

**MASTER IN**  
**CONTABILIDADE, FISCALIDADE E FINANÇAS**  
**EMPRESARIAIS**

**MASTER'S FINAL WORK**  
DISSERTATION

CULTURE'S IMPACT ON THE DISCLOSURE OF KEY AUDIT MATTERS

MARIANA CALIXTO DE SOUSA

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## **Abstract**

This dissertation explores the possibility of a relationship between financial disclosure on auditors' reports and national culture. More precisely, we propose a relationship between the nature and numerical extent of key audit matters disclosed on auditors' reports and the auditors' national culture.

To study this connection we resort to the key audit matter information disclosed on the independent auditor's report on the financial statements for the 2016 financial-year of companies listed in the PSI-20, the AEX and the FTSE 100 indexes and to Hofstede's (1980) cultural dimensions.

Our results acknowledge that auditors' professional judgement and behavior is significantly influenced by national cultural dimensions. Specifically, the more an auditor's culture expresses preference for uncertainty avoidance values, the less it is revealed in the auditor's behavior and, therefore, the more likely the auditor is to disclose a greater number of entity-level risk related key audit matters in the audit report. Additionally, the more an auditor's culture expresses tendency for individualism, the higher is the number of entity-level risk related key audit matters disclosed in the auditor's report.

**Keywords:** Key Audit Matters, New Auditor's Report, Financial Disclosure, National Culture, Individualism, Uncertainty Avoidance.

## Resumo

A presente dissertação explora a possibilidade de existir uma relação entre divulgação financeira presente nos relatórios de auditoria e cultura nacional. Mais precisamente, propomos uma relação entre a natureza e extensão numérica de matérias relevantes de auditoria divulgadas nos relatórios de auditoria e a cultura nacional dos próprios auditores.

Com o intuito de estudar esta ligação, recorreremos à informação referente a matérias relevantes de auditoria divulgada nos relatórios de auditoria das demonstrações financeiras, relativas ao ano de 2016, de empresas cotadas nos índices bolsistas do PSI-20, AEX e FTSE 100 e às dimensões culturais de Hofstede (1980).

Os resultados obtidos através do estudo desenvolvido confirmam a influência da cultura nacional no julgamento e comportamento profissionais de um auditor. Nomeadamente, constatamos que, quanto mais um auditor valoriza *uncertainty avoidance*, menos essa preferência é revelada no seu comportamento e, portanto, mais provável se torna o facto de que o auditor irá divulgar um maior número de matérias relevantes de auditoria relacionadas com o risco inerente à atividade do alvo da auditoria financeira. Adicionalmente, quanto mais um auditor valoriza características individualistas, maior o número de matérias relevantes de auditoria, relacionadas com o risco inerente à atividade do alvo da auditoria financeira, divulgadas nos relatórios de auditoria.

**Palavras-chave:** Matérias Relevantes de Auditoria, Novo Relatório do Auditor, Divulgação Financeira, Cultura Nacional, Individualismo, *Uncertainty Avoidance*.

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## **List of Abbreviations**

|          |  |
|----------|--|
| AEX      | Amsterdam Exchange   |
| ALRKAM   | Account-Level Risk Key Audit Matter  |
| ELRKAM   | Entity-Level Risk Key Audit Matter   |
| FTSE 100 | Financial Times Stock Exchange 100   |
| GLOBE    | Global Leadership and Organizational Behavior Effectiveness Research Program |
| IAASB    | International Auditing and Assurance Standards Board                         |
| IASB     | International Accounting Standards Board                                     |
| IBM      | International Business Machines  |
| IDV      | Individualism versus Collectivism  |
| IFRS     | International Financial Reporting Standard                                   |
| ISA      | International Standard on Auditing   |
| IT       | Information Technology   |
| KAM      | Key Audit Matter   |
| MAS      | Masculinity versus Femininity  |
| PDI      | Power Distance   |
| PSI-20   | Portuguese Stock Index 20  |
| ROA      | Return on Assets   |
| UAI      | Uncertainty Avoidance  |

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## 1. Introduction

Research on the financial statements' users' perception towards the communication of findings through the independent auditor's report has been a popular subject among audit and assurance standard setters for several years. The most common findings on this matter concern with the existence of a communication gap between auditors and the financial statements' users in the interpretation of the information contained in the auditor's report and an expectation gap regarding the scope of the audit. Additionally, the generality of the users request further disclosure of client-specific information and of the audit process (Asare & Wright, 2012; CFA Institute, 2010; Financial Reporting Council, 2015).

Aware of these issues, the International Auditing and Assurance Standards Board (IAASB) released its new and revised Auditor Reporting standards on January 2015, effective for financial statements' audits for periods ending on (or after) December 15, 2016. These new standards represent an attempt to improve the auditor's report informational value through a more transparent approach, and to recover the financial statements' users' reliability in the audit process and the financial statements (Auditing and Assurance Standards Board, 2015; International Auditing and Assurance Standards Board, 2011; International Federation of Accountants, 2018).

The disclosure of key audit matters (KAMs), required by the new ISA 701, *Communicating Key Audit Matters in the Independent Auditor's Report* for the audits of listed firms, is one of the most remarkable changes resulting from the adoption of the new audit standards. KAMs are matters communicated by the auditor to those charged with governance that in the auditor's professional judgement involved special audit consideration. These matters are most commonly associated with risks identified throughout the audit process that shaped the audit strategy and required greater amount of audit work (Financial Reporting Council, 2015; International Federation of Accountants, 2016a; International Federation of Accountants, 2018).

Members from IASB describe the new requirement to disclose KAMs as an important development in financial reporting quality (International Federation of Accountants, 2018). Furthermore, research shows that financial statements' users are relatively more attentive to the KAM section than the remainder non KAM-related disclosures in the auditor's report (Sirois et al., 2018).

Although the auditing standards' setters constantly try to convey the importance of international auditing standards and practices harmonization, Cooke & Wallace (1989) stated that there is a tendency to vary significantly the format and content of audit reports worldwide, which might be explained by Flint's (1988) proposition that an audit is a social product conditioned by the behavior of societies, groups and individuals. Cowperthwaite (2010, p. 8) goes even beyond and describes auditing as being "much more an art than a science. And art is always the product of the artist".

Several studies in the accounting and auditing fields have established a connection between the ability to interpret and apply global standards and individuals' particular characteristics, such as culture (Akman, 2011; Bik, 2010; Cowperthwaite, 2010; Heidhues & Patel, 2011; Hope, 2003).

Geert Hofstede (1991, p. 5) describes culture as "the collective programming of the mind which distinguishes the members of one group or category of people from another", which suggests that an individual's culture is developed through a process of socialization with family, friends and other members of society (Ghemawat & Reiche, 2011).

Culture exists at different levels, including organizational, geographical and national (Ghemawat & Reiche, 2011). This dissertation focuses on the national level of culture, which concerns with principles, standards, and behavioral patterns of national groups (Leung et al., 2005).

Hofstede (1980) developed the national cultural dimensions of Power Distance, Uncertainty Avoidance, Individualism (versus Collectivism) and Masculinity (versus Femininity), which have been used in prior literature to study national culture influence on the level of auditor's disclosure in different countries (Archambault & Archambault, 2003; Erkan & Ağsakal, 2015).

This dissertation aims to examine the effect of national culture on the disclosure of KAMs in the independent auditor's report of firms listed in the Portuguese Stock Exchange 20 (PSI-20), the Amsterdam Exchange Index (AEX) and the Financial Times Stock Exchange (FTSE) 100 index. Specifically, we argue that the level of disclosure of KAMs is negatively related to the auditor's level of uncertainty avoidance and, on the other hand, positively related to the auditor's level of individualism.

Our results show that the more an auditor values rules and avoids uncertain situations, the more KAMs the auditor discloses in the audit report. A similar effect in the disclosure of

KAMs is obtained when an auditor expresses preference for individualism. Additionally, a couple of client's and auditor's characteristics (besides auditor's national culture) demonstrated to be statistically significant in the disclosure of KAMs.

This study is a relevant addition to literature since it enhances the knowledge about a recent subject such as the new auditor's report, specifically the introduction of KAMs. Moreover, this study is especially important for standard setters and stakeholders since it recognizes the inconsistent interpretation and, subsequent, application of the same audit standards among audit professionals when considering cultural differences between the latter. Finally, this dissertation emphasizes the importance of acknowledging national culture's impact and complements the controversial findings reported in literature concerning with culture's influence on financial disclosure (Archambault & Archambault, 2003; Zarzeski, 1996; Jaggi & Low, 2000; Hope, 2003; Hope et al., 2008; House et al., 2004).

The remainder of this dissertation is organized as follows. The next section presents a literature review on the new and revised auditing standards issued by IAASB, with a special emphasis on the new KAMs section. It also exhibits a literature review on Hofstede's theory of national culture and on culture's impact on the auditor profession. The third section clarifies the methodological approach used in this study and the sample. The two following sections of this dissertation introduce the results and conclusions of this study, respectively. Furthermore, the last section comprises a few limitations encountered throughout the elaboration of this dissertation and suggestions for future research on the topic.

## 2. Literature Review

### 2.1. The New Auditor's Report and the Introduction of Key Audit Matters

The auditor's report is the most obvious deliverable of the audit process. Following the resulting events of the scandalous 2008 financial crisis, investors and other users of financial statements have called for a more detailed auditor's report with more relevant insight on the audit process. The new and revised Auditor Reporting standards, issued by the International Auditing and Assurance Standards Board (IAASB) in 2015, are a multi-year attempt to enhance the value delivery of the auditor's report to the financial statements' users (International Auditing and Assurance Standards Board, 2015). Ultimately, the aim is to reestablish the public's confidence in both the audit process and the companies' financial statements and to enable healthy decision-making (Erkan & Ağsakal, 2015; Ernst & Young China, 2016).

The new and revised Auditor Reporting standards led to several changes in the auditor's report, such as the placement of the auditor's opinion at the beginning of the report and additional information to be disclosed dealing with going concern (International Auditing and Assurance Standards Board, 2015). Appendix I demonstrates the new structure of the auditor's report and related International Standards on Auditing (ISAs). Furthermore, according to several prestigious assurance companies, the most significant change to auditor reporting is the introduction of Key Audit Matters (KAMs) by the (new) ISA 701, *Communicating Key Audit Matters in the Independent Auditor's Report* (Ernst & Young, 2016; PricewaterhouseCoopers Limited, 2017).

The ISA 701 expresses the requirements and guidance for communicating KAMs in the auditor's report. KAMs are defined as the matters that, in the auditor's professional judgment, were of most significance in the audit and, therefore, required significant auditor attention, among the matters communicated with those charged with governance (International Federation of Accountants, 2016a).

Though the identification process of KAMs is significantly based on the auditor's judgement, there are three specific areas in the financial statements the auditor is required to consider: areas of higher assessed risk of material misstatement, or significant risks; areas that involved significant management judgment, including high estimation uncertainty accounting estimates; and, the effect on the audit of significant events or transactions that occurred during the period (International Federation of Accountants,

2016a). Appendix II summarizes the complex process of identifying and communicating KAMs in the auditor's report.

The purpose of KAM disclosure is to aid the financial statements' users in understanding the audited entity and its areas of significant management judgment. Additionally, Association of Chartered Certified Accountants' (2018) research shows that KAM disclosure stimulates better governance and corporate reporting and better audit quality. However, the communication of KAM is only mandatory for listed companies (International Federation of Accountants, 2016a).

Although the new standards were not effective until "audits of financial statements for periods ending on or after December 2016", some European countries decided that an early adoption would fit best for them, to understand the nature of the changes and to plan an effective implementation method (Association of Chartered Certified Accountants, 2018). Both the United Kingdom and the Netherlands use auditing standards based on the ISAs issued by the IAASB. Nevertheless, these countries effective date for the new auditing standards was 4 years earlier than the established by the IAASB (periods on or after October 2012) whereas in the Netherlands was 2 years earlier (periods on or after December 2014) (Ernst & Young China, 2016).

It is important to remind that KAM disclosure in the auditor's report is not a substitute for the expression of a modified opinion (International Federation of Accountants, 2016a).

## **2.2. Hofstede's Dimensions of National Culture**

Kluckhohn (1962), an anthropologist from the United States, suggested there should be a generalized framework for characterizing cultures because "All cultures constitute distinct answers to the same questions posed by human biology and by the generalities of the human situation" (pp. 317-318).

Focusing on the nature of common societal problems to all cultures, numerous authors (Kluckhohn & Strodtbeck, 1961; Parsons & Shils, 1951; Rokeach, 1979; Schwartz, 1992) have tried to develop multidimensional cultural models to describe and differentiate cultures across nations but only a few were precise and supported by empirical research.

When studying the influence of culture on workplace-values, Hofstede (1980) got access to a survey database about values and related feelings among the employees of the multi-national IT company International Business Machines (IBM), from 1967 to 1973, in over

50 countries around the world, and applied the same survey to people unrelated to IBM. Thus, he identified common problems (to which he called dimensions of national culture) in different countries, for which each country had its own set of solutions. These problems concerned with (Hofstede & McCrae, 2004):

- Dependence on superiors (defined as Power Distance, PDI, which expresses a culture's way of dealing with inequality among members of a society, from the less powerful members' perspective) (Cowperthwaite, 2010; Hofstede et al., 2010);
- Necessity for rules and predictability (defined as Uncertainty Avoidance, UAI, which reflects the way a culture tries to control and feels threatened by uncertain situations) (Cowperthwaite, 2010);
- The balance between individual and company goals (defined as Individualism versus Collectivism, IDV, which represents the interaction among individuals and groups from the same society) (Cowperthwaite, 2010); and,
- Stability between ego<sup>1</sup> and social values<sup>2</sup> (defined as Masculinity versus Femininity, MAS, which manifests a society's preference for values such as competition and cooperation, respectively) (Hofstede, 1998).

These dimensions of national culture were based on Inkeles & Levinson's (1969) standard analytic issues developed in a study on modal personality and sociocultural systems.

Follow-up studies revealed two additional cultural dimensions: Long-Term versus Short-Term Orientation (which concerns with a society's orientation for future events and for past and current events, respectively) and Indulgence versus Restraint (which is associated with people's preference to indulge or control their urges) (Hofstede, 2011; Hofstede & Bond, 1988; Hofstede et al., 2010).

"Every culture is unique just as each person has a unique personality" (Cowperthwaite, 2010, p. 6). So, each dimension represents a cultural aspect that can be relatively measured among countries. Different scores on these dimensions express different ways for countries to overcome the same obstacle, 0 being the lowest score and 100 the highest (Hofstede, 2011).

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<sup>1</sup> Ego values are associated with the need for money, power and accomplishment.

<sup>2</sup> Social values are associated with cooperation and good living environment.

Although change is inevitable, overtime and it may seem that cultures are converging on practices (for instance, the ongoing globalization of corporations and technology), this does not mean that cultural differences are disappearing or diminishing (House et al., 2004). This convergence is happening only at the surface level. At a deeper level of culture, national cultural differences have persisted. The continued ethnic conflicts are a clear proof of that (Inglehart & Baker, 2000; Schwartz, 2008; Treven et al., 2008). Therefore, it is still relevant to study culture and Hofstede's country scores still provide an accurate representation of the relative country positions, though his research is based on data from about 40 years ago (Hofstede, 2011).

In addition, the approach led by a more recent project, the Global Leadership & Organizational Behavior Effectiveness (GLOBE), of adding new dimensions to the Hofstede's model and the fact that its results correlated positively with Hofstede's results, both validate Hofstede's theory of national cultural dimensions (House et al., 2004).

Nowadays, Hofstede's paradigm of cultural differences is used at a worldwide scale, for developing national cultural profiles and to study cultural influence in several fields (Ghemawat & Reiche, 2011).

### **2.3. Culture's Impact on Auditing**

Although there is a continuous effort by the IAASB and the International Accounting Standards Board (IASB) to move towards international harmonization of accounting (International Financial Reporting Standards, IFRSs) and auditing (ISAs) standards, cultural differences affect the consistent interpretation and implementation of both standards (Akman, 2011; Arnold et al., 2008; Bik, 2010; Cowperthwaite, 2010; Heidhues & Patel, 2011; Hope, 2003). Consequently, audits conducted under the same global standards will display different results in the auditor's report (Cowperthwaite, 2010).

Prior research confirmed cultural differences' effect on auditor's ability to process information and to assess and respond to ethical crisis (Arnold et al., 2006; Cohen et al., 1995; Tsui & Gul, 1996). As the processing of information leads to judgement (Hogarth, 1980), these findings suggest that auditor's professional judgement<sup>3</sup> is significantly influenced by the auditor's national culture. Therefore, the reliance of auditing standards

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<sup>3</sup> Professional judgment is defined as "the application of relevant training, knowledge and experience, within the context provided by auditing, accounting and ethical standards, in making informed decisions" through the audit process (International Federation of Accountants, 2016b).

on the judgment of the professionals who apply it is one of the main reasons for culture's influence on the interpretation and implementation of global standards (Bik, 2010; Cowperthwaite, 2010; Heidhues & Patel, 2011).

Additional studies have identified national cultural differences' impact on auditors' perception of corruption (Husted, 1999), materiality estimation (Arnold et al., 2001) and underreporting of the team's working time in the audit engagement and prematurely signing-off on audit steps (Arnold et al., 2002).

Differences in auditor's level of independency (Naslmosavi et al., 2014), risk assessment (Kanagaretnam et al., 2014) and disclosure levels (Archambault & Archambault, 2003; Erkan & Ağsakal, 2015) have also been associated to cultural differences among professionals from different countries.

Focusing on the literature about information disclosure, researchers have been progressively aiming to understand the relationship between culture, auditing and financial reporting since Gray (1988) developed a theoretical model of accounting values (Erkan & Ağsakal, 2015).

Inspired by the approach of Harrison & McKinnon (1986) and McKinnon (1986), who highlighted the importance of considering environmental influence when studying accounting policy formulation, Gray proposed a framework in which the international differences in accounting systems are explained by Hofstede's primary cultural dimensions (PDI, UAI, IDV and MAS). This author identified four accounting values, which represent the international differences in accounting systems (Gray, 1988):

- Professionalism (versus Statutory control), reflects the preference for individual professional judgment over a strict compliance with legal requirements and statutory control approach;
- Uniformity (versus Flexibility), represents the consistent use of accounting practices among companies over the possibility of adhering to accounting practices in accordance with the company's specific circumstances;
- Conservatism (versus Optimism), regards to the usage of measurement approaches that are less (more) favorable to the company; and,

- Secrecy (versus Transparency), emphasizes information asymmetry between companies and its stakeholders, evidencing a preference for limited information disclosure over a more honest and transparent information disclosure approach.

Though Gray (1988) did not supported his accounting values theory with empirical foundation, subsequent researchers theoretically and empirically appraised the relationships proposed by him (Doupnik & Tsakumis, 2004; House et al., 2004; Salter & Niswander, 1995; Zarzeski, 1996; Wingate, 1997).

According to Gray's (1988) description of Secrecy versus Transparency, this accounting value relates to "the quantity of information disclosed to outsiders" (p. 11) and can be linked most thoroughly with the PDI, UAI and IDV dimensions.

Additionally, Cowperthwaite (2010) and Naslmosavi et al. (2014) believe that the same cultural dimensions (PDI, UAI and IDV) are relevant to the auditing practice, in the way that they may affect auditor's application of the ISAs and, ultimately, the information disclosed in the auditor's report on the financial statements.

Nevertheless, because of collinearity problems among the PDI, UAI and IDV dimensions, the PDI dimension was dropped. In accordance with Arnold et al.'s (2001) approach, as PDI and IDV were nearly perfect surrogates for each other in the sample used for the present study (a 0,9991 negative correlation), PDI was dropped because its range was lower than IDV's range (a range of 28 and 62, respectively).

Since the aim of this thesis is to understand culture's impact on the disclosure of information in the new auditor's report, the following subsections are going to describe the extreme positions of the cultural dimensions UAI and IDV, their possible impact in the audit practice and the expected relationships between those dimensions and Secrecy versus Transparency, hypothesized by Gray (1988).

### 2.3.1. Uncertainty Avoidance (UAI)

The UAI dimension reflects the extent to which a culture tolerates unknown, surprising or ambiguous situations and, consequently, teaches its members to react to it (Cowperthwaite, 2010).

Countries with lower scores in UAI, such as English-speaking, Nordic and Chinese-culture countries, feel a low need to avoid uncertainty and to live strictly according to rules. These cultures emphasize experience and are more confident in their expertise to

deal with unexpected situations as they arrive. These cultures are called uncertainty accepting cultures (Hofstede, 2011; Hofstede et al., 2010).

Hereupon, for uncertainty accepting auditors the decision-making process takes less time, as they are comfortable to make judgement-based decisions and they see rules as an inspiration in solving problems, and not as a limitation. These auditors obtain only as much evidence as they believe it is absolutely necessary to support their judgement (Cowperthwaite, 2010).

On the other hand, countries like East and Central European and Latin countries, Japan and German-speaking countries, demonstrate higher UAI scores. Uncertainty avoiding cultures need structured systems with rules to reduce ambiguity and to avoid conflict. They follow strict codes of belief and of behavioral conduct, so they have limited tolerance for difference of opinions (Hofstede, 2011; Hofstede et al., 2010).

Finally, for uncertainty avoiding auditors the decision-making process takes more time because they are reticent to exercise judgement. They need a clear and structured set of rules to be able to formulate judgements more comfortably. Additionally, for these auditors the amount of evidence obtained is rarely enough to support their judgement, so the amount of audit work they have to perform to achieve an acceptable level of assurance is significantly larger than for uncertainty accepting auditors (Cowperthwaite, 2010).

Appendix III and Appendix IV expose examples of countries with low and high UAI scores and complementary characteristics to those societies, correspondingly.

In accordance with Gray's (1988) theory, strong uncertainty avoiding cultures express a substantial preference for confining information disclosure "to avoid conflict and competition and to preserve security" (p. 11). Thus, these cultures are expected to be more secretive (and, therefore to disclose significantly less information) than uncertainty accepting cultures. Following this analysis, we formulate the following hypothesis:

H1: There is a negative relationship between auditor's level of uncertainty avoidance (UAI) and the level of disclosure of Key Audit Matters.

### 2.3.2. Individualism versus Collectivism (IDV)

The extreme positions of the IDV dimension propose that a society can be based on either loose (individualistic culture) or tight (collectivistic culture) bonds between individuals (Hofstede, 2011).

In individualistic cultures (higher IDV scores), people are expected to look only after themselves and their direct family, emphasizing their individual needs and desires over those of their group. Importance is placed on being independent and autonomous (Hofstede, 2011). Developed and Western countries tend to exhibit individualistic cultures (Hofstede & McCrae, 2004).

In this sense, individualistic auditors demonstrate a task-oriented work approach, which means they are extremely focused on the tasks they need to perform to achieve certain goals, even if it happens at the expense of the corporation and family. These auditors expect a likewise behavior from others (Cowperthwaite, 2010). In addition, auditors from individualistic cultures prove to have higher levels of independency towards the client, which enhances the communicative environment between the audit team and the client and, subsequently, facilitates addressing sensitive matters (Hughes et al., 2009).

On the opposite side, collectivistic cultures (lower IDV scores) consist of interdependent social units (in-groups), in which people look after each other in exchange for loyalty. The in-group to which individuals belong shapes their personal identity (Brislin, 1993; Hofstede, 2011). Less developed and Eastern countries tend to reveal collectivistic cultures (Hofstede & McCrae, 2004).

Within the audit context, collectivistic auditors express a relationship-oriented work approach, which translates into a concern for the well-being and satisfaction of the audit team. They are particularly loyal to the corporation and family and expect a similar behavior from others (Cowperthwaite, 2010). These auditors prefer to formulate judgments and to make decisions collectively within the audit team and they are uncomfortable communicating sensitive matters with the client, so they avoid questions that can be interpreted as non-conforming. (Hughes et al., 2009)

Appendix V and Appendix VI exhibit examples of countries with low and high IDV cores and complementary characteristics to both scores, respectively.

According to Gray (1988), individualistic cultures are prone to extensive disclosure and competition, which leads to a preference for avoiding secrecy. Thus, we formulate the following hypothesis:

H2: There is a positive relationship between auditor's level of individualism (IDV) and the level of Key Audit Matters' disclosure.

### **3. Methodology and Data**

#### **3.1. Variables Selection**

##### **3.1.1. Dependent Variable**

Focusing on the approaches used by Doyle et al. (2007), Lennox et al. (2018) and Gambetta et al. (2017), we use two categories to define the KAMs disclosed in the sample audit reports: Account-Level Risk KAMs (ALRKAMs) and Entity-Level Risk KAMs (ELRKAMs). As the name suggests, these categories gather the KAMs according to the type of risk they address.

Based on Gambetta's et al. (2017) methodology, Account-Level Risk KAMs are KAMs related to specific financial statements items or account balances. This category comprises KAMs related to revenue; intangibles (including goodwill); property, plant and equipment; pension schemes; inventory; financial assets; supplier rebates; and, impairment of assets.

On the other hand, Entity-Level Risk KAMs are KAMs related to the company's risk as a whole. This category includes KAMs related to tax; litigation and/or provisions; acquisition accounting; controls; Information Technology (IT); auditor change; and, other entity-level matters (Gambetta et al., 2017).

Account-level weaknesses are easier to audit than entity-level ones, because auditors can identify the first type through substantive testing. However, as entity-level weaknesses are associated with more macro-level controls, it affects severely the audit strategy and call into question the reliability of the financial statements (Doyle et al., 2007; Doss & Jonas, 2004; Lennox et al., 2018). Additionally, entity-level material weaknesses suggest the existence of undetected misstatements (Asare & Wright, 2017)

Focusing on the aim of this study, we decided to pay closer attention to the disclosure of ELRKAMs. In this sense, the dependent variable used in this study (ELRKAM) represents the proportion of ELRKAMs disclosed to the total KAMs disclosed in the sample auditor's report.

Appendix VIII provides a more detailed description of the dependent variable.

### 3.1.1. Independent Variables

As previously mentioned, to study culture's impact on the disclosure of KAMs we use Hofstede's cultural dimensions of UAI and IDV. Specifically, we use the scores of both cultural dimensions for the countries of Netherlands, Portugal and United Kingdom.

Appendix VII reveals the UAI and IDV scores for the three sample countries. According to these scores, Netherlands is an individualistic society with a slight preference for avoiding uncertainty. Portugal, on the other hand, is a collectivistic society and is amongst the highest uncertainty avoiding societies. Finally, the United Kingdom is one of the most individualistic societies and is portrait as being uncertainty accepting (Hofstede Insights, 2018).

Based upon prior literature, Gambetta et al. (2017) suggests that auditors select KAMs bearing in mind specific characteristics of the client, including his risk. In this sense, firm dimension (SIZE), profitability (PROFIT), operating industry sector (INDUST), and the number of segments (SEGM) represent the specific client characteristics controlled for in this study (Akman, 2011; Archambault & Archambault, 2003; Bédard et al., 2014; Gambetta et al., 2017; Hope, 2003; Hope et al., 2008; Zarzeski, 1996). These variables are expected to be related to the complexity of the audit work performed and the auditor's opinion (Hope et al., 2008; Smith, 2016).

The degree of leverage (LEVRG) is also controlled for in this study and it projects the client's potential for financial distress, which might increase the auditor's assessed risk of the client (Archambault & Archambault, 2003; Hope, 2003; Hope et al., 2008).

In addition, the disclosure level in the auditor's report is also powered by auditor characteristics (Lenox et al., 2016; Smith, 2016). Auditor size is presumed to be associated with audit quality (in a positive manner) and information asymmetry (in a negative manner) (Hope et al., 2008). Therefore, the audit firm that issued the sample audit reports (AFIRM) is considered in the regression model (Gambetta et al., 2017).

Furthermore, according to ISA 701, if a matter that meets the criteria of a KAM leads to the expression of a qualified or adverse opinion, that matter is no longer communicated in the KAMs section. That matter will be present in the Basis for Qualified/Adverse Opinion section. Eventually, the auditor can determine that there are no other KAMs to be communicated (International Federation of Accountants, 2016a). Hence, it is reasonable to expect that the type of auditor's opinion affects the disclosure of KAMs.

Therefore, the type of opinion expressed in the audit report (MODIFOP) is controlled for in this study.

Appendix VIII provides a more detailed description of the independent variables.

### **3.2. Empirical Model**

The following linear regression model was developed to test our proposed hypotheses (in subsections 2.3.1 and 2.3.2.) and to understand the interaction between the two cultural dimensions:

$$\begin{aligned} \text{ELRKAM} = & \beta_0 + \beta_1 \text{IDV} + \beta_2 \text{UAI} + \beta_3 \text{AFIRM} + \beta_4 \text{INDUST} + \beta_5 \text{LEVRG} \\ & + \beta_6 \text{MODIFOP} + \beta_7 \text{PROFIT} + \beta_8 \text{SEGM} + \beta_9 \text{SIZE} + u \end{aligned}$$

### **3.3. Sample and Data Source**

The sample used in this study comprises the audit reports issued to listed companies in the Portuguese Stock Index 20 (PSI-20), the Amsterdam Exchange (AEX) Index and the Financial Times Stock Exchange 100 (FTSE 100) Index, for the 2016 financial year. The combination of these three indexes makes a total of 142 firms. Two firms were excluded because their auditor's report did not provide information concerning with KAMs. Hence, the final sample encompasses 140 firms.

Firms from the United Kingdom's and Netherlands' stock exchange were selected for analysis because of the early adoption of ISA 701 (which corresponds to ISA 700 in United Kingdom and ISA 702N in Netherlands) and because they represent an important role in international accounting (Bik, 2010). Additionally, at the national cultural level, these countries mainly differ from each other in their attitude towards uncertainty (the United Kingdom is an uncertainty accepting society, whereas Netherlands demonstrates a slight preference for avoiding uncertainty).

On the other hand, firms from the Portuguese Stock Index not only allow the understanding of the effect of a significantly different attitude towards ambiguous situations (Portugal is one of the most uncertainty avoiding societies), as also exhibit an opposite attitude towards interdependence amongst people from the other sample firms (Portugal is a collectivist society, unlike Netherlands and United Kingdom).

Appendix VII reveals the scores attributed to the previous countries in the Hofstede's national cultural dimensions of UAI and IDV. These scores come from Hofstede Insights' Country Comparison Tool (Hofstede Insights, 2018).

The financial data concerning elements from the sample firms' balance sheet and income statement (such as total assets, total debt and profit before taxes) comes from the Amadeus database (Amadeus, 2018). The remainder financial information, such as the operating segments and the operating industry sector, comes from the sample firms' annual reports available in the companies' website.

Finally, the information regarding the audit firm, the KAMs disclosed and the type of opinion expressed comes from the auditor's reports on the consolidated financial statements of the sample firms for the 2016 financial year. All audit reports were obtained in the English language, with the exception of a few companies from Portugal.

### **3.4. Descriptive Statistics**

Appendix IX provides the descriptive statistics of the regression variables for the sample firms. Panel A shows that the average of the sample's cultural characteristics demonstrates a tendency for accepting uncertain and ambiguous situations (0,459) and for preserving loose bonds among individuals of the same society (0,799). These average levels of UAI and IDV result from the fact that the majority of sample firms are listed in the United Kingdom's stock exchange (71%), followed by firms listed in the stock exchange of Netherlands (17%). For last, Portuguese firms are less representative of the total sample (12%).

In addition, the sample is composed of profitable firms (7,589) that report between 3 to 4 operating segments (0,534) and fund most of their assets with recourse to equity, as opposed to debt (0,648), in average. The auditor's reports contain a balanced average proportion of KAMs from both categories (mean of 0,488 for the proportion of ELRKAMs) and express an unqualified opinion (0,007).

Panel B and C display the distribution of each country's sample firms and ELRKAMs by industry sector and audit firms, respectively.

The AEX Index is mainly composed of firms operating in the Technology and Telecommunications industry (21%) and other industry sectors (25%), such as the Chemical, Support Services and Information and Analytics industry. Nevertheless, the industry sectors with a greater average of disclosed ELRKAMs are the Health Care and Pharmaceuticals (5) and Industrials, Metals and Mining (4).

The audit firm hired to provide audit services for the majority of these firms is Deloitte, which audits 29% of the Netherlands' sample firms, followed by EY and KPMG, each

auditing 25%. The audit firms with greater average of disclosed ELRKAMs are EY (3,167), PWC (2,5) and Deloitte (2,429).

Secondly, the PSI-20 index is mostly constituted by firms operating in the Retail, Consumer Goods and Services industry (24%), Banks, Financial Services and Insurance (18%) and Utilities, Oil and Gas (18%). These industry sectors are also the ones with greater average of disclosed ELRKAMs (2; 2,7; and, 1,667, respectively).

Deloitte and PWC are the leading suppliers of audit services, both auditing 71% of the sample firms from Portugal. Nonetheless, the audit firm with greater average of disclosed ELRKAMs is KPMG (2,333), followed by Deloitte (2,250) and EY (2).

Finally, firms operating in Banks, Financial Services and Insurance industry (19%), Retail, Consumer Goods and Services (16%) and other industry sectors (21%), such as Chemical, Industrial Transportation and Travel and Leisure industry, largely compose the FTSE 100 index. Of the previously mentioned sectors, only the Banks, Financial Services and Insurance sector demonstrates a superior average of disclosed ELRKAMs (2,623). The remaining industry sector with similar average is Utilities, Oil and Gas (2,714).

PWC significantly distinguishes itself from the remainder audit firms providing audit services to 36% of the sample firms from the United Kingdom. Follows KPMG and Deloitte, which only provide these services to 22% of the sample firms, each. Differing from the remainder countries, a couple of FTSE 100 index firms hire audit firms outside the Big Four accounting firms, specifically BDO and Grant Thornton. Each of the latter non-Big Four audit firms disclose an average of 3 ELRKAMs in the audit report. PWC is the only Big Four with a similar ELRKAM disclosure average (2,954).

Panel D exposes the average disclosure of overall KAMs, ALRKAMs and ELRKAMs by country. Focusing on ELRKAM disclosure, it indicates that Netherlands is the country with superior average of ELRKAM disclosed (2,458), followed by the United Kingdom (2,173). Lastly, the lowest average is exhibited by Portugal (1,735).

To complement, Panel E presents the type of KAMs disclosed in the sample audit reports by country. Disregarding the KAM type “Other”, in the auditor’s report issued for the firms listed in the Netherlands’ stock exchange, the most frequent ELRKAM types are related to tax and acquisition accounting matters. For the firms listed in the United Kingdom and Portugal, tax and litigation and/or provision matters are the ELRKAM types disclosed more commonly.

The total number of KAMs by category and type do not have to match exactly, because one KAM can be defined by more than one category and type. For instance, Appendix X demonstrates one of the several KAMs disclosed in the Burberry Group plc's auditor's report. This KAM includes matters of two types, specifically impairment of assets and provisions, which pertain to different categories (ALRKAM and ELRKAM, respectively).

#### 4. Results and Discussion

Pearson's correlation coefficients for the regression variables are presented in Table I and were used to assess the magnitude of the association among the variables.

UAI shows a statistically significant linear relationship (at 1%) with IDV. This represents a strong correlation between both variables and the strongest among the remaining regression variables. UAI is negatively correlated with IDV (-0,988), which indicates that cultures with higher scores of uncertainty avoidance have a tendency for collectivism, as demonstrated by Akman (2011) and Hope (2003).

Pearson's correlation matrix shows additional statistically significant relationships between regression variables. However, these remaining relationships represent weak correlations. For instance, UAI is negatively related to the level of disclosure (ELRKAM) (-0,147), whereas IDV is positively related to the same variable (0,165). Both previous relationships are consistent with Akman (2011) and Hope (2003). Finally, the positive correlations between ELRKAM and AFIRM (0,243) and LEVRG (0,230) are consistent with Gambetta et al. (2017), as well as the negative correlation between ELRKAM and PROFIT (-0,204).

Table I - Pearson's Correlation Coefficients Matrix

|         | ELRKAM    | IDV     | UAI      | AFIRM     | INDUST   | LEVRG   | MODIFOP  | PROFIT  | SEGM  | SIZE |
|---------|-----------|---------|----------|-----------|----------|---------|----------|---------|-------|------|
| ELRKAM  | 1         | -       | -        | -         | -        | -       | -        | -       | -     | -    |
| IDV     | 0,165***  | 1       | -        | -         | -        | -       | -        | -       | -     | -    |
| UAI     | -0,147*** | -0,988* | 1        | -         | -        | -       | -        | -       | -     | -    |
| AFIRM   | 0,243*    | 0,085   | -0,102   | 1         | -        | -       | -        | -       | -     | -    |
| INDUST  | -0,204**  | -0,086  | 0,097    | -0,044    | 1        | -       | -        | -       | -     | -    |
| LEVRG   | 0,230*    | -0,003  | 0,005    | 0,137     | -0,214** | 1       | -        | -       | -     | -    |
| MODIFOP | -0,169**  | -0,225* | 0,216**  | -0,161*** | 0,088    | -0,238* | 1        | -       | -     | -    |
| PROFIT  | -0,204**  | 0,079   | -0,086   | 0,056     | 0,099    | 0,051   | -0,133   | 1       | -     | -    |
| SEGM    | 0,114     | -0,084  | 0,103    | -0,070    | 0,003    | 0,180** | 0,028    | -0,049  | 1     | -    |
| SIZE    | -0,013    | 0,235*  | -0,217** | -0,025    | -0,193** | 0,104   | -0,191** | -0,249* | 0,053 | 1    |

\*Significant at 1%;  
 \*\*Significant at 5%  
 \*\*\*Significant at 10%

Table II presents the results of the regression model stated in section 3.2.

Table II - Regression results

| Hypothesis | Variables                         | Expected Sign | Coefficients         |
|------------|-----------------------------------|---------------|----------------------|
| H1         | UAI                               | -             | 1,338**<br>(0,592)   |
| H2         | IDV                               | +             | 1,624**<br>(0,621)   |
|            | Deloitte                          |               | -0,478**<br>(0,238)  |
|            | Deloitte and EY                   |               | -0,945*<br>(0,325)   |
|            | EY                                |               | -0,490**<br>(0,241)  |
|            | Grant Thornton UK                 |               | -0,426<br>(0,329)    |
|            | KPMG                              |               | -0,385<br>(0,240)    |
|            | PWC                               |               | -0,344<br>(0,237)    |
|            | Construction & Materials          |               | -0,024<br>(0,095)    |
|            | Health Care & Pharmaceuticals     |               | 0,026<br>(0,105)     |
|            | Industrials, Metals & Mining      |               | 0,039<br>(0,081)     |
|            | Other                             |               | -0,047<br>(0,065)    |
|            | Retail, Consumer Goods & Services |               | -0,056<br>(0,070)    |
|            | Technology & Telecommunications   |               | -0,118***<br>(0,071) |
|            | Utilities, Oil & Gas              |               | -0,091<br>(0,076)    |
|            | LEVRG                             |               | 0,231**<br>(0,105)   |
|            | MODIFOP                           |               | -0,781**<br>(0,334)  |
|            | PROFIT                            |               | -0,003*<br>(0,001)   |

|                                  |                    |
|----------------------------------|--------------------|
| SEGM                             | 0,141<br>(0,086)   |
| SIZE                             | -0,150*<br>(0,059) |
| _cons                            | -1,041<br>(0,794)  |
| R <sup>2</sup>                   | 0,3365             |
| Prob > F                         | 0,0001             |
| Adjusted R <sup>2</sup>          | 0,2250             |
| Observations                     | 140                |
| (Standard errors in parenthesis) |                    |
| *Significant at 1%;              |                    |
| **Significant at 5%;             |                    |
| ***Significant at 10%            |                    |

Focusing on the relationship between disclosure in audit reports and auditor's national culture, the results of this study reveal a significant relationship (at 5%) between ELRKAM disclosure and both cultural dimensions studied (IDV and UAI).

Firstly, for the UAI dimension our results propose a positive effect on the disclosure of ELRKAMs, which foments the rejection of our hypothesis H1. In this sense, the more an auditor values rules and avoids uncertain situations, the more ELRKAMs he discloses in the audit report. Archambault & Archambault (2003) also report a positive relationship between disclosure and the UAI dimension in one (out of two) tested regression model, for which the tested sample comprised companies from Netherlands, United Kingdom and Portugal (among other countries).

Opposite results were obtained by Akman (2011), Hope (2003), Jaggi & Low (2000), Salter & Niswander (1995), and Zarzeski (1996). Nevertheless, Zarzeski (1996), Jaggi & Low (2000) and Hope et al. (2008) established that national cultural values play a less significant role in disclosure when firms operate internationally.

Zarzeski (1996) found that the effect of national culture on disclosure decisions differs depending upon the firm's international competitive strategy. These findings suggest that a firm's degree of internationalization mitigates the effect of its home country's cultural traits, especially the UAI dimension. Therefore, firms from secretive cultures operating across national boundaries are expected to show less secretive practices than local firms do, which means international firms disclose more information than local firms.

Jaggi & Low (2000) got similar results and stated that “global cultural values may be more relevant for disclosures at the international level” than national cultural values (p. 517). Furthermore, when investigating national culture’s impact on decision-making, Hope et al. (2008) revealed that home country national culture has a diminished effect on the decision-making process of multinational firms, and as so multinational firms’ decisions (including disclosure decisions) do not have to reflect the level of secrecy of their home country.

As Big Four accounting firms audited the majority of our sample firms’ financial statements (138 out of 140 firms), our positive relationship between auditor’s uncertainty avoidance and the level of disclosure in the audit report might be related to the degree of internationalization of the audit firms, as the previously mentioned literature suggests.

Additionally, House et al. (2004) created measures for societies’ uncertainty avoiding values (which represent the respondents’ believe of how it should be) and uncertainty avoiding practices (symbolize the respondents’ perception of how it is effectively) when developing the GLOBE research program. They inquired 17.000 managers from 951 companies in 62 countries, including Netherlands, United Kingdom and Portugal, and established scores for uncertainty avoiding values and practices ranging from 2,88 to 5,61.

Even though GLOBE’s UAI scores are not exactly the same as Hofstede’s, there is a moderate positive relationship between both (House et al., 2004). Appendix XI exhibits GLOBE’s scores for uncertainty avoiding values and practices for Netherlands, Portugal and United Kingdom. Regarding the scores for uncertainty avoiding values, House et al. (2004) suggest that Portugal is the country with less tolerance towards uncertainty (4,43), which is consistent with Hofstede’s theory (see Appendix VII for Hofstede’s UAI scores). On the other hand, these authors indicate that the United Kingdom is less comfortable with uncertain situations than Netherlands (scoring 4,11 and 3,24, respectively), which opposes to Hofstede’s theory.

Nonetheless, GLOBE’s findings indicate that the global mean score for uncertainty avoiding values is higher than the one for uncertainty avoiding practices, which suggests that “societies reflect Uncertainty Avoidance more in their values than in their practices” (House et al., 2004, p. 621). Therefore, cultures with higher scores of uncertainty avoiding values demonstrate reduced uncertainty avoiding practices. This outcome clearly contradicts the theory supported by Hofstede (1980) that cultural practices reflect cultural

values through a positive relationship. Furthermore, it challenges Grey's hypothesized positive relationship between UAI and secrecy.

According to House et al.'s results, there is a negative relationship between uncertainty avoiding values and uncertainty avoiding practices (House et al., 2004). Subsequently, it is reasonable to establish a negative relationship between uncertainty avoiding values and secrecy, because secrecy is perceived as an uncertainty avoiding practice. As a result, we state that there is a positive relationship between uncertainty avoiding values and information disclosure.

In other words, the more a society values UAI, the less it practices uncertainty-avoiding behaviors, such as secrecy. Therefore, the more discloses information. This reasoning is consistent with our result's direction for the UAI variable.

Overall, Archambault & Archambault (2003), Zarzeski (1996), Jaggi & Low (2000), Hope et al. (2008) and House et al. (2004) emphasize the conflicting ideas about the direction of the relationship between the UAI cultural dimension and disclosure decisions (Akman, 2011).

On the other hand, the results obtained for the IDV dimension also suggest a positive effect on disclosure, which is consistent with our expectation and the results of previous literature (Akman, 2011; Archambault & Archambault, 2003; Hope, 2003; Jaggi & Low, 2000; Wingate, 1997; Zarzeski, 1996). Therefore, hypothesis H2 is not rejected, regardless of the firm's degree of internationalization (Zarzeski, 1996). Consequently, the more an auditor expresses preference for individualism, the higher is the number of ELRKAMs disclosed in the auditor's report.

Regarding the results for the control variables of auditor characteristics, the results show that Deloitte (coefficient: -0,478, significant at 5%), EY (coefficient: -0,490, significant at 5%) and Deloitte and EY (coefficient: -0,945, significant at 1%) have a negative effect on the disclosure of ELRKAMs. These results imply that these audit firms lean towards the disclosure of an inferior number of ELRKAMs in the auditor's report, as already suggested by Gambetta et al. (2017). In addition, MODIFOP is also statistically significant (at 5%) and demonstrates the same effect on disclosure. Thus, audit reports that express a qualified opinion contain an inferior number of ELRKAMs.

For the client characteristics control variables, the results show that only one industry sector (namely, the Technology and Telecommunications sector) is statistically relevant

(at 10%). As Gambetta et al. (2017) stated, this finding suggests that the industry sector is not relevant to determine the disclosure of ELRKAMs.

Concerning with LEVRG, inconsistent findings have been reported about the effect of this variable on financial disclosure (Archambault & Archambault, 2003). This study's results establish a positive impact on disclosure, which is consistent with Jaggi & Low (2000) and Wallace et al. (1994). According to these authors, opting for a financial structure based on debt creates greater obligations for the firm towards creditors, because the latter need assurance that firms are respecting debt covenants. According to our results, the more indebted a firm is, the more entity-related information is disclosed in the audit report, which is a reliable manner of satisfying creditor's needs for information. However, Hope (2003) and Zarzeski (1996) predict that leverage has a negative effect on disclosure.

Likewise, previous literature describes performance-related variables, such as PROFIT, as having a positive effect on financial disclosure (Akamn, 2011; Gambetta et al., 2017). Nevertheless, Lang & Lundholm (1993) state that previous research is unclear regarding the direction of the relationship between profitability and disclosure. Additionally, Wallace et al. (1994) concluded about the inexistence of a significant relationship between these two variables. Our results show that PROFIT decreases the disclosure of ELRKAMs. So, the higher the firm profits, the lower the number of ELRKAMs disclosed in the auditor's report. Wallace & Naser (1995) support this negative relationship.

Finally, the results for SIZE effect on disclosure demonstrate a negative relationship between the two variables, indicating that auditors disclose less ELRKAMs in the audit report for firms with greater corporate size. This relationship might be related to the fact that investors find KAM disclosure more valuable for smaller firms, because of the weak information environment that surrounds these firms (Bédard et al., 2014; Financial Reporting Council Limited, 2016). Bédard et al. (2014) expose KAM disclosure as a tool to reduce information asymmetry between firm and stakeholders. However, they found that this negative effect is mitigated by firm size. Thus, for firms with higher size, the degree of information asymmetry reduction through KAM disclosure is less relevant. This negative relationship between firm size and information asymmetry reduction might discourage auditors to disclose ELRKAMs.

Researches led by Hope (2003), Wallace & Naser (1995), Wallace et al. (1994) and Zarzeski (1996) contradict our results for firm size effect on disclosure. These studies

define firm size as positively affecting disclosure, though the basis of this relationship is unclear (Archambault & Archambault, 2003).

## **5. Conclusions**

### **5.1. General Overview of the Study**

Resorting to the independent auditor's report on the financial statements for the 2016 financial-year of companies listed in the PSI-20 (a Portuguese stock exchange index), the AEX (Netherlands stock exchange index) and the FTSE 100 (United Kingdom stock exchange index), the aim of this dissertation is to improve the knowledge concerning with the effect of national culture in the disclosure of KAMs.

The requirement to disclose KAMs in the audit report is a significantly recent topic for most countries applying the ISAs on financial audits, since it became mandatory for audits of financial statements periods ending on or after December 2016, resulting from the issuance of the new and revised Auditor Reporting standards on January 2015 (Association of Chartered Certified Accountants, 2018). The United Kingdom and Netherlands are two examples of European countries who voluntarily decided on an early adoption of these standards.

Based on prior literature, we expect that the level of disclosure of KAMs is negatively related to the auditor's level of uncertainty avoidance and, on the other hand, positively related to the auditor's level of individualism, when controlling for client and auditor characteristics besides the auditor's national culture.

However, our results only support our expectation for a positive relationship between KAM disclosure, specifically entity-level risk KAMs, and the IDV dimension.

Regarding our expectation of finding a negative relationship between KAM disclosure and the UAI dimension, our results demonstrate a relationship in the opposite direction. This finding might be explained by the degree of internationalization of the sample auditors' firms. Prior studies found that higher levels of internationalization mitigate the effect of home country's cultural traits (Hope et al., 2008; Jaggi & Low, 2000; Low, 2000; Zarzeski, 1996).

Furthermore, the research project led by House et al. (2004) exhibits a negative relationship between uncertainty avoiding values and uncertainty avoiding practices, which suggests that the more a society values uncertainty avoidance, the less it is reflected

in its behavior. This finding contradicts Hofstede's (1980) theory of a positive relationship between cultural values and cultural practices, which implies that cultural values are the basis for cultural practices.

Altogether, previous literature demonstrates a lack of consensus regarding how (or even if) national culture directly affects people's professional behavior, including disclosure practices.

In light of House et al.'s (2004) finding and Gray's (1988) theoretical proposition of a positive relationship between a culture's level of uncertainty avoidance (which was based on Hofstede's UAI cultural dimension) and its level of secrecy, the more a culture expresses preference for uncertainty avoidance values, the less it is revealed in its behavior and, therefore, the more information it discloses. This reasoning supports our results that the more an auditor's national culture is characterized by a tendency to avoid uncertain situations, the more likely the auditor is to disclose a greater number of ELRKAMs in the audit report.

This study also shows that client and auditor characteristics besides the auditor's national culture influences the level of KAM disclosure. For instance, audit reports expressing a qualified opinion contain less ELRKAMs disclosed. Nevertheless, Deloitte and EY are the audit firms that disclose an inferior number of ELRKAMs in the auditor's report. For client characteristics, our results indicate that auditors disclose a higher number of ELRKAMs for firms with high leverage. The opposite effect is obtained the more profitable and the bigger the size of the firm.

All things considered, this dissertation findings acknowledge and support Bik's (2010) and Cowperthwaite's (2010) conclusions that auditors' professional judgement and behavior is significantly influenced by national cultural, even when resorting to the same global standards to form an opinion on a company's financial information. Consequently, it affects the type and amount of information disclosed on the auditor's report.

A further development of our knowledge about national culture's effect on the auditor profession and the perception of this relationship by financial statements' users is of especial relevance for auditing standards' setters if their aim continues to be the harmonization of standards' interpretation and implementation throughout the entire audit process among professionals and the dissipation of any communication and expectation gaps between auditors and financial statements' users.

## **5.2. Limitations**

In the process of developing the present dissertation it was necessary to make several assumptions that can be perceived as limiting factors to the study. For instance, we assume that the cultural changes that have occurred over time are not significant. Therefore, Hofstede's country scores provide at the present time an accurate representation of the relative country positions, though his research is based on data from about four decades ago.

Additionally, we assume that two cultures behave exactly the same way when they exhibit the same score of a cultural dimension, which might not be very realistic since the human behavior and culture are very complex multidimensional matters that can be unpredictable (Bik, 2010; House et al., 2004).

Finally, auditing literature that applies Gray's (1988) hypothesized relationships between Hofstede's cultural dimensions and the accounting value Secrecy (versus Transparency) to explain international differences in auditing practices is almost inexistent. This lack of empirical support for our findings might indicate that Gray's theory is invalid for financial disclosures expressed by auditors.

## **5.3. Further Research**

Based upon Jaggi & Low (2000) and Hope (2003), the effect of national cultural values (defined by Hofstede, 1980) on firms' disclosure levels is meaningfully inhibited when the legal origin of the firms' home country is taken into consideration. By legal origin we mean the country's legal system of common law or code law.

According to Jaggi & Low's (2000) findings, when a country's legal system is included as an explanatory variable to study firms' level of disclosure, the national cultural variables significantly lose their power to explain differences in disclosure practices. This leads to the conclusion that "cultural values do not predict disclosure levels once legal origin is considered" (Hope, 2003, p.223). Hope (2003) even suggests that culture's connection to country-level factors that influence disclosure (such as a country's nature of legal system) may be in the origin of the correlation he obtained between national culture and firms' level of disclosure.

Based upon this literature, we suggest a further investigation into the effect of national culture on the disclosure of KAMs when accounting for legal origin.

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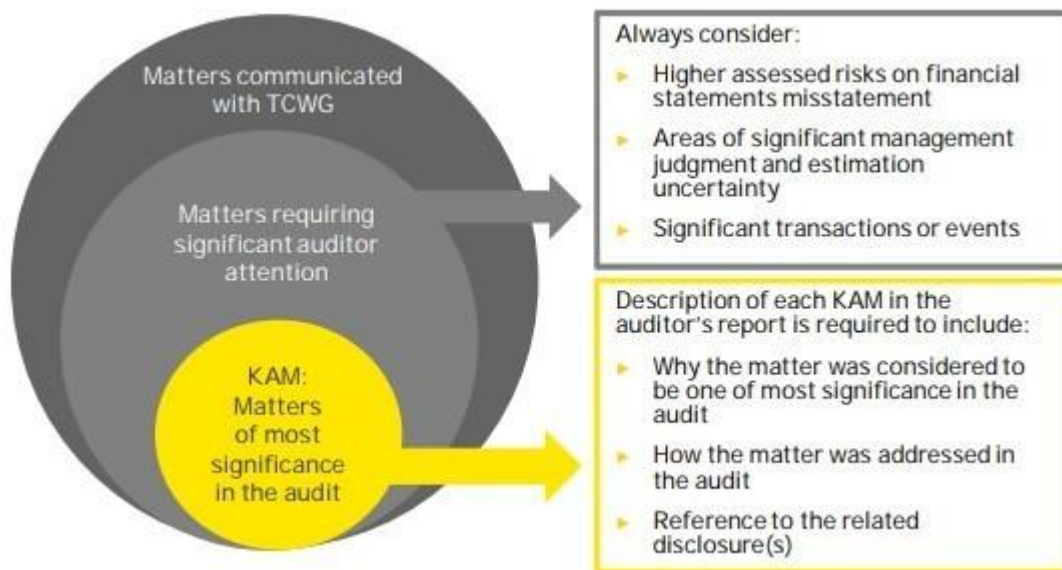
## 6. Appendices

### Appendix I - Structure of the new auditor's report and related ISAs.

| Section  | Mandatory?   | Related ISA      |
|--|--|------------------|
| Opinion  | Yes  | ISAs 700 and 705 |
| Basis for Opinion  | Yes  | ISAs 700 and 705 |
| Other Information [or another title if appropriate such as "Information Other than the Financial Statements and Auditor's Report Thereon"] | Yes  | ISA 720          |
| Emphasis of Matter   | If necessary   | ISA 706          |
| Material Uncertainty Related to Going Concern  | If necessary   | ISA 570          |
| Key Audit Matters  | Only for listed companies (may be applied voluntarily to other audits)   | ISA 701          |
| Other Matter   | If necessary   | ISA 706          |
| Responsibilities of Management and TCWG for the Financial Statements (including going concern)   | Yes  | ISA 700          |
| Auditor's Responsibilities for the Audit of Financial Statements (including going concern)   | Yes  | ISA 700          |
| Report on Legal and Other Regulatory Requirements  | If applicable under local law / regulation / national auditing standards | ISA 700          |

Source: Mazars (2016).

### Appendix II - KAM decision-making framework.



Source: Ernst & Young China (2016).

**Appendix III** - Examples of countries with low and high UAI scores.

| Low UAI   |    | High UAI |     |
|-----------|----|----------|-----|
| Singapore | 8  | Spain    | 86  |
| Jamaica   | 13 | Japan    | 92  |
| Denmark   | 23 | Belgium  | 94  |
| Hong Kong | 29 | Russia   | 95  |
| China     | 30 | Greece   | 100 |

Source: Hofstede Insights (2018).

**Appendix IV** - Characteristics of societies with low and high UAI scores.

| Low UAI   | High UAI   |
|---|--|
| Comfortable with ambiguity.   | Uncomfortable with ambiguity; avoid making judgements.                 |
| Less stress and anxiety, more self-control, less emotions are shown; employees work at a slower pace. | Higher stress and anxiety, less self-control, more emotions are shown. |
| Flexible adherence to rules; innovators fell independent of rules.                                    | Rules are followed “by the book”; innovators feel inhibited by rules.  |
| Tolerance for difference of opinion; less resistance to change.                                       | More resistance to change; change is faced as dangerous and a threat.  |
| Weak loyalty to employer; short average duration of employment.                                       | Strong loyalty to employer; long average duration of employment.       |

Source: Cowperthwaite (2010) and Hofstede (2011).

**Appendix V** - Examples of countries with low and high IDV scores.

| Low IDV   |    | High IDV      |    |
|-----------|----|---------------|----|
| Guatemala | 6  | Sweden        | 71 |
| Ecuador   | 8  | New Zealand   | 79 |
| Colombia  | 13 | Canada        | 80 |
| Pakistan  | 14 | Australia     | 90 |
| Angola    | 18 | United States | 91 |

Source: Hofstede Insights (2018).

**Appendix VI** - Characteristics of societies with low and high IDV scores.

| Low IDV   | High IDV  |
|---|---|
| Transgression of rules lead to shame feelings.  | Transgression of rules and offences cause guilt feelings and loss of self-esteem.                                     |
| Employer-employee relationship is perceived like a family link; the company is responsible for its employees; | The employer-employee relationship is a contract based on mutual advantage; employees are responsible for themselves. |
| Preference for relatives of employer and employees in hiring decisions.                                       | Hiring and promotion decisions are based on merit.  |
| Collective decision-making process.   | Individual decision-making process.   |
| Emphasis on belonging; personal relationships prevail over tasks.   | Preference for challenging work and freedom to work independently; emphasis   |

|  |  |
|--|--|
|  | on privacy; tasks prevail over personal relationships. |
|--|--|

Source: Cowperthwaite (2010) and Hofstede (2011).

**Appendix VII - Hofstede's cultural dimensions scores for the countries studied (Netherlands, Portugal and United Kingdom).**

|                       | <b>UAI</b> | <b>IDV</b> |
|-----------------------|------------|------------|
| <b>Netherlands</b>    | 53         | 80         |
| <b>Portugal</b>       | 99         | 27         |
| <b>United Kingdom</b> | 35         | 89         |

Source: Hofstede Insights (2018).

**Appendix VIII - Description of the regression variables.**

| <b>Variables</b>             | <b>Description</b>   |
|------------------------------|--|
| <b>Dependent Variable</b>    |  |
| ELRKAM                       | Represents the ratio between the number of ELRKAMs and the total number of KAMs (which includes ELRKAMs and ALRKAMs) disclosed in the audit report.  |
| <b>Independent Variables</b> |  |
| <b>Test Variables</b>        |  |
| IDV                          | Equals to Hofstede's IDV decimal score for the sample countries (Netherlands, Portugal and United Kingdom).  |
| UAI                          | Equals to Hofstede's UAI decimal score for the sample countries (Netherlands, Portugal and United Kingdom).  |
| <b>Control Variables</b>     |  |
| AFIRM                        | This is a dichotomous variable which portrays the different audit firms which performed the audit to the sample firms: Deloitte; Deloitte & EY <sup>4</sup> ; EY; Grant Thornton UK; KPMG; PWC; and, BDO.<br>Each variable equals to one when the audit is performed by each audit firm and equals to zero otherwise.  |
| INDUST                       | This is a dichotomous variable which captures the different industries in which the sample firms operate: Banks, Financial Services & Insurance; Construction & Materials; Health Care & Pharmaceuticals; Industrials, Metals & Mining; Other; Retail, Consumer Goods & Services; Technology & Telecommunications; and, Utilities, Oil & Gas.<br>Each variable equals to one when the firm operates in each industry and equals to zero otherwise. |
| LEVRG                        | Represents the debt ratio at the period-end of the financial statements (defined as total debt divided by total assets).   |
| MODIFOP                      | This is an indicator variable of the type of opinion expressed in the auditor's report. Equals to one if the auditor's opinion is modified; equals to zero if the opinion is clear.  |

<sup>4</sup> Represents a combined audit opinion on the firm's financial statements by Deloitte and EY.

|        |   |
|--------|---|
| PROFIT | Represents the Return on Assets (ROA) ratio at the period-end of the financial statements (defined as profit before taxes divided by total assets and expressed as a percentage).   |
| SEGM   | Represents the logarithmic transformation of the number of operating segments disclosed in the financial statements according to the IFRS 8.  |
| SIZE   | Firm dimension was obtained by the natural logarithm of total assets at the period-end of the financial statements. Firm dimension ranges from 11 to 21 and is divided into two groups. SIZE represents the group of firms which dimension values are higher than 15. |

### Appendix IX - Descriptive Statistics.

**Panel A:** Descriptive statistics of the regression variables.

| Variable | Observations Number | Mean  | Standard Deviation | Minimum | Maximum |
|----------|---------------------|-------|--------------------|---------|---------|
| ELRKAM   | 140                 | 0,488 | 0,247              | 0       | 1       |
| UAI      | 140                 | 0,459 | 0,209              | 0,35    | 0,99    |
| IDV      | 140                 | 0,799 | 0,200              | 0,27    | 0,89    |
| AFIRM    | 140                 | 4,886 | 2,057              | 1       | 7       |
| INDUST   | 140                 | 4,614 | 2,297              | 1       | 8       |
| LEVRG    | 140                 | 0,648 | 0,219              | 0,036   | 1,259   |
| MODIFOP  | 140                 | 0,007 | 0,085              | 0       | 1       |
| PROFIT   | 140                 | 7,589 | 23,419             | -29,11  | 267,222 |
| SEGM     | 140                 | 0,524 | 0,238              | 0       | 0,954   |
| SIZE     | 140                 | 0,836 | 0,372              | 0       | 1       |

**Panel B:** Distribution of sample firms and ELRKAMs by industry sector.

| Industry Sector                       | Netherlands  |                | Portugal     |                | United Kingdom |                | Total Sample Firms |
|---------------------------------------|--------------|----------------|--------------|----------------|----------------|----------------|--------------------|
|                                       | Sample Firms | ELRKAM Average | Sample Firms | ELRKAM Average | Sample Firms   | ELRKAM Average |                    |
| Banks, Financial Services & Insurance | 4            | 3              | 3            | 2,667          | 19             | 2,623          | 26                 |
| Construction & Materials              | 1            | 2              | 1            | 1,5            | 7              | 1,643          | 9                  |
| Health Care & Pharmaceuticals         | 1            | 5              | 0            | 0              | 5              | 2,4            | 6                  |
| Industrials, Metals & Mining          | 1            | 4              | 1            | 1              | 11             | 2,318          | 13                 |
| Other                                 | 6            | 2,167          | 3            | 1,333          | 21             | 1,714          | 30                 |
| Retail, Consumer Goods & Services     | 3            | 1,333          | 4            | 2              | 16             | 2              | 23                 |
| Technology & Telecommunications       | 5            | 2              | 2            | 1              | 13             | 2,256          | 20                 |
| Utilities, Oil & Gas                  | 3            | 3              | 3            | 1,667          | 7              | 2,714          | 13                 |

|                    |    |  |    |  |    |  |     |
|--------------------|----|--|----|--|----|--|-----|
| Total Sample Firms | 24 |  | 17 |  | 99 |  | 140 |
|--------------------|----|--|----|--|----|--|-----|

**Panel C:** Distribution of sample firms and ELRKAMs by audit firms.

| Audit Firm         | Netherlands  |                | Portugal     |                | United Kingdom |                | Total Sample Firms |
|--------------------|--------------|----------------|--------------|----------------|----------------|----------------|--------------------|
|                    | Sample Firms | ELRKAM Average | Sample Firms | ELRKAM Average | Sample Firms   | ELRKAM Average |                    |
| BDO                | 0            | 0              | 1            | 0              | 1              | 3              | 2                  |
| Deloitte           | 7            | 2,429          | 6            | 2,250          | 22             | 1,417          | 35                 |
| Deloitte and EY    | 1            | 0              | 0            | 0              | 0              | 0              | 1                  |
| EY                 | 6            | 3,167          | 1            | 2              | 17             | 1,882          | 24                 |
| Grant Thornton     | 0            | 0              | 0            | 0              | 1              | 3              | 1                  |
| KPMG               | 6            | 2,167          | 3            | 2,333          | 22             | 1,803          | 31                 |
| PWC                | 4            | 2,5            | 6            | 1,167          | 36             | 2,954          | 46                 |
| Total Sample Firms | 24           |                | 17           |                | 99             |                | 140                |

**Panel D:** Distribution of KAM category by country.

| KAM Category      | Netherlands | Portugal | United Kingdom |
|-------------------|-------------|----------|----------------|
| ALRKAM            | 42          | 46       | 203            |
| ELRKAM            | 59          | 30       | 215            |
| Total KAM         | 101         | 75       | 418            |
| ALRKAM Average    | 1,750       | 2,676    | 2,049          |
| ELRKAM Average    | 2,458       | 1,735    | 2,173          |
| Total KAM Average | 4,208       | 4,412    | 4,222          |

**Panel E:** Type of KAMs disclosed in the auditor's reports.

| KAM Category | KAM Type                     | Netherlands | Portugal  | United Kingdom |
|--------------|------------------------------|-------------|-----------|----------------|
| ALRKAM       | Financial assets             | 3           | 9         | 22             |
|              | Impairment of assets         | 8           | 12        | 45             |
|              | Intangibles & Goodwill       | 15          | 6         | 33             |
|              | Inventory                    | 1           | 4         | 16             |
|              | Pension Schemes              | 2           | 6         | 27             |
|              | Property, Plan and Equipment | 2           | 4         | 8              |
|              | Revenue                      | 11          | 5         | 60             |
|              | Supplier rebates             | 1           | 2         | 9              |
|              | <b>Total</b>                 | <b>43</b>   | <b>48</b> | <b>220</b>     |
| ELRKAM       | Acquisition accounting       | 9           | 2         | 23             |
|              | Auditor Changes              | 4           | 0         | 3              |
|              | Controls                     | 2           | 0         | 5              |
|              | IT                           | 5           | 0         | 16             |

|                       |           |           |            |
|-----------------------|-----------|-----------|------------|
| Litigation/Provisions | 9         | 7         | 45         |
| Other                 | 16        | 11        | 84         |
| Tax                   | 14        | 10        | 51         |
| <b>Total</b>          | <b>59</b> | <b>30</b> | <b>227</b> |

**Appendix X – KAM disclosed in Burberry Group plc’s auditor’s report.**

**Impairment of property, plant and equipment and onerous lease provisions**

The Group has a material operational asset base which may be vulnerable to impairment in the event of trading performance being below expectations.

The value-in-use models used to determine the amount of any impairment charge are based on assumptions including revenue forecasts, gross and operating margins and discount rates, all of which are country, as well as store, specific (refer to note 13 to the financial statements). Such stores may be located in both emerging markets, which are typically more volatile than developed markets, as well as more established economies such as the US, where the Group is working towards consolidating its position within the market.

The same judgements are used in determining whether an onerous lease provision is required and in calculating the appropriate amount of the provision. In addition, judgement is required in assessing whether there are any alternative uses for stores which may affect the amount of onerous lease provision required.

Management’s assessment resulted in the recognition of a net impairment charge for FY16 of £45.3m (FY15: £10.8m), including £24.2m (2015: £3.9m) for store impairments and £21.1m (2015: £6.7m) for onerous leases and £nil (2015: £0.2m) for intangible assets. We focused on this area because of the inherent judgement involved in determining key assumptions such as future sales growth, profit margins and discount rates, and the magnitude of the assets under consideration and the lease obligations.

We tested management’s assessment of indicators both of impairment and of onerous lease provisions taking into consideration the challenging trading conditions in some territories, and are satisfied that they appropriately took into account both internal and external impairment indicators, including the trading performance of each store.

We tested the value-in-use models for assets where an impairment trigger or potential requirement for an onerous lease provision has been identified, including challenging management forecasts and other assumptions including discount rates and long term growth rates, and found that these assumptions were reasonable.

In particular we focused on the forecasts for sales growth and are satisfied that they reflect reasonable expectations for each store, taking into account the maturity of each store, the market in which it is located and management’s specific plans for improving store performance.

Given the judgement inherent in the impairment and onerous lease provision calculations, particularly relating to revenue growth assumptions, management has disclosed a sensitivity analysis in the financial statements (see note 13).

Having re-performed the sensitivity calculations and considered whether any other sensitivities might be more appropriate, we are satisfied that the financial statements adequately disclose the potential risk of future impairment if the performance of the stores with indicators of impairment do not meet management’s expectations.

*Source:* Burberry Group plc (2016).

**Appendix XI – GLOBE’s scores for uncertainty avoiding values and practices.**

| <b>Uncertainty Avoiding Societal Values</b> |      | <b>Uncertainty Avoiding Societal Practices</b> |      |
|---|------|--|------|
| Netherlands                                 | 3,24 | Netherlands                                    | 4,7  |
| Portugal                                    | 4,43 | Portugal                                       | 3,91 |
| United Kingdom                              | 4,11 | United Kingdom                                 | 4,65 |

*Source:* Adapted from House et al. (2004).