

Are provisions and contingent liabilities priced by the market?

An exploratory study in Portugal and the UK

Ana Isabel Lopes

*Instituto Universitário de Lisboa (ISCTE-IUL),
Business Research Unit (BRU-IUL), Lisboa, Portugal, and*

Laura Reis

Instituto Universitário de Lisboa (ISCTE-IUL), Lisboa, Portugal

Abstract

Purpose – This paper aims to examine pricing differences regarding contingencies presented in statements of financial position or notes, which are considered an area for creative accounting.

Design/methodology/approach – The authors have chosen two countries with different cultural environments to test the exploratory study. The sample includes companies using the International Accounting Standard (IAS) 37, which requires recognition of provisions while contingent liabilities are only disclosed, implying different impacts from underlying judgement related with contingencies. The authors apply a regression model based on the Ohlson equity-valuation framework.

Findings – The most important conclusion is that market participants in both countries follow different patterns when incorporating information about provisions and contingent liabilities. More precisely, the results suggest that provisions are value-relevant, but incrementally less negative in Portugal. Contingent liabilities seem to have no value relevance. However, an exception exists for Portuguese companies having a risk committee board, in which case a significant market valuation of contingent liabilities is found and discounted in share prices. The existence of a risk committee corroborates the value relevance of this board, which is positively valued by market participants in both national cultures.

Practical implications – The findings may make a contribution to the IASB research project on the IAS 37 and possible amendments to it (suspended until the revisions to the conceptual framework are finalized) and to the IASB prioritization of communication effectiveness of financial statements to all users.

Originality/value – Value relevance of contingencies differentiating countries from two different national cultures and firms with a risk committee on the board of directors.

Keywords National culture, Contingencies, IAS 37, Provisions, Contingent liabilities, Creative accounting

Paper type Research paper

Introduction

The recognition of “provisions” and the disclosure of “contingent liabilities” have been considered sources of *creative accounting*, primarily because of *judgement* used on management estimates. We perform an exploratory analysis to examine whether market participants incorporate information regarding contingencies communicated through



financial statements into market prices. We use a sample of firms reporting under International Financial Reporting Standards (IFRS). First, regarding theory, we analyze the effects of recognizing provisions versus disclosing contingent liabilities and the resulting differences in leverage ratios. Then, we analyze the value relevance of those two contingent elements, differentiating between countries from two different national cultures. In addition, we examine the results distinguishing firms with a risk committee on the board of directors and those without, to identify whether our results are positively or negatively changed.

The concept of *creative accounting* varies, and its meaning may differ according to how a company communicates information. In a recent speech, Hans Hoogervorst, the Chairman of the International Accounting Standards Board (IASB), flags the desire for “better communication” of financial reporting, saying that:

(. . .) Increasingly, preparers present their investors alternative performance measures which are not based on IFRS Standards. This information is easier to consume by users, but it almost always paints a rosier picture than reality and can be highly misleading (Hoogervorst, 2016).

Some authors (e.g., [Gowthorpe and Amat, 2005](#)) also highlight that some financial statement preparers deliberately distort the communication and messages delivered by financial statements. Thus, it is worth considering the possible impacts of distorted disclosure and recognition in financial statements, in particular, those related to the diminishing or augmenting of debt values that thereby creates an illusion of stability within the organization that can mislead investors. Another issue is related with charges in income when provisions are recognized. From the accounting perspective, some companies do not have to accrue a charge to income for a potential decline in economic activity, but from a valuation perspective the central attention is whether such decline in the economic-wide activity was reasonably predicted ([Skaked and Orelowitz, 2015](#)).

To fit our design, accounting and creativity are considered together when corporate reporting uses accounting choices, estimates and other practices allowed by accounting standards to communicate to stakeholders an artificially enhanced financial position through their financial statements. Thus far, *judgement* is inherent in expert behavior and in management estimates, especially when analyzing facts and circumstances involving monetary amounts clearly presented in summarized financial statements (e.g. statement of financial position) or “hidden” in mixed disclosures for all other events that must be disclosed (e.g. notes). The room for creativity exists because subjectivity is widespread. As such, there is a window of opportunity for an entity to employ creative accounting using contingent liability disclosure techniques[1]. Using an expert *judgement* to replace a liability clearly presented in the liability section of the statement of financial position (under *provisions*) with nothing other than a mention in the notes section is one of the techniques used by preparers. This type of expert *judgement* is legitimate in some International Financial Reporting Standards (IFRSs). The *International Accounting Standard (IAS) 37, provisions, contingent liabilities and contingent assets*, issued by IASB, focus on this very topic. Contingent liabilities are a potentially misleading element because, unlike provisions, they are not recognized liabilities. However, they are disclosed and may have a long-term impact on companies’ performance.

Relying on perceptions of market participants on provisions and contingent liabilities, our paper contributes to research investigating whether capital market participants evaluate financial report disclosures differently from recognized items. This paper extends earlier literature regarding valuation of contingencies. In particular, our research introduces a general approach to the value relevance of provisions and contingent liabilities in companies of a diverse set of industries in two different countries. Earlier research addresses this topic

mainly by considering environmental liabilities within only a specific country (Campbell *et al.*, 2003; Moneva and Cuellar, 2009; Li and McConomy, 1999) and mainly using specific legislation about environment impacts of polluting industries. Apart from contaminating industries, Backmon and Vickrey (1997), Banks and Kinney (1982) and Frost (1991) are examples of research on the relationship between loss contingencies and market values of shares or bonds. Nevertheless, those researches involved companies using US GAAP, and at the time were different from the current IAS on the topic. We believe there is still a research gap to fill in the analysis of the relationship between general provisions and contingent liabilities. Our research extends earlier literature, covering companies applying the most recent version of IAS 37 from different industries based on ICB Classification and from two different national culture environments. This study also incorporates a variable to capture the existence of a risk committee in the board of directors which is considered important to control, analyze, and report risks. Research on the value relevance of board committees is still scarce (Chen *et al.*, 2011) but the presence of a separate risk committee may have a positive stock market reaction (Benaroch and Chernobai, 2017) and a positive effect on firm performance (Chowdhury, 2015). No distinction has been drawn between companies with or without a risk committee on stock market valuation of companies reporting provisions and contingencies.

This paper also contributes to literature on the influence of national culture on the recognition of accounting elements. Our sample includes firms with recognized provisions and/or disclosed contingent liabilities. Both can occur simultaneously for different events when applying IAS 37. These two elements are both subject to the same estimate technique for the measurement but to different judgement criteria. Recognition, in turn, is not a question of free choice but a judgement on the probability of (non-)occurrence. Earlier research reports a distinction between accountants' application of financial reporting rules to contingencies (Tsakumis, 2007) and their interpretation of probability phrases on those topics (Du *et al.*, 2016), with both examining the influence of national culture on such a distinction. These studies used Gray's (1988) and Hofstede's (1980) frameworks to postulate that accountants in different countries are more or less likely to recognize contingent liabilities. However, as far as we know, using national culture to compare investor perception approaches to these specific elements of financial statements is still a breach. We build on this literature, and our sample includes firms where market participants operate in different cultural environments: Portugal and the UK. A significant number of studies have been published covering cross-cultural research in accounting or auditing (Eddie, 1990; Patel and Psaros, 2000; Salter and Niswander, 1995; Sudarwan and Fogarty, 1996; Zarzeski, 1996; Wingate, 1997; Jaggi and Low, 2000; Hope, 2003; Tsakumis, 2007; Elshandidy *et al.*, 2014; Khlif *et al.*, 2015; Khlif, 2016), as well as the problem of recognition and disclosure (Bernard and Schipper, 1994; Choudhary, 2011; Imhoff *et al.*, 1995; Niu and Xu, 2009). Provisions and contingencies have nevertheless received less attention (Choudhary, 2011; Libby *et al.*, 2006), and research that combines this topic with a view of institutional culture is found only in Tsakumis (2007). Our paper thus extends the literature regarding the valuation of contingent liabilities (Campbell *et al.*, 2003; Moneva and Cuellar, 2009) by incorporating and differentiating results between two different culture environments.

The most important conclusion is that market participants in both countries follow different patterns when incorporating information about provisions and contingent liabilities. More precisely, our results suggest that provisions are value relevant, but the (negative) relationship with share prices found in the UK is of opposite direction in Portugal (positive). Contingent liabilities seem to have no value relevance in either country. However, an exception exists for Portuguese firms with a risk committee board, in which case a

significant market valuation of contingent liabilities is found and discounted in share prices. The existence of a risk committee corroborates the value relevance of this board, which is positively valued by market participants in both national cultures. We believe these results are helpful to the IASB in its research project on the IAS 37 (IFRS Foundation, 2016), which is currently at the assessment stage.

The remainder of our paper is structured as follows. The next section describes the literature review, including a brief analysis of IAS 37. Then, research design and explorative expectations are presented, including the research method employed, the sample used, and descriptive statistics. Following this, results are offered and commented upon before the last section, in which the paper's conclusions are presented.

Underpinning literature

Recognition and disclosure requirements (International Accounting Standard 37) applicable to provisions and contingent liabilities

Under IAS 37, provisions and contingent liabilities are not the same. A contingency may give rise to a *contingent liability*, disclosed and communicated through the notes included in corporate reports. In this case, a contingent liability is defined as (1) a *possible obligation* that arises from past events and whose existence will be confirmed only by the occurrence or nonoccurrence of one or more uncertain future events not wholly within the control of the entity or as (2) a *present obligation* that arises from past events but is not recognized because it is *not probable* that an outflow of resources in the form of economic benefits will be required to settle the obligation, and the amount of the obligation cannot be reliably measured. However, a contingency also may give rise to a *provision*, which is recognized and communicated in the statement of financial position. In this case, a provision is defined as (3) a *present obligation*, assuming that, although of uncertain timing or amount, a reliable estimate can be made, and it is *probable* that an outflow of resources embodying economic benefits will be required to settle the obligation. A contingent liability, as defined in (1) or in (2), falls outside the scope of the concept of liabilities, as opposed to a provision as defined in (3).

This *potentially misleading* terminology means that whenever a company has a possible obligation that arises from past events, and whose existence will be confirmed only by the occurrence or nonoccurrence of one or more uncertain future events not wholly within the control of the entity, that event (and amount) can be disclosed solely in the notes but not included in the total debt of the firm. The criterion of *probability* is used to distinguish between a possible liability that is merely disclosed and a probable liability, which is recognized and presented under "provisions" (unless the possibility of an outflow is *remote*, in which case preparers of financial statements do nothing).

How is the probability threshold assessed? It is based on *judgement*, taking into account all available evidence, where IAS 37 permits decisions based on the opinion of experts (e.g. lawyers), upon whom management can call to demonstrate that it is *more likely than not* that a present obligation exists. This is why contingencies are highlighted as a creative accounting technique – although not all companies are deliberately using them to reduce apparent debt. Judgement on what is *probable*, *possible*, or *remote* is most often left to the opinions of experts, and this judgement is based on events that can then be recognized, disclosed or hidden.

Theoretically, 51 per cent likelihood or more is *probable* (Alexander, et al., 2014). In practice, an experiment detected that a Russian participant assigned higher numeric value to the word *probable* than US participants, because of national cultural differences, but their notion of *remote* was very similar (Du et al., 2016). Skaked and Orelowitz (2015) give

examples of cases in which accounting standards are not necessarily compatible with valuation and solvency analysis, justifying why contingent liabilities are critically important.

To help investors and other users make sense of the numbers, IAS 37 aims to ensure that whenever an entity reports a provision or a contingent liability, sufficient information is disclosed in the notes to enable users to understand the nature, timing, and amount of the underlying event. While opinions on the acceptability of accounting manipulation vary, it is often perceived as morally reprehensible, as it involves an unfair exercise of power, unfairness to users, and undermines accounting regulations (Gowthorpe and Amat, 2005). Even with attempts to establish international accounting convergence, caution is required and corporate disclosure needs to be improved on a global scale (Angeloni, 2016) to remove bias in the way users interpret information.

The following example helps to illustrate the differences between a contingent liability and a provision, as well as the respective impacts on income, shareholders' equity and total liabilities. The starting point is a real case included in the consolidated financial statements of a group operating in the paper supply sector in several European countries and listed on a European Stock Exchange. Another entity brought proceedings against the group. However, the group believed (in its own words) that this action would have no financial impacts and, therefore, no provision was made. At the end of the fiscal period of 2014, the amount of provisions of the group was "344 thousand" euros, as indicated in Column A of Table I (line [5]). This amount represented about 0.07 per cent of total liabilities out of "473,140 thousand" euros (line [7]) and about 5 per cent of total assets out of "664,592 thousand" euros (line [8]), as reported in Column A of Table I. The amounts presented on the face of the statement of financial position did not include the financial effects of the claim by the other entity. However, that claim, which was contested by the group, had an estimated value of "24.46 million" euros! Note the number of units used to describe the currency: all the information on the face of the financial statements is presented in thousands, but the amount disclosed in the notes to communicate this contingency is in millions. Additionally, this amount is merely disclosed and has no impact on liabilities, equity or any other financial or performance indicator.

	Column A: as reported	Column B: as-if liabilities
<i>Statement of financial position</i>		
[1] Total assets	€664,592 thousand	€664,592 thousand
[2] Total shareholders' equity	€191,452 thousand	€166,992 thousand
[3] net income	€2,078 thousand	€-22,382 thousand
[4] Total liabilities	€473,140 thousand	€497,600 thousand
[5] Provisions	€344 thousand	€24,808 thousand
<i>Notes</i>		
[6] Contingent liabilities	€24.46 million	0
<i>Weights</i>		
[7] Provisions on total liabilities ([5]/[4])	0.07%	4.99%
[8] Provisions on total assets ([5]/[1])	0.05%	3.73%
<i>Ratios</i>		
[9] ROE [=3]/[2])	1.09%	-13.4%
[10] Leverage: Debt/equity ([4]/[2])	247.13%	297.98%
[11] Leverage: Debt/assets (4)/[1])	71.2%	74.9%

Table I.
Comparison of a
contingent liability
as reported and as-if
liabilities

As indicated in Column B of [Table I](#), if this contingent liability had been included in provisions, as-if liabilities, the group would present “24,769 thousand” euros in provisions, which is about 4.99 per cent of (new) total liabilities, instead of just 0.07 per cent, as reported in Column A of [Table I](#) (line [7]) and about 3.73 per cent of total assets (line [8]). Additionally, the increase in liabilities would be of the same amount, as the increase in losses presented in the statement of comprehensive income means that the reported income would drop from a profit of “2,078 thousand” euros to a loss of “22,382 thousand” euros (line [3]). The “more likely than not” criterion regarding the occurrence of a future outflow to settle that possible obligation is estimated by the group, but any external user of financial statements should be aware of the potential impact of those contingencies on the outflow of resources from the group. Column A and Column B also demonstrate differences in ratios (lines [9]-[11]), such as return on equity (ROE) and leverage, which decreases or increases, respectively, with the inclusion of contingent liabilities as-if liabilities.

As such, creative accounting^[2] exists not because of the disclosure of the contingency in the notes rather than in the statement of financial position, but in the judgement and the arguments used by an entity to justify the probability of a possible obligation that is presented out of other liabilities. The effect can be similar to hiding certain financing through off-balance sheet financing procedures.

Disclosure versus recognition differences

Well-documented earlier research focusses on how participants in capital markets use recognized versus disclosed amounts. [Bratten et al. \(2013\)](#) summarize at least three views:

- (1) a “no differences” view, in which all information that is reported is used the same way;
- (2) a “rational differences” view, in which information features between recognized and disclosed items are different and such differences affect decision usefulness; and
- (3) a “user characteristics” view, in which cognitive factors can induce differences in how recognized and disclosed information is used.

The second and third need not be mutually exclusive. [Bernard and Schipper \(1994\)](#) state that if market participants view footnote disclosures as less reliable or not sufficiently sophisticated to make appropriate judgements, they are more likely to attribute more importance to recognized items, leading to greater value relevance. This is particularly evident when reliability is an issue ([Choi et al., 1997](#); [Davis-Friday et al., 2004](#); [Ahmed et al., 2006](#)). When reliability is not an issue, i.e. when the disclosed amounts are reliable, readily identifiable, and easily processed, investors appear to use these two features similarly ([Bratten et al., 2013](#)). This last result is consistent with findings in different locations presenting similar information ([Lopes et al., 2013](#)). Other examples of issues related to amounts presented under liabilities or equity other than provisions and contingencies include post-retirement benefits obligations ([Davis-Friday et al., 2004](#)), derivatives ([Ahmed et al., 2006](#)), stock options ([Choudhary, 2011](#)), lease arrangements ([Bratten et al., 2013](#)) and non-controlling interests ([Lopes et al., 2013](#)).

As the criteria for measuring provisions and as-if provisions are the same (see IAS 37), the difference is the probability criterion, which is based on *judgement* and can be considered under the creative accounting umbrella. Our paper sheds light on how capital market participants price provisions that are recognized, compared to contingent liabilities

disclosed, when reliability is not an issue but where judgement is used to distinguish those two concepts[3].

Capital market participant assessment of provisions and contingent liabilities

Many financial statement users have complained that existing disclosures are “inadequate or ineffective” in helping in the assessment of the likelihood, timing, and amount of loss contingencies (Hennes, 2014). Similarly, Wayne Carnall, chief accountant for the SEC’s Division of Corporate Finance, advised critics on how companies produce “pages of disclosures” on contingent liabilities that “say little”, as cited by Leone (2010). Schipper (2007) adds that required disclosures are not well understood, despite the significant amount of information they communicate. Everything can be left to the “skill and imagination of the operator that uses the knowledge and experience in the field combined with an optimal dose of ingenuity, but also the gaps within legislation” (Adrian et al., 2012, p. 668). Most of the prior literature uses the association of accounting aggregates with capital-market effects to empirically assess the usefulness of financial statements.

Our setting should link our research to previous analyses that report results on whether investors appear to treat contingent liabilities as-if effective liabilities. Campbell et al. (2003) linked this topic to the potential uncertainty-reducing role of accounting information in a specific context of valuation of contingent liabilities in the chemical industry. They conclude that recognizing environmental liabilities (provisions), rather than just disclosing them as contingencies, plays a value relevant uncertainty-reducing role. In addition, both are differentially effective in reducing different types of uncertainty. The value relevance of financial and non-financial environmental reporting was also tested by Moneva and Cuellar (2009), who concluded that the market considers provisions and contingencies related with environment to be negative factors, considering that this information may be linked to potential risks (but did not separate contingencies from provisions). Also, Li and McConomy (1999) found that disclosure of provisions for some environmental information is value relevant (but did not cover disclosures only). A different approach was firstly taken by Backmon and Vickrey (1997), who analyzed the relationship between loss contingency data and bond parameters and found that information derived from the annual report (financial statements and footnotes disclosures) may provide useful information about increases of risk because of loss contingencies. Research conducted under US GAAP, and before the most recent versions of IAS 37, also contributes to this topic. At the time, Banks and Kinney (1982) and Frost (1991) found that contingencies disclosed in both the footnotes and the auditor’s report had a greater impact on stock prices than footnote disclosures alone.

Earlier literature, thus, provides evidence that provisions recognized (which give rise to loss contingencies accrued to income) and/or contingencies just disclosed (with no impact on elements of financial statement) can be value relevant for market participants’ decision-making[4]. At the same time, another line of research develops the influence of national culture when analyzing contingencies. Our paper links the disclosure and valuation literatures by investigating the potential for the cultural environment to affect valuation of both provisions and contingencies. This approach most directly relates to Tsakumis (2007), who undertakes an experiment regarding the influence of national culture on accountants’ practices, although the relationship with market participants remained unexplored. Tsakumis based his work on Hofstede’s (1980) and Gray’s (1988) frameworks, arguing that accountants are expected to apply financial reporting rules in a manner consistent with their cultural values. Differences in their cultural values when applying the rules, especially those requiring judgment, can lead to different financial reporting decisions. Tsakumis (2007) assumes conservatism (a preference for a cautious approach to measurement) and secrecy

(a preference for confidentiality and the restriction of disclosure of information about the business) as the most important characteristics, as did Gray (1988).

Portugal reveals higher conservatism and secrecy than the UK, consistent with Hofstede's Dimension scores. Supported in Tsakumis (2007), we also consider the IAS 37 an ideal example of a financial-reporting decision task influenced by such cultural factors. We extend prior work to analyze how investors price financial reporting decisions that required judgement on the (non-)recognition of liabilities, along with countries that are also likely to differ in conservatism and secrecy. As such, investors need to understand the differences and the impacts of provisions and contingent liabilities to price them, and this ability can differ between countries with low and high levels of conservatism and secrecy. We build on this idea to identify how stock prices are associated with contingencies, and whether there are differences between countries from different cultural environments.

Another explorative impression to address in this study is related with the impact of board committees on the value relevance of financial statement information. In European stock exchanges, and according to supervisory and regulatory rules, listed firms should all have an audit committee (or equivalent), and at least one of the members should be qualified to analyze compliance with accounting standards. Overall, one issue of critical importance to this committee is the identification and management of financial risks that can affect the firm's financial reporting. However, firms can also designate specific committees on the board to address specific issues (Michaels, 2009; Michelon and Parbonetti, 2012; Liao *et al.*, 2014), such as risks or litigation. The establishment of stand-alone risk committees on boards of directors is increasing, which has an impact on audit fees (Hines *et al.*, 2015). Little is known about their impact on share prices. The presence of a separate risk committee has a positive stock market reaction (Benaroch and Chernobai, 2017) and a positive effect on firm performance (Chowdhury, 2015) and are associated with greater market risk disclosures (Al-Hadi *et al.*, 2016).

Our research extends earlier research on environmental contingencies and introduces a general approach to the value relevance of provisions and contingent liabilities in entities of a diverse set of industries in two different countries. We thus also contribute to the literature on the influence of national culture on the recognition of accounting elements. As far as we know, using national culture to compare investor perception approaches to provisions and contingent liabilities is still unexplored. The analyses will also incorporate an approach to the value relevance of having a risk committee board.

Research design and expectations

Expected association between equity and provisions and contingent liabilities

Firms have two different approaches to revealing information about facts surrounding contingencies: recognition (i.e. considered as provisions and add them to recognized liabilities) or disclosure (i.e. considered as contingent liabilities and mention them in the Notes). While contingent liabilities do not affect the statement of financial position or the income statement, provisions can affect accounting-based measures of leverage and profitability. When provisions are recognized, an increase in liabilities occurs simultaneously with a decrease in earnings (and a decrease in shareholder equity). When contingent liabilities are disclosed, leverage or profitability remains unchanged, except when users process and adjust recognized amounts[5] (Table I). We explore whether market participants price both the recognized liabilities (provisions) and as-if liabilities (contingent liabilities) communicated in financial statements. Differences between recognized and disclosed information are most likely to exist when financial reporting requires judgment and estimation (Choi *et al.*, 1997; Campbell *et al.*, 2003;

Davis-Friday *et al.*, 2004; Choudhary, 2011). If investors do not adjust financial statement totals for the obligations implied in some disclosures, then those investors might misinterpret leverage (Imhoff and Thomas, 1988) or other accounting measures. Provisions and contingent liabilities are an excellent area to test judgement but not measurement, as the basis for measurement is the same for both (i.e. measured by the “best estimate” according to IAS 37). Our research will firstly explore whether there is a relationship between provisions recognized and between contingent liabilities disclosed with share prices.

Our explorative research is then extended to analyze if the relationship between provisions and contingent liabilities with share prices is more intensified or mitigated according to the classification of different cultural environments. More precisely, we chose two national cultural environments using two different countries as proxies: Portugal and the UK. The rankings attributed by Hofstede to these countries (Figure 1[6]) match the accounting value assumptions that Gray (1988) also used to group countries into different clusters. Portugal (Figure 2) demonstrates greater conservatism and secrecy than the UK, consistent with Hofstede’s dimension scores. The different clusters justify the way preparers classify contingent liabilities and contingent assets (Tsakumis, 2007) and the way preparers understand probability thresholds (Du *et al.*, 2016). This paper relies not on preparer but investor’s perspectives. We extend previous works on provisions and contingencies linked to environmental issues analyzed in a context of one country alone (Moneva and Cuellar, 2009) or an industry alone (Campbell *et al.*, 2003) by analyzing two countries with a mixed set of industries.

Theoretically, in conservative and secretive countries such as Portugal, investors would price provisions but not contingent liabilities. Based on cultural characteristics, Portuguese preparers would be less transparent and have a tendency to hide information, one reason why less attention would be given by investors to disclosed information in comparison to recognized information. In contrast, in countries with low levels of conservative behavior and secrecy (i.e. more optimistic and transparent) such as the UK, investors would price both types of contingencies, and both would be associated with share prices, regardless of their location in financial statements. In the UK, preparers would assume more transparency, and information tends to be more complete and reliable, and investors place trust in that information. Our research will explore whether the relationship between contingencies and share prices is intensified or mitigated in countries with different national cultures.

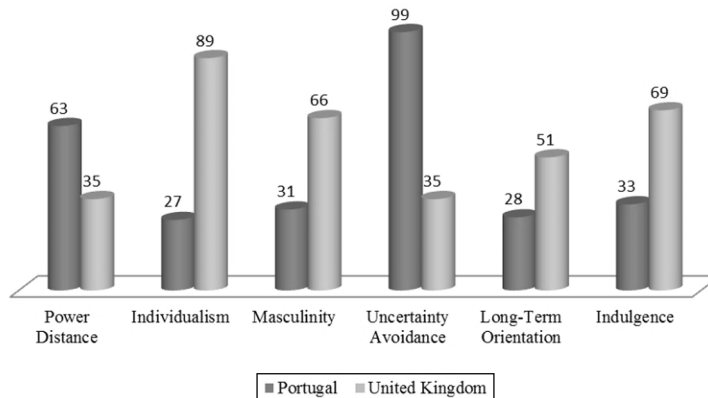


Figure 1.
Hofstede's cultural
dimension scores for
Portugal and UK

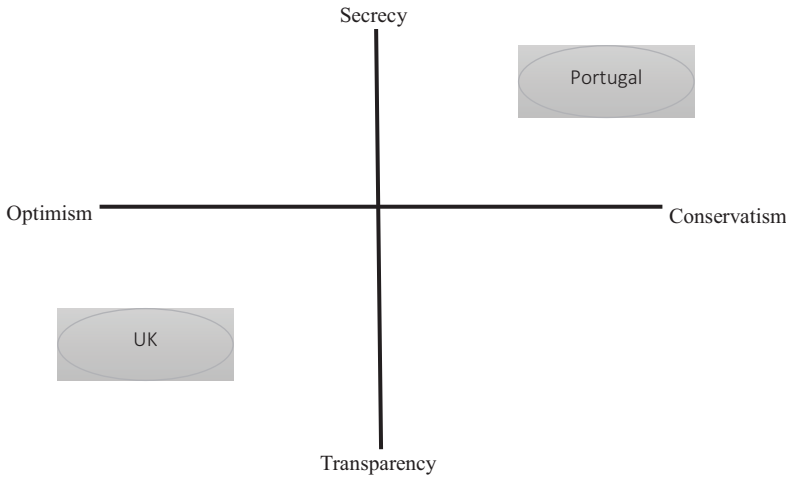


Figure 2.
Gray's measurement
and disclosure,
comparative position
between Portugal and
UK

Our explorative research design will also test market participants' perception on the presence of a risk committee beyond the audit committee. Because of concerns regarding reliability, the existence of such a committee would suggest that investors could process information on provisions and contingent liabilities, considering that the figures are subject to greater scrutiny. Thereafter, the research will test whether investors evaluate the existence of a risk committee board. Then, a distinction is made between firms having a risk committee on the board of directors and those without, to see whether the effect on provisions and contingent liabilities on share prices are mitigated or intensified with the presence of such a committee.

Research method and data

As in earlier research (Davis-Friday *et al.*, 2004; Moneva and Cuellar, 2009; Müller *et al.*, 2015), we rely on basic valuation models to provide evidence on market participants' use of information presented in financial statements. To measure this evidence, we define a valuation model based on Ohlson (1995), modeling the market value of equity as a function of book equity and residual earnings, as well as other information. We want to test financial information through the lens of investors analyzing contingencies, namely, those that are as-if recognized (contingent liabilities) and those that are effectively recognized (provisions) in financial statements. We want also to test if investors positively perceive the presence of a separate risk committee on the board of directors. Specifically, we estimate the following OLS regression (considering the omission of firm and time subscripts for brevity):

$$MV = \beta_1 BV + \beta_2 NI + \beta_3 LOSS + \beta_4 LOSS \times NI + \beta_5 PROV + \beta_6 CONT + Controls + \varepsilon \quad (1)$$

The dependent variable, *MV*, is the market value of equity at the end of the fiscal year [7], taken as a summary indicator of capital participants (Ahmed *et al.*, 2006; Callahan *et al.*, 2013). The independent variable *BV* is the book value of shareholders' equity adjusted to

exclude the effect of provisions in the statement of financial position (e.g. is calculated as the book value of shareholder's equity added to the book value of provisions). The *NI* is the pretax net income at the fiscal year end. The binary variable *LOSS* assumes 1 if the firm has negative pretax income at the fiscal year end. Then, *LOSS* is interacted with *NI* to control for loss-making firms (which can be priced differently from other firms (Rees and Thomas, 2010)).

The two main continuous variables are *PROV* (book value, in euros, of provisions recognized in the statement of financial position) and *CONT* (book value, in euros, of contingent liabilities disclosed only in the notes).

To avoid scale biases, all these variables are deflated by total assets (TA) (Moneva and Cuellar, 2009) of the firms at the end of the fiscal year. As such, all the magnitudes represent weights, mitigating differences between observations that are larger or smaller – the analyses become relative rather than absolute amounts of assets, liabilities, equity, provisions or contingent liabilities:

$$\frac{MV}{TA} = \beta_1 \frac{BV}{TA} + \beta_2 \frac{NI}{TA} + \beta_3 LOSS + \beta_4 LOSSx \frac{NI}{TA} + \beta_5 \frac{PROV}{TA} + \beta_6 \frac{CONT}{TA} + Controls + \varepsilon \quad (2)$$

Control variables are those commonly used in research associating accounting measures with market values, as follows: *Size*, the size of the entity measured as the natural logarithm of firms' assets, as it is usually associated with share prices; *Leverage*, the ratio of total debt to equity; *BIG 4*, a dummy variable, assuming 1, if the firm is audited by a BIG 4 audit firm (EY, Deloitte, KPMG, or PwC) and 0 otherwise; *XLIST*, a dummy variable, assuming 1, if the firm is listed on more than one stock exchange and 0 otherwise. *Year* and *Industry* effects are also included.

Data for contingent liabilities are hand-collected directly from firms' consolidated financial statements and includes only those disclosed based on the probability criteria. This information is usually not provided by databases, making disclosed information harder to use, highlighted by Barth *et al.* (2003) as an explanation for the different treatment of recognized versus disclosed amounts. We include the firm in the sample only if the information in the notes is salient and readable aiding the ability to process information or limiting cognitive bias. Data for other variables are retrieved from Thomson Worldscope Database.

Our predictions are as follows. If market participants value both provisions and contingent liabilities, then the estimates for the coefficient term of *PROV* (β_5) and of *CONT* (β_6) should be statistically significant. Then, to test whether cultural environment influences the relationship between provisions and contingent liabilities, we have re-estimated equation (2) differentiating between Portugal and the UK. Portugal is more secretive, less transparent, and more conservative while the UK is diametrically opposed (less secretive, more transparent and more optimistic).

Additionally, to meet the opportunity to test the effect of a risk or litigation (or equivalent) committee on firm value, we apply all of the previous analysis augmenting equation (2). We include an additional variable, *Committee*, assuming 1 if there is a Risk Committee (or equivalent) on the board of directors and 0 otherwise. The information regarding the existence of such a committee is hand-collected from corporate governance reports. Equation (3) is as follows:

$$\frac{MV}{TA} = \beta_1 \frac{BV}{TA} + \beta_2 \frac{NI}{TA} + \beta_3 LOSS + \beta_4 LOSSx \frac{NI}{TA} + \beta_5 \frac{PROV}{TA} + \beta_6 \frac{CONT}{TA} + \beta_7 Committee + Controls + \varepsilon$$

Provisions and
contingent
liabilities

(3)

If investors evaluate the existence of a committee for risks and litigation on the board of directors, β_7 should be different from zero. The variable *Committee* is then interacted with countries, with provisions, and with contingent liabilities to analyze its ability to moderate the relationship between provisions and contingencies and investors' perceptions in different cultural environments.

239

Sample, descriptive statistics and correlations

The sample includes entities listed on the continuous market of the Euronext Lisbon (Portugal) and London Stock Exchange (UK). Entities such as banks or financial services were excluded (Code 8000 in ICB Classification, based on Worldscope item ICBIC). Because of differences in the number of entities listed in both stock exchanges, we tracked the following procedure. In Portugal, we have chosen the 25 with the highest market capitalization. In the UK, we randomly selected the same number of entities from the FTSE 100. After dropping those with non-available or non-readable data, with no complete annual reports during the sample period, outliers based on studentized residuals greater than 3 (in absolute value), the final sample includes 192 firm-year observations (time window: 2010-2013) all of them from entities applying IFRS in consolidated financial statements, which is our scope of analysis.

Table II reports the sample distribution across the two countries and industries. The consumer services industry is the most dominant in Portugal (38.0 per cent), in the UK (29.6 per cent), and in the set of firms considered together (33.3 per cent), followed by industrials (23.8 per cent in Portugal vs 14.8 per cent in the UK) and consumer goods (14.3 per cent in Portugal vs 22.3 per cent in the UK), with a weight of 18.8 per cent each in the pooled sample. Table III presents the descriptive statistics for the entire sample, as well as for the sub-samples of Portuguese and UK firms. When comparing both countries, all the continuous variables means and medians are higher for the UK firms, except for leverage and contingent liabilities, where Portugal boasts higher figures. The country where entities are

Industry	Portugal		UK		All	
	N	(%)	N	(%)	N	(%)
Oil and gas	0	0	12	11.1	12	6.3
Basic materials	4	4.8	12	11.1	16	8.3
Industrials	20	23.8	16	14.8	36	18.8
Consumer goods	12	14.3	24	22.2	36	18.8
Health care	0	0	8	7.4	8	4.2
Consumer services	32	38.0	32	29.6	64	33.3
Utilities	4	4.8	4	3.7	8	4.2
Technology	12	14.3	0	0	12	6.3
Observations	84	100	108	100	192	100

Notes: Number of observations for Portugal and the UK for sample period 2010–2013; industry classification is based on the Industry Classification Benchmark (ICB)

Table II.
Sample composition
by country and by
industry

	Mean	Median	SD	Min	Max	Percentage of firms-years with risk or litigation committee
<i>All (N = 192)</i>						
MV/TA	0.800	0.511	0.859	0.012	4.272	
BV/TA	0.337	0.318	0.174	-0.079	0.691	
NI/TA	0.589	0.051	0.085	-0.160	0.350	
PROV/TA	0.028	0.016	0.041	-0.002	0.288	
CONT/TA	0.029	0.002	0.078	0.000	0.534	
Size	6.476	6.562	0.924	4.445	8.361	
Leverage	0.240	0.226	0.143	0.000	0.703	
LOSS	0.234	0	0.425	0	1	
Committee						52.1
<i>Portugal (N = 84)</i>						
MV/TA	0.200	0.132	0.190	0.012	0.842	
BV/TA	0.249	0.235	0.166	-0.079	0.643	
NI/TA	-0.050	0.002	0.046	-0.160	0.130	
PROV/TA	0.011	0.009	0.014	-0.002	0.081	
CONT/TA	0.053	0.006	0.111	0.000	0.534	
Size	5.651	5.624	0.573	4.445	6.875	
Leverage	0.269	0.279	0.157	0.000	0.703	
LOSS	0.488	0	0.503	0	1	
Committee						52.4
<i>UK (N = 108)</i>						
MV/TA	1.274	0.976	0.885	0.332	4.272	
BV/TA	0.405	0.379	0.149	0.088	0.691	
NI/TA	0.059	0.081	0.085	-0.160	0.350	
PROV/TA	0.041	0.027	0.049	0.004	0.288	
CONT/TA	0.012	0.000	0.028	0.000	0.150	
Size	7.109	6.933	0.576	6.104	8.361	
Leverage	0.218	0.195	0.128	0.000	0.523	
LOSS	0.037	0	0.189	0	1	
Committee						51.9

Notes: MV/TA = Market value of equity at end of the fiscal year divided by total assets at the end of the same period; BV/TA = Book value of shareholders' equity adjusted to exclude the effect of provisions, divided by total assets at the end of the same period; NI/TA = Pretax net income at the fiscal year end divided by total assets at the end of the same period; PROV/TA = Book value of provisions recognized in the statement of financial position divided by total assets at the end of the same period; CONT = Book value of contingent liabilities disclosed only in the notes divided by total assets at the end of the same period; Size = Natural logarithm of total assets at the end of the fiscal period; Leverage = debt-to-equity ratio at the end of fiscal year. Loss = binary variable, coded as 1 if pretax income is negative and 0 otherwise; Committee = binary variable, coded as 1 if the company has a risk committee on the board and 0 otherwise

Table III.
Descriptive statistics

more leveraged is also where they present more contingencies. However, contingent liabilities have no impact on ratios (except if investors adjust them) because the amounts are disclosed only in the Notes and not in the face of the Statement of financial position. More than half of the entities have a committee for risks and/or litigations on the board of directors (Pooled: 52.1 per cent; Portugal: 52.4 per cent; UK: 51.9 per cent) and almost 50 per cent of the Portuguese firms are loss making. Except for the percentage of firm-years with a risk or litigation committee on board, non-tabulated results for the equality of means parametric *t* test indicate that the mean values are statistically different for all the variables.

Table IV provides correlations for the continuous variables included in the regression equations. Dichotomous variables, such as LOSS, Committee, *XLIST*, *BIG 4*, *Year*, and *Industry*, were not included in the Pearson correlation analysis (because of being discrete and of a limited range). Based on conventional results in the accounting literature, the *MV* is positively and statistically related with *BV* and *NI*. Market value is also significantly associated with *Size* in the UK but not in Portugal. These variables, while showing some indications of collinearity, have no pairwise correlation coefficients exceeding 0.80, which is a conventional indication about the limited peril of multicollinearity (Gujarati, 1995).

Results and discussion

Independent and paired sample: t-tests on mean differences

Table V presents an evaluation of the cell means for our primary variables, specifically, provisions (*PROV/TA*) and contingent liabilities (*CONT/TA*). These two variables are deflated by total assets in the research model, and thus are not used in euros amounts. This approach enables us to compare the relative proportion of these two measures over the size of the firms and is more suitable for comparing firms from countries with capital markets of different sizes. The data presented in these panels are based on accounting measures presented in consolidated financial statements. In panel A of Table V, we summed up all the provisions and as-if provisions (contingent liabilities) found in financial statements in each country. We first use independent sample *t*-test to compare the mean of the weight on these pooled measures in Portugal with the UK equivalent. Findings reveal that, on average, the difference between the mean in Portugal (mean = 0.065) and the mean in the UK (mean = 0.053) is not statistically significant at conventional levels (*t*-test = 0.964). Second, we separated provisions from contingent liabilities and performed the same test but compared these two amounts separately.

Panel B of Table V presents the results. The findings suggest that Portuguese firms are less likely to recognize provisions (mean = 0.012 vs mean = 0.041) and more likely to disclose contingent liabilities (mean = 0.053 vs mean = 0.012) than UK firms. In these cases, the mean differences are statistically significant at conventional levels. These findings suggest that, although similar on average, regarding the weight of all types of contingencies presented in financial statements, Portugal and the UK differ in the way they report those contingencies: a preference for contingent liabilities in Portugal and for provisions in the UK. These conclusions are, in part, in accordance with those of Tsakumis (2007). Using an experiment, he also found that Greek accountants (with a cultural environment similar to Portugal's) were less likely to recognize provisions [8] than US accountants (with an environmental culture similar to the UK), contrary to their expectations.

Panel B of Table V also presents the findings for within-country *t*-test, comparing the mean of the weight of provisions recognized and contingent liabilities disclosed. Findings reveal that, on average, Portuguese firms are less likely to recognize provisions than contingent liabilities (mean = 0.012 vs mean = 0.053; *t* = -3.270) and firms from the UK are the opposite, being more likely to recognize provisions than contingent liabilities (mean = 0.041 vs mean = 0.012; *t* = 6.253). These findings also partially corroborate those of Tsakumis (2007). His research did not compare contingent liabilities with provisions but rather with contingent assets, suggesting that the US was more conservative than Greece. This is consistent with our findings, in the sense that if entities recognize more provisions for the same type of event, they are more conservative, as they anticipate losses that are still potential.

Overall, the findings of Table V seem to support Tsakumis' (2007) work, extending the conclusions to Portugal and the UK. At least with respect to provisions and contingencies,

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>All (N = 192)</i>							
(1) MV/TA	1						
(2) BV/TA	0.302**	1					
Sig. (two-tailed)	0.000						
(3) NI/TA	0.623**	0.251**	1				
Sig. (two-tailed)	0.000	0.000					
(4) PROV/TA	0.091	0.437**	0.111	1			
Sig. (two-tailed)	0.214	0.000	0.127				
(5) CONT/TA	-0.231**	0.020	-0.277**	-0.041	1		
Sig. (two-tailed)	0.001	0.782	0.000	-0.569			
(6) Size	0.323**	0.372**	0.415**	0.467**	-0.159**	1	
Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.028		
(7) Leverage	-0.455**	-0.680**	-0.468**	-0.214**	0.065	-0.456**	1
Sig. (two-tailed)	0.000	0.000	0.000	0.003	0.374	0.000	
<i>Portugal (N = 84)</i>							
(1) MV/TA	1						
(2) BV/TA	0.110**	1					
Sig. (two-tailed)	0.000						
(3) NI/TA	0.318**	0.108	1				
Sig. (two-tailed)	0.003	0.333					
(4) PROV/TA	0.191	0.030	0.214	1			
Sig. (two-tailed)	0.064	0.787	0.052				
(5) CONT/TA	-0.244**	0.168	-0.243*	-0.096	1		
Sig. (two-tailed)	0.026	0.128	0.027	0.386			
(6) Size	-0.176	-0.002	0.079*	0.341**	-0.005	1	
Sig. (two-tailed)	0.112	0.984	0.477	0.002	0.961		
(7) Leverage	0.048	-0.648**	-0.076	0.265*	-0.175	0.159	1
Sig. (two-tailed)	0.666	0.000	0.497	0.016	0.114	0.150	
<i>UK (N = 108)</i>							
(1) MV/TA	1						
(2) BV/TA	0.046**	1					
Sig. (two-tailed)	0.000						
(3) NI/TA	0.779**	-0.159	1				
Sig. (two-tailed)	0.000	0.100					
(4) PROV/TA	-0.241*	0.467**	-0.248**	1			
Sig. (two-tailed)	0.013	0.000	0.010				
(5) CONT/TA	-0.192*	0.196	-0.163	0.285**	1		
Sig. (two-tailed)	0.050	0.042	0.091	0.003			
(6) Size	0.432**	0.085	-3.383**	0.358**	0.324**	1	
Sig. (two-tailed)	0.000	0.384	0.000	0.000	0.001		
(7) Leverage	-0.138	-0.507**	-0.071	-0.023	-0.071	0.058	1
Sig. (two-tailed)	0.160	0.000	0.466	0.813	0.468	0.550	

Notes: MV/TA = Market value of equity at end of the fiscal year divided by total assets at the end of the same period; BV/TA = Book value of shareholders' equity adjusted to exclude the effect of provisions, divided by total assets at the end of the same period; NI/TA = Pretax net income at the fiscal year end divided by total assets at the end of the same period; PROV/TA = Book value of provisions recognized in the statement of financial position divided by total assets at the end of the same period; CONT = Book value of contingent liabilities disclosed only in the notes divided by total assets at the end of the same period; Size = Natural logarithm of total assets at the end of the fiscal period; Leverage = debt-to-equity ratio at the end of fiscal year. Loss = binary variable, coded as 1 if pretax income is negative and 0 otherwise; Committee = binary variable, coded as 1 if the company has a risk committee on the board and 0 otherwise. **Correlation is significant at the 0.01 level (two-tailed). *Correlation is significant at the 0.05 level (two-tailed)

Table IV.
Correlation matrix
for the main
continuous variables

that particular author argues that culture may not play a direct role in the application of recognition rules across cultures, as the likelihood of recognizing provisions or disclosing contingencies does not seem to support traditional theory.

However, our main goal is to analyze market participants' perception of these two accounting measures, which requires a different approach. On the other hand, [Hellman et al. \(2015\)](#) remark upon how harmonization efforts in Europe toward IFRS adoption in the pre-2005 period might have reduced differences in "bottom line" terms, making these differences irrelevant. Moreover, from 2005 to 2010, the timeline for harmonization is arguably sufficient to mitigate cultural differences based on former associations (secrecy/transparency, conservatism/optimism, class A/class B, Common Law/Roman Law). Accordingly, "If this is the case, the international accounting classification patterns may not emerge" ([Hellman et al., 2015: 175](#)).

Results of Ordinary Least Square (OLS) estimation

The estimation of the regression equations (2) and (3) pools all the observations cross-sectionally and over time. Given that a pilot estimation of the models revealed the presence of heteroskedacity in the residuals, all the models have been estimated using year and industry dummies. Additionally, because of the small size of the sample, the models were transformed using rank-based normalizing transformations based on the Blom's procedure ([Soloman and Sawilowsky, 2009](#)). All statistics are White-adjusted ([White, 1980](#)).

Table VI presents the results for the coefficients estimated for equations 2 and 3. In column (1), we present the results of the overall sample [Equation (2)] without separation between culture environments. Given that we want to test the value relevance of provisions (PROV/TA) and contingent liabilities (CONT/TA), we expect that the coefficients associated with these two variables to be statistically different from zero. The estimation gives different results for both variables and both are statistically significant, so both are taken into account by the market. However, while the coefficient of contingent liabilities (CONT/TA) is negative ($\beta = -0.182$; $t = -4.361$), the one of provisions (PROV/TA) is positive ($\beta = 0.119$; $t = 2.765$). These results suggest that disclosures are discounted by market participants, but the coefficient of provisions seems to be not in line with earlier research, often also attributing a negative coefficient ([Moneva and Cuellar, 2009](#)). Although seeming to be counter-intuitive, a positive sign for provisions was also found by [Wegener and Labelle \(2017\)](#), whose results indicate that environmental provisions act as liabilities only for oil and gas firms that release stand-alone sustainability reports. For other oil and gas firms without sustainability reports, as well as for the mining industry, those authors found that provisions are associated with higher market values. Beyond industries,

Independent sample <i>t</i> -test	Portugal (<i>n</i> = 84)	UK (<i>n</i> = 108)	Mean difference	<i>t</i> -test
<i>Panel A: Comparison of the mean of provisions and contingent liabilities pooled</i>				
Provisions and Contingent liabilities	0.065	0.053	0.012	0.964
<i>Panel B: Comparisons of means for primary variables – provisions and contingent liabilities</i>				
Paired sample <i>t</i> -test				
Provisions	0.012	0.041	-0.029	-5.363***
Contingent liabilities	0.053	0.012	0.041	3.748***
Mean difference	-0.041	0.029		
<i>t</i> -test	-3.270***	6.253***		

Table V.
Independent and paired sample tests

Table VI.
Results of the OLS
estimation

	(1)	(2)	(3)	(4)	(5)
Constant	-0.797 (-0.505)	0.311** (1.868)	-0.132 (-0.846)	0.002 (0.017)	0.189 (1.250)
BV/TA	0.162*** (2.411)	0.171*** (2.807)	0.170*** (2.911)	0.204*** (3.394)	0.179*** (2.965)
NI/TA	0.884*** (11.062)	0.745*** (10.180)	0.869*** (11.557)	0.727*** (11.472)	0.648*** (9.569)
LOSS	0.001 (0.997)	0.177 (1.371)	0.002 (0.016)	0.210* (1.673)	0.206* (1.671)
LOSS × NI/TA	-0.651*** (-5.611)	-0.577*** (-5.429)	-0.637*** (-5.712)	-0.548*** (-5.502)	-0.437*** (-4.249)
PROV/TA	0.119*** (2.765)	-0.059* (-1.701)	0.120*** (2.774)	0.088** (2.022)	-0.106* (-1.761)
CONT/TA	-0.182*** (-4.361)	-0.041 (-1.021)	-0.188*** (-4.431)	-0.131*** (-3.579)	-0.054 (-1.044)
PT		-0.887*** (-5.073)		-0.925*** (-4.532)	-1.006*** (-5.179)
PT* PROV/TA		0.294*** (3.303)			0.318** (2.039)
PT* CONT/TA		-0.080 (-1.019)			0.041 (0.392)
Committee			0.084** (2.015)	0.306*** (3.380)	0.362*** (4.196)
PT*Committee				-0.142 (-1.030)	-0.161 (-1.145)
PT*Committee*PROV/TA					0.074 (0.489)
PT*Committee*CONT/TA					-0.213*** (-2.042)
Controls	Included	Included	Included	Included	Included
Adjusted R ²	0.824	0.863	0.825	0.865	0.876
Number of observations	192	192	192	192	192

Notes: Main variables: MV/TA = Market value of equity at end of the fiscal year divided by total assets at the end of the same period; BV/TA = Book value of shareholders' equity adjusted to exclude the effect of provisions, divided by total assets at the end of the same period; NI/TA = Pretax net income at the fiscal year end divided by total assets at the end of the same period; PROV/TA = Book value of provisions recognized in the statement of financial position divided by total assets at the end of the same period; CONT = Book value of contingent liabilities disclosed only in the notes divided by total assets at the end of the same period; PT = binary variable, coded as 1 if the firm is from Portugal and 0 otherwise; Loss = binary variable, coded as 1 if pretax income is negative and 0 otherwise; Committee = binary variable, coded as 1 if the company has a risk committee on the board and 0 otherwise. Controls: Size = Natural logarithm of total assets at the end of the fiscal period; Leverage = debt-to-equity ratio at the end of fiscal year; XLIST = binary variable, coded as 1 if the firm is listed in more than one stock exchange and 0 otherwise; BIG 4 = binary variable, coded as 1 if the firm is audited by a big 4 audit company and 0 otherwise. Dummy variables for years and for ICB Industries included. *** p -value < 0.001; ** p -value < 0.01; * p -value < 0.05. The t -statistics are White-adjusted (White, 1980)

Feleagaõ *et al.* (2010) conclude that national accounting culture exhibits a significant influence on the IFRS policies that firms apply with regard to the recognition and measurement of provisions, and it is still a matter of managerial discretion, whether influenced by traditional accounting practices or by other factors. We are not aware whether this influence of culture may be extended to market participants too when pricing this information. Probably, including Portuguese and British firms in a single sample is not understandable because cross-country differences exist.

The research is then changed in Column (2), where the results of Equation (2) are adjusted and the dummy variable *PT* is added. *PT* is a proxy for national culture, assuming 1 when the sample firms are from Portugal. This variable is then interacted with provisions and with contingent liabilities. Now the results reveal that both provisions and contingent liabilities present a negative influence on the market value of firms (PROV/TA: $\beta = -0.059$ and $t = -1.701$; CONT/TA: $\beta = -0.041$; $t = -1.021$) but are statistically significant only for provisions. This result is consistent with the findings reported in earlier literature, namely, that when the disclosed amounts are reliable, identifiable, and easily processed, investors appear to evaluate these two figures similarly (Bratten *et al.*, 2013). The lack of significance of contingent liabilities can be related with the low number of British firms presenting this element in consolidated financial statements.

In the same column, results for Portugal are rather different. The interaction of the variable *PT* shows that the value relevance of contingent liabilities is similar to that in the UK ($PT * CONT/TA$: $\beta = -0.080$; $t = -1.019$), namely, the inverse but no statistically significant relationship with market prices holds and is not intensified or mitigated. However, in Portugal the influence of provisions on market value is different ($PT * PROV/TA$: $\beta = 0.294$; $t = 3.303$). The different results between Column 1 and Column 2 suggest that national culture may play a role in the relationship between provisions and contingent liabilities. In fact, the interaction variable indicates that provisions are incrementally less negative in Portugal, but not ineludibly that the value is positive for the country by itself.

We run again the estimation presented in Column 1 separately on the UK and Portugal samples (not tabulated). The inferences persist. In the UK sample provisions display negative coefficients, while in the Portuguese sample they are positive, and the coefficient of contingent liabilities is statistically significant in neither. These results are consistent with the interactions in Column 2. An explanation for the positive sign of provisions with market shares should be explored and may be linked to differences in the way Portuguese investors perceive this element.

Column 3 presents the results for equation (3). In this case, we want to test whether the presence of a risk committee (or other equivalent) is priced by the market. The coefficient on the variable of interest, *Committee*, reveals a positive influence on stock prices ($\beta = 0.084$; $t = 2.015$). This is consistent with the literature showing that the presence of a separate risk committee has a positive stock market reaction (Benaroch and Chernobai, 2017) and a positive effect on firm performance (Chowdhury, 2015). The coefficients on the main variables provisions and contingent liabilities are consistent with those presented in Column 1 (PROV/TA: $\beta = 0.120$ and $t = 2.774$; CONT/TA: $\beta = -0.188$; $t = -4.431$).

Our research also tests whether the influence of the existence of a risk committee on share prices differs according to national culture. Column 4 presents the results adjusting equation (3) to include again the dummy variable *PT*, and this variable is interacted with the variable *Committee*. The results are consistent with Column 3, suggesting that the market evaluates positively the presence of the Risk committee on the board of directors ($\beta = 0.306$; $t = 3.380$), and that this influence is not more intensified or mitigated in Portugal ($\beta = -0.142$; $t = -1.030$).

Finally, Column 5 presents the situation in which there are two moderator variables (PT and *Committee*) which jointly influence the regression of the dependent and independent variables. This means that Column 5 presents a regression model that has a three-way interaction of continuous variables. The adjusted R squared is higher when compared to the prior columns. The findings about the presence of a risk committee are consistent with column 4, namely, the positive relationship between the existence of a risk committee and share prices (*Committee*: $\beta = 0.362$; $t = 4.196$), and the interaction of PT with the variable committee is not statistically significant (*PT*Committee*: $\beta = -0.161$; $t = -1.145$), meaning that national culture does not change the way market participants price that committee. In both countries, the existence of the risk committee is value relevant.

The results showed in Column 5 also reveal that there is a negative relationship between provisions and share prices (PROV/TA: $\beta = -0.106$; $t = -1.761$) but this negative influence is reduced in Portuguese firms (PT*PROV/TA: $\beta = 0.318$; $t = 2.039$). This result is consistent with column 2, confirming that national culture probably justifies the way participants in different markets evaluate provisions. Moreover, the mean level of provisions in Portugal is significantly lower than in the UK (Table IV, panel B), which may justify differences on the value relevance of both countries. Additionally, the existence of the risk committee in Portuguese firms does not mediate the way provisions are priced by the market (PT*Committee*PROV/TA: $\beta = 0.074$; $t = 0.489$).

Contingent liabilities, in turn, seem to have no value relevance (CONT/TA: $\beta = -0.054$; $t = -1.044$), showing that investors make a difference when evaluating provisions (value relevant) and contingent liabilities (no relevance), despite the same direction in the relationship. The coefficient of the interaction of contingent liabilities with national culture is not statistically significant (PT * CONT/TA: $\beta = 0.041$; $t = 0.392$). However, as opposed to provisions, contingent liabilities in Portuguese firms are incrementally negatively associated with share prices but this relationship is statistically significant only when those Portuguese firms have a risk committee on the board of directors (PT*Committee * CONT/TA: $\beta = -0.213$; $t = -2.042$). This may be justified by the fact that in Portugal, the likelihood of disclosing contingent liabilities is greater than in the UK, and is also greater than the likelihood of recognizing provisions (Table IV, panel B). Thereafter we also estimated again the model presented in Column 6, also separately for both countries, and the findings are again consistent with the previous ones. In the UK, sample provisions and contingent liabilities present negative coefficients but are statistically significant only for provisions. In the Portuguese sample provisions continue to obtain a non-negative coefficient, while contingent liabilities has a negative one, but only when there is a committee on risks on the board. Indeed, our results about provisions corroborate the findings of Campbell *et al.* (2003), in the way that recognizing liabilities rather than disclosing them as contingent liabilities has the ability to remove some of the pricing uncertainty around these potential liabilities.

Sensitivity analysis

As is typical in studies using firm valuation models, alternative explanations for the results presented may include the effects of correlated omitted variables and measurement errors bias. Presenting robust tests across alternative model specification to mitigate correlated omitted variables is one of the solutions (Campbell *et al.*, 2003). Even so, recent papers have discussed different methods used in the literature proposing a solution to the correlation of the residuals in cross-sectional and time-series dependence in accounting research (Petersen, 2009; Gow *et al.*, 2010). Wintoki *et al.* (2012) argue that a firm's current actions can affect its future actions and future performance. In the context of provisions and contingencies, a

firm's past decision related to recognizing or simply disclosing these amounts can affect its future performance, because of the reclassification that the IAS 37 permits when analyzing the threshold of probability. Contingent liabilities can be recognized as provisions in later periods and vice versa. This causal effect is referred to by [Wintoki et al. \(2012\)](#) as dynamic endogeneity and the authors claim that any study that does not recognize this source of endogeneity may be biased. We used the dynamic modeling approach to deal with the potential problem of endogeneity ([Chowdhury, 2015](#)), and accordingly lagged variables are used as the instruments for explanatory variables. A 2SLS model is re-estimated; we regressed the lagged variables of our models from 2010 to 2013 against the period 2006-2009. The remaining results are consistent with our earlier regression findings. However, this procedure is most suitable for large samples. In addition, we run all of the equations using generalized linear model estimation instead of OLS estimation, and the main results are also maintained. The results presented in [Table VI](#) were then tested using panel least squares with year fixed effects and dummies for industry effects. Given the small size of sample, some coefficients changed significance when standard errors were clustered by firm, even though most of our previous inferences were maintained, as well as the sign of each coefficient. [Table VII](#) (Panel A) helps to make readers aware of the extent of the impact that our research methodology choices could have on inferences. We include in this table only the main variables of interest, and we present in [Table VII](#) the same 5 columns as in [Table VI](#). For each column, we flag those coefficients that maintained the same tendency as in the previous table (with \surd) and the ones that lost statistical significance at conventional levels if standard errors were clustered by firms (with \neq). This can be understood as a limitation of this explorative research, and a source of motivation to open an avenue for new researches. Including more firms from more national culture environments is a challenge.

Furthermore, [equations 2 and 3](#) and the results of the OLS estimation presented in [Table VI](#) were also performed, adjusting the scaler. Instead of scaling the main variables using total assets, the number of shares outstanding was also used, resulting in a share basis analysis ([Barth and Clinch, 2009](#)). Simultaneously, we deleted the unique observation with a negative amount on provisions (which could be seen as an asset). The main results are maintained. After deleting that unique observation, we used the Cook's distance (COO) statistic to identify cases which may be having an excessive influence on the overall model (removing all the observations with $COO > 4/191$, as the usual rule of thumb). We run the models again using the number of shares as deflator, and report the results in Panel B of [Table VII](#). We use the same flags as in Panel A to signalize similarities and differences when comparing outcomes using different deflators. The coefficient on provisions remains positive in some models. Furthermore, we winsorize the continuous variables at the 1 and 99 percentiles in the OLS regressions using those two different deflators (scaling the continuous independent variables by total assets and by the number of shares) and the provisions continues to present a positive sign in some models (not tabulated). These findings are consistent with [Wegener and Labelle \(2017\)](#) who found that instead of downwardly adjusting stock prices to reflect the future settlement of the obligation, investors appear to be evaluating some provisions positively. Specifically, they found that Canadian firms in the oil and gas industry that do not release stand-alone CSR reports environmental provisions convey valuation instead of liability information.

The positive sign of the relationship between provisions (main variable or interactions) and market value is some of our results is driven by Portuguese firms. The recognition of provisions instead of the merely disclosure as contingent liabilities (with no impacts on total liabilities) could indicate "good" news through the firm's willingness to estimate higher costs or commitment to lower reported earnings.

	(1)	(2)	(3)	(4)	(5)
<i>Panel A: standard errors clustered by firm</i>					
PROV/TA	0.139**	√ -0.052	≠ 0.138**	√ 0.094	≠ -0.114
CONT/TA	-0.159***	√ -0.019	√ -0.168***	√ -0.116***	√ -0.041
PT		√ -0.914***	√	√ -0.917***	√ -0.997***
PT * PROV/TA		√ 0.312***	√	√	√ 0.354*
PT* CONT/TA		√ -0.077	√	√	√ 0.053
Committee			0.106	≠ 0.378***	√ 0.423***
PT*Committee				√ -0.241	√ -0.252
PT*Committee*PROV/TA				√	√ 0.057
PT*Committee*CONT/TA					√ -0.228
<i>Panel B: OLS Regression using number of shares as deflator</i>					
PROVpershare	0.171***	√ -0.003	≠ 0.170***	√ 0.134***	√ -0.057
CONTpershare	-0.127***	√ -0.025	√ -0.139***	√ -0.085***	√ -0.055
PT		√ -0.461***	√	√ -0.564***	√ -0.517***
PT * PROVpershare		√ 0.243***	√	√	√ 0.184
PT* CONTpershare		√ -0.070	√	√	√ 0.021
Committee			0.169***	√ 0.264***	√ 0.0208**
PT*Committee				√ -0.041	√ -0.041
PT*Committee*PROVpershare				√	√ -0.065
PT*Committee*CONTpershare					√ -0.033

Notes: Panel A: PROV/TA = Book value of provisions recognized in the statement of financial position divided by total assets at the end of the same period; CONT/TA = Book value of contingent liabilities disclosed only in the notes divided by total assets at the end of the same period; PT = binary variable, coded as 1 if the firm is from Portugal and 0 otherwise; Committee= binary variable, coded as 1 if the company has a risk committee on the board and 0 otherwise. Panel B: PROVpershare = Book value of provisions recognized in the statement of financial position divided by number of shares outstanding at the end of the same period; CONTpershare = Book value of contingent liabilities disclosed only in the notes divided by number of shares outstanding at the end of the same period; PT = binary variable, coded as 1 if the firm is from Portugal and 0 otherwise; 2Committee= binary variable, coded as 1 if the company has a risk committee on the board and 0 otherwise. *** p -value < 0.001; ** p -value < 0.01; * p -value < 0.05

Table VII.
Sensitivity analysis

Supported in the arguments of [Wegener and Labelle \(2017\)](#), only strong firms can afford to outline this decrease in their earnings, also evidenced in earlier research on bank loan provisions, which have been shown to have a positive impact on market value in some studies ([Liu and Ryan, 1995](#); [Kanagaretnam et al., 2009](#)). On the other hand, the decision to include provisions in the statement of financial position is supported in accountants' beliefs that it is more likely than not that the payout to settle the obligation will occur. But accountants in a high conservatism country, such as Portugal, assign a lower numerical probability to verbal probability expressions that determine the threshold for the recognition of items that decrease income than accountants in a low conservatism country, such as the UK ([Doupnik and Riccio, 2006](#)). If the market:

(...) believes that a firm will not be held accountable for these likely or conditional obligations, it dramatically alters the impact this "bad" news component may have on market value ([Wegener and Labelle, 2017: 149](#)).

Our exploratory study, thus, supports future research on national culture factors and on the way as investors interpret and process the information about provisions presented in financial statements with a larger number of countries. For instance, how do legal and cultural forces interact in ways that exacerbate or mitigate the effect of contingencies on

market price, how does culture affect the way in which investors judge and evaluate provisions and contingent liabilities across various industries, market settings and type of organizations or to what extent is the relationship between contingencies and debt markets influenced by different institutional environments.

Conclusion

We analyze whether market participants' price recognized and disclosed contingencies differently when setting firm value. We used the same firms during the same time period with both provisions and/or contingent liabilities. Five main conclusions emerge. First, there are differences in the weights of provisions recognized and contingencies disclosed in the financial statements in Portugal and in the UK. Second, there is no tendency for a greater recognition of provisions in Portugal or a higher propensity for disclosure in the UK. This seems to contradict the theoretical approach of Gray's hypotheses for high secrecy (transparency) and high conservatism (optimism) in countries with high (low) uncertainty avoidance such as Portugal (UK). Going ahead with the findings, the third suggestion is that provisions and contingencies have a negative association with share prices, but is not statistically significant for contingencies. However, in Portugal, while contingent liabilities are incrementally negatively associated with share prices, the negative relationship between provisions and share prices is mitigated. We suggest that the national culture environments in each country dictate the way that investors interpret and process the provisions presented in financial statements in different countries. Fourthly, in both countries the market participants evaluate positively the existence of a risk committee on the board, which can contribute to a better assignment on the contingencies to be recognized in financial statements or simply disclosed. Finally, when the risk committee is introduced in the model as a prior omitted variable, the prior results on the relationship between provisions and contingent liabilities with share prices are maintained but not exactly for Portugal. In Portugal, investors discount on share prices the contingent liabilities disclosed if the firm has a risk committee board.

Our findings may be of interest to the IASB in relation to its IAS 37 research project (IFRS Foundation, 2016), which is currently at the assessment stage. Staff identified some problems with IAS 37, and conducted informal outreach with representatives of some accounting firms and preparers of financial statements, who reported that they have few problems applying IAS 37 in practice and see no need for a fundamental review of the whole Standard. However, users of financial statements (where market participants are included), standard-setters, regulators, and accountability bodies expressed a different view, some describing the research project on the IAS 37 as important (high or medium) and urgent (high or medium). Among other things, staff reported that the scope of the project should include updating IAS 37 to make its requirements consistent with the definition of a liability and the concepts supporting that definition in the revised Conceptual Framework, but not a review of the existing recognition criteria. The recognition criteria are applied by preparers, who say that they have few problems. However, users have called special attention to the criteria, and some of these users are in the market, valuing or not the information recognized and/or disclosed in financial statements. No discussion paper on possible amendments to IAS 37 will be issued until the revisions to the conceptual framework are finalized.

This paper has some limitations. Many entities can report the maximum amount payable, rather than a best estimate, for contingencies, while measurement of provisions is more likely to reflect the best estimate. While we analyzed all the content on notes, and we believe the firms in the sample used the best estimate for both, our reading could be biased. We acknowledge this aspect as a limitation, because we did not control for situations in which the best estimate versus maximum amount payable could occur, interpreting both

would be the same. Another limitation related with this is that prior research into pricing of recognized versus disclosed amounts includes processing costs in the model, especially when the measurement basis is not the same between both. Based on our content analysis, we assume that the basis of measurement used by the entities was the same (best estimate), and we did not include differential processing costs in the model. Lastly, we used two countries having different cultural environments. However, potentially there is a diverse set of other characteristics between countries that could justify differences in the value relevance of contingencies between countries. With only two countries, it is difficult to include other magnitudes and evaluate how this would affect pricing. Thus, our limitations open an avenue for future research. Our explorative study can be extended to include more countries from different cultural environments and other economic, reporting and market characteristics to control for the effect on pricing.

Notes

1. Empirical research regarding issues that can be under the creative accounting umbrella have covered topics such as the recognition versus disclosure process (Schipper, 2007; Libby *et al.*, 2006; Clor-Proell & Maines, 2014), quality of information reported (Burgstahler *et al.*, 2006; Hope *et al.*, 2013), litigation contingency disclosure (Desir *et al.*, 2010; Hennes, 2014), reduced uncertainty (Linsmeier *et al.*, 2002), incentives to engage in such actions (Aboody *et al.*, 2004), country-specific factors (Darrrough *et al.*, 1998; Kinnunen & Koskela, 2003; Bhattacharya *et al.*, 2003), and the effects of disclosures (Conover *et al.*, 2008; Libby & Brown, 2013). Overall, the literature concludes that, notwithstanding major resistance by the preparers of financial statements to corporate quantitative disclosures, the accounting information released to the market mitigates information asymmetry and improves communication amongst managers, shareholders, and creditors.
2. There are two types of definitions for creative accounting – a wider definition used in the United States and adopted by Mulford & Comiskey (2002), and a narrower definition adopted in the United Kingdom. According to Jones (2010, p. 5) “the wider US definition sees creative accounting as including fraud whereas the UK definition sees creative accounting as using the flexibility within the regulatory system, but excludes fraud”. It includes the type of flexibility underlying *judgements* that accounting standards require from those who prepare and communicate financial information. An example of detailed accounting techniques can be found in Smith (1998), who reported accounting manipulations by 208 of the largest UK companies and identified 12 different techniques commonly used. One of the techniques was the use of contingencies. As a consequence, investors and users of financial statements may consider income smoothing, earnings management, window dressing, financial engineering, aggressive accounting, innovative accounting, or cosmetic accounting as specific types of creative accounting (Beidleman, 1973; Mulford & Comiskey, 2002; Jones, 2010; Vladu & Matis, 2010; Vladu and Pelinescu, 2014; Shafer, 2015). Increasing income, decreasing expenses, increasing assets, and decreasing liabilities are four main approaches to engage creativity (Jones, 2010).
3. Prior important works document such differences and attempt to explain how these two different presentations are used by the capital markets and why the process would be different. Differential processing costs (Barth *et al.*, 2003), differences in reliability (Choi *et al.*, 1997; Davis-Friday *et al.*, 2004; Choudhary, 2011), and cognitive biases among investors (Schipper, 2007; Hirshliefer and Teoh, 2003) are highlighted as main causes for those differences. These studies usually evaluate items that require estimation, for example, (1) post-retirement benefit obligations (Davis-Friday *et al.*, 2004 recall estimation on future compensation, mortality rates, among other factors), and (2) stock options (Hodder *et al.*, 2006 evoke estimates of volatility, interest rates among others). When disclosures are not based on estimates and are amenable to simple techniques for imputing as-if recognized amounts (as in leases), disclosed items are not processed differently from recognized items (Bratten *et al.*, 2013).

4. Extensive literature concludes that, despite strong resistance by the preparers of financial statements to corporate quantitative disclosures, accounting information released to the market mitigates information asymmetry and improves communication amongst managers, shareholders, and creditors (Darrough *et al.*, 1998; Linsmeier *et al.*, 2002; Bhattacharya *et al.*, 2003; Kinnunen & Koskela, 2003; Aboody *et al.*, 2004; Burgstahler *et al.*, 2006; Libby *et al.*, 2006; Schipper, 2007; Conover *et al.*, 2008; Desir *et al.*, 2010; Hope *et al.*, 2013; Libby & Brown, 2013; Clor-Proell & Maines, 2014; Hennes, 2014). More focused, disclosures of provisions and contingencies related to environment plays a value-relevant uncertainty-reducing role (Campbell *et al.*, 2003) and are market valued (Moneva & Cuellar, 2010).
5. It is important to highlight that investors will not use creative accounting techniques to influence judgment on the likelihood of the event confirming the loss (to recognize a provision or not). Managers and preparers could have done it. However, differences in provisions and contingent liabilities can arise, not exactly from management biases but from legitimate differences based on evidence from different events in different countries. We do not control for such different events for the following reasons. First, market participants use consolidated financial statements, in which corporate and accounting information is not about one single company but about one reporting entity, including the parent company and a large range of subsidiaries. Controlling for events under the application of IAS 37 that are similar or similarly treated by different entities would imply an extremely small sample with almost unique cases (within-company context). Second, market participants usually have a portfolio of different investments. If they are rational and unbiased by cognitive reasons, they analyse the aggregate amounts of all companies and interpret provisions and contingent liabilities globally (based on definitions of IAS 37). Third, all entities provide information about the “key assumptions and estimates” used in the preparation of financial statements. Most, if not all, include contingencies in this section, based on lack of control or lack of knowledge of future events but usually not identifying any particular event except the call to judgement used on them.
6. The scores given for each dimension are taken from the Hofstede’s Center – Country Comparison Tool. It is worth mentioning that according to the website, the scores attributed to the 5th dimension are based on Hofstede *et al.* (2010) latest research.
7. The market value of the equity three months after fiscal year end was also used. Results are maintained.
8. Tsakumis (2007) used the term “recognized contingent liabilities” referring to provisions, and “disclosed contingent liabilities” referring to typical contingent liabilities not recorded on the balance sheet. We use provisions (when recognized) and contingent liabilities (when only disclosed) to be more consistent with IAS 37 terminology.

References

- Aboody, D., Barth, M. and Kasznik, R. (2004), “Firms’ voluntary recognition of Stock-Based compensation expense”, *Journal of Accounting Research*, Vol. 42 No. 2, pp. 123-150.
- Adrian, G., Ramona, R.P. and Romulus, B.S. (2012), *International Research regarding Creative Accounting, Annals of the University of Oradea, Economic Science Series*, pp. 668-674.
- Ahmed, A., Kilic, E. and Lobo, G. (2006), “Does recognition versus disclosure matter? Evidence from value-relevance of banks’ recognized and disclosed derivative financial instruments”, *The Accounting Review*, Vol. 81, pp. 567-588.
- Alexander, D., Britton, A., Hoogendoon, M. and Mourik, C.V. (2014), *International Financial Reporting and Analysis*, 6th ed., Cengage Learning EMEA, UK.
- Al-Hadi, A., Hasan, M.M. and Habib, A. (2016), “Risk committee, firm lifecycle, and market risk disclosures”, *Corporate Governance: An International Review*, Vol. 24 No. 2, pp. 145-170.

- Angeloni, S. (2016), "Cautiousness on convergence of accounting standards across countries", *Corporate Communications: An International Journal*, Vol. 21 No. 2, pp. 246-267.
- Backmon, I.R. and Vickrey, D. (1997), "An empirical investigation of the relationship between bond risk premiums and loss contingency disclosures", *Journal of Accounting, Auditing and Finance*, Vol. 12 No. 2, pp. 179-198.
- Banks, D.W. and Kinney, W. Jr (1982), "Loss contingency reports and stock prices: an empirical study", *Journal of Accounting Research*, Vol. 20 No. 1, pp. 240-254.
- Barth, M.E. and Clinch, G. (2009), "Scale effects in capital Markets-Based accounting research", *Journal of Business Finance and Accounting*, Vol. 36 Nos 3/4, pp. 253 -288.
- Barth, M., Glinch, G. and Shibano, T. (2003), "Market effects of recognition and disclosures", *Journal of Accounting Research*, Vol. 41 No. 4, pp. 581-609.
- Beidleman, C.R. (1973), "Income smoothing: the role of management", *The Accounting Review*, Vol. 48 No. 4, pp. 653-667.
- Benaroch, M. and Chernobai, A. (2017), "Operational IT failures, IT value destruction and board-level IT governance changes", *MIS Quarterly*, Vol. 41 No. 3, pp. 729-762.
- Bernard, V. and Schipper, K. (1994), "Recognition and disclosure in financial reporting", Working Paper, *University of Michigan and University of Chicago*.
- Bhattacharya, U., Daouk, H. and Welker, M. (2003), "The world price of earnings opacity", *The Accounting Review*, Vol. 78 No. 3, pp. 641-678.
- Bratten, B., Choudhary, P. and Schipper, K. (2013), "Evidence that market participants access recognized and disclosed items similarly when reliability is not an issue", *The Accounting Review*, Vol. 88 No. 4, pp. 1179-1210.
- Burgstahler, D.C., Hail, L. and Leuz, C. (2006), "The importance of reporting incentives: earnings management in European private and public firms", *The Accounting Review*, Vol. 81 No. 5, pp. 983-1016.
- Callahan, C., Smith, R. and Spencer, A. (2013), "The valuation and disclosure implications of FIN 46 for synthetic lease", *Journal of Accounting and Public Policy*, Vol. 32 No. 4, pp. 271-291.
- Campbell, K., Sefcik, S. and Soderstrom, N. (2003), "Disclosure of private information and reduction of uncertainty: environmental liabilities in the chemical industry", *Review of Quantitative Finance and Accounting*, Vol. 21 No. 4, pp. 349-378.
- Choi, B., Collins, D. and Johnson, W.B. (1997), "Valuation implications of reliability differences: the case of nonpension postretirement benefit obligations", *The Accounting Review*, Vol. 72 No. 3, pp. 351-383.
- Choudhary, P. (2011), "Evidence on differences between recognition and disclosure: a comparison of inputs to estimate fair values of employee stock options", *Journal of Accounting and Economics*, Vol. 51 Nos 1/2, pp. 77-94.
- Chowdhury, F. (2015), "Governance structure and the performance of traditional and diversified banks during the financial crisis 2007/2008", *Banking and Finance Review*, Vol. 7 No. 1, pp. 59-78.
- Clor-Proell, S.M. and Maines, L.A. (2014), "The impact of recognition versus disclosure on financial information: a preparer's perspective", *Journal of Accounting Research*, Vol. 52 No. 3, pp. 671-701.
- Conover, C.M., Miller, R.E. and Szakmary, A. (2008), "The timeliness of accounting disclosures in international security markets", *International Review of Financial Analysis*, Vol. 17 No. 5, pp. 849-869.
- Darrough, M., Pourjalali, H. and Saudagaran, S. (1998), "Earnings management in Japanese companies", *International Journal of Accounting*, Vol. 33 No. 3, pp. 313-334.
- Davis-Friday, P.Y., Liu, C. and Mittelstaedt, H.F. (2004), "Recognition and disclosure reliability: evidence from SFAS no. 106", *Contemporary Accounting Research*, Vol. 21 No. 2, pp. 399-429.

- Desir, R., Fanning, K. and Pfeiffer, R.J. (2010), "Are revisions to SFAS no. 5 needed?", *Accounting Horizons*, Vol. 24 No. 4, pp. 525-545.
- Doupnik, T.S. and Riccio, E.L. (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*, Vol. 41 No. 3, pp. 237-261.
- Du, N., Stevens, K., Ahern, J. and Shigaev, A. (2016), "Cross-cultural differences in interpreting IAS 37 probability phrases", *International Journal of Financial Research*, Vol. 7 No. 1, pp. 1-8.
- Eddie, I. (1990), "Asia pacific cultural values and accounting systems", *Asia Pacific International Management Forum*, Vol. 16, pp. 22-30.
- Elshandidy, T., Fraser, I. and Hussainey, K. (2014), "What drives mandatory and voluntary risk reporting variations across Germany, UK and US?", *The British Accounting Review*, Vol. 47 No. 4, pp. 376-394.
- Feleagađ, L., Dragomir, V.D. and Feleagađ, N. (2010), "National accounting culture and empirical evidence on the application of conservatism", *Economic Computation and Economic Cybernetics Studies and Research*, Vol. 44 No. 3, pp. 43-60.
- Frost, C. (1991), "Loss contingency reports and stock prices: a replication and extension of banks and kinney", *Journal of Accounting Research*, Vol. 29 No. 1, pp. 157-169.
- Gow, I.D., Ormazabal, G. and Taylor, D. (2010), "Correcting for cross-sectional and time-series dependence in accounting research", *The Accounting Review*, Vol. 85 No. 2, pp. 483-512.
- Gowthorpe, C. and Amat, O. (2005), "Creative accounting: some ethical issues of macro and Micro-Manipulation", *Journal of Business Ethics*, Vol. 57 No. 1, pp. 55-64.
- Gray, S.J. (1988), "Towards a theory of cultural influence on the development of accounting systems internationally", *Abacus*, Vol. 24 No. 1, pp. 1-15.
- Gujarati, D. (1995), *Basic Econometrics*, 3rd ed., McGraw-Hill, New York, NY.
- Hellman, N., Gray, S.J., Morris, R.D. and Haller, A. (2015), "The persistence of international accounting differences as measured on transitions to IFRS", *Accounting and Business Research*, Vol. 45 No. 2, pp. 166-195.
- Hennes, K.M. (2014), "Disclosure of contingent legal liabilities", *Journal of Accounting and Public Policy*, Vol. 33 No. 1, pp. 32-50.
- Hines, C.S., Masli, A., Mauldin, E.G. and Peters, G.F. (2015), "Board risk committees and audit fees", *Auditing: A Journal of Practice and Theory*, Vol. 34 No. 4, pp. 59-84.
- Hirshliefer, D. and Teoh, S.H. (2003), "Limited attention, information disclosure, and financial reporting", *Journal of Accounting and Economics*, Vol. 36 No. 1, pp. 337-386.
- Hodder, L., Mayen, W. and McNally, M. (2006), "Employee stock option fair-value estimates: do managerial discretion and incentives explain accuracy?", *Contemporary Accounting Research*, Vol. 23 No. 4, pp. 933-975.
- Hofstede, G. (1980), *Culture's Consequences: International Differences in Work-Related Values*, Sage Publications, Newbury Park, CA.
- Hofstede, G., Hofstede, G.J. and Minkov, M. (2010), *Cultures and Organizations: Software of the Mind*, 3rd ed., McGraw-Hill, USA.
- Hoogervorst, H. (2016), "Better communication", available at: www.ifrs.org/Features/Pages/Hans-Hoogervorst-better-communication.aspx (accessed 21 July 2016).
- Hope, O.-K. (2003), "Firm-Level disclosures and the relative roles of culture and legal origin", *Journal of International Financial Management and Accounting*, Vol. 14 No. 3, pp. 218-248.
- Hope, O.-K., Thomas, W.B. and Vyas, D. (2013), "Financial reporting quality of US private and public firms", *The Accounting Review*, Vol. 88 No. 5, pp. 1715-1742.
- IFRS Foundation (2016), "Staff paper IASb Meeting – Research project – IAS 37 provisions, Contingent liabilities and contingent assets, April", available at: www.ifrs.org/Meetings/MeetingDocs/IASB/2016/April/AP22-IAS-37.pdf (accessed 22 July 2016).

- Imhoff Jr, E. and Thomas, J.K. (1988), "Economic consequences of accounting standards. The lease disclosure rule change", *Journal of Accounting and Economics*, Vol. 10, pp. 277-310.
- Imhoff, E., Thomas, J. and Lipe, R. (1995), "Is footnote disclosure an adequate alternative to financial statement recognition?", *The Journal of Financial Statement Analysis*, Vol. 1, pp. 70-81.
- Jaggi, B. and Low, P.Y. (2000), "Impact of culture, market forces, and legal system on financial disclosures", *International Journal of Accounting*, Vol. 35 No. 4, pp. 495-519.
- Jones, M. (2010), *Creative Accounting, Fraud and International Accounting Scandals*, Wiley, UK.
- Kanagaretnam, K., Krishnan, G. and Lobo, G. (2009), "Is the market valuation of banks' loan loss provision conditional on auditor reputation? ", *Journal of Banking and Finance*, Vol. 33 No. 6, pp. 1039-1047.
- Khlif, H. (2016), "Hofstede's cultural dimensions in accounting research: a review", *Meditari Accountancy Research*, Vol. 24 No. 4, pp. 545-573.
- Khlif, H., Hussainey, K. and Achek, I. (2015), "The effect of national culture on the association between profitability and corporate social and environmental disclosure", *Meditari Accountancy Research*, Vol. 23 No. 3, pp. 296-321.
- Kinnunen, J. and Koskela, M. (2003), "Who is miss world in cosmetic earnings management? A Cross-National comparison of small upward rounding of net income numbers among eighteen countries", *Journal of International Accounting Research*, Vol. 4, pp. 39-68.
- Leone, M. (2010), "What's on the SEC's radar?", available at: <http://ww2.cfo.com/accounting-tax/2010/09/whats-on-the-secs-radar> (accessed 26 May 2015).
- Li, Y. and McConomy, B.J. (1999), "An empirical examination of factors affecting the timing of environmental accounting standard adoption and the impact on corporate valuation", *Journal of Accounting, Auditing and Finance*, Vol. 14 No. 3, pp. 279-313.
- Liao, L., Luo, L. and Tang, Q. (2014), "Gender diversity, board independence, environmental committee and Greenhouse gas disclosure", *The British Accounting Review*, Vol. 47 No. 4, pp. 409-424, available at: <http://dx.doi.org/10.1016/j.bar.2014.01.002>
- Libby, R. and Brown, T. (2013), "Financial statement disaggregation decisions and auditors' tolerance for misstatement", *The Accounting Review*, Vol. 88 No. 2, pp. 641-665.
- Libby, R., Nelson, M.W. and Hunton, J.E. (2006), "Recognition vs Disclosure, auditor tolerance for misstatement, and the reliability of Stock-Compensation", *Journal of Accounting Research*, Vol. 44 No. 3, pp. 533-560.
- Linsmeier, T., Thornton, D., Venkatachalam, M. and Welker, M. (2002), "The effect of mandated market risk disclosures on trading volume sensitivity to interest rate, exchange rate, and commodity price movements", *The Accounting Review*, Vol. 77 No. 2, pp. 343-377.
- Liu, C. and Ryan, S. (1995), "The effect of bank loan portfolio composition on the market reaction to and anticipation of loan loss provisions", *Journal of Accounting Research*, Vol. 33 No. 1, pp. 77-94.
- Lopes, A.I., Lourenço, I. and Soliman, M. (2013), "Do alternative methods of reporting non-controlling interests really matter?", *Australian Journal of Management*, Vol. 38 No. 1, pp. 7-30.
- Michaels, G. (2009), "The boardroom's climate is changing: more companies are designating specific committees for environmental issues to help inform the board of potential problems", Directorship Boardroom Intelligence, available at: http://governancefocus.blogspot.com.au/2009/10/boardroomsclimate-is-changing_29.html/ (accessed 18 July 2015).
- Michelon, G. and Parbonetti, A. (2012), "The effect of corporate governance on sustainability disclosure", *Journal of Management and Governance*, Vol. 16 No. 3, pp. 477-509.
- Moneva, J.M. and Cuellar, B. (2009), "The value relevance of financial and non-financial environmental reporting", *Environmental and Resource Economics*, Vol. 44 No. 3, pp. 441-56.
- Mulford, C.W. and Comiskey, E.E. (2002), *The Financial Numbers Game: Detecting Creative Accounting Practices*, John Wiley and Sons, New York, NY.

- Müller, M., Riedl, E. and Sellhorn, T. (2015), "Recognition versus disclosure of fair values", *The Accounting Review*, Vol. 6, pp. 2411-2447.
- Niu, F. and Xu, B. (2009), "Does recognition versus disclosure really matter? Evidence from the market valuation of recognition of employee stock option expenses", *Asia-Pacific Journal of Accounting and Economics*, Vol. 16, pp. 215-234.
- Ohlson, J. (1995), "Earnings, book values, and dividends in security valuation", *Contemporary Accounting Research*, Vol. 11 No. 2, pp. 661-687.
- Patel, C. and Psaros, J. (2000), "Perceptions of external auditors' independence: some cross-cultural evidence", *British Accounting Review*, Vol. 32 No. 3, pp. 311-338.
- Petersen, M.A. (2009), "Estimating standard errors in finance panel data sets: comparing approaches", *Review of Financial Studies*, Vol. 22 No. 1, pp. 435-480.
- Rees, L. and Thomas, W. (2010), "The stock price effects of changes in dispersion of investor beliefs during earnings announcements", *Review of Accounting Studies*, Vol. 15 No. 1, pp. 1-31.
- Salter, S.B. and Niswander, F. (1995), "Cultural influence on the development of accounting systems internationally: a test of Gray's (1988) theory", *Journal of International Business Studies*, Vol. 26 No. 2, pp. 379-397.
- Schipper, K. (2007), "Required disclosures in financial reports", *The Accounting Review*, Vol. 82 No. 2, pp. 301-326.
- Shafer, W.E. (2015), "Ethical climate, social responsibility, and earnings management", *Journal of Business Ethics*, Vol. 126 No. 1, pp. 43-60.
- Skaked, I. and Orelowitz, B. (2015), "Contingent liabilities: GAAP vs valuation perspective", *American Bankruptcy Institute Journal*, Vol. 34 No. 8, pp. 34-69.
- Smith, M. (1998), "Creative accounting: the auditor effect", *Managerial Auditing Journal*, Vol. 13 No. 3, pp. 155-158.
- Soloman, S. and Sawilowsky, S. (2009), "Impact of rank-based normalizing transformations on the accuracy of test scores", *Journal of Modern Applied Statistical Methods*, Vol. 8 No. 2, pp. 448-462.
- Sudarwan, M. and Fogarty, T.J. (1996), "Culture and accounting in Indonesia: an empirical examination", *International Journal of Accounting*, Vol. 31 No. 4, pp. 463-481.
- Tsakumis, G.T. (2007), "The influence of culture on accountant's application of financial reporting rules", *Abacus*, Vol. 43 No. 1, pp. 27-48.
- Vladu, A.B. and Matis, D. (2010), "Corporate governance and creative accounting: two concepts strongly connected? Some interesting insights highlighted by constructing the internal history of a literature", *Annales Universitatits Apulensis, Series Oeconomica*, Vol. 1 No. 12, pp. 332-346.
- Vladu, A.B. and Pelinescu, E. (2014), "Shortcomings in earnings management detection research area: a state of the art of contemporary insights", *Internal Auditing and Risk Management*, Vol. 36 No. 1, pp. 75-90.
- Wegener, M. and Labelle, R. (2017), "Value relevance of environmental provisions pre- and Post-IFRS", *Accounting Perspectives*, Vol. 16 No. 3, pp. 139-168.
- White, H. (1980), "A Heteroskedasticity-Consistent covariance matrix estimator and a direct test for heteroskedasticity", *Econometrica*, Vol. 48 No. 4, pp. 817-830.
- Wingate, M.L. (1997), "An examination of cultural influence on audit environments", *Research in Accounting Regulation Supplement*, Vol. 1, pp. 129-148.
- Wintoki, M.B., Linck, J.S. and Netter, J.M. (2012), "Endogeneity and the dynamics of internal corporate governance", *Journal of Financial Economics*, Vol. 105 No. 3, pp. 581-606.
- Zarzeski, M.T. (1996), "Spontaneous harmonization effects of culture and market forces on accounting disclosure practices", *Accounting Horizons*, Vol. 10, pp. 18-37.

Further reading

- Ashtead Group (2012), "Annual reports and Accounts 2012", available at: www.ashtead-group.com/lib/docs/155231-ashtead-ara-2012.pdf (accessed 15 August 2015).
- Baskerville, R.F. (2003), "Hofstede never studied culture", *Accounting, Organizations and Society*, Vol. 28 No. 1, pp. 1-14.
- BP (2013), "Annual report and form 20-F", available at: www.bp.com/content/dam/bp/pdf/investors/bp-annual-report-and-form-20f-2013.pdf (accessed 15 August 2015).
- Burberry Group (2013), "Corporate governance report – 2013/2014 annual report", available at: www.burberrypc.com/investor_relations/corporate_governance/ (accessed 10 July 2015).
- Chan, R.S.Y., Lau, C.K.S. and Ng, A.W. (2011), "Compliance and value relevance of audit committees: evidence from Hong Kong", *Journal of Financial Reporting and Accounting*, Vol. 9 No. 1, pp. 74-97.
- Chow, C.W., Shields, M.D. and Wu, A. (1999), "The importance of national culture in the design of and preference for management controls for multi-national operations", *Accounting, Organizations and Society*, Vol. 24 Nos 5/6, pp. 441-461.
- Copeland, R. (1968), "Income smoothing", *Journal of Accounting Research*, Vol. 6, pp. 101-116.
- Dhaliwal, D. (1986), "Measurement of financial leverage in the presence of unfunded pension liabilities", *The Accounting Review*, Vol. 61, pp. 651-666.
- Dhaliwal, D., Gleason, C. and Mills, L. (2004), "Last chance earnings management: using tax expense to meet analysts' forecasts", *Contemporary Accounting Research*, Vol. 21 No. 2, pp. 431-457.
- Dietrich, J., Kachelmeier, S., Kleinmuntz, D. and Linsmeier, T. (2001), "Market efficiency bounded, rationality, and supplemental business reporting disclosures", *Journal of Accounting Research*, Vol. 39 No. 2, pp. 243-268.
- Doupnik, T.S. and Richter, M. (2004), "The impact of culture on the interpretation of 'In context' Verbal probability expressions", *Journal of International Accounting Research*, Vol. 3 No. 1, pp. 1-20.
- Gray, S.J. and Vint, H.M. (1995), "The impact of culture on accounting disclosures: some international evidence", *Asia-Pacific Journal of Accounting*, Vol. 2 No. 1, pp. 33-63.
- Guan, L. and Pourjalalia, H. (2010), "Effect of cultural environmental and accounting regulation on earnings management: s multiple Year-Country analysis", *Asia-Pacific Journal of Accounting and Economics*, Vol. 17, pp. 99-127.
- Hirst, E., Hopkins, P. and Wahlen, J. (2004), "Fair values, Income measurement, and bank analysts' risk and valuation judgments", *The Accounting Review*, Vol. 79 No. 2, pp. 453-472.
- Hofstede, G. (2001), *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations*, Sage Publications, Thousand Oaks, CA.
- Jaafar, A. and McLeay, S. (2007), "Country effects and sector effects on the harmonization of accounting", *Abacus*, Vol. 43 No. 2, pp. 156-189.
- Jawad, F. and Xia, X. (2015), "International financial reporting standards and moral hazard of creative accounting on hedging", *International Journal of Finance and Accounting*, Vol. 4 No. 1, pp. 60-70.
- Kadan, O., Madureira, L., Wang, R. and Zach, T. (2012), "Analysts' industry expertise", *Journal of Accounting and Economics*, Vol. 54 Nos 2/3, pp. 95-120.
- Leuz, C., Nandab, D. and Wysockic, P.D. (2003), "Earnings management and investor protection: an international comparison", *Journal of Financial Economics*, Vol. 69 No. 3, pp. 505-527.
- McSweeney, B. (2002a), "Hofstede's model of national cultural differences and their consequences: a triumph of faith—A failure of analysis", *Human Relations*, Vol. 55 No. 1, pp. 89-118.
- McSweeney, B. (2002b), "The essentials of scholarship: a reply to geert hofstede", *Human Relations*, Vol. 55 No. 11, pp. 1363-1382.

- MacArthur, J.B. (1996), "An investigation into the influence of cultural factors in the international lobbying of the international accounting standards committee: the case of E32, Comparability of financial statements", *International Journal of Accounting*, Vol. 31 No. 2, pp. 213-237.
- MacArthur, J.B. (1999), "The impact of cultural factors on the lobbying of the international accounting standards committee on E32, Comparability of financial statements: An extension of MacArthur to accounting member bodies", *Journal of International Accounting, Auditing and Taxation*, Vol. 8 No. 2, pp. 315-335.
- Myers, M.D. and Tan, F.B. (2002), "Beyond models of national culture in information systems research", *Journal of Global Information Management*, Vol. 10 No. 1, pp. 24-32.
- Naser, K. (1992), "A note on the use of creative accounting", *British Accounting Review*, Vol. 24 No. 2, pp. 111-118.
- Nobes, C. (1996), *International Guide to Interpreting Company Accounts*, FT Financial Publishing, Pearson Professional, London.
- Nobes, C. (1998), "Towards a general model of the reasons for international differences in financial reporting", *Abacus*, Vol. 34 No. 2, pp. 162-187.
- Nobes, C. (2006), "The survival of international differences under IFRS: towards a research agenda", *Accounting and Business Research*, Vol. 36 No. 3, pp. 233-245.
- Paananen, M., Renders, A. and Shima, K.M. (2012), "The amendment of IAS 39: determinants of reclassification behavior and capital market consequences", *Journal of Accounting, Auditing and Finance*, Vol. 27 No. 2, pp. 208-235.
- Roberts, C.B. and Salter, S.B. (1999), "Attitudes towards uniform accounting: cultural or economic phenomena?", *Journal of International Financial Management and Accounting*, Vol. 10 No. 2, pp. 121-142.
- Schultz, J.J. and Lopez, T.J. (2001), "The impact of national influence on accounting estimates: implications for international accounting Standard-Setters", *The International Journal of Accounting*, Vol. 36 No. 3, pp. 271-290.
- Wong-On-Wing, B. and Lui, G. (2013), "Beyond cultural values: an implicit theory approach to cross-cultural research in accounting ethics", *Behavioural Research in Accounting*, Vol. 25 No. 1, pp. 15-36.

About the authors

Ana Isabel Lopes, PhD, is an Assistant Professor of Financial Accounting at Lisbon University Institute (ISCTE-IUL) and a researcher at BRU-UNIDE, in Lisbon (Portugal). She is the Director of the MsC in Accounting in ISCTE-IUL. Prior to ISCTE-IUL, she taught at the NOVA Business School. She has experience in teaching in doctoral programs, masters and programs for executive education. Her subjects are financial accounting and business reporting, management control in multinationals, consolidated financial statements and corporate governance. She is Executive Director of "Advanced Financial Accounting" Program for executives and Director of the Master in Accounting. She has published in academic journals such as *Australian Journal of Management*, *Accounting Education: an International Journal*, *Spanish Journal of Finance and Accounting*, *Journal of Economics and Business* and *European Business Review*. Ana Isabel Lopes is the corresponding author and can be contacted at: ana.isabel.lopes@iscte.pt

Laura Reis holds a double MSc degree in International Management (ISCTE-IUL, Portugal and KEDGE Business School, France). She is consultant in EY. Her specialties are the projects within risk assurance and risk transformation for diversified industries such as oil and gas, telecommunications, consumer products and retail or pharmaceuticals. She designs continuous auditing and internal control processes over financial reporting and proposes business improvements.

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgrouppublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.