experienced a decrease in the level of book-tax conformity in China. Narrowing the book-tax difference gap can reduce the opportunities and incentives for tax non-compliance.

### 3.2 Opponents of book-tax conformity

Supporters of low book-tax conformity and the two-book system argue that the two systems have different purposes. The decision of The Supreme Court Of The United States «Thor Power Tool Co. v. Commissioner, 439 U.S. 522 (1978)» states that the primary goal of financial accounting is to provide useful information to management, shareholders, creditors, and others properly interested; the major responsibility of the accountant is to protect these parties from being misled. The primary goal of the income tax system, in contrast, is the equitable collection of revenue; the major responsibility of the Internal Revenue Service is to protect the public. Consistently, financial accounting has as its foundation the principle of conservatism, with its corollary that «possible errors in measurement [should] be in the direction of understatement rather than overstatement of net income and net assets.»[xii] In view of the Treasury's markedly different goals and responsibilities, understatement of income is not destined to be its guiding light. Given this

diversity, even contrariety, of objectives, any presumptive equivalency between tax and financial accounting would be unacceptable.[xiii]

Similarly, Whitaker (2005) demonstrates that federal income taxation is intended primarily to raise money for the government and legislators use the tax code to provide economic incentives for socially beneficial activities. Financial accounts, meanwhile, must provide current and potential investors with an accurate picture of a corporation's economic position. Defenders of the book-tax divide have argued that a unified system cannot accommodate these differing objectives. Moreover, Hanlon et al. (2005) indicate that investors and other users of financial statements appear to rely on book income more than taxable income as a measure of firm performance and that both income measures have significant incremental explanatory power.

Three studies examine the Tax Reform Act of 1986 (TRA 86) and the book income adjustment provision in the 1986 alternative minimum tax (AMT[xiv]) on financial accounting practices. Dhaliwal and Wang (1992) find that corporations shifted timing and permanent differences across years to reduce the impact of the AMT, while Guenther et al. (1997) find that deferred financial statement income - increased the trade-off between tax and financial reporting goals. Hanlon et al. (2008) find that the informational role of accounting earnings reduced. Similarly, Alford et al. (1993) state that the information content and timeliness of accounting earnings is timelier or more value-relevant in countries where the alignment of financial and tax accounting is low. Ali and Hwang (2000) demonstrate that the value relevance[xv] of financial reports is lower for countries where tax rules have a greater influence on financial accounting measurements.

Atwood et. al. (2010) find that increasing the required level of book-tax conformity may result in reported accounting earnings that are less persistent. Earnings persistence in countries with the highest book-tax conformity is almost one-quarter lower than earnings persistence in countries with the lowest book-tax conformity. They also find that the association between current earnings and future cash flows in countries with the highest book-tax conformity is almost one-third lower than in countries with the lowest book-tax conformity. Finally, Lang et al. (2012) state that managers smooth earnings less in countries with weaker link between tax and financial reporting.

## 4 Book-tax conformity and earnings management

Healy and Wahlen (1999) define earnings management as follows (p. 368): «Earnings management occurs when managers use judgment in financial reporting and in structuring

transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers». Tang and Firth (2011) point out that the propensity to engage in opportunistic behavior is predicated on tax and non-tax cost considerations and on a manager's incentives. Managers' strategies include (1) managing book and taxable income (taxes) in an opposite direction; (2) managing book income while keeping taxable income (taxes) constant; and (3) managing taxable income (taxes) while keeping book income constant (Tang and Firth, 2011).

Chen et al. (2012) claim that the informativeness of book and tax income are bigger for firms with consistent book-tax differences. Particularly firms that neither engage in earnings management (more persistent earnings) nor in tax planning-aggressiveness strategies (more persistent tax benefits) have more consistent book-tax differences. When, in contrast, firms apply temporary earnings management or tax planning-aggressiveness strategies, persistence and earnings quality are both reduced. Important factor of the informativeness of book and tax income is the consistency of book-tax differences over time. Consistency of book-tax differences is incremental to the effects of earnings management and tax planning on information content of both book and tax income.

Chen et al. (2013) study companies in Israel, a country with moderate book-tax conformity. They discover that, both in public and private firms, taxable income management is not related to book income management. Firms that the tax authorities determined have understated tax income did not overstate book income. This is evidence that managers, even if they have the flexibility to manage both book and tax income at the same time due to non book-tax conformity, do not benefit from this. They conclude that, when book-tax conformity is stronger, managers' opportunistic behavior is reduced.

There are various studies which examine the Greek setting. Greece is characterized as a country with high earnings management (Leuz et. al. 2003, Karampinis and Hevas 2011, Blaylock et al. 2015, Tang 2015). Particularly, Leuz et al. (2003) observe that earnings smoothing is more pervasive in Greece between thirty-one countries. Moreover, Karampinis and Hevas (2011) characterize Greece as a code-law country, bank oriented, with high book-tax conformity, concentrated corporate ownership, poor shareholders' protection, weak regulatory quality and legal enforcement. They find that Greece is first in earnings opacity and earnings management among sixteen European countries. Blaylock et al. (2015) find that earnings management is the highest in Greece among the countries used in the sample

and Tang (2015) observes that conformity is generally high in code-law countries and developed capital markets and that Greece is a country with high earnings management.

Atwood et. al. (2010) develop a comprehensive book-tax conformity measure that can vary across countries and within a country over time. This measure is defined as the flexibility that a firm has to report taxable income that is different from pre-tax book income. They observe that earnings quality is lower when book-tax conformity is higher. The results provide evidence that earnings persistence is higher, and current earnings better predict future cash flows, when the required level of book-tax conformity is lower. Even though some managers may take advantage of their reporting discretion to report accounting earnings opportunistically, when book-tax-conformity is lower, the benefits of allowing managers flexibility in reporting accounting earnings outweigh the costs from manager opportunism.

Studies examining earnings management across countries provide mixed evidence regarding the impact of book-tax conformity (see Table 1 for a comparison of these studies).

**Table 1. A comparison of studies on the association between book-tax conformity and earnings management**

| **Studies** | **The effect of book-tax conformity on earnings management** |
|---|---|
| Leuz et al. (2003) | No effect across 31 countries from 1990 to 1999 |
| Burgstahler et al. (2006) | Positive association across 13 European countries from 1997 to 2003 |
| Lang et al. (2012) | Positive association across 46 countries from 1994 to 2007 |
| Watrin et al. (2014) | Positive association across 27 European countries from 2004 to 2011 |
| Blaylock et al. (2015) | Positive association across 34 countries from 1996 to 2007 |
| Frank et al. (2009) | Negative association in U.S. from 1991 to 2005 |
| Atwood et al. (2012) | Negative association across 22 countries from 1995 to 2007 |
| Tang (2015) | Negative association across 32 countries from 1994 to 2007 |
| Evers et al. (2016) | Negative association in Germany from 2008 to 2012 |
| Wong (2020) | Negative association across 34 countries from 2007 to 2018 |
| Watrin et al. (2012) | Private corporations in Germany take part in earnings management due to a tax rate reduction, on the contrary public corporations do not due to the tax reform of 2001 |
| Lin et al. (2014) | Firms manage earnings downward to a greater extent than |

| | |
|---|---|
| | public firms before a tax rate decrease in China in 2008 |
| Sundvik (2017) | Firms in jurisdictions where book-tax conformity is higher manage their earnings more as a response to an upcoming tax reform that decreases the corporate tax rate across 12 countries from 2007 to 2014 |
| Eichfelder et al. (2020) | Public firms engage less in tax-induced earnings management than private firms. Firms in countries where the book-tax conformity is bigger increase their tax avoidance behavior across 23 countries from 2005 to 2013 |

Leuz et al. (2003) examine the degree of a country's book-tax conformity, and do not find significant earnings management for tax and financial accounting purposes. Burgstahler et al. (2006), Lang et al. (2012), Watrin et al. (2014) and Blaylock et al. (2015) find a positive association of book-tax conformity and earnings management. However, Frank et al. (2009), Atwood et al. (2012), Tang (2015), Evers et al. (2016) and Wong (2020) find a negative association.

Burgstahler et al. (2006) assert that firms in countries where financial and tax accounts are highly aligned and tax rates are high engage in more earnings management, but this effect is mitigated by market pressure on public firms. Lang et al. (2012) state that managers smooth earnings less in countries with weaker link between tax and financial reporting. Watrin et al. (2014) demonstrate that consolidated earnings in countries with one-book systems are managed downwards to a greater extent than in countries with two-book systems. Moreover, they observe that the book-tax trade-off that European firms may initiate at the single-entity level seems to create a similar trade-off at the consolidated level. Similarly, Blaylock et al. (2015) find a negative relation between earnings persistence and book-tax conformity and a negative relation between the ability of earnings to predict one year ahead cash flows and book-tax conformity. They also find a positive relation between book-tax conformity and smoothing and a positive relation between book-tax conformity and other forms of earnings management that are likely to decrease earnings persistence.

On the contrary, Frank et al. (2009) explain that a firm's ability to engage in aggressive financial and tax reporting behaviors depends, in part, on the extent of book-tax conformity to which they are subject. To the extent that a particular firm operates in an environment that allows substantial discretion in its financial and tax accounting decisions, the firm could have a greater ability to be aggressive for both financial and tax reporting purposes. Their results assert that insufficient costs exist to offset basic financial and tax reporting

incentives. Non-conformity 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 vein, Tang and Firth (2011) find that in China earnings management and tax management are dependent and interactive and they explain abnormal book tax differences. Atwood et al. (2012) find that firms avoid more taxes, when the home country has lower book-tax conformity and lower perceived strength of tax enforcement. Likewise, Tang (2015) observes that high book-tax conformity deters overall accrual-based earnings management (i.e. upward and downward) and tax avoidance (i.e. non-conforming and conforming). Therefore, high book-tax conformity is associated with lower levels of earnings management and tax avoidance. Evers et al. (2016) discover that corporations in Germany following a weaker book-tax conformity legislation in 2010, demonstrate bigger book-tax differences, especially profitable companies and smaller ones. Additionally, they observe a decline in the persistence of taxable income contrary to higher persistence of book income. Consequently, this weakening of book-tax conformity leads to an increase of opportunistic reporting behavior and deterioration of earnings quality. Wong (2020) examine earnings management and book-tax conformity in 34 countries from 2007 to 2018. They find that as book-tax conformity increases, earnings management decreases.

Watrin et al. (2012) observe that corporations in Germany (a country that book-tax conformity is strong and bigger than in U.S.) which are accounting strategy balancers (i.e. they care about tax accounting and financial accounting concurrently) take less part in tax-induced earnings management concerning a corporate tax reduction than non-balancing corporations. Lin et al. (2014) infer that despite both firms (public and private) have a tax rate-based incentive (reduction of statutory tax rate from 33 percent to 25 percent in China a high book-tax conformity country) to manage earnings, private firms manage earnings downward to a greater extent than public firms before the rate decrease (due to smaller nontax costs).

Sundvik (2017) states that firms in jurisdictions where book-tax conformity is higher manage their earnings more as a response to an upcoming tax reform that decreases the corporate tax rate (firms shift income into lower tax periods to present lower earnings while taxation is still high). Eichfelder et al. (2020) also point out that in countries where the book-tax conformity is bigger, firms increase their tax avoidance behavior (tax-induced earnings management). Further they observe that public firms engage less in tax-induced earnings management than private firms due to public market pressure for bigger earnings.

# 5 Conclusion

Firms prepare two different financial statements with opposite objectives. On the one hand, they want to illustrate higher book income and, on the other hand, smaller taxable income. These differences arise either due to the statutory differences between the two financial statements or due to managerial discretion.

In this study, we reviewed the arguments of the proponents and opponents of book-tax conformity. Proponents argue that adoption of high book-tax conformity results in more representative and reliable earnings, less aggressive reported earnings, and reduced tax avoidance. Furthermore, they argue that the managerial discretion is eliminated due to the simultaneous, opposite and unfavorable consequences. Opponents claim that high book-tax conformity is not possible due to the different objectives of each set of financial statements. Moreover, in a high-book tax conformity jurisdiction managers smooth earnings more, and the informative role of book income (earnings) is decreased, as well as the value relevance of financial reports.

Furthermore, studies examining the association between book-tax conformity and earnings management provide mixed results. The propensity to engage in opportunistic behavior is predicated on tax and non-tax cost considerations and on a manager's incentives. Consistency of book-tax differences is incremental to the effects of earnings management and tax planning on the information content of both book and tax income. A firm's ability to engage in aggressive financial and tax reporting behaviors depends, in part, on the extent of book-tax conformity to which they are subject. Some researchers find a positive relationship between book-tax conformity and earnings smoothing, and conforming tax avoidance. Others note that higher book-tax conformity decreases earnings management and tax avoidance. One explanation for these differences is that book-tax conformity has different effects on different types of earnings management incentives. Also, there are two types of tax avoidance, the conforming tax avoidance, which reduces both financial and taxable income, and the non-conforming tax avoidance.

Some suggestions for future research include the effect of: a) the new Greek Accounting Standards (Law 4308/2014) which are applied from 01.01.2015 on private firms as long as the public ones apply IAS/IFRS, b) the new income tax law (Law 4172/2013) in Greece which is applicable from 01.01.2014 and c) the alterations of statutory tax rates in Greece, on book-tax conformity and earnings management.

## Notes

[i] https://ec.europa.eu/taxation_customs/business/company-tax/common-consolidated-corporate-tax-base-ccctb_en

[ii] Established in 1973, the Financial Accounting Standards Board (FASB) is the independent, private-sector, not-for-profit organization based in Norwalk, Connecticut, that establishes financial accounting and reporting standards for public and private companies and not-for-profit organizations that follow Generally Accepted Accounting Principles (GAAP). The FASB is recognized by the U.S. Securities and Exchange Commission as the designated accounting standard setter for public companies. (https://www.fasb.org/facts/)

[iii] The IFRS Foundation is a not-for-profit, public interest organization established to develop a single set of high-quality, understandable, enforceable and globally accepted accounting standards—IFRS Standards—and to promote and facilitate adoption of the standards. (https://www.ifrs.org/about-us/who-we-are/)

[iv] The International Accounting Standards Board (IASB) is an independent, private-sector body that develops and approves International Financial Reporting Standards (IFRSs). The IASB operates under the oversight of the IFRS Foundation. The IASB was formed in 2001 to replace the International Accounting Standards Committee (IASC). (https://www.iasplus.com/en/resources/ifrsf/iasb-ifrs-ic/iasb)

[v] https://cdn.ifrs.org/-/media/feature/around-the-world/adoption/use-of-ifrs-around-the-world-overview-sept-2018.pdf

[vi] https://www.ifrs.org/-/media/project/conceptual-framework/fact-sheet-project-summary-and-feedback-statement/conceptual-framework-project-summary.pdf

[vii] Information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity. (https://www.iasplus.com/en/news/2018/10/definition-of-material)

[viii] https://www.iasplus.com/en/standards/ias/ias1

[ix] https://www.oecd-ilibrary.org/taxation/tax-on-corporate-profits/indicator/english_d30cc412-en

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[xiv] In determining the AMT, firms have to include in the minimum tax base the book income adjustment, defined as half the difference between adjusted pre-tax book income and the alternative minimum tax base.

[xv] Value relevance is specified primarily in terms of explanatory power of accounting variables (earnings and book value of equity).

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