



International financial reporting standards adoption in the European Union and earnings conservatism: a review of empirical research

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Abstract

The move towards the widespread adoption of international financial reporting standards (IFRS) opened the field for extensive research into the consequences of the voluntary and mandatory IFRS adoption. This paper attempts to provide a broad picture regarding these consequences in the context of the European Union by reviewing the extant empirical literature on earnings conservatism. The review reveals that mixed evidence exists regarding the effect of IFRS adoption, whether voluntary or mandatory, on earnings conservatism. The reasons behind these mixed results are likely multi-factorial but may include a greater flexibility of IFRS relative to domestic generally accepted accounting principles. In doing so, this study provides opportunities for future research.

Keywords IFRS · Financial reporting · EU · Reporting incentives · Earnings conservatism

Introduction

Without question, financial reporting plays a multiple role in the business world. For instance, it not only represents corporate financial information required by any legislative regulators which firms have to deal with, but also can be used as a medium to communicate between the firm and its related parties (e.g., creditors, investors, and analysts). Financial information shown on the corporate report is thus of interest and can affect the user who relies on that information. In general, financial reporting users have expected to receive information with a certain level of quality to achieve their corresponding objectives. Thus, it is not surprising that a growing stream of literature in the area of financial reporting has focused on and been aware of the quality of accounting information disclosed in the corporate financial report (Moy 2014).

The starting point in this paper is the importance of accounting standards (which are one aspect of the countries' disclosure and financial reporting systems; other aspects

include securities regulation and disclosure rules, reporting enforcement, and audit enforcement (Leuz and Wysocki 2016)) for the quality of corporate reporting (e.g., Alford et al. 1993; Auer 1996; Joos and Lang 1994).¹ For example, Alford et al., in a widely cited article published in 1993, find that differences in countries' accounting standards affect the timeliness and information content of reported accounting earnings. The association of non-reporting institutional variables and international differences in financial reporting quality has also been studied. The range of these institutional variables is extensive (Isidro et al. 2016; Leuz and Wysocki 2016) and includes factors that measure aspects of the legal system, capital market features, tax systems, political institutions, and culture, to cite a few examples (e.g., Ball et al. 2000; Robert M Bushman and Piotroski 2006; Francis and Wang 2008; Haw et al. 2004; Kanagaretnam et al. 2014; Leuz et al. 2003; Salter et al. 2013). For instance, Ball et al. (2000, p. 4) findings suggest that "important properties of accounting income (conservatism in particular) around the world are a function of the varying demands that accounting income satisfies under different institutional arrangements."

Furthermore, it is interesting to note that "[a]s with other nonaccounting institutions, reporting standards and other elements of the reporting system likely have arisen to facilitate specific business transactions that commonly arise in

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¹ Prior literature has seen accounting standards as the primary input for high-quality reporting. (e.g., Levitt 1998).



a country [...]. Thus, there is an inherent interdependency and complementarity between reporting and nonreporting institutions in each country” (Leuz and Wysocki 2016, pp. 594–595). In this respect, Ball et al. (2003) conclude their study by arguing that it is misleading to classify countries in terms of their formal accounting standards, ignoring preparers’ (i.e., managers’ and auditors’) financial reporting incentives, which are in turn highly influenced by the interplay between market and political forces (i.e., institutional factors) in the reporting jurisdiction.

The adoption and implementation of International Financial Reporting Standards (IFRS) in the European Union (EU) in 2005 marks major progress toward a common set of high-quality, globally accepted accounting language (Ozkan et al. 2012; Thi et al. 2020). The objective was to promote earnings quality in corporate financial reporting and to reach a high level of harmonization in accounting practices (Callao and Jarne 2010; Ozkan et al. 2012).

However, IFRS provide financial statement preparers with flexibility in the application of the standards due to explicit options, discretion in interpretation, and the need for estimates that is inherent in financial reporting (e.g., Ball 2016; Brown and Tarca 2012; Capkun and Collins 2016; Daske et al. 2008, 2013; Fuad 2017; Leuz and Wysocki 2016; C. Nobes 2006; Schatt et al. 2016). The key point is that reporting incentives, which are shaped by many institutional factors, are important in determining how managers use the flexibility offered by the standards (Leuz and Wysocki 2016). Therefore, given the persistence of international differences in institutional frameworks (Kvaal and Nobes 2010, 2012; Nobes 2008, 2011, 2013), it is questionable whether the adoption of IFRS in the EU (the *de jure* harmonization) necessarily leads to improved and harmonized reporting practices (the *de facto* harmonization) (Gray et al. 2015; Wehrfritz and Haller 2014).

The main objective of this paper is to provide an overview on whether the earnings quality is altered by the transition from the national accounting standards to IFRS in the EU, based on the research literature.

In investigating accounting earnings quality, I concentrate on earnings conservatism which is only one aspect of financial reporting (Robert M. Bushman et al. 2011). Nevertheless, focusing on conservatism is important given the widespread implications and debate surrounding conservatism. Indeed, it has been argued to provide several governance benefits, such as reducing agency conflicts and improving managerial investment decisions (Ball and Shivakumar 2005; Holthausen and Watts 2001; Watts 2003), enhancing the efficiency of debt contracts (Ahmed et al. 2002; Zhang 2008), and reducing litigation costs (Watts 2003). On the other hand, the Conceptual Framework (CF) issued by the International Accounting Standards Board (IASB) in 2010 removed the concept of prudence under the pretext of its

incompatibility with the concept of neutrality. Thus, it seems that conservatism is a less desirable characteristic under the new CF. This position is softened in the recent CF issued in March 2018, in which the IASB reaccepted the idea of a degree of caution when making judgments under conditions of uncertainty (cautious prudence), by claiming it to be consistent with the concept of neutrality (Pelger 2020).

This paper contributes to the accounting literature in two important ways. First, it helps the accounting community to gain knowledge by providing an overview of the rapidly increasing studies on the effect of the adoption of IFRS in the EU on earnings quality. To the best of the author’s knowledge, this paper is the first to attempt to synthesize the research literature on the effect of IFRS adoption on earnings conservatism in the EU. Second, a comprehensive analysis of the academic research to date can provide valuable insights to the national and international accounting authority bodies, as well as to the users of financial reports.

The remainder of this paper is organized as follows. “IFRS implementation in the EU” in Section sheds insights into the implementation of IFRS in the EU. “the concept of conservatism in accounting” in Section and “conservatism in the IASB/IASB CF” in Section place the concept of conservatism within the context of the current literature and the views of the standard setters, respectively. “prior research on the effect of ifrs adoption on earnings conservatism” in Section provides an overview on whether the adoption of uniform accounting standards, i.e., IFRS, in the EU is associated with incremental changes in the earnings conservatism. “conclusion” in Section 6 concludes.

IFRS implementation in the EU

Since the 1960s, the European Commission (the predecessor of the EU) has been dedicated to harmonizing the accounting practices of member states, aiming at clearing barriers to establish a uniform European financial market, and this through improving disclosure quality, reducing transaction costs, and promoting intra-trade among member states (Chen et al. 2010). A first attempt for accounting harmonization took place through the introduction of the Fourth and Seventh Directives (of 25 July 1978 and 13 June 1983, respectively; hereinafter: the EC-Directives).² However, “the expected harmonization effect was insufficient” (Beuselinck et al. 2007, p. 11). On July 19, 2002,

² The Fourth Directive requires all limited liability companies to prepare annual accounts. The Seventh Directive relates to consolidated accounts. It requires a parent company to prepare, in addition to its individual accounts, consolidated accounts and a consolidated annual report.



the European Parliament passed a regulation (Regulation (EC) No 1606/2002 of the European Parliament and of the Council of July 19, 2002, on the application of International Accounting Standards (IAS); hereinafter: the IAS Regulation)³ requiring companies with securities “admitted to trading on a regulated market” (Article 4 of the IAS Regulation) in the EU to adopt IFRS to prepare consolidated financial statements starting from January 1, 2005.,⁴⁵ The main motivation is that while the EC-Directives “provide a basis for harmonized accounts for both individual and groups of companies within the Economic Union, they did not meet more rigorous disclosure requirements elsewhere in the world, particularly accounting standards issued by the US Financial Accounting Standards Board (FASB)” (Jones and Finley 2011, p. 23). Following this development, about or more than 7000 European listed companies subsequently became obliged to report their consolidated accounts under IFRS (Delvaille et al. 2005; Hoogendoorn 2006).

The adoption of IFRS in the EU in 2005 following the so-called IAS Regulation, marks major progress toward a single set of high-quality accounting standards (Ozkan et al. 2012), and is primarily aimed at promoting earnings quality and achieving a high degree of harmonization of accounting practices (Callao and Jarne 2010; Ozkan et al. 2012). As noted by Whittington (2005, p. 129), the EU’s adoption of the IASB’s standards represents “a good example of the nature of the demand. There was no existing single set of accounting standards within the EU: rather there was a variety of national standards of varying degrees of completeness, sophistication and authority, reflecting different national traditions and institutional arrangements.” He adds that, “without common accounting standards, there could be 28 different national methods of accounting, in addition to the use of IFRS and of United States Generally Accepted Accounting Principles (US GAAP) which is permitted by some EU countries” (p. 129).

³ Available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002R1606&from=EN>.

⁴ Two types of publicly listed companies in the EU can delay adoption of IFRS to 2007 if the country allows it: firms with a domicile in the EU that do not publicly list on any EU stock exchange and that use US GAAP to prepare financial statements, and firms that have only publicly traded debt securities (Article 9 of the IAS Regulation).

⁵ Because not all securities exchanges are EU-regulated, for instance Alternext or London-based AIM (Alternative Investment Market), some publicly traded companies may not fall within the scope of the IAS Regulation (Forst & Salerno 2016).

The concept of conservatism in accounting

Conservatism is a central accounting principle that has influenced financial reporting for centuries (Basu 1997; Goh et al. 2017; Watts 2003). Citing Penndorf (1933) and Littleton (1941), Basu (2009) indicates that conservatism has influenced financial accounting since the early fifteenth century. Holthausen and Watts (2001) provide evidence that conservatism existed prior to formal standard setting and regulation in the United States (US), which suggests that managers of US firms have incentives to report conservatively even in the absence of mandated rules and regulations. Despite criticism of conservatism, there is evidence that US financial reporting not only is conservative but has become increasingly conservative (Basu 1997; Givoly and Hayn 2000; Holthausen and Watts 2001; Ryan and Zarowin 2003). “This long-standing resilience of conservatism suggests that U.S. firms may derive significant economic and informational benefits from conservative reporting” (Goh et al. 2017 footnote 2, p. 217).

Basu (1997, p. 7) defines conservatism as the “accountants’ tendency to require a higher degree of verification to recognize good news as gains than to recognize bad news as losses”, a definition that is consistent with the adage “anticipate no profits but anticipate all losses”. Basu (1997) provides several conservatism estimators. I focus on the primary estimator, the incremental coefficient on negative returns (the proxy for negative shocks, or bad news) in a scaled piecewise linear regression of accounting income on fiscal-year change in market value of equity.^{6,7} Basu (1997) predicts and finds that the asymmetric timeliness coefficient indeed is positive, indicating timelier incorporation of economic losses (i.e., negative economic shocks) than economic gains (i.e., positive economic shocks).

Under this definition of conservatism, how accounting income incorporates shocks to firm value depends on their sign, so Ball and Shivakumar (2005) and Beaver and Ryan (2005) term it conditional conservatism, also referred to as news-dependent or ex-post conservatism (Ryan 2006). It “involves firms writing down the book value of net assets in a timely fashion upon receiving sufficiently bad news but not writing up net assets as quickly upon receiving correspondingly good news, with the latter being the conservative behavior” (Ryan 2006, pp. 512–513). Examples of

⁶ “Because income recognition in accounting is largely a choice between timely and deferred incorporation of economic gains and losses, conditional conservatism is also known as asymmetrically timely loss recognition, and the incremental coefficient on negative returns is known as the asymmetric timeliness coefficient” (Ball, Kothari, & Nikolaev 2013b, p. 756).

⁷ The secondary estimator is a piecewise linear regression of change in accounting income on lagged change.



Table 1 Examples of accounting conservatism

Type of conservatism	Common examples
Conditional conservatism	Goodwill impairment Long-lived asset impairment Inventory recorded at the lower of cost or market Asymmetry in gain/loss contingencies
Unconditional conservatism	Accelerated depreciation methods Expensing research and development costs Expensing advertising costs Last-in-first-out inventory Accumulated reserves in excess of expected future costs (e.g., allowance for doubtful accounts, warranty allowance)

conditional conservatism include lower of cost or market accounting for inventory and impairment accounting for long-lived tangible and intangible assets (Ryan 2006).

Conditional conservatism has been delineated from unconditional conservatism. Unconditional conservatism refers to early recognition of losses independent of news (Shivakumar 2013). It “involves firms committing at inception to recognizing book values of net assets that are below their expected market values during their lives” (Ryan 2006, p. 513). Unconditional conservatism is also termed balance sheet conservatism, news-independent conservatism, or ex-ante conservatism. Unconditional conservatism decisions include adoption of accelerated depreciated schedules (defined at the start of the useful life of the asset), i.e., amortization of long-lived assets at a rate above the expected economic amortization rate, and immediate expensing of the cost of internally generated intangible assets. Table 1 provides a list of conditional and unconditional conservatism practices.

The key difference between the two types is predicated on news, that is, whether or not the managers’ decision to recognize losses depends on new information or if it is a pre-defined decision. The distinction between conditional and unconditional conservatism is thought to matter due to the implications for contracting and reducing information asymmetry (Ball and Shivakumar 2005). As conditional conservatism utilizes information after the occurrence of the event, it improves the contracting efficiency of information as the treatment of the news can then be observed (Ball and Shivakumar 2005), while “unconditional conservatism will likely reduce contracting efficiency because it does not do so” (Basu 2005, p. 313).⁸ According to Shivakumar (2013), “from a contracting standpoint, unconditional conservatism

merely introduces noise in the financial statements and does not provide information relevant for decision-making” (p. 373).

In contrast to unconditional conservatism, the effect of conditional conservatism appears only when new information about a firm’s economic situation is received. This makes conditional conservatism more relevant to debt contracting and to stewardship (Shivakumar 2013) and, hence, I focus only on conditional conservatism in this paper.

Conservatism in the IASC/IASB CF

The International Accounting Standards Committee (IASC), the predecessor of the IASB, issued in 1989 its Conceptual Framework for the Preparation and Presentation of Financial Statements.^{9,10} In this original CF, there was an explicit role for conservatism, also known as prudence, which was described as a sub-characteristic of reliability, being “the inclusion of a degree of caution in the exercise of the judgments needed in making the estimates required under conditions of uncertainty, such that assets or income are not overstated and liabilities or expenses are not understated” (IASC 1989, paragraph 37).

It was further clarified that the exercise of conservatism “does not allow [...] the deliberate understatement of assets or income, or the deliberate overstatement of liabilities or expenses, because the financial statements would not be neutral and, therefore, not have the quality of reliability” (IASC 1989, paragraph 37).

In this sense, conservatism was a balance of two considerations: (1) the exercise of conservatism, in the form of a degree of caution when judgments are needed to make the

⁸ Basu (2005, p. 314) argue that “the existence of unconditional conservatism does not automatically imply that it is desirable [...]. In other words, even though both types of conservatism eventually reduce income and equity, the timing of these reductions is crucial, since only conditional conservatism provides new information that could generate contracting responses”

⁹ When the IASB replaced the IASC in 2001, it adopted the 1989 CF without any changes (Pelger 2020).

¹⁰ This CF was said to be “strongly reminiscent” of that of the Financial Accounting Standards Board (FASB) (Camfferman & Zeff 2007, p. 260). Prior to 1989, the FASB was the only national standard setter to have completed a normative CF (Zeff 2013).



estimates required under conditions of uncertainty, in not overstating net assets; and (2) the absence of conservatism, in the form of a respect for neutrality and therefore reliability, avoiding a deliberate understatement of net assets (Barker and McGeachin 2015).

In September 2010, however, the first of these two considerations was dropped (Barker and McGeachin 2015; Pelger 2020). In fact, after a joint review between 2004 and 2010, the IASB, together with the FASB, issued a revised CF, in which important changes were introduced (Pelger 2020). This revised version of the original CF states that for financial information to be useful, “it must be relevant and faithfully represents what it purports to represent.” The qualitative characteristic faithful representation replaced the previous counter-balance to relevance: reliability (Barker and McGeachin 2015). A faithful representation is defined to be neutral, meaning “not slanted, weighted, emphasized, de-emphasized or otherwise manipulated to increase the probability that financial information will be received favorably or unfavorably by users.” The revision therefore resulted in conservatism being excluded from the CF because including it would be logically inconsistent with the concept of neutrality (Barker and McGeachin 2015).

After six years of work on revising its CF (without the FASB),¹¹ the IASB published a new version on March 2018, in which prudence, defined as “the exercise of caution when making judgments under conditions of uncertainty,” is reintroduced as part of neutrality, one of the sub-aspects of faithful representation. It is claimed that neutrality is supported by the exercise of prudence (Pelger 2020).

Prior research on the effect of IFRS adoption on earnings conservatism

The widespread adoption of IFRS since 2005 has been described as constituting “a truly historical innovation in financial reporting” (Ball 2016, p. 545). “Many proponents believe that IFRS reporting is of a higher quality than previous local Generally Accepted Accounting Principles (GAAP) and that its adoption improves financial transparency, lowers information asymmetry in capital markets, promotes cross-border comparability, attracts foreign capital flows, and consequently lowers the cost of capital for firms in adopting countries [...]. Given these oft-repeated benefits, it is of little surprise that the earliest IFRS studies typically focus on evaluating the quality of financial reports under

IFRS following Europe’s mandatory IFRS adoption” (De George et al. 2016, p. 908).

Several prior studies have attempted to provide direct evidence on reporting quality under IFRS by examining the properties of accounting numbers, including conservatism (hereafter, I use the terms “earnings conservatism,” “conditional conservatism,” and “conservatism” interchangeably). I begin this section by reviewing and discussing the evidence based on voluntary adoption and then explore and discuss the evidence from mandatory adoption.

Empirical evidence based on voluntary IFRS adoption

“Although large-scale mandatory adoption of IFRS did not occur until 2005, a handful of European countries had allowed firms to voluntarily report under IAS since the early 1990s” (De George et al. 2016, p. 909). Focusing on these voluntary adopters, researchers have attempted to provide preliminary insights into the potential effects of IFRS adoption on accounting conservatism.

Based on a multi-country study, Lara et al. (2008) examine the voluntary adoption of IFRS and its effect on conditional conservatism as measured by the Basu (1997) asymmetric timeliness model. Their sample consists of 10,302 firm-year observations from 7 continental European countries (Austria, Belgium, France, Germany, Italy, Spain, and Switzerland) over the period of 1994–2003. The study shows that the use of IASB standards has significantly increased the measures of conditional conservatism in adopting firms. This result, as noted by the authors, is “consistent with high quality accounting standards increasing the quality of financial information only if properly enforced and when appropriate corporate governance mechanisms are in place to protect investors” (p. 198), and “could be attributable to IASB standards (IAS 16) being less balance sheet conservative than local European continental GAAPs and, consequently, leading to more conservative earnings numbers [...]. Also, European firms using IAS might be listed in other markets, more widely held, and subject to pressures other than those from the European continental institutional context [...].” (p. 206).

Based on a sample of 80 German industrial firms that adopted IAS for the first time during the 1998 through 2002 period, Hung and Subramanyam (2007) examine the effects on reported accounting numbers. The authors exploit the setting in Germany, where firms were able to voluntarily adopt IFRS instead of domestic GAAP (according to Handelsgesetzbuch (HGB), i.e., commercial code) starting in 1998, until it became mandatory to adopt IFRS in 2005. For analyzing the differences in timely loss recognition across these accounting standards, they apply Basu (1997) piecewise linear regression of earnings on returns. Results show

¹¹ “When putting the CF project back on its agenda in May 2012, the IASB decided to continue the project without the FASB. This reflected the difficulties that the two Boards experienced in phase A, [...], and increasing difficulties in the convergence program more generally” (Pelger 2020, p. 36).



weak evidence that IAS income exhibits greater conditional conservatism than HGB income. “A notable feature of the study is its ability to control for underlying economic activities, as it focuses on data related to the same firm-year across two accounting standards” (De George et al. 2016, p. 909).

In a related study, Christensen et al. (2015) examine how accounting quality is affected by the adoption of IFRS for those that supposedly perceive net benefits of these standards (i.e., voluntary adopters). Their sample, constructed to test the earnings conservatism hypothesis, consists of 1395 German firm-year observations over the period of 1993–2006. In contrast to the findings of Hung and Subramanyam (2007), the results of Christensen et al. (2015), obtained using the Basu (1997) reverse-regression between earnings and contemporaneous returns, show that voluntary adoption of IFRS is associated with increased timely loss recognition. These inconsistent results could arise from the use of two different samples; whereas the sample in Hung and Subramanyam (2007) is limited to firms that changed accounting standards to IAS, with the availability of financial statements one year before the IAS adoption (when both IAS and German GAAP financial statements were available), the sample in Christensen et al. (2015) is larger and includes all firms traded at German stock exchanges from 1993 to 2006.

Overall, studies based on large samples (Christensen et al. 2015; Lara et al. 2008) has documented that voluntary adoption of IFRS leads to improved earnings quality (proxied by earnings conservatism). However, “these results do not endure when underlying institutional details and economic activities are held constant, as in the study by Hung and Subramanyam (2007). Although these studies attempt to rule out self-selection biases, one should be aware that the potential for such biases remains in any voluntary adoption setting” (De George et al. 2016).

Empirical evidence based on mandatory IFRS adoption

Following the mandatory IFRS adoption in the EU and several other countries worldwide, several researchers have revisited the effects of IFRS adoption on earnings conservatism. Below I distinguish between single-country studies and studies comparing the effect of adoption in several countries.¹²

¹² As noted by De George et al. (2016, p. 968), “A major advantage of using a multi-country setting is that the results can typically be generalized to a wider variety of firms and a wider set of institutional and enforcement factors. Such studies also can conduct cross-country analysis of the role of country characteristics in influencing IFRS outcomes. The samples used in multi-country analysis are also typically larger, yielding greater power of tests. However, studies focusing on a single IFRS-adopting country have their own advantages. Single-country settings allow researchers to focus on a more homogenous sample of firms with broadly comparable ownership structures and

Single-country studies

In Greece, Karampinis and Hevas (2011) investigate the mandatory adoption of IFRS and its potential effect on two salient properties of accounting income: value relevance and conditional conservatism. The authors measure accounting conservatism by the extent of asymmetric loss recognition impounded in earnings (Basu 1997) and accruals (Ball and Shivakumar 2005). Their sample comprises a panel of 1050 firm-year observations (the Ball and Shivakumar (2005) piecewise linear accruals regression is based on 951 firm-year observations) for the years 2002 through 2007. The pre-IFRS adoption period (2002–2004) is compared to the post-IFRS adoption period (2005–2007). Overall, Karampinis and Hevas (2011) find, even after restricting the sample to those firms that are audited by either one of the Big 4 (i.e., Deloitte & Touche, Ernst & Young, KPMG, and PwC) or SOL SA (the largest Greek audit firm), some evidence of conditional conservatism in the pre- and the post-IFRS periods but no proof of substantial improvements stemming from mandatory IFRS adoption. The explanation advanced by the authors to this finding is that IFRS are mandated in unfavorable jurisdiction where inadequate economic and institutional infrastructures (e.g., concentrated corporate ownership, poor shareholders’ protection, and low regulatory quality) accommodate countervailing reporting incentives. In contrast, Dimitropoulos et al. (2013) argue that the adoption of IFRS in Greece is associated with more timely loss recognition. Their study is based on 101 companies listed in Athens Stock Exchange, where 25 were early voluntary adopters before 2005. In their Table 5, they first show that voluntary IFRS adopters exhibited significant timely loss recognition than the other firms following the Greek GAAP in the pre-IFRS period (2001–2004). They then find that the coefficient on timely loss recognition in the post-IFRS period (2005–2008) is much higher than the coefficient in the pre-IFRS period.

Multi-country studies

Expanding beyond country-specific analysis, Zéghal et al. (2012) look at the mandatory adoption of IFRS in the EU. The authors address the question whether this adoption is associated with higher accounting quality, including conditional conservatism. Their sample consists of 1547 firms incorporated in one of the 15 “old” EU countries, totaling

Footnote 12 (continued)

capital market incentives. They also hold legal and regulatory factors constant and enable researchers to delve deeper into analysis of institutional details, adopt better identification strategies, and better control for potential confounding events”



7735 firm-year observations. The pre-IFRS adoption period (2002–2004) is compared to the post-IFRS adoption period (2006–2007). The authors use the Basu (1997) reverse-regression between earnings and contemporaneous returns as their primary model to capture conditional conservatism, which has been augmented with an indicator variable, IFRS, taking on the value 0 for the pre-IFRS period and 1 for the post-IFRS period, in order to test if there is any difference between the two periods.¹³ The results indicate that the recognition of economic losses is marginally less timely in the post-IFRS period (-0.0481 ; p value < 0.10). Therefore, mandatory IFRS adoption is associated with a decrease in conditional accounting conservatism. In addition to presenting results for the full sample, Zéghal et al. (2012) also provide inferences for two subsamples partitioned by the degree of convergence of the domestic GAAP toward IFRS.¹⁴ The findings show that there isn't any change in the conditionally conservative financial reporting after the mandatory transition to IFRS for these subsamples.¹⁵

Based on a sample of 1216 firms (totaling 9623 firm-year observations) over a longer period (2000–2010), Zéghal and Lahmar (2016) revisit the evidence provided by Zéghal et al. (2012). The pre-IFRS adoption period (from 2000 to 2004) is compared to the post-IFRS adoption period (from 2006 to 2007 and from 2009 to 2010). Results show that (1) firms belonging to countries operating under the Anglo-American model (i.e., Ireland, Netherlands, and the UK) have a lower conditional conservatism level than those belonging to countries operating under the Continental model (i.e., the other countries in the sample); (2) the recognition of bad news over good news decreases in the post-period of the IFRS adoption (-0.0510 ; p value < 0.05); (3) this decrease is more pronounced in countries operating under the Continental model; and (4) the difference in the conservatism level between countries operating under both models diminished after IFRS adoption. Thus, and according to Zéghal and Lahmar (2016), IFRS promote the harmonization of conditional accounting practices.

Using a sample of 2111 listed non-financial firms from 17 European countries that mandatorily adopted IFRS over the period 2005–2008, Ke et al. (2013) assess the effect of mandatory IFRS adoption on conditional accounting conservatism defined using Basu's (1997) differential timeliness (DT) measure. An important distinction of their study is that

they compare the DT coefficient under two different sets of accounting standards, domestic standards versus IFRS, for the same firm-years.^{16,17} The authors find no evidence that the mandatory IFRS adoption results in any significant change in accounting conservatism, irrespective of the legal enforcement quality of the firms' countries of domicile. Further, and based on the implicit assumption that the mandatory IFRS adoption is an economically significant event only for firms from countries with domestic standards that differ significantly from IFRS, Ke et al. (2013) replicate the analysis after removing the following countries: the UK, Ireland, Netherlands, and Norway.¹⁸ Unfortunately, the authors fail to provide support for their prediction. Indeed, they report that their findings continue to hold.

In a related study, André et al. (2015) investigate the mandatory adoption of IFRS in Europe and its impact on conditional conservatism and whether institutional factors or inappropriate application of particular accounting mechanisms (such as impairment testing rules) can explain changes in conditional conservatism post-IFRS adoption. The authors argue that though the switch to IFRS introduced accounting rules and procedures intended to promote conditional conservatism, each country's ability to enforce these rules and procedures will also influence firm's levels of conservatism in the post-IFRS area. Furthermore, André et al. (2015) focus on impairment testing rules for non-financial assets (all tangible and intangible fixed assets, including goodwill) which can be considered as IFRS' main mechanism ensuring earnings conservatism (e.g., Kim et al. 2013; Lawrence et al. 2013; Paugam and Ramond 2015).

André et al. (2015) sample consists of 13,711 firm-year observations from 16 European countries over the period of 2000–2010.¹⁹ To estimate conditional conservatism (in their main tests), the authors use an extension of the Khan and Watts (2009) version of the Basu (1997) measure also

¹³ They also include country and industry fixed effects.

¹⁴ The authors use the country-specific GAAP differences score as defined in Bae et al. (2008) to construct their partitions.

¹⁵ The authors note that introducing control variables, including *SIZE* (natural logarithm of end-of-year market value of equity), *LEV* (end-of-year total liabilities divided by end-of-year book value of equity), and *GROWTH* (annual percentage change in sales), in their model has no effect on their inferences.

¹⁶ They exploit the requirement of IFRS that when a firm adopts IFRS it must provide a reconciliation of net income and equity book value based on domestic standards to those based on IFRS for the last year the firm applied domestic standards.

¹⁷ A common feature of the previous (and even future) studies' research design is that they examine the change in accounting conservatism in the period before versus the period after the mandatory IFRS adoption (i.e., an intertemporal approach). As noted by Barth et al. (2014, p. 302), "a limitation of intertemporal approaches is that such approaches make it difficult to rule out competing explanations for observed changes in characteristics of accounting amounts for firms adopting IFRS, i.e., changes in the reporting environment unrelated to characteristics of accounting amounts".

¹⁸ Based on Bae et al. (2008), they eliminate countries whose differences between domestic standards and IFRS are no greater than 7 (i.e., one third of the 21 items in Bae et al. (2008)).

¹⁹ André et al. (2015) analyze 16 countries—the 15 "old" EU member states (excluding Luxembourg which had insufficient data) plus Norway and Switzerland.



known as the C_Score, in which they include controls for the effects of shifts in unconditional conservatism and cost of capital after the adoption of IFRS. They show that conditional conservatism has significantly decreased after the mandatory adoption of IFRS in Europe in 2005.²⁰

Next, André et al. (2015) explore if the strength of enforcement led to a change in the degree of timely loss recognition after the adoption of IFRS in 2005 using a recent index, developed by Brown et al. (2014), measuring the quality of the auditing environment and the strength of accounting enforcement activity (Brown et al. 2014). The authors show that the decrease in timely loss recognition is less pronounced for high auditing quality/strong accounting enforcement countries. They conclude that “the institutional environment appears to be particularly important to the application of IFRS” (André et al. 2015, p. 486). This result contrasts with the findings of Ahmed et al. (2013) (discussed later in this subsection) who report a more significant decline in the conditional conservatism for high enforcement countries. This contradiction could come from two factors: the difference in the index of law enforcement used by the two studies and the length of the periods under investigation which may have an impact on the ability to achieve better relative enforcement of IFRS (André et al. 2015).

The third and final hypothesis of their study deals with the role played by assets impairment testing rules in the change of the degree of conditional conservatism in Europe. In particular, they examine the effect of impairment recognition and impairment avoidance on the level of conditional conservatism after the adoption of IFRS. The authors show that firms that book impairment (on any assets, on intangible assets and on goodwill) exhibit a smaller decrease in the level of earnings conservatism relative to other firms (non-impairers) that carry similar assets. They also show that firms that do not recognize asset impairment, although evidence suggests the probable need to do so, present a greater decline in the degree of earnings conservatism than other firms. André et al. (2015, p. 507) conclude that “on average, impairments are potentially not booked in a timely fashion (because there is too much flexibility and/or lack of enforcement), thus reducing overall timely loss recognition of financial reporting.”

Piot et al. (2015), in their working paper, investigate the effect of mandatory IFRS adoption on accounting conservatism for European listed companies, with a focus on the way auditor characteristics (i.e., reputation and industry specialization) moderate these effects. Piot et al. (2015) cover 20 EU countries over the period 2001–2008, with 19,215 firm-year observations from 2973 firms. Conditional conservatism is

measured by Basu’s (1997) asymmetric timeliness model. The authors’ result confirms that of previous studies: conditional conservatism decreased post-IFRS adoption. Piot et al. (2015) further show that this decrease is only attributable to Big 4-audited companies (i.e., to the reputation of the auditor). They do not document a similar moderating effect using auditor industry specialization metrics instead of the Big 4 label.

Based on a sample of 916 firms (totaling 11,169 firm-year observations) over a longer period (2000–2014), Guermazi and Halioui (2018) investigate how the mandatory shift from domestic standards to IFRS in Europe affects the conservatism level of reported accounting earnings (i.e., conditional conservatism). The pre-IFRS adoption period (from 2000 to 2004) is compared to the post-IFRS adoption period (from 2006 to 2014). In the main tests, the authors use the Basu’s (1997) earnings-return specification. Results show that conditional conservatism has increased after the mandatory adoption of IFRS in Europe in 2005. Moreover, greater increase in conditional conservatism is observed in countries whose pre-IFRS domestic standards differed more from IFRS.

Moving beyond the EU, Ahmed et al. (2013) investigate the mandatory adoption of IFRS and its effect on properties of accounting numbers they identify as reducing accounting quality—income smoothing, earnings management to beat or meet a target, and reporting aggressiveness. For reporting aggressiveness, they use two proxies: the magnitude of signed accruals and the Basu’s (1997) timely loss recognition measure.²¹ To test their hypothesis on the timeliness of loss recognition, they use a treatment sample of 1343 first-time IFRS adopters (6715 firm-year observations) from 20 countries requiring IFRS beginning in 2005 compared to 1356 benchmark firms (6780 firm-year observations) from 15 countries not requiring IFRS adoption.^{22,23} The period under investigation was split into a pre-IFRS period (2002–2004) and a post-IFRS period (2006–2007). Ahmed et al. (2013) augmented the Basu (1997) model with variables to allow the slope coefficients to vary over periods

²⁰ They argue that this result holds even when using the classic Basu (1997) model.

²¹ Given the concerns about the validity of the Basu (1997) measure, Ahmed et al. (2013) use the asymmetric timeliness measure “only to supplement [their] accruals test in providing evidence on changes in aggressiveness of financial reporting after IFRS adoption and to compare [their] findings with prior work that has used timeliness of loss recognition measures” (p. 1354).

²² The IFRS adopters comprise of mainly EU countries plus Australia, Hong Kong, Norway, Philippines, South Africa, and Switzerland.

²³ Ahmed et al. (2013, footnote 4, p. 1346) argue that “given that properties of accounting numbers are affected by changes in the economic environment, it is difficult to draw inferences about the effects of mandatory adoption without a benchmark that controls for contemporaneous changes in the global economic environment over time.”



and over IFRS and benchmark samples. In a slight variation to the original Basu (1997) measure, the dependent variable used is the residual from regressing earnings per share before extraordinary items (scaled by stock price at the fiscal year-end of $t-1$) on country and industry fixed effects.²⁴ The authors find evidence of a significant decrease in timeliness of loss recognition for firms in IFRS adopting countries relative to benchmark firms.

Furthermore, Ahmed et al. (2013) link IFRS adoption and timely loss recognition to an institutional factor, namely strength of legal enforcement.²⁵ They argue that accounting quality may decline after mandatory IFRS adoption even in strong enforcement countries given that managers have incentives to exercise their discretion in their own interests, or because principles-based standards are looser, on average, than domestic standards and thus may be more difficult to enforce. For weak enforcement countries, even if IFRS are of higher quality than domestic GAAP, they are unlikely to result in improvements in accounting quality because they are unlikely to be properly enforced. Breaking their sample into two subsamples, strong legal enforcement and weak legal enforcement, the authors replicate the analysis for each subsample. They find that the decrease in the asymmetric timeliness of loss recognition appears to be driven by adopters in strong enforcement countries relative to non-adopters. In contrast, there were no significant changes in the corresponding coefficients in weak enforcement countries. These results are consistent with the arguments presented above.

In a concurrent study, Jaweher and Mounira (2014) find that IFRS earnings are not more conservative than earnings based on local GAAP regulation for a sample of 1901 mandatory adopting firms within 17 countries from Australia and Europe over the period 2001–2010. Their primary metric to measure timely loss recognition is based on the framework of Ball and Shivakumar (2005). However, they use net income instead of accruals as the dependent variable.

With the exception of the studies by Ke et al. (2013), Jaweher and Mounira (2014) and Guermazi and Halioui (2018), previous literature consistently reveals decreased conditional conservatism in the years after IFRS adoption. One potential reason for this result is that enforcement mechanisms at the time of IFRS adoption are insufficient to offset the greater flexibility relative to domestic GAAP (e.g., Ahmed et al. 2013; Ball et al. 2015; Zéghal et al. 2012). André et al. (2015) argue that the ability to achieve better relative enforcement of IFRS may take more than three

years after IFRS adoption. Therefore, how the standards are applied and enforced is instrumental in determining how IFRS affects conditional conservatism (Ahmed et al. 2013). Another possible explanation, pointed out by Brüggemann et al. (2013), is that the effect documented in previous studies “could simply be artefacts of the short history of mandatory IFRS adoption, reflecting a combination of idiosyncratic, transitory effects of first-time adoption and low statistical power due to relatively short analysis periods” (p. 22). A final explanation is that the studies use a (modified²⁶) conservatism measure based on Basu (1997) specification, the validity of which has been hotly debated in the literature (e.g., Ball et al. 2013a, b; Banker et al. 2016; Cano-Rodríguez and Núñez-Nickel 2015; Collins et al. 2014; Dietrich et al. 2007; Givoly et al. 2007; Patatoukas and Thomas 2011, 2016; Roychowdhury and Watts 2007).

Conclusion

IFRS has become a global concern since its publication and implementation. Most of the countries around the world have committed to adopt IFRS in preparing their financial statements. There is still much debate about the consequences of the application of IFRS. In the present state of knowledge, it seems unsafe to attempt to draw an overall conclusion on the effect of IFRS adoption on earnings conservatism across the EU, except that the effect differs among countries. Taking into account all the papers reviewed in this study, it is indeed impossible to say whether earnings conservatism improved after IFRS adoption. Future research may review the question of the influence of IFRS adoption in the EU on other aspects of financial reporting quality.

Declarations

Conflict of interest The author declares no potential conflict of interest.

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²⁴ Using the raw value instead of the residual value, Ahmed et al. (2013) find support for their primary inferences (i.e., less timely loss recognition).

²⁵ Ahmed et al. (2013) measure the strength of legal enforcement using the rule of law variable for 2005 from Kaufmann et al. (2007).

²⁶ I mean C_SCORE metric estimated following Khan and Watts (2009).



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