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# Do differences in national cultures affect cross-country conditional conservatism behavior under IFRS?

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#### **Graphical abstract**

National c	ulture
Individualism	Uncertainty Avoidance
<b>₽</b> -	+
Conditional conservatism in	n the post-IFRS period

#### Abstract

The purpose of this paper is to explore whether international differences in cultural dimensions of individualism and uncertainty avoidance affect how managers from different countries implement International Financial Reporting Standards (IFRS) and influence cross-country conditional conservatism behavior. We analyze the

conditional conservatism behavior of publicly listed firms in 14-member countries of the European Union (EU) during the period 2006-**2016**. The results confirm the relationship between the individualism and uncertainty avoidance dimensions of national culture and conditional conservatism in the post-IFRS period. Particularly, conditional conservatism is higher in countries where individualism is lower and where uncertainty avoidance is higher.

Keywords National culture – Conditional conservatism – IFRS – European Union

#### 1. Introduction

Earnings information is crucial for decision-making by the users of financial statements, including stockholders, financial analysts, creditors, tax authorities, managers, and even economists (Black 1980; Gray et al. 2015). In addition to several firm-level determinants, accounting researchers have provided evidence that country-level differences affect the quality of earnings such as the legal system origin (e.g., Ball et al. 2000; Ball et al. 2003). Gray (1988) asserts that national culture also "influences accounting measurement practices thus impacting earnings quality differentially across countries" (Gray et al. 2015, 828). While the earlier studies (Salter et al. 2013; Kanagaretnam et al. 2014) reveal an association between national culture and international differences in earnings conservatism,<sup>1</sup> it is not clear whether this relation persists under a single accounting framework. Thus, the focus of this study is to investigate the extent to which the mandatory adoption of international accounting standards<sup>2</sup> in the European Union (EU) influences the impact of national culture on earnings conservatism. This research is motivated by the growing interest in the influences of culture on business practices including accounting (Gray et al. 2015; Brochet et al. Forthcoming).

Culture is a concept that has been studied, researched and discussed for thousands of years. A highly recognized in-depth study of culture was conducted by Geert Hofstede in the early 1980s. A notable outcome of his study was an understanding of culture itself (Young 2013). Hofstede (1984, 82) described culture as: "the collective programming of the mind which distinguishes the members of one group or society from those of another".

Conditional conservatism means that book values are written down under sufficiently adverse circumstances but not written up under favorable circumstances (Bonetti et al. 2017). It is an

<sup>&</sup>lt;sup>1</sup> In this research, the terms 'earnings conservatism', 'conditional conservatism', and 'accounting conservatism' are used interchangeably.

<sup>&</sup>lt;sup>2</sup> The international accounting standards refer to International Financial Reporting Standards ("IFRS") and International Accounting Standards ("IAS"). IAS are a set of international accounting standards issued by International Accounting Standards Committee, which is the former international accounting standard setter that is replaced by International Accounting Standards Board (IASB) in 2001.

important and desirable attribute of financial reporting (Givoly et al. 2010; Kanagaretnam et al. 2014).

The importance of national culture as an explanatory factor for differences in levels of accounting conservatism across countries is due to the fact that conservatism choices "are not made by automatons but rather by managers or board members" (Salter et al. 2013, 608). What is even more interesting is that managers or board members "whether aware of it or not, are influenced by culture, and their behavior reflects this" (Cieslewicz 2014, 513). In this regard, it is argued that individual's cultural beliefs and values have a broad and profound influence on their thoughts, judgments, and decisions (Chung 2017). Consistent with prior literature, we consider two cultural dimensions identified by Hofstede (2001) namely: individualism and uncertainty avoidance. Hofstede's individualism dimension focuses on self-construals (independent or interdependent) and captures the extent to which individuals target their goals over those of their groups. Uncertainty avoidance is associated with unpredictability about the future and reflects the extent to which people feel uncomfortable with uncertain, unknown, or unstructured (i.e., ambiguous) situations. In uncertainty avoidance cultures, there is a need for rules and procedures to counter any ambiguity or uncertainty. We focus on these two dimensions because they have the clearest implications for managers' choice behaviors (e.g., Han et al. 2010; Salter et al. 2013; Kanagaretnam et al. 2014).

In the context of IFRS, André et al. (2015), Bonetti et al. (2017), and Guermazi and Halioui (2018), among others, argue that the transition to IFRS introduces accounting rules intended to increase conditional conservatism relative to domestic GAAP. Recent findings by Guermazi and Halioui (2018) suggest that even though IFRS provide managers with flexibility in the application of the standards, they lead to more conservative reporting practices. Recall that the adoption of such principles-based standards (the *de jure* harmonization) is meant (i) to improve the quality of accounting information and (ii) to achieve harmonized reporting practices in all jurisdictions (the *de facto* harmonization) (e.g., Callao and Jarne 2010; Ozkan et al. 2012). However, it is possible that this desired *de facto* harmonization may remain theoretical rather than real (e.g., Hope et al. 2006; Bradshaw and Miller 2008; Zéghal et al. 2012; Gray et al. 2015; McGee 2015). The argument behind this assumption is that IFRS standards (like any other set of accounting standards) provide managers with substantial discretion (e.g., Jeanjean and Stolowy 2008; Callao and Jarne 2010; Ball et al. 2015; Florou et al. 2017). How managers use this discretion is likely to depend on their reporting incentives (Daske et al. 2008), which are shaped by many factors, including national culture (Kanagaretnam et al. 2014).

This study applies Gray's (1988) conceptual framework, as extended by Doupnik and Tsakumis (2004), and used by Salter et al. (2013), in order to explore the impact of differences in national cultures across a number of EU countries on the extent of conditional conservatism behavior in the post-IFRS period. Using a sample of 9,237 firm-year observations during the period 2006–2016, we confirm the relationship between the individualism and uncertainty avoidance dimensions of national culture and conditional conservatism in the post-IFRS period. Particularly, conditional conservatism is higher in countries where individualism is lower and uncertainty avoidance is higher. Our results hold up to a number of robustness tests.

This study contributes to the literature in three important ways. First, we directly address the debate on whether accounting standards alone are sufficient for comparable reporting behavior. Prior literature has seen accounting standards as the primary input for high-quality reporting (Levitt 1998). Ball et al. (2003), however, state that reporting quality is an endogenous function of managers' incentives, market demands and political influences. We corroborate their assertion and provide evidence that factors other than accounting standards have a significant impact on firms' reporting practices. Our findings support the view that accounting practices harmonization is unlikely to be achieved by accounting standards alone.

Second, a growing stream of studies demonstrate that national culture has an impact on a wide range of economic activities (e.g., Zheng et al. 2012; Gray et al. 2013; Ashraf et al. 2016; Boubakri and Saffar 2016; Chui et al. 2016). These studies argue that shared values and preferences impact the way that people respond to economic incentives and the institutions that make up an economic system. Despite theoretical arguments for the important role that national culture plays in shaping individual behavior, empirical evidence on how this shaping manifests in the context of corporate reporting is largely missing (Brochet et al. Forthcoming). Our study thus contributes to this scarce area of research by investigating the association between national culture and international differences in earnings conservatism. While existing studies (Salter et al. 2013; Kanagaretnam et al. 2014) show that national cultural differences affect earnings conservatism, these studies use firms that report under different standards. Consequently, they have not distinguished whether national culture affects accounting standards (i.e., standard setting), or both. We add to these studies by focusing on the implementation of uniform set of accounting standards.

Third, we contribute to the growing accounting literature that recognizes the importance of accounting for national cultural differences when analyzing accounting decisions that managers make.

This study adds value not only in its results, but also in its methodological and data improvements on previous research work. Indeed, similar to Salter et al. (2013) and Kanagaretnam et al. (2014), we use actual financial data to measure accounting conservatism, while most of the previous studies (e.g., Doupnik and Richter 2004; Doupnik and Riccio 2006; Tsakumis 2007; Chand 2012; Chand et al. 2012; Hu et al. 2013) have used surveys or experiments. Findings by Ball et al. (2000) and Ball et al. (2003) suggest that there are often significant differences between prescribed GAAP and actual reporting practices.

The remainder of this paper is organized as follows. In the next section, we provide a review of the background literature and develop our hypotheses. Then, in section 3, we present our empirical framework. This is followed by a brief description of the data and sample selection procedure. Main empirical findings come next followed by robustness tests in section 6. Section 7 concludes the paper.

### 2. Background and hypotheses development

### 2.1. The reporting incentives view

Recent international accounting studies investigate the link between countries' institutions<sup>3</sup> and financial reporting attributes (such as accounting conservatism) (Wysocki 2011). In general, corporate reporting incentives are likely to be affected by several institutional factors such as market and political forces, ownership and governance structures, as well as by national culture (e.g., Wysocki 2011; Kanagaretnam et al. 2014; De George et al. 2016). While the research on the effect of institutions on accounting attributes "is still in its infancy" (Wysocki 2011, 315), the existing empirical evidence supports the idea that institutions affect firms' disclosure and reporting practices regardless of the accounting standards applied (e.g., Ball et al. 2000; Fan and Wong 2002; Leuz et al. 2003; Haw et al. 2004; Salter et al. 2013; Kanagaretnam et al. 2014). This literature highlights the role of institutional reporting incentives, rather than reporting standards, as a fundamental determinant of observed financial reporting attributes (Wysocki 2011).

<sup>&</sup>lt;sup>3</sup> North (1990) cited in Boubakri and Saffar (2016) distinguishes between formal institutions (which correspond to political, legal and regulating structures) and informal institutions, which come from socially transmitted information and are part of the heritage that we call culture.

The incentives view assumes that since the application of the reporting standards involves considerable judgment<sup>4</sup>, managers are entrusted with substantial reporting discretion (Leuz and Wysocki 2016). Furthermore, reporting standards "deliberately give discretion to managers because they intend to elicit managers' private information" (Leuz and Wysocki 2016, 583). The way in which managers use this discretion likely depends on their reporting incentives (e.g., Callao and Jarne 2010; Daske et al. 2013; Leuz and Wysocki 2016). Note that this is not just a matter of proper enforcement (e.g., Daske et al. 2008; Leuz and Wysocki 2016). Even with perfect enforcement, "standards would provide reporting discretion for good reasons, and, as long as there is discretion, reporting outcomes (e.g., the properties of earnings) are heavily influenced by incentives and not solely determined by standards" (Leuz and Wysocki 2016, 583-584). This view is fundamental to accounting and goes back at least to Watts and Zimmerman (1986) (e.g., Ball et al. 2003; Leuz and Wysocki 2016). Furthermore, Wysocki (2011) argue that the incentives view has direct implications for the IFRS debate because various studies show that, even when firms are subject to the same accounting standards, reporting practices differ considerably across firms and countries (e.g., Ball et al. 2003; Ball and Shivakumar 2005; Burgstahler et al. 2006; Lang et al. 2006).

### 2.2. Gray's theoretical framework of accounting values

Culture may affect corporate financial reporting policy choices (Khlif 2016). In this regard, and based upon a review of accounting literature and practice (Doupnik and Tsakumis 2004), Gray (1988) presents a theoretical model in which the differences in countries' financial reporting practices are related to national culture and institutional development (Salter and Lewis 2011). More importantly, Gray (1988) distinguishes between four accounting subculture values (professionalism, uniformity, conservatism and secrecy) and posits that they are closely linked to and derived from Hofstede's (1980) cultural values (Khlif 2016).

The accounting value of relevance to our current research is that of conservatism, which indicates "a preference for a cautious approach to measurement so as to cope with the uncertainty of future events as opposed to a more optimistic, laissez-faire, risk-taking approach". Specifically, Gray (1988, 10) hypothesized that "the higher a country ranks in terms of uncertainty avoidance and the lower it ranks in terms of individualism [...] then the more likely it is to rank highly in terms of conservatism".

<sup>&</sup>lt;sup>4</sup> A finite set of standards cannot anticipate all future contingencies that firms may face, and new circumstances, events and transactions may arise (Leuz and Wysocki 2016)

Gray (1988) explains his hypothesis in the following way: "[...] conservatism can be linked most closely with the uncertainty avoidance dimension. A preference for more conservative measures of profits is consistent with strong uncertainty avoidance following from a concern with security and a perceived need to adopt a cautious approach to cope with the uncertainty of future events. There would also seem to be a link, if less strong, between high levels of individualism [...] on the one hand, and weak uncertainty avoidance on the other, to the extent that an emphasis on individual achievement and performance is likely to foster a less conservative approach to measurement" (10)(p. 10).

It is interesting to note that Gray's (1988) notion of conservatism has elements of Basu's (1997, 4) conditional conservatism, where "earnings reflect bad news more quickly than good news" (Mohamed Yunos et al. 2012; Salter et al. 2013).

#### 2.3. Empirical tests of Gray's (1988) framework

Gray (1988) extends Hofstede's (1980) well-known work on national cultures to develop a theoretical framework that posits causal relations between cultural (societal) and accounting values. Gray does not operationalize the hypothesis or conduct any empirical tests (Doupnik and Tsakumis 2004). In concluding, Gray (1988, 14) states "empirical research now needs to be carried out to assess the extent to which there is in fact a match between ... societal values and accounting values". In fact, "determining the extent to which the theory holds is of academic interest but has practical implications as well" (Doupnik and Riccio 2006, 242). Gray's (1988) model has been tested at a number of levels. Since this study focuses on Gray's (1988) conservatism dimension, we will limit our review to those studies that test conservatism. Three studies (Eddie 1990; Salter and Niswander 1995; Sudarwan and Fogarty 1996) have focused on testing Gray's hypothesis using countries as the unit of analysis by examining relationships between Hofstede's cultural dimensions and one aspect of national accounting systems (accounting conservatism, in our case).

It is noteworthy that, in our research context, the relevance of the above research question declines. Indeed, as noted by Doupnik and Tsakumis (2004, 39), "after 2005, cultural differences across European countries will have limited, if any, impact on the accounting rules required to be followed by publicly traded companies". However, they add, "even if all countries have the same set of financial reporting rules, cultural-relativism may still be relevant in explaining differences in the way those rules are interpreted and applied by accountants from different countries. The pertinent question then becomes: Does national culture affect

*accountants' application of* a country's financial reporting rules? Answering this question requires research to be conducted at the individual level" (Doupnik and Tsakumis 2004, 39).

Based on this partial refinement of Gray's framework, Gray's conservatism hypothesis can be restated as follows: *Accountants from countries that rank higher (lower) in terms of uncertainty avoidance and lower (higher) in terms of individualism [...] will be more (less) conservative in their application of financial reporting rules (Doupnik and Tsakumis 2004, 40).* 

Several subsequent studies have tried to test Gray's restated conservatism hypothesis (e.g., Doupnik and Riccio 2006; Tsakumis 2007). However, these studies examine cultural differences between a limited number of countries, typically two or three. Additionally, these studies employ surveys or experiments without using the actual reported numbers to measure accounting conservatism. Exceptions are Salter et al. (2013) and Kanagaretnam et al. (2014).

Using a sample of 22 countries over the period of 1989 through 2006, Salter et al. (2013) investigate whether national culture is a neglected explanatory factor for differences in levels of accounting conservatism across countries. Building on prior work by Hope et al. (2008), Salter et al. (2013) operationalize Gray's (1988) accounting value of conservatism by using a composite measure of Hofstede's cultural dimensions.<sup>5</sup> The proxies Salter et al. (2013) use for conditional conservatism are derived from the Basu (1997) reverse-regression between earnings and returns. They estimate the Basu (1997) model in each country-year (country-level approach), and use coefficients from that regression in their main analysis. Following Givoly and Hayn (2000), Salter et al. (2013) also use an alternative non-market measure of conditional conservatism is greater in countries with more conservative societal and accounting values. Furthermore, looking at the societal Hofstede values individually, they find that individualism and uncertainty avoidance are unrelated to timely loss recognition and are weakly related to non-operating accruals. The results are found after controlling for prior known differences between countries such as legal, institutional and economic differences.

Using an international sample of banks over the period 2000-2006 and country-level indices for individualism and uncertainty avoidance as proxies for national culture, Kanagaretnam et al. (2014) study how differences in culture across countries affect firm-level conservative reporting behavior. Consistent with expectations, their cross-country analysis indicates that

<sup>&</sup>lt;sup>5</sup> This is calculated as Hofstede's uncertainty avoidance score minus the sum of the individualism and masculinity scores (Salter et al. 2013).

individualism is negatively related to conservatism and uncertainty avoidance is positively related to conservatism.

Our research differs from Salter et al. (2013) and Kanagaretnam et al. (2014) in that we only include the countries that have adopted IFRS so that all countries use a single set of accounting standards. Previous cultural accounting studies use countries with different reporting standards, which does not allow distinguishing whether culture affects reporting outcomes through the application or the development (i.e. standard setting) of the standards. Because IFRS are developed externally by IASB, using IFRS countries minimizes culture's influence on the development of accounting standards, which also would affect cross-country accounting conservatism behavior. The facts that IFRS are relatively constant across countries and are developed externally allow better testing of whether cultural differences reduce accounting conservatism through the implementation of accounting standards.

#### 2.4. Hypotheses development

From a normative perspective, IFRS can be considered conditionally conservative (André et al. 2015; Guermazi and Halioui 2018). The rules under IFRS appear to be more conservative compared to those under domestic GAAP (e.g., the elimination of goodwill amortization and the introduction of an impairment-only approach with write-offs if necessary), and hence, conditional conservatism should probably be more pronounced in the post-IFRS era (Guermazi and Halioui 2018).

Impairment-testing can arguably be considered as one of the key mechanisms ensuring conditional conservatism of financial reporting (Kim et al. 2013; Lawrence et al. 2013; Filip et al. 2015; Paugam and Ramond 2015; André et al. 2016). Note, however, that the implementation of impairment tests (in particular for intangible assets with indefinite lives among which goodwill) requires managers to make substantial and subjective judgments and assumptions (e.g., Petersen and Plenborg 2010; André et al. 2015; Paugam and Ramond 2015; Kabir and Rahman 2016; Mazzi et al. 2016). Gray et al. (2015) argue that judgments are likely to be influenced by culture. Thus, to the extent managers have more discretion (i.e., a high degree of judgment and estimation) under IFRS, it seems that the influence of culture on accounting choice may be expected to persist in the post-IFRS adoption period (Gray et al. 2015).

If culture is a fundamental informal institution that is slow to change, we expect to observe a persistent effect of culture on conditional conservatism during the period when EU firms use a

uniform set of accounting standards (i.e., IFRS). Specifically, we predict the associations between individualism and uncertainty avoidance with conditional conservatism will continue to be observable in the post IFRS period and formulate our hypotheses as follows:

H1: Culture affects the level of conditional conservatism post-IFRS in Europe.

**H1a:** Individualism is negatively related to the level of conditional conservatism post-IFRS in Europe.

**H1b:** Uncertainty avoidance is positively related to the level of conditional conservatism post-IFRS in Europe.

#### **3.** Empirical framework: Firm-level tests<sup>6</sup>

#### The Basu conservatism metric

Basu's (1997) differential timeliness metric is the most commonly used proxy for conditional conservatism (Ettredge et al. 2012), and is the primary conservatism metric investigated in this study. Conditional conservatism is viewed as requiring higher verification standards for recognizing good news (positive returns) in earnings than for recognizing bad news (negative returns), resulting in asymmetric timeliness of recognition of earnings declines versus gains in accounting income. The Basu model is as follows:

$$NI_{it} = \alpha_0 + \alpha_1 RET_{it} + \alpha_2 NEG_{it} + \alpha_3 RET_{it} * NEG_{it} + \varepsilon_{it}$$
(1)

In Equation (1), the subscripts *i* and *t* indicate firm and year, respectively, and  $\varepsilon$  is the error term; *NI* is net income before extraordinary items deflated by the beginning of the fiscal year market value of equity; *RET* is the holding-period return over the company's fiscal year, adjusted for dividends (i.e.,  $[P_t - P_{t-1} + D_t] / P_{t-1}$ , where P<sub>t</sub> is the price of shares of firm i at the end of the fiscal year t, P<sub>t-1</sub> is the price of shares of firm i at the end of the fiscal year t, P<sub>t-1</sub> is the price of shares of firm i at the end of the fiscal year t, P<sub>t-1</sub> is the price of shares of firm i at the end of the fiscal year t-1, and D<sub>t</sub> is dividends paid per share of firm i over time period t-1 to t);<sup>7</sup> *NEG* is a dummy variable equaling one if *RET* is less than zero, and zero otherwise. Coefficient  $\alpha_1$  captures the sensitivity of accounting income to economic gains; ( $\alpha_1 + \alpha_3$ ) capture the sensitivity of accounting income to economic gains; ( $\alpha_1 + \alpha_3$ ) capture the sensitivity of accounting income to economic gains; ( $\alpha_1 + \alpha_3$ ) capture the sensitivity of accounting income to economic gains; ( $\alpha_1 + \alpha_3$ ) capture the sensitivity of accounting income to economic gains; ( $\alpha_1 + \alpha_3$ ) capture the sensitivity of accounting income to economic losses; and  $\alpha_3$  is the differential slope for bad versus good economic news

<sup>&</sup>lt;sup>6</sup> Another possibility is to conduct our analysis with country-level regressions (e.g., Salter et al. 2013). However, "a cost of the country-level approach is that it places more weight on firms from smaller countries" (Mclean et al. 2012, 319). As an example, Austria has 32 firm-year observations, while France has 2,210, so when we use country-level regressions we give each Austrian observation 69 times more weight than each French observation. The country-level regressions are therefore biased towards the effects of firms from smaller countries (see Holderness (2008) for a detailed discussion regarding firm-level versus country-level analyses).

<sup>&</sup>lt;sup>7</sup> We obtain the same main results if we use share return of firm i in year t, adjusted for firm i's country average return in year t as in André et al. (2015) and Ferramosca and Ghio (2018).

(differential timeliness). Accounting income is reported conservatively if it is more sensitive to bad news than to good news, that is, if  $\alpha_3$  is positive.

### **Research** design

Next, to examine the impact of national culture on earnings conservatism in the post-IFRS area (H1a and H1b), we estimate the following augmented Basu model:

 $NI_{it} = \alpha_0 + \alpha_1 RET_{it} + \alpha_2 NEG_{it} + \alpha_3 RET_{it} * NEG_{it} + \alpha_4 CULTURE + \alpha_5 CULTURE * RET_{it} + \alpha_6$  $CULTURE * NEG_{it} + \alpha_7 CULTURE * RET_{it} * NEG_{it} + \alpha X_{it} + \alpha W_k + Year fixed effects + \varepsilon_{it}$ (2)

where *CULTURE* represents the two dimensions of national culture (i.e., individualism (*IND*) and uncertainty avoidance (*UAI*); see Table 2 for the definitions of these two variables);  $X_{it}$  is a vector of firm-level control variables outlined in Table 1;  $W_k$  is a vector of country-level control variables outlined in Table 2; and all other variables are as defined previously in Model (1) above. Additionally, Model (2) includes year fixed effects to control for any unobserved time-varying effect common across all firms that affect net income. The inclusion of control variables allows us to better assess the incremental effect of national culture on conditional conservatism (e.g., Zheng et al. 2012; Dhaliwal et al. 2014; Kanagaretnam et al. 2014).

Firm-level control variables are included to capture firm characteristics that are identified as potential factors to affect conditional conservatism as in prior research (Lafond and Roychowdhury 2008; Shuto and Takada 2010; Ramalingegowda and Yu 2012; Sultana 2015; Sultana and Mitchell Van der Zahn 2015; Rickett et al. 2016).

In addition, following past studies (Salter et al. 2013; Kanagaretnam et al. 2014), we include three country-level factors that could affect earnings conservatism: ENFORCE, which measures the degree to which the law is fairly and effectively enforced in a country, LGDP, which control for economic well-being of the country, and COMMON, which control for the legal system origin – common law vs. code law.

Following Kanagaretnam et al. (2014), we estimate the above and all the following models in this study with robust standard errors clustered by country and firm to correct for heteroscedasticity and serial dependence (Petersen 2009). To mitigate the impact of outliers on the regression results, we winsorize all continuous variables each year at the 1st and 99th percentiles.

Our main predictions are that firms in high individualism societies will have less conservative accounting whereas firms in high uncertainty avoidance societies will have more conservative

accounting. Specifically, we predict that the coefficient  $\alpha_7$  on *CULTURE\*RET<sub>it</sub>\*NEG<sub>it</sub>* will be negative (positive) in high individualism (high uncertainty avoidance) societies.

### 4. Sample, cultural dimensions, and descriptive statistics

### Data and sample construction

Our data come from WorldScope (for financial statement data) and Datastream (for stock price data), with a time period spanning from 2006 to 2016. Consistent with prior studies (e.g., André et al. 2015; Guermazi and Halioui 2018), we exclude financial firms (SIC code  $\geq$  6000 and SIC code  $\leq$  6999) because they follow specific reporting regulations. We also exclude firms that were cross-listed on one of the three major US stock exchange (New York Stock Exchange (NYSE), American Stock Exchange (AMEX), or National Association of Securities Dealers Automated Quotations (NASDAQ)) as American Deposit Receipts (ADRs) during our sample period based on the ADR databases provided by the Bank of New York, Citibank, and JP Morgan.<sup>8</sup> Finally, we delete firms with non-December 31 year-ends (e.g., Kohlbeck and Warfield 2010; Zéghal et al. 2012; Guermazi and Halioui 2018). The final sample contains 9,237 firm-year observations, for 902 individual firms across fourteen European countries that prepare their consolidated financial statements according to IFRS. These countries are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden, and the UK.

The EU appears to be a very appropriate setting for this study as it has many advantages when compared with previous studies addressing the same research question.

On the one hand and as noted by Liñán and Fernandez-Serrano (2014), the EU is a culturally heterogeneous geographic area. They claim that "even though some aspects of what may be called a 'common European culture' distinguish Western Europe from other developed countries, when a closer look is taken, relevant differences between European countries regarding culture do emerge" (686)(p. 686). In addition, Gray et al. (2015, 828-829) argue that the EU has "a more or less unified legal system impacting accounting as each member state must adopt EU regulations directly and/or incorporate EU directives into local law. The EU securities markets are fairly homogeneous in the sense that laws, regulations and standards governing investment, securities and company activities are similar across national borders.

<sup>&</sup>lt;sup>8</sup> Lang et al. (2003) find, for an international sample of non-financial firms, that accounting quality is higher for firms cross-listed in the US, relative to a matched sample of foreign firms that are not cross-listed. Specifically, cross-listed firms exhibit more conservative accounting earnings.

Moreover, the EU has a single commercial market thus many aspects of the economic system and regulations governing business transactions (e.g. banking) are relatively homogeneous compared to the rest of the world. At the same time, each member state appears to have maintained its distinct culture and tradition during the harmonization process". From these two points of view, we can conclude, similar to Gray et al. (2015), that the EU has remained a culturally diversified, but a politically, legally and financially integrated economy, and therefore this research setting is well suited for studying the effects of national culture on conditional conservatism behavior as it minimizes the impact of changes in formal institutional factors, apart from the adoption of IFRS.

On the other hand, prior studies have difficulty examining how institutionally shaped reporting incentives affect financial reporting outcomes given that these outcomes "are influenced *simultaneously* by accounting standards and by reporting incentives" (Isidro and Raonic 2012, 408). Holthausen (2003) and Schipper (2005), among others, argue that when institutional factors and accounting standards vary simultaneously, it is difficult to single out their individual effects on the properties of accounting information. Nevertheless, many previous international studies do not examine the effects of institutional factors on the quality of the financial reporting in a setting with constant accounting standards (Isidro and Raonic 2012). Following Isidro and Raonic (2012), we fill this gap by investigating the quality of accounting outcomes (earnings conservatism, in our case) in a context where institutional factors (national culture, in our case) vary but accounting standards remain constant. In this vein, Isidro and Raonic (2012, 408) suggest that "mandatory adoption of IFRS across a large number of jurisdictions provides not similar but identical standards of a high quality".

Table 1 reports the frequency distribution and mean values of selected variables (both test and control variables) by fiscal year. The three test variables scaled net income (*NI*), stock returns (*RET*), and scaled accruals (*ACCR*) display considerable variation over time. The mean value of scaled net income before extraordinary items (*NI*) ranges from a minimum of -0.098 in 2013 to a maximum of 0.051 in 2006 and 2007. The mean value of stock returns (*RET*) is negative in two out of the 11 years and the percentage of negative stock returns (*NEG*) ranges from 16.1 percent in 2009 to 96.7 percent in 2008. The mean value of scaled accruals (*ACCR*) ranges from -0.347 in 2009 to -0.048 in 2007. The mean value of scaled operating cash flows (*CFO*) ranges from 0.084 in 2008 to 0.291 in 2009. However, the percentage of negative scaled operating cash flows (*DCFO*) exhibits little variation over the sample period with values ranging from 11.7 percent in 2009 to 15.9 percent in 2006.

In terms of control variables, the mean value of firm size increases from  $\notin 1,773$  million in 2008 to  $\notin 4,456$  million in 2016. The mean value of leverage (*LEV*) exhibits little variation over the sample period with values ranging from 16.8 percent in 2006 to 20.8 percent in 2016. The mean value of market-to-book ratio (*MTB*) ranges from 1.309 in 2008 to 3.088 in 2006.

TABLE 1	
Sample distribution by fiscal year	

		Test variabl	es					Control vo	ariables	
Fiscal year	Ν	NI	RET	NEG	ACCR	CFO	DCFO	SIZE	LEV	MTB
2006	899	0.051	0.332	0.211	-0.054	0.098	0.159	2,913	0.168	3.088
2007	892	0.051	0.038	0.496	-0.048	0.097	0.139	2,999	0.178	2.430
2008	889	0.005	-0.464	0.967	-0.087	0.084	0.142	1,773	0.202	1.309
2009	880	-0.051	0.578	0.161	-0.347	0.291	0.117	2,360	0.199	1.727
2010	870	0.013	0.249	0.318	-0.132	0.143	0.150	2,646	0.191	1.836
2011	855	-0.019	-0.130	0.709	-0.152	0.120	0.143	2,440	0.186	1.507
2012	840	-0.088	0.183	0.329	-0.288	0.181	0.152	2,663	0.196	1.593
2013	834	-0.098	0.342	0.219	-0.271	0.155	0.142	3,073	0.197	1.961
2014	821	-0.042	0.065	0.450	-0.173	0.108	0.149	3,149	0.197	1.933
2015	824	-0.026	0.267	0.282	-0.155	0.121	0.139	3,428	0.204	2.298
2016	633	0.017	0.132	0.383	-0.112	0.124	0.121	4,456	0.208	2.288

Notes: This table reports the sample distribution and the mean values of the variables used in our analysis for each fiscal year. All continuous variables are winsorized each year at the 1% and 99% levels.

**Variable definitions:** *NI* is net income before extraordinary items deflated by the beginning of the fiscal year market value of equity. *RET* is the holding-period return over the company's fiscal year. *NEG* is a dummy variable equaling one if *RET* is less than zero (market value decrease over fiscal year), and zero otherwise (market value increase). *ACCR* is net income before extraordinary items minus operating cash flows deflated by market value of equity at the beginning of the fiscal year. *CFO* is operating cash flows deflated by market value of equity at the beginning of the fiscal year. *CFO* is an indicator variable equaling one if *CFO* is less than zero, and zero otherwise. *SIZE* is market value of equity in €millions at the end of the fiscal year. *LEV* is measured as the book value of total debt (total long term debt + current portion of long term debt) divided by the total assets at the end of the fiscal year. *MTB* is the ratio of market value of equity divided by book value of equity at the end of the fiscal year.

### Cultural dimensions

Similar to prior studies (e.g., Salter et al. 2013; Kanagaretnam et al. 2014), we use Hofstede's scores to represent each country's cultural dimensions.<sup>9</sup> Although critiques of Hofstede's scores have appeared periodically in the literature, these have not curtailed their attractiveness and applications (Lee and Herold 2018). Hofstede's scores are "the most widely used measures of national culture and have produced a widely accepted, well-defined, empirically based terminology to characterize culture" (Hooghiemstra et al. 2015, 365). Hofstede's cultural dimensions comprise six different measures, namely individualism (*IND*), uncertainty avoidance (*UAI*), masculinity, power distance, long-term orientation, and indulgence. For the reasons noted above, our analysis focuses on the individualism and uncertainty avoidance dimensions.

Although the use of Hofstede's conceptual framework for categorizing national cultures may raise the issue that the data are outdated (e.g., Bernardi 2006; Zheng et al. 2012; Beugelsdijk et al. 2015),<sup>10</sup> Hofstede (1983, 2001) contends that these measures retain their validity over a long period because: (1) national culture is extremely stable over time ('the time-persistent property of culture' (Chui et al. 2016)) which is consistent with Williamson's (2000) framework,<sup>11</sup> and (2) country scores along these dimensions do not provide a country's absolute position but rather its position relative to other countries, which rarely shifts even if cultural changes occur. Moreover, and as noted by Zheng et al. (2012), several recent cross-cultural studies have validated Hofstede's work. For example, in their review of recent advances in the culture and international business literature, Leung et al. (2005) indicate that most of the cultural dimensions suggested by recent studies are conceptually related and empirically correlated with Hofstede's dimensions, suggesting that the latter are quite robust.

However, and according to Triandis et al. (1990), it is important to triangulate the findings with multiple methods when studying cultural differences. Thus, in robustness tests we examine whether our primary findings are sensitive to using alternative national culture measures, namely, Tang and Koveos' (2008) cultural dimensions.

 <sup>&</sup>lt;sup>9</sup> The most current version of the data is available at https://www.hofstede-insights.com/country-comparison.
<sup>10</sup> Other concerns regarding Hofstede's cultural constructs include that these constructs are not comprehensive as other important value constructs may be omitted and data is collected based on employee opinion surveys in subsidiaries of a single multinational corporation (IBM) around the world (Zheng et al. (2012); for a comprehensive review of these concerns, see, for example, Heidhues and Patel (2011) and Khlif (2016)).

<sup>&</sup>lt;sup>11</sup> Chui et al. (2016, 3) argue that "cultural values remain largely unchanged over time because parents and teachers tend to teach their children and students what they were taught by their parents and teachers. Indeed, schools play an important role in transmitting culture over generations".

### Descriptive statistics

The values of the institutional variables at the country-level are reported in Table 2, which also provides the number of firms and firm-year observations by country. The statistics show that our sample is dominated by firms from three countries: France (24.94%), the UK (12.97%), and Sweden (12.20%). Each of the other countries represents less than 8% of the sample. The individualism index (*IND*) is high in the UK (89) and Netherlands (80), but low in Portugal (27) and Greece (35). The uncertainty avoidance index (*UAI*) is high in Greece (100), Portugal (99), and Belgium (94), but low in Denmark (23) and Sweden (29). In summary, Table 2 exhibits a cross-country heterogeneity in the informal institution represented by national culture, suggesting that our investigation is indeed appropriate (e.g., Boubakri and Saffar 2016; Boubakri et al. 2017).

**TABLE 2** Institutional variable measures by country

<b>TABLE 2</b> Institutional varia	ble measures by country	y							
Country	Firm-year observations	% of firm-year observations	Number of firms	% of firms	IND	UAI	ENFORCE	COMMON	LGDP
Austria	32	0.35	3	0.33	55	70	6.38	0	10.768
Belgium	373	4.04	37	4.10	75	94	5.60	0	10.703
Denmark	365	3.95	34	3.77	74	23	6.00	0	10.992
Finland	715	7.74	66	7.32	63	59	6.96	0	10.749
France	2,210	23.92	225	24.94	71	86	6.67	0	10.626
Germany	513	5.55	58	6.43	67	65	6.51	0	10.665
Greece	723	7.83	72	7.98	35	100	4.12	0	10.155
Ireland	107	1.16	10	1.11	70	35	4.31	1	10.885
Italy	553	5.99	51	5.65	76	75	3.37	0	10.480
Netherlands	465	5.03	44	4.88	80	53	5.13	0	10.835
Portugal	233	2.52	22	2.44	27	99	5.47	0	10.004
Spain	569	6.16	53	5.88	51	86	5.53	0	10.334
Sweden	1,184	12.82	110	12.20	71	29	5.42	0	10.878
The UK	1,195	12.94	117	12.97	89	35	5.38	1	10.602
Totals	9,237	100.00	902	100.00					

Notes: This table reports measures of institutional characteristics by country. Column 1 identifies the country. Column 2 and column 3 report the number and the percentage of firm-year observations, respectively. Column 4 and column 5 report the number and the percentage of firms in the sample, respectively. Variable definitions: IND = Hofstede's cultural index on individualism; UAI = Hofstede's cultural index on uncertainty avoidance; ENFORCE = law enforcement index (for each country for each year) that ranges from 0 to 10, with higher values indicating greater law enforcement (Data from the Economic Freedom of the World (EFW) database); COMMON = indicator that equals 1 if the legal origin is common law, 0 otherwise (Data from La Porta et al. (1998)); LGDP = log of GDP per capita, in constant 2005 U.S. dollars (Data from Global Financial Development database).

#### 5. Empirical results

### Differences in cultural beliefs and values and conditional conservatism

Table 3 provides the results from the random-effects estimation of Equation (2). The first model examines the effect of individualism and the second model examines the effect of uncertainty avoidance. As expected, in both models, the estimated coefficient on  $RET_{it}$ \*NEG<sub>it</sub> is positive (0.9149 and 0.1661, respectively) and significant (*t*-statistic = 6.73) and *t*-statistic = 1.82, respectively), indicating that firms are timelier in reporting earnings declines compared with reporting earnings increases. Our main predictions are that firms in high individualistic (low collectivistic) and low uncertainty avoidance societies will report accounting earnings less conservatively. Consistent with our prediction, the coefficient on the interaction variable  $CULTURE * RET_{it} * NEG_{it}$  in Model (1) is negative (-0.0079) and significant (*t-statistic* = -4.19), indicating lower differential timeliness of recognizing earnings declines versus earnings increases in higher individualist societies. Also, consistent coefficient with our prediction, the on the three-way interaction term, CULTURE \* RET<sub>it</sub> \* NEG<sub>it</sub> in Model (2), is positive (0.0033) and significant (t-statistic = 1.87), indicating that recognition of earnings declines is more timely than recognition of earnings increases when uncertainty avoidance is higher. These results, which are in line with those in Salter et al. (2013) and Kanagaretnam et al. (2014), who use actual financial reporting data to measure conservatism, provide support for our predictions that conditional accounting conservatism is higher in societies where individualism is lower and where uncertainty avoidance is higher.

### TABLE 3

Cultural differences and cross-country conditional conservatism

	Model (1) CULTURE=	IND	Model (2) CULTURE=UAI		
Independent variables	Coefficient	t-statistic	Coefficient	t-statistic	
Intercept $(\alpha_0)$	-1.8464	-1.74*	-3.2856	-1.81*	
$RET_{it}(\alpha_1)$	-0.2702	-3.06***	0.0212	0.62	
$NEG_{it}(\alpha_2)$	-0.0040	-0.13	-0.0533	-1.74*	
$RET_{it}*NEG_{it}(\alpha_3)$	0.9149	6.73***	0.1661	1.82*	
CULTURE $(\alpha_4)$	-9.27e-06	-0.01	0.0011	1.16	
$CULTURE * RET_{it} (\alpha_5)$	0.0035	2.71***	-0.0007	-0.90	

 $NI_{it} = \alpha_0 + \alpha_1 RET_{it} + \alpha_2 NEG_{it} + \alpha_3 RET_{it} * NEG_{it} + \alpha_4 CULTURE + \alpha_5 CULTURE * RET_{it} + \alpha_6 CULTURE * NEG_{it} + \alpha_7 CULTURE * RET_{it} * NEG_{it} + \alpha_{it} + \alpha_{it} + \alpha_{k} + Year fixed effects + \varepsilon_{it}$ (2)

$CULTURE*NEG_{it}$ ( $\alpha_6$ )	-0.0001	-0.42	0.0006	1.48
CULTURE*RET <sub>it</sub> *NEG <sub>it</sub> ( <i>a</i> <sub>7</sub> )	-0.0079	-4.19***	0.0033	1.87*
$SIZE_{it}(\alpha_8)$	0.0372	2.86***	0.0370	2.94***
$LEV_{it}$ ( $\alpha_9$ )	-0.3536	-3.68***	-0.3549	-3.93***
$MTB_{it} (\alpha_{10})$	-0.0037	-1.68*	-0.0036	-1.51
ENFORCE $(\alpha_{11})$	0.0198	2.65***	0.0163	1.39
$LGDP(\alpha_{12})$	0.1088	1.23	0.2386	1.51
$COMMON(\alpha_{13})$	-0.0259	-0.92	0.0334	0.88
Year fixed effects	Included		Included	
Number of observations	9,237		9,237	
Number of firms	902		902	
Adjusted R-Square (%)	17.23		16.95	

**Notes:** This table reports the results of a Basu-type (1997) regression analysis on the relation, post-IFRS, between national culture and conditional conservatism behavior of firms in fourteen countries of the EU. The dependent variable is *NI*, which is net income before extraordinary items deflated by the beginning of the fiscal year market value of equity. *IND* is Hofstede's cultural index on individualism. *UAI* is Hofstede's cultural index on uncertainty avoidance. *SIZE* is the natural logarithm of market value of equity at the end of the fiscal year. All other variables are defined in Table 1. Coefficients on year indicators are not tabulated for brevity. All continuous variables are winsorized each year at the 1% and 99% levels. The reported standard errors are clustered by country and firm. \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.

#### 6. Robustness tests

To further strengthen the evidence that cultural differences affect cross-country conditional conservatism behavior, we conduct three robustness tests and briefly report the results in this section.

### (i) Exclusion of sample dominating countries:

In our sample, we have three countries (France, the UK, and Sweden – see Table 2) that dominate our dataset (firms from France, the UK, and Sweden constitute about 50% of the sample). We thus exclude these countries to check the validity of our results. Table 4 reports the results of excluding sample dominating countries. Our main previous findings remain consistent and robust. Firms in more conservative cultures (low individualism and high uncertainty avoidance) report more conservative earnings than firms in less conservative cultures (high individualism and low uncertainty avoidance).

### TABLE 4

Robustness test excluding sample dominating countries

 $NI_{it} = \alpha_0 + \alpha_1 RET_{it} + \alpha_2 NEG_{it} + \alpha_3 RET_{it}*NEG_{it} + \alpha_4 CULTURE + \alpha_5 CULTURE*RET_{it} + \alpha_6 CULTURE*NEG_{it} + \alpha_7 CULTURE*RET_{it}*NEG_{it} + \alpha_{it} + \alpha_{it} + \alpha_{k} + Year fixed effects + \varepsilon_{it}$ (2)

	Model (1) CULTURE=IND		Model (2) CULTURE=	UAI
Independent variables	Coefficient	t-statistic	Coefficient	t-statistic
Intercept ( $\alpha_0$ )	-1.6236	-0.98	-3.9595	-2.22**
$RET_{it}(\alpha_1)$	-0.3405	-5.26***	0.1179	2.23**
$NEG_{it}(\alpha_2)$	0.0017	0.04	-0.1079	-2.68***
$RET_{it}*NEG_{it}(\alpha_3)$	0.9013	6.27***	-0.0268	-0.21
$CULTURE (\alpha_4)$	0.0001	0.11	0.0022	1.81*
$CULTURE * RET_{it} (\alpha_5)$	0.0049	4.80***	-0.0023	-2.35**
$CULTURE*NEG_{it}$ ( $\alpha_6$ )	-0.0001	-0.18	0.0014	2.86***
$CULTURE * RET_{it} * NEG_{it} (\alpha_7)$	-0.0077	-3.71***	0.0064	3.84***
$SIZE_{it} (\alpha_8)$	0.0578	2.90***	0.0577	2.92***
$LEV_{it}$ ( $\alpha_9$ )	-0.4420	-3.43***	-0.4359	-3.44***
$MTB_{it} (\alpha_{10})$	-0.0021	-0.47	-0.0021	-0.46
ENFORCE $(a_{11})$	0.0318	2.55**	0.0252	1.35
LGDP $(\alpha_{12})$	0.0469	0.32	0.2568	1.76*
$COMMON(\alpha_{13})$	-0.0752	-1.44	-0.0809	-1.88*
Year fixed effects	Included		Included	
Number of observations	4,648		4,648	
Number of firms	450		450	
Adjusted R-Square (%)	20.60		20.60	

**Notes:** This table reports the results of a Basu-type (1997) regression analysis on the relation, post-IFRS, between national culture and conditional conservatism behavior of firms in eleven countries of the EU after excluding sample dominating countries. The dependent variable is NI, which is net income before extraordinary items deflated by the beginning of the fiscal year market value of equity. *IND is* Hofstede's cultural index on individualism. *UAI* is Hofstede's cultural index on uncertainty avoidance. *SIZE* is the natural logarithm of market value of equity at the end of the fiscal year. All other variables are defined in Table 1. Coefficients on year indicators are not tabulated for brevity. All continuous variables are winsorized each year at the 1% and 99% levels. The reported standard errors are clustered by country and firm. \*\*\*, \*\*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.

(ii) Accruals-based measure of conditional conservatism:

We test the robustness of our results to an alternative measure of conditional conservatism that does not rely on stock returns: the accrual model of Ball and Shivakumar (2005).<sup>12</sup> Specifically, similar to Equation (2), we extend the basic accrual model as follows:

<sup>&</sup>lt;sup>12</sup> Recent international studies use this model to capture the differences in firms' earnings conservatism (Bushman et al. 2011; Yip and Young 2012; Haw et al. 2015; Capkun and Collins 2018; Guermazi and Halioui 2018).

 $ACCR_{it} = \beta_0 + \beta_1 CFO_{it} + \beta_2 DCFO_{it} + \beta_3 CFO_{it}*DCFO_{it} + \beta_4 CULTURE + \beta_5$   $CULTURE*CFO_{it} + \beta_6 CULTURE*DCFO_{it} + \beta_7 CULTURE*CFO_{it}*DCFO_{it} + \beta X_{it} + \beta W_k$  $+ Year fixed effects + \varepsilon_{it}$ (3)

where *ACCR* is net income before extraordinary items minus operating cash flows deflated by market value of equity at the beginning of the fiscal year; *CFO* is operating cash flows deflated by market value of equity at the beginning of the fiscal year; *DCFO* is an indicator variable equaling one if *CFO* is less than zero, and zero otherwise; *CULTURE* represents the two dimensions of national culture (i.e., individualism (*IND*) and uncertainty avoidance (*UAI*); see Table 2 for the definitions of these two variables);  $X_{it}$  is a vector of firm-level control variables outlined in Table 1; and  $W_k$  is a vector of country-level control variables outlined in Table 2. Year fixed effects are also included.

From Equation (3), we predict that the coefficient  $\beta_7$  on *CULTURE\*CFO<sub>it</sub>\*DCFO<sub>it</sub>* will be negative (positive) in high individualism (high uncertainty avoidance) societies. Table 5 reports the results of estimating Equation (3). The reported results largely support our main evidence and mitigate any concerns surrounding the non-linear earnings-return technique. Indeed, in countries with high uncertainty avoidance and low individualism, firms report earnings more conservatively.

### TABLE 5

#### Robustness test using an accruals-based measure of conditional conservatism

	Model (1) CULTURE=IND		Model (2) CULTURE=UAI		
Independent variables	Coefficient	t-statistic	Coefficient	t-statistic	
Intercept ( $\beta_0$ )	-1.2474	-1.67*	-2.7084	-1.83*	
$CFO_{it}(\beta_1)$	-1.7116	-13.73***	-0.5567	-4.18***	
$DCFO_{it}(\beta_2)$	0.0047	0.06	-0.1363	-2.15**	
$CFO_{it}*DCFO_{it}(\beta_3)$	4.3479	3.13***	-0.6859	-0.67	
$CULTURE (\beta_4)$	-0.0016	-1.29	0.0022	2.34**	
$CULTURE*CFO_{it} (\beta_5)$	0.0084	3.25***	-0.0080	-4.87***	
$CULTURE*DCFO_{it}$ ( $\beta_6$ )	-0.0009	-0.86	0.0014	1.54	
$CULTURE*CFO_{it}*DCFO_{it}$ ( $\beta_7$ )	-0.0483	-2.38**	0.0298	1.88*	
$SIZE_{it}$ ( $\beta_8$ )	0.0270	2.89***	0.0272	3.02***	
$LEV_{it}$ ( $\beta_9$ )	-0.3249	-5.43***	-0.3229	-6.14***	
$MTB_{it} (\beta_{10})$	0.0010	0.52	0.0027	1.25	

$ACCR_{it} = \beta_0 + \beta_1 CFO_{it} + \beta_2 DCFO_{it} + \beta_3 CFO_{it} * DCFO_{it} + \beta_4 CULTURE + \beta_5 CULTURE * CFO_{it}$	$+ \beta_6$
$CULTURE*DCFO_{it} + \beta_7 CULTURE*CFO_{it}*DCFO_{it} + \beta X_{it} + \beta W_k + Year fixed effects + \varepsilon_{it}$	(3)

ENFORCE $(\beta_{11})$	0.0191	2.63***	0.0141	1.34
$LGDP(\beta_{12})$	0.0817	1.23	0.1957	1.46
$COMMON (\beta_{13})$	-0.0012	-0.05	0.0292	0.88
Year fixed effects	Included		Included	
Number of observations	9,237		9,237	
Number of firms	902		902	
Adjusted R-Square (%)	45.53		44.69	

**Notes:** This table reports the results of estimation of the effect, post-IFRS, of national culture on conditional conservatism behavior of firms in fourteen countries of the EU using an accruals-based measure of conditional conservatism. The dependent variable is *ACCR*, which is net income before extraordinary items minus operating cash flows deflated by market value of equity at the beginning of the fiscal year. *IND is* Hofstede's cultural index on individualism. *UAI* is Hofstede's cultural index on uncertainty avoidance. *SIZE* is the natural logarithm of market value of equity at the end of the fiscal year. All other variables are defined in Table 1. Coefficients on year indicators are not tabulated for brevity. All continuous variables are winsorized each year at the 1% and 99% levels. The reported standard errors are clustered by country and firm. \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.

(iii) An alternative measure of national cultural traits:

Although it is well-documented that Hofstede's cultural dimensions have had the most impact than other competing cultural dimensions, several studies have questioned the applicability of Hofstede's scores (Chen et al. 2015). In an important paper, Tang and Koveos (2008) update Hofstede's scores based on the changing economic climate within countries. They argue that cultural values must reflect both the institutional traditions and economic conditions of a country. The results of using the cultural indices of Tang and Koveos (2008) are presented in Table 6. It is evident from these results that the influence of individualism and uncertainty avoidance on conditional accounting conservatism holds for an alternative measure of these two cultural dimensions.

#### TABLE 6

Robustness test using an alternative measure of national culture traits

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	Model (1) CULTURE=	IND	Model (2) CULTURE=UAI				
Independent variables	Coefficient	t-statistic	Coefficient	t-statistic			
Intercept ( $\alpha_0$ )	-1.8106	-1.69*	-2.8488	-1.73*			
$RET_{it}(\alpha_1)$	-0.3155	-3.53***	0.0499	0.70			
$NEG_{it}(\alpha_2)$	0.0051	0.18	-0.0621	-1.84*			
$RET_{it}*NEG_{it}$ ( $\alpha_3$ )	1.0554	9.46***	0.0580	0.38			
CULTURE $(\alpha_4)$	0.0000	0.08	0.0012	0.73			

 $NI_{it} = \alpha_0 + \alpha_1 RET_{it} + \alpha_2 NEG_{it} + \alpha_3 RET_{it} * NEG_{it} + \alpha_4 CULTURE + \alpha_5 CULTURE * RET_{it} + \alpha_6 CULTURE * NEG_{it} + \alpha_7 CULTURE * RET_{it} * NEG_{it} + \alpha_{it} + \alpha_{it} + \alpha_{k} + Year fixed effects + \varepsilon_{it}$ (2)

$CULTURE * RET_{it} (\alpha_5)$	0.0038	3.21***	-0.0012	-0.87
CULTURE*NEG <sub>it</sub> ( $\alpha_6$ )	-0.0002	-0.78	0.0007	1.49
CULTURE*RET <sub>it</sub> *NEG <sub>it</sub> ( <i>a</i> <sub>7</sub> )	-0.0090	-6.05***	0.0051	1.87*
$SIZE_{it}(\alpha_8)$	0.0374	2.90***	0.0372	2.95***
$LEV_{it}$ ( $\alpha_9$ )	-0.3544	-3.70***	-0.3590	-3.91***
$MTB_{it} (\alpha_{10})$	-0.0038	-1.59	-0.0039	-1.62
ENFORCE $(\alpha_{11})$	0.0173	2.04**	0.0201	1.99**
$LGDP(\alpha_{12})$	0.1059	1.11	0.1948	1.42
$COMMON(\alpha_{13})$	-0.0288	-0.87	0.0295	0.50
Year fixed effects	Included		Included	
Number of observations	9,237		9,237	
Number of firms	902		902	
Adjusted R-Square (%)	17.30		16.86	

**Notes:** This table reports the results of estimation of the effect, post-IFRS, of national culture on conditional conservatism behavior of firms in fourteen countries of the EU using an alternative measure of national culture traits. The dependent variable is NI, which is net income before extraordinary items deflated by the beginning of the fiscal year market value of equity. *IND* is Hofstede\_TK alternative of individualism index. *UAI* is Hofstede\_TK alternative of uncertainty avoidance index. *SIZE* is the natural logarithm of market value of equity at the end of the fiscal year. All other variables are defined in Table 1. Coefficients on year indicators are not tabulated for brevity. All continuous variables are winsorized each year at the 1% and 99% levels. The reported standard errors are clustered by country and firm. \*\*\*, \*\*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.

#### 7. Conclusion

The research question addressed in this study is whether two important dimensions of national culture, individualism and uncertainty avoidance, influence firm accounting conservatism. We address this question by analyzing a sample of 9,237 firm-year observations for 902 firms from 14 countries in the EU for the period 2006 to 2016.

Our empirical results lead to the conclusion that, in the post-IFRS period, managers in more individualistic countries tend to be less conservative in exercising earnings measurement discretion while those in more uncertainty avoiding countries tend to be more conservative. Overall, this result support the growing awareness among researchers who study international financial markets that informal institutions, such as national culture, matter in financial reporting (Kanagaretnam et al. 2014). We are not aware of any other study investigating the direct effect of national culture on conditional conservatism behavior in the post-IFRS period.

This study is subject to some limitations. First, since our analysis is conducted in an international setting, we acknowledge that our findings should be viewed as international

evidence that may not necessarily generalize to a single country. Second, Hofstede's cultural variables are measured at the country-level whereas our tests are primarily based on firm-level analysis.

### References

- André, P., A. Filip, and L. Paugam. 2015. The effect of mandatory IFRS adoption on conditional conservatism in Europe. *Journal of Business Finance & Accounting* 42 (3-4):482-514.
  - ——. 2016. Examining the patterns of goodwill impairments in Europe and the US. *Accounting in Europe* 13 (3):329-352.
- Ashraf, B. N., C. Zheng, and S. Arshad. 2016. Effects of national culture on bank risk-taking behavior. *Research in International Business and Finance* 37:309-326.
- Ball, R., S. Kothari, and A. Robin. 2000. The effect of international institutional factors on properties of accounting earnings. *Journal of Accounting and Economics* 29 (1):1-51.
- Ball, R., X. Li, and L. Shivakumar. 2015. Contractibility and transparency of financial statement information prepared under IFRS: Evidence from debt contracts around IFRS adoption. *Journal of Accounting Research* 53 (5):915-963.
- Ball, R., A. Robin, and J. S. Wu. 2003. Incentives versus standards: Properties of accounting income in four East Asian countries. *Journal of Accounting and Economics* 36 (1-3):235-270.
- Ball, R., and L. Shivakumar. 2005. Earnings quality in UK private firms: Comparative loss recognition timeliness. *Journal of Accounting and Economics* 39 (1):83-128.
- Bernardi, R. A. 2006. Associations between Hofstede's cultural constructs and social desirability response bias. *Journal of Business Ethics* 65 (1):43-53.
- Beugelsdijk, S., R. Maseland, and A. van Hoorn. 2015. Are scores on Hofstede's dimensions of national culture stable over time? A cohort analysis. *Global Strategy Journal* 5 (3):223-240.
- Black, F. 1980. The magic in earnings: Economic earnings versus accounting earnings. *Financial Analysts Journal* 36 (6):19-24.
- Bonetti, P., E. Ipino, and A. Parbonetti. 2017. The role of unaffiliated bankers on conditional conservatism: Evidence from IFRS information shock. *Journal of Business Finance & Accounting* 44 (7-8):925-952.
- Boubakri, N., J.-C. Cosset, and W. Saffar. 2017. The constraints on full privatization: International evidence. *Journal of Corporate Finance* 42:392–407.
- Boubakri, N., and W. Saffar. 2016. Culture and externally financed firm growth. *Journal of Corporate Finance* 41:502-520.
- Bradshaw, M. T., and G. S. Miller. 2008. Will harmonizing accounting standards really harmonize accounting? Evidence from non-U.S. firms adopting U.S. GAAP. *Journal of Accounting, Auditing & Finance* 23 (2):233-264.
- Brochet, F., G. S. Miller, P. Naranjo, and G. Yu. Forthcoming. Managers' cultural background and disclosure attributes. *The Accounting Review*.
- Burgstahler, D. C., L. Hail, and C. Leuz. 2006. The importance of reporting incentives: Earnings management in European private and public firms. *The Accounting Review* 81 (5):983-1016.
- Bushman, R. M., J. D. Piotroski, and A. J. Smith. 2011. Capital allocation and timely accounting recognition of economic losses. *Journal of Business Finance & Accounting* 38 (1-2):1-33.
- Callao, S., and J. I. Jarne. 2010. Have IFRS affected earnings management in the European Union? *Accounting in Europe* 7 (2):159-189.

- Capkun, V., and D. W. Collins. 2018. The effects of IFRS adoption on observed earnings smoothness properties: The confounding effects of changes in timely gain and loss recognition. *European Accounting Review* 27 (5):797-815.
- Chand, P. 2012. The effects of ethnic culture and organizational culture on judgments of accountants. *Advances in Accounting, incorporating Advances in International Accounting* 28 (2):298-306.
- Chand, P., L. Cummings, and C. Patel. 2012. The effect of accounting education and national culture on accounting judgments: A comparative study of Anglo-Celtic and Chinese culture. *European Accounting Review* 21 (1):153-182.
- Chen, Y., P. Y. Dou, S. G. Rhee, C. Truong, and M. Veeraraghavan. 2015. National culture and corporate cash holdings around the world. *Journal of Banking & Finance* 50:1-18.
- Chui, A. C. W., C. C. Y. Kwok, and G. Zhou. 2016. National culture and the cost of debt. *Journal of Banking & Finance* 69:1-19.
- Chung, B. H. 2017. Do differences in national cultures affect cross-country financial statement comparability under IFRS?, The University of Iowa.
- Cieslewicz, J. K. 2014. Relationships between national economic culture, institutions, and accounting: Implications for IFRS. *Critical Perspectives on Accounting* 25 (6):511-528.
- Daske, H., L. Hail, C. Leuz, and R. Verdi. 2008. Mandatory IFRS reporting around the world: Early evidence on the economic consequences. *Journal of Accounting Research* 46 (5):1085-1142.
- ——. 2013. Adopting a label: Heterogeneity in the economic consequences around IAS/IFRS adoptions. *Journal of Accounting Research* 51 (3):495-547.
- De George, E. T., X. Li, and L. Shivakumar. 2016. A review of the IFRS adoption literature. *Review of Accounting Studies* 21 (3):898-1004.
- Dhaliwal, D., S. Huang, I. K. Khurana, and R. Pereira. 2014. Product market competition and conditional conservatism. *Review of Accounting Studies* 19 (4):1309-1345.
- Doupnik, T. S., and E. L. Riccio. 2006. The influence of conservatism and secrecy on the interpretation of verbal probability expressions in the Anglo and Latin cultural areas. *The International Journal of Accounting* 41 (3):237-261.
- Doupnik, T. S., and M. Richter. 2004. The impact of culture on the interpretation of "in context" verbal probability expressions. *Journal of International Accounting Research* 3 (1):1-20.
- Doupnik, T. S., and G. T. Tsakumis. 2004. A critical review of tests of Gray's theory of cultural relevance and suggestions for future research. *Journal of Accounting Literature* 23:1-48.
- Eddie, I. A. 1990. Asia Pacific cultural values and accounting systems. Paper read at Asia Pacific International Management Forum.
- Ettredge, M., Y. Huang, and W. Zhang. 2012. Earnings restatements and differential timeliness of accounting conservatism. *Journal of Accounting and Economics* 53 (3):489-503.
- Fan, J. P. H., and T. J. Wong. 2002. Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of Accounting and Economics* 33 (3):401-425.
- Ferramosca, S., and A. Ghio. 2018. Accounting conservatism in family firms. In *Accounting choices in family firms: An analysis of influences and implications*. Cham: Springer International Publishing, 139-164.
- Filip, A., T. Jeanjean, and L. Paugam. 2015. Using real activities to avoid goodwill impairment losses: Evidence and effect on future performance. *Journal of Business Finance & Accounting* 42 (3-4):515-554.

- Florou, A., U. Kosi, and P. F. Pope. 2017. Are international accounting standards more credit relevant than domestic standards? *Accounting and Business Research* 47 (1):1-29.
- Givoly, D., and C. Hayn. 2000. The changing time-series properties of earnings, cash flows and accruals: Has financial reporting become more conservative? *Journal of Accounting and Economics* 29 (3):287-320.
- Givoly, D., C. K. Hayn, and S. P. Katz. 2010. Does public ownership of equity improve earnings quality? *The Accounting Review* 85 (1):195-225.
- Gray, S. J. 1988. Towards a theory of cultural influence on the development of accounting systems internationally. *Abacus* 24 (1):1-15.
- Gray, S. J., T. Kang, Z. Lin, and Q. Tang. 2015. Earnings management in Europe post IFRS: Do cultural influences persist? *Management International Review* 55 (6):827-856.
- Gray, S. J., T. Kang, and Y. K. Yoo. 2013. National culture and international differences in the cost of equity capital. *Management International Review* 53 (6):899-916.
- Guermazi, W., and K. Halioui. 2018. Mandatory IFRS adoption in Europe: Effect on the conservative financial reporting. *Journal of Financial Reporting and Accounting* 16 (4):543-563.
- Han, S., T. Kang, S. B. Salter, and K. Y. Yoo. 2010. A cross-country study on the effects of national culture on earnings management. *Journal of International Business Studies* 41 (1):123-141.
- Haw, I.-M., B. Hu, L.-S. Hwang, and W. Wu. 2004. Ultimate ownership, income management, and legal and extra-legal institutions. *Journal of Accounting Research* 42 (2):423-462.
- Haw, I.-M. G., S. S. M. Ho, Y. Li, and F. Zhang. 2015. Product market competition, legal institutions, and accounting conservatism. *Journal of International Accounting Research* 14 (2):1-39.
- Heidhues, E., and C. Patel. 2011. A critique of Gray's framework on accounting values using Germany as a case study. *Critical Perspectives on Accounting* 22 (3):273-287.
- Hofstede, G. 1983. The cultural relativity of organizational practices and theories. *Journal* of International Business Studies 14 (2):75-89.
  - ——. 1984. Cultural dimensions in management and planning. *Asia Pacific Journal of Management* 1 (2):81-99.
    - —. 2001. Culture's consequences: Comparing values, behaviors, institutions and organizations across nations. second edition ed: Sage Publications.
- Holderness, C. G. 2008. Do differences in legal protections explain differences in ownership concentration? *Available at SSRN 1104678*.
- Holthausen, R. W. 2003. Testing the relative power of accounting standards versus incentives and other institutional features to influence the outcome of financial reporting in an international setting. *Journal of Accounting and Economics* 36 (1-3):271-283.
- Hooghiemstra, R., N. Hermes, and J. Emanuels. 2015. National culture and internal control disclosures: A cross-country analysis. *Corporate Governance: An International Review* 23 (4):357-377.
- Hope, O.-K., J. Jin, and T. Kang. 2006. Empirical evidence on jurisdictions that adopt IFRS. *Journal of International Accounting Research* 5 (2):1-20.
- Hope, O.-K., T. Kang, W. Thomas, and Y. K. Yoo. 2008. Culture and auditor choice: A test of the secrecy hypothesis. *Journal of Accounting and Public Policy* 27 (5):357-373.
- Hu, C., P. Chand, and E. Evans. 2013. The effect of national culture, acculturation and education on accounting judgments: A comparative study of Australian and Chinese culture. *Journal of International Accounting Research* 12 (2):51-77.

- Isidro, H., and I. Raonic. 2012. Firm incentives, institutional complexity and the quality of "harmonized" accounting numbers. *The International Journal of Accounting* 47 (4):407-436.
- Jeanjean, T., and H. Stolowy. 2008. Do accounting standards matter? An exploratory analysis of earnings management before and after IFRS adoption. *Journal of Accounting and Public Policy* 27 (6):480-494.
- Kabir, H., and A. Rahman. 2016. The role of corporate governance in accounting discretion under IFRS: Goodwill impairment in Australia. *Journal of Contemporary Accounting & Economics* 12 (3):290-308.
- Kanagaretnam, K., C. Y. Lim, and G. J. Lobo. 2014. Influence of national culture on accounting conservatism and risk-taking in the banking industry. *The Accounting Review* 89 (3):1115-1149.
- Khlif, H. 2016. Hofstede's cultural dimensions in accounting research: A review. *Meditari Accountancy Research* 24 (4):545 573.
- Kim, S., C. Lee, and S. Wook Yoon. 2013. Goodwill accounting and asymmetric timeliness of earnings. *Review of Accounting and Finance* 12 (2):112-129.
- Kohlbeck, M., and T. Warfield. 2010. Accounting standard attributes and accounting quality: Discussion and analysis. *Research in Accounting Regulation* 22 (2):59-70.
- La Porta, R., F. Lopez-De-Silanes, A. Shleifer, and R. W. Vishny. 1998. Law and finance. *Journal of Political Economy* 106 (6):1113-1155.
- Lafond, R., and S. Roychowdhury. 2008. Managerial ownership and accounting conservatism. *Journal of Accounting Research* 46 (1):101-135.
- Lang, M., J. S. Raedy, and W. Wilson. 2006. Earnings management and cross listing: Are reconciled earnings comparable to US earnings? *Journal of Accounting and Economics* 42 (1):255-283.
- Lang, M., J. S. Raedy, and M. H. Yetman. 2003. How representative are firms that are crosslisted in the United States? An analysis of accounting quality. *Journal of Accounting Research* 41 (2):363-386.
- Lawrence, A., R. Sloan, and Y. Sun. 2013. Non-discretionary conservatism: Evidence and implications. *Journal of Accounting and Economics* 56 (2–3, Supplement 1):112-133.
- Lee, K.-H., and D. M. Herold. 2018. Cultural relevance in environmental and sustainability management accounting (EMA) in the Asia-Pacific Region: A link between cultural values and accounting values towards EMA values. In *Accounting for Sustainability: Asia Pacific Perspectives*, edited by K.-H. Lee and S. Schaltegger. Cham: Springer International Publishing, 11-37.
- Leung, K., R. S. Bhagat, N. R. Buchan, M. Erez, and C. B. Gibson. 2005. Culture and international business: Recent advances and their implications for future research. *Journal of International Business Studies* 36 (4):357-378.
- Leuz, C., D. Nanda, and P. D. Wysocki. 2003. Earnings management and investor protection: An international comparison. *Journal of Financial Economics* 69 (3):505–527.
- Leuz, C., and P. D. Wysocki. 2016. The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research. *Journal of Accounting Research* 54 (2):525-622.
- Levitt, A. 1998. The importance of high quality accounting standards. *Accounting Horizons* 12 (1):79-82.
- Liñán, F., and J. Fernandez-Serrano. 2014. National culture, entrepreneurship and economic development: different patterns across the European Union. *Small Business Economics* 42 (4):685-701.

- Mazzi, F., G. Liberatore, and I. Tsalavoutas. 2016. Insights on CFOs' perceptions about impairment testing under IAS 36. Accounting in Europe 13 (3):353-379.
- McGee, R. W. 2015. Financial Reporting. In *Wiley Encyclopedia of Management*: John Wiley & Sons, Ltd.
- Mclean, R. D., T. Zhang, and M. Zhao. 2012. Why does the law matter? Investor protection and its effects on investment, finance, and growth. *The Journal of Finance* 67 (1):313-350.
- Mohamed Yunos, R., Z. Ismail, and M. Smith. 2012. Ethnicity and accounting conservatism: Malaysian evidence. *Asian Review of Accounting* 20 (1):34-57.
- Ozkan, N., Z. V. I. Singer, and H. You. 2012. Mandatory IFRS adoption and the contractual usefulness of accounting information in executive compensation. *Journal of Accounting Research* 50 (4):1077-1107.
- Paugam, L., and O. Ramond. 2015. Effect of impairment-testing disclosures on the cost of equity capital. *Journal of Business Finance & Accounting* 42 (5-6):583-618.
- Petersen, C., and T. Plenborg. 2010. How do firms implement impairment tests of goodwill? *Abacus* 46 (4):419-446.
- Petersen, M. A. 2009. Estimating standard errors in finance panel data sets: Comparing approaches. *The Review of Financial Studies* 22 (1):435-480.
- Ramalingegowda, S., and Y. Yu. 2012. Institutional ownership and conservatism. *Journal* of Accounting and Economics 53 (1–2):98-114.
- Rickett, L. K., A. Maggina, and P. Alam. 2016. Auditor tenure and accounting conservatism: Evidence from Greece. *Managerial Auditing Journal* 31 (6/7):538-565.
- Salter, S. B., T. Kang, G. Gotti, and S. T. Doupnik. 2013. The role of social values, accounting values and institutions in determining accounting conservatism. *Management International Review* 53 (4):607-632.
- Salter, S. B., and P. A. Lewis. 2011. Shades of Gray: An empirical examination of Gray's model of culture and income measurement practices using 20-F data. *Advances in Accounting, incorporating Advances in International Accounting* 27 (1):132-142.
- Salter, S. B., and F. Niswander. 1995. Cultural influence on the development of accounting systems internationally: A test of Gray's [1988] theory. *Journal of International Business Studies* 26 (2):379-397.
- Schipper, K. 2005. The introduction of International Accounting Standards in Europe: Implications for international convergence. *European Accounting Review* 14 (1):101-126.
- Shuto, A., and T. Takada. 2010. Managerial ownership and accounting conservatism in Japan: A test of management entrenchment effect. *Journal of Business Finance & Accounting* 37 (7-8):815-840.
- Sudarwan, M., and T. J. Fogarty. 1996. Culture and accounting in Indonesia: An empirical examination. *The International Journal of Accounting* 31 (4):463-481.
- Sultana, N. 2015. Audit committee characteristics and accounting conservatism. *International Journal of Auditing* 19 (2):88-102.
- Sultana, N., and J. L. W. Mitchell Van der Zahn. 2015. Earnings conservatism and audit committee financial expertise. *Accounting & Finance* 55 (1):279-310.
- Tang, L., and E. P. Koveos. 2008. A framework to update Hofstede's cultural value indices: Economic dynamics and institutional stability. *Journal of International Business Studies* 39 (6):1045-1063.
- Triandis, H. C., C. McCusker, and C. H. Hui. 1990. Multimethod probes of individualism and collectivism. *Journal of personality and social psychology* 59 (5):1006-1020.
- Tsakumis, G. T. 2007. The influence of culture on accountants' application of financial reporting rules. *Abacus* 43 (1):27-48.

- Williamson, O. E. 2000. The New Institutional Economics: Taking stock, looking ahead. *Journal of Economic Literature* 38 (3):595-613.
- Wysocki, P. 2011. New institutional accounting and IFRS. Accounting and Business Research 41 (3):309-328.
- Yip, R. W. Y., and D. Young. 2012. Does mandatory IFRS adoption improve information comparability? *The Accounting Review* 87 (5):1767-1789.
- Young, M. 2013. Cultural influences on accounting and its practices. Senior Honors Theses, Liberty University.
- Zéghal, D., S. M. Chtourou, and Y. M. Fourati. 2012. The effect of mandatory adoption of IFRS on earnings quality: Evidence from the European Union. *Journal of International Accounting Research* 11 (2):1-25.
- Zheng, X., S. El Ghoul, O. Guedhami, and C. C. Y. Kwok. 2012. National culture and corporate debt maturity. *Journal of Banking & Finance* 36 (2):468-488.

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