The Interpretation of Verbal Probability Expressions Used in the IAS/IFRS: The Auditors Registered with the Portuguese Securities Market Commission

ABSTRACT

One of the main arguments in favour of the adoption and convergence with the international accounting standards published by the IASB (i.e. IAS/IFRS) is that these will allow comparability of financial reporting across countries. However, because these standards use *verbal probability expressions* (v.g. "probable") when establishing the recognition and disclosure criteria for accounting elements, they require professional accountants to interpret and classify the probability of an outcome or event taking into account those terms and expressions and to best decide in terms of financial reporting.

This paper reports part of a research we carried out on the interpretation of "in context" *verbal probability expressions* used in the IAS/IFRS by the auditors registered with the Portuguese Securities Market Commission, the *Comissão do Mercado de Valores Mobiliários* (CMVM). Our results provide support for the hypothesis that culture affects the CMVM registered auditors' interpretation of *verbal probability expressions* through its influence on the accounting value (or attitude) of conservatism. Our results also suggest that there are significant differences in their interpretation of the term "probable", which is consistent with literature in general. Since "probable" is the most frequent *verbal probability expression* used in the IAS/IFRS, this may have a negative impact on financial statements comparability.

Keywords: *verbal probability expressions* (VPE); IAS/IFRS; culture; auditors; comparability; Portugal.

1. INTRODUCTION

One of the main purposes of the international accounting harmonization process developed by the *International Accounting Standards Board* (IASB) is to achieve the comparability of financial reporting across countries. In order to do so, it is necessary to adopt an identical set of standards, though not enough to guarantee an effective comparability. In fact, professional accountants (i.e. *accountants and auditors*) should also interpret and apply the accounting standards similarly, so as to make possible the international comparability of financial statements (Doupnik and Riccio, 2006).

However, professional accountants are faced with accounting standards using *verbal probability expressions* (VPE)[1] to describe (in terms of probability) the occurrence of a certain event or result (Simon, 2002). Accountants and auditors have to give a meaning to such terms and expressions (Doupnik and Richter, 2003).

The accounting standards use VPE to establish the recognition, measurement or disclosure criteria, and accountants and auditors often use and interpret those terms and expressions in their professional activities. This issue is vital, because an inconsistent and imprecise interpretation of VPE by professional accountants may endanger the proper interpretation and application of accounting standards and can represent a serious obstacle to global financial reporting comparability and convergence (Zeff, 2007).

The VPE have been widely used in accounting standards, but little is known about the way they are interpreted. These terms and expressions have been investigated mainly over the last three decades and,

[1] Such as "*remote*", "*possible*", "*probable*" and "*virtually certain*".

essentially, in the United States context. Presently, some studies carried out in a European context (v.g. Simon, 2002; Doupnik and Richter, 2003; Doupnik and Richter, 2004), though with different scopes and in much lesser numbers, have partially alter this situation, as they investigate the interpretation of these terms and expressions by European professional accountants.

Therefore, we consider it timely to investigate the way these terms and expressions are interpreted both by accountants and auditors, considering that a consistent interpretation of such terms and expressions is vital to promote and assure financial information comparability and, consequently, the needs of its users.

This paper reports part of a research we carried out on the way the auditors registered with the Portuguese Securities Market Commission - the *Comissão do Mercado de Valores Mobiliários* (CMVM) - interpret some VPE. The main objective of this research was to examine how the VPE used in the IAS/IFRS are interpreted by the CMVM registered auditors, though this paper mainly reports the impact of culture on those interpretations. To our knowledge this is the first study on Portuguese auditors' interpretation of "in context" VPE used in the IAS/IFRS.

This study is relevant for those involved in regulating financial reporting as it reviews the interpretation of VPE used in the IAS/IFRS by the CMVM registered auditors and draws attention to the inconsistent interpretation of the most commonly used term in those standards (i.e. "probable"), as well as to the impact of national culture on the interpretation of those terms and expressions. The study is also important for preparers, auditors and users of financial statements, as it identifies the mean interpretation (expressed in percentage) of some VPE by Portuguese auditors.

The paper is structured as follows. In Section 2 we analyze the use of VPE in the IAS/IFRS and its influence on the recognition and disclosure criteria. Then, in Section 3, we provide a review of previous relevant literature on the subject. In Section 4 we present the research design, the description of the methodology and population and sample data. Results are presented and discussed in Section 5 and, finally, our conclusions and suggestions for future research are presented in Section 6.

2. THE VPE USED IN THE IAS/IFRS

The IASB has gradually taken on a particularly dominant role in the international accounting harmonization process. However, the international accounting standards published by the IASB (IAS/IFRS), developed with the objective of promoting the international comparability of financial reporting, use the already mentioned VPE. These terms and expressions are used in those standards to establish the recognition and disclosure criteria for accounting elements (i.e. financial statement *items*) such as, assets (v.g. IAS 12[2]), revenues, expenses and losses (v.g. IAS 11[3]) and liabilities (v.g. IAS 37[4]); as well as to establish the thresholds for derecognizing, namely, assets (v.g. IAS 12).

The VPE used in the IAS/IFRS are framed both in a positive and negative way/form (Doupnik and Richter, 2004). Nevertheless, most VPE have a positive form, as is the case of "remote" and "virtually certain".

Table 1 shows a summary of some of the most frequently examined and used VPE in the IAS/IFRS (v.g Simon, 2002; Doupnik and Riccio, 2006), without discriminating its form.

[2]IAS 12, *Income Taxes*, IASC 1996, reviewed in 2000.
[3] IAS 11, *Construction Contracts*, IASC 1993.
[4] IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*, IASC 1998.

Table 1 – The Most frequently used VPE in the IAS/IFRS

VPE	IAS/IFRS
Probable	IAS 1; IAS 11; IAS 12; IAS 16; IAS 18; IAS 21; IAS 23; IAS 28; IAS 32; IAS 36; IAS 37; IAS 38; IAS 40; IAS 41; IFRS 1; IFRS 3; IFRS 6
Highly Probable	IAS 32; IAS 39; IAS 40; IAS 41; IFRS 4; IFRS 5; IFRS 7
Remote	IAS 17; IAS 19; IAS 31; IAS 36; IAS 37; IFRS 7
Reasonably Possible	IAS 1; IAS 36; IAS 39; IFRS 7
Expected	IAS 11; IAS 12; IAS 21
Virtually Certain	IAS 19; IAS 37

In fact, the VPE used in the IAS/IFRS are quite frequent and varied. Therefore, apart from the diversity of terms and expressions, there is also the issue of the number of occurrences of each VPE, which raises considerably the impact of their use.

Of all the VPE used in the IAS/IFRS, the term "probable" is the most used. This term also assumes both positive and negative forms.

We can see that almost all standards have VPE; some of them are mentioned in concepts, while others are present in the recognition, measurement and disclosure criteria. The first may have an indirect impact on the interpretation and application of accounting standards, and those used in the recognition, measurement and disclosure criteria may have a decisive and direct impact on the interpretation and application of accounting standards.

3. PREVIOUS STUDIES ON VPE INTERPRETATION IN THE ACCOUNTING AND AUDITING CONTEXT

In this section we will basically present prior studies published on this matter, under the scope of accounting and auditing, as well as their methodological approach and main conclusions.

Prior studies have mainly examined the numerical interpretation of the VPE used in the *Statement of Financial Accounting Standards* (SFAS) Nº. 5: *Accounting for Contingencies*[5], published by the *Financial Accounting Standards Board* (FASB). Therefore, the following terms and expressions are the most researched in the literature that reviews the interpretation of VPE in accounting and auditing scenarios: "remote", "reasonably possible" and "probable" (v.g. Jiambalvo and Wilner, 1985; Chesley, 1986; Harrison and Tomassini, 1989; Reimers, 1992; Amer *et al.*, 1994; Amer *et al.*, 1995; Laswad and Mak, 1997; Aharony and Dotan, 2004; Doupnik and Riccio, 2006).

In the European context, the research in this area is still quite recent and there are few reference studies (v.g. Simon, 2002; Doupnik and Richter, 2003; Doupnik and Richter, 2004), which where mainly instigated by the recent developments in the international accounting harmonization process (v.g. the new harmonization of accounting standards in the European Union). Nevertheless, the most studied VPE are "remote", "probable" and "virtually certain".

The study conducted by Simon (2002) represents the first research on the interpretation of VPE used in accounting standards by European professional accountants. The thirty terms and expressions examined in that study fairly reflect the diversity and complexity of VPE used in this context.

The predominant research method for assessing the interpretation of VPE has been to survey respondent's interpretation through the use of a research instrument (i.e. a survey questionnaire). The majority of the

[5] Hereafter referred to as SFAS 5.

studies on this matter use samples with less than 100 respondents, except for those aimed at students, which register more respondents, though less skilled when compared to the respondents who are professional accountants.

Several methods have been used to assess the interpretation of VPE. For example, respondents have been asked to:

(i) analyze a series of VPE and subsequently to interpret them as numerical percentage (v.g. Chesley, 1986; Reimers, 1992; Amer *et al.*, 1994; Laswad and Mak, 1997; Simon, 2002). This method provides useful indicators about the typical perception of the respondents on VPE;

(ii) assign a numerical range that best represents the probability associated to each VPE (v.g. Jiambalvo and Wilner, 1985; Chesley, 1986; Reimers, 1992; Amer *et al.*, 1994; Laswad and Mak, 1997; Simon, 2002). This method helps to overcome the natural difficulty in assigning a single value, point or estimation (i.e. point estimates) to VPE;

(iii) examine the terms and expressions in the context of the activities they carry out, through the simulation of "real" professional situations (v.g. Jiambalvo and Wilner, 1985; Harrison and Tomassini, 1989; Amer *et al.*, 1994). The simulation of a context will always be an attempt to recreate the "reality", but in practice, this method falls short of its aim, since it is not feasible to generalize all possible scenarios for a given situation or event;

(iv) analyze the terms and expressions "in isolation", that is, without a context (v.g. Chesley, 1986; Reimers, 1992; Laswad and Mak, 1997; Simon, 2002; Doupnik and Richter, 2003); and

(v) review the terms and expressions "in context", that is, contextualized in standards, through excerpts of the accounting standards (v.g. Doupnik and Richter, 2004; Doupnik and Riccio, 2006). The main objective of this methodology is to understand the perception (expressed in percentage) of such VPE used in different accounting contexts, in order to observe a pattern in the interpretation of VPE along different accounting scenarios (v.g. recognition of liabilities, assets and losses). However, the respondents will always consider their own professional experience in the accounting contexts under analysis, which leads to the implicit consideration of a vast array of scenarios.

The majority of the previous studies have focused on the interpretation of VPE used within the context of SFAS 5 and aimed to evaluate the consistency of the interpretation of VPE among auditors. They, likewise, aimed to assess the consistency of auditors' evaluation under the same circumstances and also to determine whether the decision made at the recognition and disclosure criteria established for accounting elements (v.g. contingent losses) was consistent with the percentages or ranges assigned to VPE by professional accountants.

Most of these studies reported inconsistent interpretations of those terms and expressions among professional accountants (v.g. Jiambalvo and Wilner, 1985; Harrison and Tomassini, 1989; Amer *et al.*, 1994; Amer *et al.*, 1995; Simon, 2002; Doupnik and Richter, 2003; Doupnik and Richter, 2004; Doupnik and Riccio, 2006). Such inconsistencies may result from the existence or absence of an accounting context.

The literature seems to agree that the use of VPE (and, in particular, the use of the term "probable") is not appropriate to express probabilities, and that its inconsistent interpretation may compromise the accurate application of accounting standards and the comparability of financial reporting.

The results of recent studies show that culture strongly influences the countries' accounting systems and the way the financial information is there perceived (v.g. Doupnik and Richter, 2004; Doupnik and Riccio, 2006; Tsakumis, 2007). In this context, national culture can have a negative impact on the interpretation of VPE, as it compromises the consistent interpretation and application of IAS/IFRS across countries.

Apart from the role played by culture in the interpretation of VPE by professional accountants in general, there are other factors that influence the perception and interpretation of those terms and expressions by auditors, namely the professional judgment and the effect incentives have on auditors' decision-making process (v.g. Nelson and Kinney, 1997; Arahony and Dotan, 2004).

Likewise, prior literature provides empirical evidence that supports the existence of different interpretations of VPE by those involved in financial reporting, as a result of conflicting incentives in their analysis (Arahony and Dotan, 2004).

After a general review of previous studies on the interpretation of VPE used in the auditing and accounting standards, we will present in the next section part of a research we developed on the interpretation of VPE used in the IAS/IFRS within the Portuguese context.

4. OBJECTIVES, RESEARCH HYPOTHESES AND METHODOLOGY

4.1. OBJECTIVES

As a consequence of the new accounting harmonization strategy adopted by the European Union (EU), and considering the Regulation 1606/2002 of the European Commission, the expansion of the adoption (and convergence with) the IAS/IFRS is imminent in Portugal. Thus, we consider it timely to study the way the VPE are interpreted by the Portuguese auditors, as European auditing professionals.

This paper reports part of a research we carried out in Portugal and aims to expand the knowledge on this matter. This is the first study on Portuguese auditors' interpretation of some VPE used in the IAS/IFRS.

The main objective of this research was to examine how the VPE used in the IAS/IFRS are interpreted by the CMVM registered auditors[6], though this paper mainly reports the impact of culture on those interpretations.

Therefore we (ii) examined auditors' interpretation of VPE when these terms and expressions are contextualized in the IAS/IFRS and (ii) verified whether the accounting values (or attitudes) related to the Portuguese accounting system, identified by Gray (1988) - namely conservatism and secrecy -, have any influence on the CMVM auditors' interpretation, and then compared our results with the literature.

4.2. RESEARCH HYPOTHESES

Based on Gray's theoretical framework (1988), cultural differences may result in different interpretations and applications of the international accounting standards by professional accountants. Gray (1988) places the Portuguese accounting system in the "conservatism/secrecy" quadrant, since the author characterizes the financial reporting in Portugal as being related to a more cautious approach in terms of

[6] Hereafter referred to as auditors or CMVM auditors.

measurement and recognition of accounting elements, as well as to a more secretive approach (i.e. confidentiality, secrecy) in terms of disclosure. More precisely, Gray (1988) places Portugal[7] both at the extreme conservatism end of the optimism/conservative continuum and at the extreme secrecy end of the secrecy/transparency continuum.

Following Doupnik and Richter (2004) suggestions for future research, we decided to investigate the effect of conservatism and secrecy on the interpretations of VPE done by the professional accountants from a country assigned to the *less-developed Latin cultural area* and classified by Gray (1988) as previously mentioned. Thus, we could test whether the authors' findings could be generalized and extended to other cultural areas or our findings show other trends and patterns in this interpretation. Accordingly, we tested the following hypotheses:

H1: *Conservatism influences the way the term "probable" and the expression "virtually certain" (when contextualized in the IAS/IFRS) are interpreted by the CMVM auditors;*

H2: *Secrecy influences the way the term "remote" (when contextualized in the IAS/IFRS) is interpreted by the CMVM auditors.*

4.3. METHODOLOGY

The methodology adopted in this empirical study follows the general literature and Doupnik and Richter (2004) and Doupnik and Riccio (2006), in particular.

As noted earlier, the survey questionnaire is the most common research method used to assess the meaning of VPE. Our questionnaire asked the respondents to provide a numerical range (on a scale from 0% to 100%) that best represents the probability associated to some VPE examined in different accounting contexts. The questionnaire also asked questions concerning the characterization of the sample.

We selected three of the most studied VPE in the European context, namely "remote", "probable" and "virtually certain", to examine in the present study. So as to contextualize them, we considered three standards that have a significant number of occurrences of those terms: IAS 11, IAS 12 and IAS 37.

Similarly to Doupnik and Richter (2004) and Doupnik and Riccio (2006), we considered different accounting contexts (i.e. asset and loss recognition and contingent liabilities disclosure) to test the consistency of the responses and to verify whether there is any pattern resulting from the context effect.

We held meetings with Portuguese auditing professionals with the purpose of (i) validating the questionnaire in general and the selected accounting contexts to assess the interpretation of VPE, in particular; and (ii) analyzing the most effective way to get in touch with the auditors considering our research purposes. Afterwards, we sent the questionnaire to the CMVM auditors.

The data gathered from the questionnaires were treated with the statistical software program *Statistical Package for the Social Sciences* (SPSS). We carried out statistical tests according to our research

[7] Classified as a country from the *less-developed Latin cultural area* (Hofstede, 1980).

objectives and hypotheses. Thus, to contrast our results with those in the literature, we used the *one-sample t-test* as we wanted to assess whether the mean responses for the analyzed VPE showed similar interpretation when compared with other studies.

As in Simon (2002), we collected outlier observations in assigning percentages to VPE. For instance, respondents assigned 100% to term "remote". So, following the literature (v.g. Simon, 2002; Doupnik and Riccio, 2006), we decided to exclude the outlier observations from the data analysis[8].

4.4. POPULATION AND SAMPLE

In Portugal, the statutory auditors are called Revisores Oficiais de Contas (ROC). However, we will name these professionals simply as auditors and will use the national official designation, ROC, only when characterizing them according to the functions they carry out as auditing professionals in Portugal.

We have chosen the CMVM auditors because they are certified professionals who are expected to have the required expertise and professional practice to make decisions about the interpretation of VPE used in the accounting standards. Therefore, and based on the information announced by the CMVM on the 21 January 2008[9], the population considered in this study consists of 45 entities.

Of the 45 questionnaires mailed (that is, mainly e-mailed) to the CMVM auditors, 35 entities returned the questionnaire, which represents a response rate of approximately 78%.

The respondents were characterized according to (i) their professional experience, (ii) their main specialization, (iii) the functions (no more than two) they perform (or had previously performed) as auditors and (iv) the knowledge they consider to have on IAS/IFRS.

In short, the sample is mainly composed by:

(i) experienced auditors, with a professional experience of more than ten years (94%);

(ii) auditors whose main professional specialization is auditing itself, that is, the statutory audit (83%);

(iii) auditors who have carried out, at least, functions as *partner* and ROC (66%);

(iv) auditors whose knowledge on IAS/IFRS is considered to be reasonable (77%).

5. ANALYSIS OF THE EMPIRICAL RESULTS

According to our research hypotheses, we wanted to verify whether the interpretations of VPE contextualized in the IAS/IFRS are affected by the effects of conservatism (H1) and secrecy (H2). A significance level of 5% was adopted for all analyses.

Based on different accounting contexts, similar to Doupnik and Richter (2004) and Doupnik and Riccio (2006), we examined the effect of context on the interpretation of VPE. So, we compared the mean percentages assigned to the examined VPE in different accounting contexts and compared them with the literature. If this interpretation is affected by the accounting value of conservatism: in situations that imply the recognition of assets or an increase in results, this term will get a higher numerical percentage than in those other contexts that imply the recognition of liabilities or a decrease in results.

[8] As in Doupnik and Riccio (2006), we excluded all responses that assigned a percentage of (or above) 50% to the term "remote".

[9] Considering the last change being made to the CMVM auditors list before our data analysis on the 28 February 2008.

Since we excluded the incomplete questionnaires or those with outlier observations from the statistical analysis, the descriptive analysis resulted from the assessment of 29 questionnaires, which corresponds to a response rate of approximately 64%.

The following tables summarize the descriptive statistics for the examined VPE and they are listed in order of increasing mean percentage (i.e. point estimates mean) assigned by auditors.

Table 2 – Descriptive statistics [10] for the term "Probable"

Probable	Recognition	Mean	Median	Standard Deviation	Minimum	Maximum
IAS 11, §36	Loss	65	65	20	50	95
IAS 11, §34	Expense	69	75	20	20	100
IAS 12, §34	Asset	75	80	14	50	100
IAS 12, §37	Asset	76	75	14	50	100
IAS 12, §14	Asset	77	80	15	50	100

Considering the descriptive statistics for the term "probable", we can see that the mean percentages vary a lot along the different accounting contexts. For instance, this term mean perceptions vary from 65% (for the recognition of a loss) to 77% (for the recognition of an asset), which shows a significant interpretation variation that seems to result from the accounting context under analysis.

These results are consistent with those reported by Doupnik and Richter (2004) and suggest that when the term "probable" is used in a context of contingent loss recognition, under IAS 11, it leads to a lower mean percentage than when the term is examined in an opposite context. In fact, the results presented in this study for the recognition of a loss show a mean percentage (65%) that is very close to the one assigned by German accountants (66%) in Doupnik and Richter (2004). Generally speaking, the mean percentages assigned to this term in both studies are very similar. That is, the mean percentage for the interpretation of "probable" in our study varies from 65% to 77% and in the study conducted by Doupnik and Richter (2004) the mean percentage varies from 66% to 76%. Nevertheless, we would like to emphasize that we did not examined all the contexts considered by those authors (i.e. profit recognition and revenue recognition), and also that we recorded a different interpretation (apparently significant) when this term is interpreted in an asset recognition context under IAS 12.

In fact, the mean interpretation of that term in this accounting context (i.e. asset recognition) ranges from 75% to 77% in our study, whereas in Doupnik and Richter (2004) the German accountants mean interpretation is 68%. We also verified that in the asset recognition context, under IAS 12, the interpretation of the CMVM auditors appears to be closer to the United States accountants' interpretation (72%), as presented in that study.

We tested these observations[11] when we had directly comparable contexts to those of the literature. Table 3 reports the results for the direct comparisons. We did not round (to the nearest whole percentage) the mean percentages assigned to VPE so that we could compare them with those in other studies. A significance level of 5% was adopted for all analyses.

[10] As presented in Simon (2002), the results are rounded to the nearest whole percentage.

[11] We applied the *one-sample t-test* in order to examine if the mean responses were similar to those recorded in other studies.

Table 3 – Comparison of the mean percentages assigned to the term “Probable” in our study with those in the literature

Probable	**Portugal**	**Brasil** **Doupnik and Riccio (2006)**	**United States** **Doupnik and Riccio (2006)**	**Germany** **Doupnik and Richter (2004)**	**United States** **Doupnik and Richter (2004)**
IAS 11, §36 (Loss Recognition)	64,55	73,19 (*p-value*=0,027)	71,56 (*p-value*=0,069)	67,84 (*p-value*=0,383)	74,12 (*p-value*=0,015)
IAS 12, §34 (Asset Recognition)	75,00	76,56 (*p-value*=0,557)	71,95 (*p-value*=0,255)	67,28 (*p-value*=0,007)	71,59 (*p-value*=0,205)

We may see that, under a loss recognition context, the interpretation of this term by the CMVM auditors is significantly different (*p-value*=0,015) from the interpretation of United States professional accountants, as presented by Doupnik and Richter (2004), and from the interpretation of Brazilian professional accountants (*p-value*=0,027), as identified in Doupnik and Riccio (2006).

The interpretation of this term by the CMVM auditors is close to be considered statistically different from the United States professional accountants' interpretation (*p-value*=0,069) identified in Doupnik and Riccio (2006).

We find interesting the fact that the way the CMVM auditors interpret this term, under an asset recognition context, is closer to the interpretation of Brazilian professional accountants (*p-value*=0,557) identified in Doupnik and Riccio (2006) and shows statistically significant differences (*p-value*=0,007) when compared to the German professional accountants' interpretation obtained by Doupnik and Richter (2004).

As far as these two opposite contexts are concerned, the CMVM auditors seem to make a more cautious interpretation of the term "probable" when compared to professionals from other countries. In an asset recognition context, they assign the second highest percentage (in order to defer recognition), and in a loss recognition context, they assign the lowest percentage (in order to accelerate recognition).

These results substantially support the hypothesis that culture affects the CMVM auditor's interpretation through its influence on the accounting value (or attitude) of conservatism, and, therefore, support H1 for the term "probable".

As for the expression "virtually certain", the descriptive statistics (see Table 4) show a smaller variation in the auditors' interpretation, which ranges from 93% to 94%, and that its median (95%) is close to the mean (93% and 94%). We also obtained a substantially smaller standard deviation than the one obtained for the term "probable".

Table 4 – Descriptive statistics [12]for the expression "virtually certain"

Virtually Certain	Recognition	Mean	Median	Standard Deviation	Minimum	Maximum
IAS 37, §35	Asset	93	95	9	65	100
IAS 37, Int., pto.22	Asset	94	95	7	70	100
IAS 37, §53	Asset	93	95	7	70	100

Contrasting our results with the ones obtained by Doupnik and Richter (2004), it is possible to notice a significant difference in the interpretation of this expression, since those authors present a mean percentage of 83.47% for the interpretation of German professional accountants[13] and a mean percentage of 77.91% for the interpretation of United States professional accountants[14].

We tested these observations when we had directly comparable contexts to those of the literature[15]. A significance level of 5% was adopted for all analyses.

These results show that the CMVM auditors' interpretation of the expression "virtually certain" is significantly different (*p-value*=0,000) from the one of German professional accountants identified by

[12] These results were rounded to the nearest whole percentage.
[13] Analyzing VPE in a German-language version.
[14] Analysing VPE in an English-language version.
[15] Again, we did not round the values of the mean percentage assigned to VPE. In this case, the mean is 93.03%.

Doupnik and Richter (2004) and, likewise, significantly different (*p-value*=0,000) from the interpretation of United States professional accountants identified by those same authors.

These results also support the hypothesis that, through its influence on the accounting value (or attitude) of conservatism, culture affects the CMVM auditors' interpretation of the expression "virtually certain". That is, under an asset recognition context, the CMVM auditors assign higher percentages to VPE, thus deferring its recognition. So, the results also support H1 for the expression "virtually certain".

In order to assess the effect secrecy has on the CMVM auditors' interpretation of VPE we examined the mean percentage they assigned to the term "remote" in a context of contingent liabilities disclosure. According to Doupnik and Riccio (2006), assigning higher percentages to the term "remote" is a signal of a less willing attitude to provide disclosure of contingent liabilities, which is consistent with a higher tendency for secrecy.

Table 5 – Descriptive statistics[16] for the term "remote"

Remote	Disclosure	Mean	Median	Standard deviation	Minimum	Maximum
IAS 37, Int., pto.19	Cont. Liability	12	10	9	0	30
IAS 37, §86	Cont. Liability	12	10	9	0	30
IAS 37, §28	Cont. Liability	13	10	11	0	30

Considering the descriptive statistics for the term "remote", we observed a smaller variation in its interpretation by the CMVM auditors, ranging from 12% to 13% and also that the median (10%) is close to the mean (12% and 13%). We also recorded a substantially smaller standard deviation than the one for the term "probable".

We tested these results when we had directly comparable contexts to those of the literature[17]. A significance level of 5% was adopted for all analyses.

So, we detected a significantly different interpretation made by the CMVM auditors (*p-value*=0,000) from the one made by Brazilian professional accountants (23.88%) identified by Doupnik and Riccio (2006), and quite close (*p-value*=0,730) to the interpretation made by United States professional accountants (12.67%).

Apparently, these results are not consistent with Gray's (1988) theoretical framework, as this author locates Portugal (in terms of accounting values or attitudes) in the "conservatism/secrecy" quadrant, while he locates the United States in the "optimism/transparency" quadrant; as, in this matter, the accounting value of transparency is the opposite value to secrecy.

These results suggest that secrecy does not have an impact on the way the term "remote" is interpreted by the CMVM auditors. Therefore, there is no support for H2.

According to Guerreiro *et al*. (2008), the type of company where the auditor works or provides services seems to influence the level of disclosure. Auditors working in international auditing companies, in order to avoid reputation costs, tend to demand from their clients a higher level of information disclosure.

So, we consider that the professionals under study - as they are registered with the CMVM and, in most cases, were *partners* in international auditing companies - feel more pressure to avoid the costs of

[16] These results were rounded to the nearest whole percentage.
[17] Again, we did not round the values of the mean percentage assigned to VPE. In this case, the mean is 12.10%.

reputation loss and, therefore, tend to a higher level of information disclosure (i.e. disclosure of contingent liabilities).

For this reason, we consider that this conclusion may not be suitable to Portuguese auditors in general, because the auditors under study show a different attitude regarding disclosure.

6. CONCLUSIONS AND SUGGESTIONS FOR FUTURE RESEARCH

One of the main arguments in favour of the adoption and convergence with the international accounting standards published by the IASB is that these will allow comparability of financial reporting across countries. However, because the IAS/IFRS use VPE when establishing the recognition and disclosure criteria for accounting elements, they require professional accountants to interpret and classify the probability of an outcome or event taking into account those terms and expressions and to best decide in terms of financial reporting.

Auditors have to verify the proper application of accounting standards and to evaluate alternative accounting practices that were adopted. These professionals evaluate the application of accounting standards and make recommendations to the companies regarding financial reporting issues. Therefore, the auditors' professional judgment is particularly important, as accounting standards apply to specific cases, and demand the assessment of probability concerning uncertain events.

Once the IAS/IFRS do not have quantitative guidelines for the interpretation of VPE, auditors, apart from using their professional judgment, must also interpret the probability expressed by those terms and expressions. Many authors (v.g. Arahony and Dotan, 2004) show their concern about the inconsistent and different application of accounting standards (v.g. SFAS 5, IAS 37), which results from the diversity of interpretations of VPE (v.g. "remote", "probable" and "virtually certain").

In fact, if there is no agreement among auditors on how to interpret these VPE, there might be a potentially serious communication problem and, consequently, an inconsistent application of accounting standards (Amer *et al*., 1994), which will probably reduce financial statements usefulness (Simon, 2002). This issue is vital, because an inconsistent and imprecise interpretation of VPE by professional accountants may endanger the proper interpretation and application of accounting standards and can represent a serious obstacle to global financial reporting comparability and convergence (Zeff, 2007).

We carried out an empirical study on the interpretation of "in context" VPE used in the IAS/IFRS by the auditors registered with the Portuguese Securities Market Commission, the CMVM auditors, because (i) no such research has previously been undertaken in a Portuguese context and also because (ii) we wanted to contribute to the literature that investigates the impact of culture on the interpretation of VPE used in the IAS/IFRS testing Gray's (1988) theoretical framework.

The results of this study suggest the effect of conservatism on the interpretation of the term "probable" and of the expression "virtually certain", when used in the IAS/IFRS, by the CMVM auditors. Since "probable" is the most used VPE in the IAS/IFRS, we consider that this circumstance may compromise the international comparability of financial reporting.

As for the accounting value of "secrecy", we did not detect its effect on the interpretation of the term "remote" by the CMVM auditors, which seems to be related with the characteristics of these auditors in particular, that is, the type of attitude towards information disclosure (i.e. the disclosure of contingent liabilities).

In short and when compared with other studies, our results suggest the effect of culture on the VPE interpretation by the CMVM auditors, expressed through a more cautious approach in terms of recognition of assets, expenses and losses. In this context, the results of our study show that culture might adversely affect the cross-national comparability of financial reporting, as they provide additional evidence supporting Gray's theory and, consequently, suggest that those terms and expressions can be differently interpreted across different cultural areas.

This evidence seems not to correspond to the intention of accounting and auditing regulators concerning the use of these terms and expressions. According to Laswad and Mak (1997), the regulators expect the VPE used in accounting standards to be consistently applied across countries, regardless of the context in which they are used.

Considering the evidence provided in the literature regarding accounting and auditing contexts, we believe that it is fair to review the use of VPE in the accounting standards, namely the IAS/IFRS; and to make its interpretation easier by providing more proper guidelines for the understanding of those VPE in such specific contexts. On the other hand, accounting standards ambiguity is also harmful for the users of financial reporting, who must deduct from the financial statements (and from the auditor's report) the possible occurrence of the reported events.

The debate over this issue and the explanation of the probability levels related to VPE may lead the regulators to reconsider the use of certain terms and expressions (Laswad and Mak, 1997). Nevertheless, it is necessary to improve and expand the knowledge on this matter and to examine whether the replacement of the ambiguous and vague terminology with more specific and consensual VPE will reduce or eliminate the effect culture has on their interpretation. If this does not occur, the IASB may, as an alternative, adopt the use of suitable numerical equivalents to replace the existing VPE (Doupnik and Richter, 2004). The clarification of the meaning and interpretation of the VPE used in the accounting standards through their numerical equivalents would be useful both for those interpreting and applying the IAS/IFRS and for those who use financial statements for decision-making.

Future research might address the extension of this study to the Portuguese population of statutory auditors, so as to assess whether the results obtained in this study are similar or, on the contrary, there are different results. Another possible development will be the analysis of the interpretation of VPE contextualized in the IAS/IFRS among preparers (v.g. accountants and financial directors), auditors and users of financial statements (v.g. financial analysts) within the Portuguese context.

Future research also might compare the interpretation of VPE between Portuguese auditors and Spanish or British auditors, so as to contrast their behavior when recognizing and disclosing accounting elements, under Gray's (1988) theory. Thus, it would broaden the research to cultural areas different from the ones already examined in the literature and it also would investigate significantly different cultural areas.

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