

**Luca Menicacci**

# **Book-Tax Conformity in the IFRS Era**

Evidence from Italian Listed Companies

Accounting  
& Business  
Studies

**FrancoAngeli**

The Series publishes research concerning two wide and interwoven fields: Theories of Firm and Organizations, Company Strategy, Corporate Governance, Business Ethics, Corporate Social Responsibility; Financial Accounting, Managerial Accounting, Social Reporting, Company Valuation, Internal and External Auditing, Financial Statement Analysis, Fundamental Analysis and Security Valuation, Accounting History, Corporate Disclosure and Communication to Financial Market.

The Series is open to contributions based on: different methodologies and methods; theoretical, empirical or experimental research; positive, interpretive, and critical approaches. Nevertheless, only rigorous, original, contributive and clear pieces of research that will make a contribution to the above mentioned fields of study will be published. Purely normative or descriptive works will not be accepted as well as inappropriate subject matter.

The Editor in Chief, the Co-Editors and the Editorial Board will insure that the Editorial Policy will be respected. They make a first appraisal of the publication proposals, considering their coherence with the aims and scope of the Series. The Editor in Chief and the Co-Editors, assisted by the Editorial Board, choose the reviewers, and guarantee a transparent and correct application of a double blind review process.

The members of the Scientific Committee, and other valuable scholars, contribute as reviewers, on the basis of their specific competency. Each member of the Scientific Committee can also select and address publication proposals to the Editor. In this case, the member cannot be involved in the reviewing process.

Our Series also hosts collected volumes. In this case, if the volume has a responsible editor and contains many chapters concerning different topics, a single blind review process is applied.

*This Series is supervised by AIDEA  
Collana accreditata AIDEA*



*Editor in Chief*

Francesco Giunta (Florence University)

*Co-Editors*

Luciano Marchi (Pisa University)

Lucio Potito (Federico II Naples University)

*Editorial Board*

Marco Allegrini (Pisa University)

Alessandro Lai (Verona University)

Roberto Maglio (Federico II Naples University)

Michele Pisani (L'Aquila University)

Ugo Sostero (Venice University)

*Italian Scientific Committee*

Paolo Andrei (Parma University)  
Luca Anselmi (Pisa University)  
Elio Borgonovi (Bocconi Milan University)  
Fabrizio Cerbioni (Padua University)  
Lino Cinquini (Scuola Superiore Sant'Anna, Pisa)  
Paolo Collini (Trento University)  
Stefano Coronella (Parthenope Naples University)  
Luciano D'Amico (Teramo University)  
Vittorio Dell'Atti (Bari University)  
Antonio Del Pozzo (Messina University)  
Enrico Laghi (La Sapienza Rome University)  
Giovanni Liberatore (Florence University)  
Riccardo Macchioni (Federico II Naples University)  
Stefano Marasca (Marche University)  
Antonio Matacena (Bologna University)  
Pietro Mazzola (IULM Milan University)  
Luciano Olivotto (Venice University)  
Antonella Paolini (Macerata University)  
Giuseppe Paolone (Pescara University)  
Angelo Riccaboni (Siena University)  
Stefano Pozzoli (Parthenope Naples University)  
Alberto Quagli (Genoa University)  
Paolo Tartaglia Polcini (Salerno University)  
Claudio Teodori (Brescia University)  
Riccardo Viganò (Federico II Naples University)  
Stefano Zambon (Ferrara University)

*International Scientific Committee*

David Alexander (The Birmingham Business School, UK)  
Bruce Behn (University of Tennessee, Usa)  
Garry Carnegie (RMIT University, Australia)  
Pablo Fernandez (IESE Business School, University of Navarra)  
Günther Gebhardt (Johann Wolfgang Goethe Universität, Frankfurt am Main)  
Richard Slack (Northumbria University, Newcastle, UK)  
Maria Shtefan (Higher School of Economics, Nizhny Novgorod, Russia)

**Luca Menicacci**

# **Book-Tax Conformity in the IFRS Era**

Evidence from Italian Listed Companies

**FrancoAngeli**

Copyright © 2022 by FrancoAngeli s.r.l., Milano, Italy.

*L'opera, comprese tutte le sue parti, è tutelata dalla legge sul diritto d'autore. L'Utente nel momento in cui effettua il download dell'opera accetta tutte le condizioni della licenza d'uso dell'opera previste e comunicate sul sito [www.francoangeli.it](http://www.francoangeli.it).*

«The taxing authority is an uninvited party to all contracts»  
(Scholes et al., 2014)

## **Acknowledgements**

I gratefully acknowledge financial support from *Fondazione Cassa di Risparmio di Pistoia e Pescia*, scholarship grant *Alta Formazione 2017*.

I want to express my deep gratitude to all those who supported me over the last few years and have contributed to this book. Firstly, I would like to thank Prof. Francesco Giunta for his authoritative role of guidance, advice, and supervision during my experience as a PhD student. Moreover, I thank Prof. Massimiliano Bonacchi for his precious recommendations and supporting remarks on my research. Finally, my most heartfelt appreciation goes to my family: my wife and my parents, who supported and trusted me not just over the last few years but from the very beginning of my academic path.

# INDEX

<b>Introduction</b>	p.	9
<b>1. The relationship between book and taxable income across jurisdictions</b>	»	13
1.1. Conforming book and taxable income: mere academic debate or real policy issue?	»	13
1.2. European directives on IFRS: impact on taxation	»	17
1.3. IFRS adoption: the case of Italy	»	20
1.4. The Italian system of corporate taxation	»	25
1.4.1. Evolution of Italian corporate taxation	»	27
1.4.2. Assessing the link between financial and tax accounting	»	30
1.4.3. Book earnings and taxable income: evidence from aggregate data of tax returns	»	39
<b>2. Book-tax conformity in accounting research</b>	»	42
2.1. The crossroad of financial accounting and taxation	»	42
2.1.1. The tax planning approach to financial reporting	»	42
2.1.2. The agency perspective on tax avoidance	»	45
2.2. Extant accounting research on book-tax conformity	»	51
2.2.1. Costs and benefits of increased conformity	»	51
2.2.2. Empirical research in national contexts	»	55
2.2.3. Cross-country studies	»	62
2.2.4. Summary and future developments	»	71

<b>3. BTC and accounting quality: empirical evidence from Italian listed companies</b>	p.	72
3.1. Motivation: the switch from a two-book to a one-book system	»	72
3.2. Hypotheses development	»	79
3.3. Data: unconsolidated IFRS annual reports	»	80
3.4. Empirical measures	»	83
3.4.1. Book-tax conformity metrics	»	83
3.4.2. Accounting quality metrics	»	88
3.5. Descriptive statistics	»	90
3.6. Book-tax conformity assessment	»	95
3.7. Accounting quality analysis	»	100
3.7.1. Earnings persistence and correlation with future cash flows	»	100
3.7.2. Earnings management	»	104
<b>4. Concluding remarks</b>	»	110
4.1. Contribution, limitations and future developments	»	110
4.2. Policy implications	»	114
<b>References</b>	»	117
<b>Appendix A – Variables definition</b>	»	129

# INTRODUCTION

There is an ongoing debate in the accounting literature about book-tax conformity (BTC) and its effects on accounting quality. Accounting researchers have discussed at length the costs and benefits of a fully conformed system (one-book) wherein book and tax items are perfectly aligned, as opposed to an utterly disconnected system (two-book) wherein taxable income and book earnings are detached. However, only a few studies have investigated the effects of a switch from a system where taxable income and accounting earnings are disconnected (two-book) to a system where the two measures of income are strictly related (one-book). This study evaluates the impact on accounting quality of an increase in BTC caused by a change in tax rules toward IFRS-oriented taxation. Since the large body of extant literature on BTC has not reached a consensus over its consequences on accounting quality, especially in cross-country studies, this work widens the findings of this strand of research.

The relationships between financial reporting and corporate taxation across different jurisdictions, specifically referring to the European Union, are described and analysed in Section 1. Then, to investigate the switch from a two-book system to a one-book system, Italy has been selected as a setting that allows the observation of such an event. During the first years of mandatory adoption of International Financial Reporting Standards (2006-2007), Italian listed companies had their taxable income determined based on local GAAP earnings. This meant to restate IFRS financial statements according to local GAAP and then apply tax adjustments. In 2008, accounting earnings determined according to IFRS became the starting point for tax calculations. This switch from a two-book (2006-2007) to a one-book (2008-2010) system will serve as the primary reference of this work. The consequent motivation

is to assess if these changing tax law requirements served as means of increased alignment and if this led to a change in accounting quality.

In Section 2, theory and prior literature on BTC are introduced. The theoretical background of this study is laid down, together with a review of current issues on BTC as discussed by both policymakers and academics. The theoretical framework is the agency theory mediated by the tax variable, in a principal-agent-tax authority relation, which is a variant of agency theory developed by the tax avoidance literature. The main assumption underlying this approach is that a strong BTC can be beneficial to both financial reporting and corporate tax enforcement. In a fully aligned system, increased market pressure on tax reporting, on the one hand, and reinforced scrutiny of the tax authority on accounting numbers, on the other hand, will result in increased tax compliance and lower agency costs. However, a fully aligned system can generate relevant incentives to earnings deflation to save on tax payments. Previous literature has long debated the potential benefits and costs of book-tax conformity. The main issue is whether the degree of book-tax conformity affects accounting quality or the information conveyed by accounting earnings, or both. Initial studies have focused on the US. They show that a strong BTC reduces the informativeness of financial statements. Other studies, which examine the value relevance of accounting earnings and the quality of accounts across countries, provide mixed evidence on the effects of book-tax conformity.

Section 3 includes the empirical analysis of Italian listed companies. The sample selection process is illustrated. It results in a sample of 114 unconsolidated financial statements of mandatory IFRS adopters listed on the Italian stock exchange over the years 2006 to 2010. The switch serves as an opportunity to assess the impact of different degrees of BTC on accounting quality. Then, research methods are described. BTC is measured using different types of book-tax differences (BTDs). Accounting quality is assessed by testing the association of current earnings with future earnings and future cash flows, and using earnings management metrics, therefore measuring also conforming tax avoidance. Results show that an increase in BTC under the same set of accounting standards reduces earnings persistence. However, tests on the association of current earnings with future cash flows show no impact of changes in BTC levels. Earnings management analysis reveals limited signals of a downward trend in abnormal pre-tax working capital accruals after the switch, as a consequence of stronger tax incentives to earnings deflation and, thus, to conforming tax avoidance. Although no conclusive evidence is shown concerning earnings management and conforming tax avoidance practices, the analysis allows some generalizations on the impact

of BTC changes on accounting quality when tax rules tend to align to accounting standards (IFRS).

In the final Section, the conclusions are drawn by evaluating both the contribution to the accounting literature and the policy implications of this study. Limitations and future developments are discussed. In reference to policy implications, this study intends to assist policymakers in two ways. Firstly, it provides a better understanding of how accounting standards and tax rules interact, influencing tax policies. Secondly, this study represents a significant improvement in the knowledge of IFRS-driven tax bases, being potential support for national and European lawmakers in determining a Common Corporate Tax Base (CCTB). In reference to its contribution to the accounting literature, to the best of my knowledge, this is the first study that tests the switch from a two-book to a one-book system for all listed firms within the same institutional setting and under the same set of accounting standards. The work contributes to the literature on BTC in two ways. From a methodological standpoint, it contributes to refining various aspects of BTC measurement relying on different types of book-tax differences (BTDs). From an empirical standpoint, it contributes to widening the findings on the effects of increased BTC by highlighting the trade-off between higher conformity and accounting quality.



# 1. THE RELATIONSHIP BETWEEN BOOK AND TAXABLE INCOME ACROSS JURISDICTIONS

## 1.1. Conforming book and taxable income: mere academic debate or real policy issue?

From a financial accounting point of view, the main aim of financial statements is to provide useful information to capital providers and other stakeholders to make economic decisions. Financial statements are also used for monitoring, playing an essential role in the business contracting process (Beyer et al., 2010). From a taxation point of view, the role of financial statements is more nuanced. On the one hand, they can serve as a starting point for determining taxable income in jurisdictions that adopt the dependence principle. On the other hand, they do not play any relevant role for tax purposes in countries wherein taxable income is independent of accounting profit. In the middle, there is a vast grey area with different shades of dependence, either material or formal.

In such a discussion, the concept of book-tax conformity is always centre stage. Book-tax conformity (*hereinafter BTC*) describes the extent to which accounting income (following GAAP) and taxable income (following the country's Tax Code) mirror each other (Blaylock et al., 2017). BTC is assumed to be strong when managers have limited discretion in reporting accounting earnings that differ from taxable income, according to accounting standards and tax rules. This commonly means that companies under a strong BTC adopt a one-book system, i.e. they use the same accounting system for both financial and tax reporting purposes, even if with some adjustments. one-book systems are typical of Civil Law countries, especially in continental Europe (e.g. Germany, France, Italy).

On the contrary, BTC is assumed to be weak when managers are allowed to report accounting earnings that differ significantly from taxable income.

This usually happens in a two-book system, wherein companies adopt two completely different sets of rules and, in some cases, two different sets of accounts: one for financial reporting purposes and another for tax reporting purposes. Such a system is typical of Common Law countries, like the United States and others that had been under the British crown (e.g. Australia, Hong Kong, Singapore). Notwithstanding this distinction, it is pretty clear that complete conformity is not practically feasible. There will always be book-tax differences (BTD) due to tax incentives (e.g. accelerated depreciation) or special tax credits (e.g. R&D tax credit). At the same time, the complete independence of taxable income from accounting profit is very rare and limited to special regimes (especially for SMEs)<sup>1</sup>. This is particularly the case with large companies, whose accounting earnings are always the starting point for income taxes computation. In other words, BTC must be analysed as a continuum rather than a dichotomous phenomenon. Therefore, what is apparently just an accounting technicality, gives wide room for discussion among policymakers. In fact, there has been an animated debate among regulators about BTC on both sides of the Atlantic.

US policymakers have discussed at length the opportunity to introduce a strong BTC over the last twenty years. It seems that this issue has been passing a quite long series of ups and downs after the so-called “dot-com bubble” of the early 2000s. Studies like Desai (2005) stimulated the debate on the “degradation of reported corporate profit” following large financial scams like Enron and WorldCom. He suggested re-evaluating the US dual reporting system, highlighting the potential informative benefits of conforming book and tax earnings. Even if being under the scrutiny of policymakers<sup>2</sup>, this kind of proposal was never implemented, neither partially nor totally. Substantial opposition to a strong BTC emerged due to its prospective impact on fiscal revenues for two main reasons. Firstly, the risk of a distorted use of the discretion afforded by financial accounting principles to inappropriately reduce taxable income. This is particularly relevant in settings where companies are indifferent to a decrease in their reported earnings but eager to lower their

<sup>1</sup> Certain types of businesses are allowed to adopt cash-basis accounting for tax purposes in various jurisdictions. For example, in the US and in the UK many small businesses (sole traders or partners) use the cash method of accounting in order to work out their tax returns. In Italy there is a similar tax regime for sole traders and partnerships. These kinds of businesses are usually exempt from filing financial statements with the local Registry of Commerce. Therefore, financial accounting is used only for contractual purposes, like relationships among business partners or with some categories of creditors (e.g. banks).

<sup>2</sup> President Bush’s Tax Reform Panel evaluated a proposal to tax large corporations based on book earnings instead of requiring a separate calculation of income for tax purposes (President’s Advisory Panel on Federal Tax Reform, 2005).

tax liability (e.g. family-owned private companies). Secondly, the potential limitations posed to the parliaments' ability to administer fiscal and social policy via the tax law, as the accounting standards are drawn up by the standard setters (e.g. FASB, IASB), not tax authorities (Joint Committee on Taxation, 2006).

After the financial crisis of 2007-2008, a call for increased conformity seemed to gain new momentum in the US. An example was the Senate Bill n. 1491<sup>3</sup> introduced in July 2009 as the "Ending Excessive Corporate Deductions for Stock Options Act". It proposed to limit the corporate tax deduction for stock options granted to employees, setting them equal to the book value of such options. This meant to align the tax deduction (excess of stock market value over the strike) to the financial accounting cost (at grant, using the option pricing method). Another good example was "The President's Framework for Business Tax Reform" presented under the Obama administration in 2012. The improvement of transparency and reduction of accounting gimmicks was included under the "five elements of Tax Reform", stating that:

Corporate tax reform should increase transparency and reduce the gap between book income, reported to shareholders, and taxable income, reported to the IRS. These reforms could include greater disclosure of annual corporate income tax payments (Treasury, 2012, p. 10).

More recently, political attention has been devoted to multinational entities. In particular, the so-called "Big-Tech" operating in the digital economy are accused of paying no or little federal taxes on their reported income. In 2019 Senator Elizabeth Warren released a proposal to enact a surtax on US corporations called "Real Corporate Profits Tax". This would equal 7% of the worldwide book earnings, with an exemption of the first \$100 million in profits. Similarly, in his campaign for the 2020 presidential election, senator Joe Biden proposed a "Minimum Book-Tax" of 15% on book earnings of firms with \$100 million reported profits or more. Lastly, the US government has strongly advocated for the recent G7 agreement on a "Global Minimum Tax" to curb international tax avoidance practices. Such agreement has raised concerns about the subsequent need for a global corporate tax base, presumably really close to reported earnings. These examples<sup>4</sup> show that the

<sup>3</sup> An identical bill was newly introduced by Senator Carl Levin in July 2011 as Senate Bill 1375 (112<sup>th</sup> Congress).

<sup>4</sup> A minor example is the 2017 US tax reform commonly referred to as the "Tax Cuts and Jobs Act" (TCJA – Pub. L. No. 115-97, §13221), which introduced some new book-conformity requirements for recognizing income. Under new section 451(b)(1) of the US Tax Code, accrual-method taxpayers must generally include an item in taxable income no later than the tax year in which that item is included in book revenues for financial reporting purposes.

BTC issue has constantly been re-emerging in the economic policy debate in the US, even if lacking a clear and comprehensive project. The main question has always been: is increased conformity an incentive or a disincentive to improve financial statements' informativeness?

The discussion on BTC in Europe has developed on different grounds. The European Union (and previously the European Economic Community) has a long history of Directives aimed at harmonising accounting law and accounting standards across member states<sup>5</sup>. This process had its peak with the adoption of IFRS<sup>6</sup> in 2005 for consolidated financial statements of EU companies. The adoption of IFRS contributed to intensifying the debate on book-tax alignment, as it raised concerns about the determination of the tax base, especially in countries with a one-book system (Freedman, 2004, 2008; Schön, 2004). While introducing a new set of accounting standards for financial reporting purposes, policymakers were challenged to re-evaluate book and taxable income alignment<sup>7</sup>. An initial project for a Common Corporate Tax Base (CCTB) in Europe suggested deriving taxable income from IFRS accounting earnings:

The Commission considers that despite some conceptual disadvantages [...] the IAS [IFRS] can be used as a tool for designing a tax base, at least as general starting and reference point. However, discussions should ultimately be guided by appropriate tax principles which would be discussed at an early stage, taking particular account of similarities to and differences from accounting principles (European Commission, 2004).

The Commission seems to have abandoned this idea over time. The first complete proposal for a Common Corporate Tax Base (CCTB) and a Consolidated Common Corporate Tax Base (CCCTB) in 2011 outlined a completely autonomous corpus of tax rules in a sort of “European two-book system”. This involved only the computation of the tax base, excluding any effect on financial accounts. Therefore, Member States had to maintain their national rules on financial accounting. The CCCTB system introduced autonomous rules for computing the tax base of companies without affecting

<sup>5</sup> Directive 78/660/EC (Fourth Directive), Directive 2003/51/EC, Regulation (EC) n. 1606/2002 (IFRS adoption), Directive 2013/34/EU.

<sup>6</sup> In this work the term IFRS will refer to both International Financial Reporting Standards and to the International Accounting Standards issued by the International Accounting Standard Board (IASB).

<sup>7</sup> According to Freedman, “while a key issue in the USA is whether BTC would be an aid to improved corporate governance, in most European countries the debate on the use of accounting standards for tax purposes centres on the suitability of accounting standards as a method of defining the tax base; perhaps even as a mode of harmonising the computation of taxable profits across Europe” (Freedman, 2008, p. 3).

the preparation of annual or consolidated accounts (European Commission, 2011). Accordingly, the most recent efforts to harmonise the computation of corporate tax profits in the European Union do not consider an IFRS-driven Tax Base (European Commission, 2016a, 2016b). This proposal is currently on hold; therefore, corporate tax bases across Europe are still determined in virtue of National Tax Codes. This generates multiple settings in every European country. As argued by tax scholars (Watrin et al., 2014), in some countries, a three-book system exists, one for consolidated financial accounts (IFRS), one for unconsolidated financial accounts (domestic GAAP) and one for tax accounts (National Tax Code). Further distinctions are made by every jurisdiction between the accounting practice of listed and unlisted companies, creating a pretty complex set of norms and regulations across the European Union. This array of settings gives rise to several issues covering both financial reporting and tax accounting, simultaneously generating a wide range of BTC levels across countries and types of firms.

What happened in Italy between 2006 and 2008 was quite emblematic of the tax issues arising from IFRS adoption. The practical introduction of a two-book system in 2006 and the subsequent switch to a one-book system for IFRS adopters represents a unique opportunity to test the impact of BTC on accounting quality and (conforming) tax avoidance<sup>8</sup>.

## 1.2. European directives on IFRS: impact on taxation

The ongoing harmonisation of financial reporting all over the globe implied an increasing relevance of International Financial Reporting Standards (IFRS), issued by the International Accounting Standard Board. This process has been intense in Europe, where the European Union mandated adopting IFRS for consolidated financial statements of listed companies. Specifically, Regulation (EC) n. 1606/2002 required listed EU incorporated companies to prepare their consolidated financial statements according to IFRS by 2005 at the latest. The IFRS Regulation provided an option for the member states to

<sup>8</sup> It is worth noticing that throughout this study, the reference to tax avoidance is twofold. On the one hand, the reference is to tax avoidance in general terms, as a tax planning strategy, when outlining the theoretical basis of the study. On the other hand, when it comes to hypothesis testing, the reference is to *conforming* tax avoidance which is the one obtained through a downward earnings manipulation. The latter is also called tax-induced earnings management, by which companies report lower book earnings that simultaneously reduce taxable income to save taxes. It is opposed to *nonconforming* tax avoidance, by which companies access greater tax savings by reporting lower taxable income in a way that does not affect book income (Atwood et al., 2012; Tang, 2015).

permit or require IFRS adoption for unconsolidated financial statements of listed companies and consolidated financial statements of unlisted companies. Some countries<sup>9</sup> exercised the option provided by the Regulation and required listed companies to adopt IFRS for their unconsolidated financial statements and permitted unlisted companies to prepare consolidated and unconsolidated financial statements according to IFRS.

In this respect, Procházka and Molin (2016) analyse the main features of financial and tax accounting systems across the EU after the IFRS adoption. They intersect the different financial accounting regimes (IFRS/Local GAAP) regarding unconsolidated financial statements with the link between accounting standards and tax rules. Three different book-tax accounting systems are hereby identified, elaborating on their analysis (Table 1.1): one-book systems in which statutory accounts are the starting point for corporate income tax computations; mixed systems (*quasi-two-book*) in which a restatement of IFRS earnings as Local GAAP earnings is required, together with a subsequent adjustment for tax purposes; two-book systems wherein complete independence of tax and financial accounting rules is adopted<sup>10</sup>.

Table 1.1 – Links between IFRS and taxation across Europe

	IFRS required	Local GAAP required	Local GAAP or IFRS
<b>One-Book System</b>	Cyprus (L), Denmark (L), Bulgaria (M), Greece (M), Italy (M), Malta (M), Croatia (H), Lithuania (H), Romania (H)	Austria (L), Belgium (L), Hungary (L), Sweden (M), France (H), Germany (H), Spain (H)	Luxembourg (L), Finland (M), Poland (M), Slovenia (M), Ireland (H), United Kingdom (H)
<b>Mixed System (Quasi-Two-Book)</b>	Czech Republic (H)	-	Latvia (L), Portugal (H), Slovakia (H)
<b>Two-Book System</b>	Estonia	-	Netherlands

Table 1.1 shows corporate and tax accounting systems of EU countries after the IFRS adoption as of 31<sup>st</sup> December 2013. In columns are the different regimes enacted in reference to IFRS adoption for unconsolidated financial statements. In rows are the resulting book-tax accounting systems. One-Book systems are those in which statutory accounts are the starting point for corporate income tax computations; Mixed Systems (*Quasi-Two-Book*) are those which require a restatement of IFRS earnings as Local GAAP earnings, and a subsequent adjustment for tax purposes; Two-Book Systems imply complete independence of tax and financial accounting rules. Based on Procházka and Molin (2016), letter (H) indicates a high number of adjustments which determines low BTC; letter (M) indicates an average number of adjustments, which determines average BTC; letter (L) indicates a low number of adjustments, which determines high BTC.

<sup>9</sup> Nearly all EU member states used the option to permit IFRS adoption in the consolidated accounts of some or all types of unlisted companies (European Commission, 2012).

<sup>10</sup> Procházka and Molin (2016) identify these three systems as tax filings based on statutory accounts (here one-book), independent tax rules (here two-book), and other methods (here mixed / quasi-two-book).

Following Procházka and Molin (2016), the classification is as follows:

- A high number of adjustments, which determines low BTC, is denoted with the letter (H).
- An average number of adjustments, which determines average BTC, is denoted with the letter (M).
- A low number of adjustments, which determines high BTC, is denoted with the letter (L).

As shown in Table 1.1, no significant tax issues emerged in countries where IFRS are not allowed at the single entity level (Local GAAP required). They all apply a one-book system for single accounts prepared according to local GAAP and are mainly continental-Europe countries with “creditor-oriented” systems. In countries where IFRS are mandated or permitted also at the single entity level (IFRS required / Local GAAP or IFRS), the relationship between financial accounting and taxation has been lessened in some cases. Two countries (Estonia and the Netherlands) introduced a two-book system. Four countries adopted a mixed system where IFRS items are generally converted into local GAAP figures and, finally, adjusted for tax purposes<sup>11</sup>. All other countries where IFRS are mandated or permitted for single accounts adopted a one-book system. Notwithstanding this classification, different levels of BTC can also be identified among one-book-adopter countries by looking at the number of adjustments required to compute taxable income starting from statutory accounts. Relevant examples are the UK and Ireland (i.e. “investor-oriented” accounting systems), which require a high number of tax adjustments, representing cases of formal dependence but substantial independence<sup>12</sup>.

This setting creates a potential distortion in implementing tax rules across Europe, giving rise to potential impacts on international capital mobility and cross border profit shifting. De Simone (2016) documented that the mandatory or voluntary adoption of IFRS at the single entity level is suitable to facilitate tax-motivated income shifting across European countries due to its impact on transfer pricing practices. Adopting a common set of accounting

<sup>11</sup> Slovakian listed IFRS adopters can actually compute taxes according to either IFRS or local GAAP rules. Anyway, several adjustments have to be made in tax returns.

<sup>12</sup> Tax law scholars distinguish between tax law systems with a formal dependence and with formal independence to describe the degree of alignment between the tax base and book earnings. Formal dependence occurs when taxable income is fully aligned with financial accounting profit. Formal independence refers to situations wherein financial accounting is irrelevant to the computation of the tax base (Grandinetti, 2016).

standards (IFRS) expands the set of potential benchmark firms for transfer pricing computations and comparisons. Expressly, multinational entities (MNEs) could be provided with a more flexible environment to set forth tax-advantaged transfer prices for individual affiliates. Using a sample of European profitable MNE affiliates over the period 2003 to 2012 (57,252 affiliate-year observations), De Simone (2016) demonstrates that IFRS adopters experience a substantial increase in the number of potential benchmark firms and the range of possible benchmark book profit margins. Moreover, affiliates engage in more tax-motivated income shifting following IFRS adoption for unconsolidated reporting. Such a context let the need for more international coordination on the overall topic of corporate taxation and accounting rules, as advocated by Sikka (2017).

### **1.3. IFRS adoption: the case of Italy**

Italy exercised the option provided by the European regulation with Legislative Decree 28<sup>th</sup> February 2005, No. 38. It obliged listed companies, banks, and other financial institutions to adopt IFRS for consolidated and unconsolidated financial statements. The former from financial year ended or ongoing on 31<sup>st</sup> December 2005, the latter from financial year ended or ongoing on 31<sup>st</sup> December 2006. All subsidiaries within listed groups were permitted to use IFRS to prepare unconsolidated financial statements. Additionally, unlisted groups were allowed to adopt IFRS for their consolidated accounts. In such a case, they were also allowed to adopt IFRS for the unconsolidated accounts of the group's companies. Subsequently, unlisted companies which did not prepare the consolidated accounts or were not part of a group that applied the IFRS at the consolidated level were prohibited from applying IFRS. The initial institutional setting, which is relevant to the present study, is summarized in Table 1.2.