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A Study of IFRS-Based Uncertainty Expressions: The Case of Middle East region

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Abstract

Purpose

This study examines the interpretation of uncertainty expressions used in IFRS. In addition, the study aims to examine whether the interpretations of uncertainty expressions are vary according to familiarity with IFRS, experience and gender. Examining the similarity in the interpretations of some uncertainty expressions and constructing a plausible list of uncertainty expressions are also main objectives of this study.

Design/methodology/approach

This study uses self-administrated questionnaire as a data collection method. A list of 14 out-of-context IFRS-based uncertainty expressions has been distributed. The sample consists of 100 Lebanese accountants and the response rate is 57%. This study conducts several statistical procedures to answer research questions. Mann Whitney U test is used in testing variation in uncertainty expressions interpretations according to familiarity with IFRS, experience and gender. In addition, the Kendal agreement coefficient is used to test the agreement between the respondents regarding the ranking of uncertainty expressions. Finally, the study uses Student-Newman-Keuls (SNK) procedure to investigate which uncertainty expressions have equivalent level of probability and therefore share similar meaning.

Findings

The empirical results show a high variability in the interpretations of uncertainty expressions among Lebanese accountants. Expression "remote" received the lowest probability level while "reasonable assurance" received the highest probability level. This result is consistent with the results of some previous literature. However, the accountants show moderate agreement about their ranking to the uncertainty expressions. Furthermore, the results report some similarities in the meaning of several uncertainty expressions. For example, expression "virtually certain", "reasonably certain" and "highly probable" share a similar meaning and therefore some of the uncertainty expressions are redundant. Moreover, low communication efficiency may reflect the lack of agreement and awareness among respondents about the application of IFRS and indicates inconsistent interpretation of uncertainty

expressions. The results report potential impact of familiarity with IFRS, experience and gender on the interpretations of uncertainty expressions.

Research limitations

This study suffers from some limitations. First, the results of this study are based on the perception of a small sample of accountants regarding the interpretation of some uncertainty expressions. Second, this study examines only 14 uncertainty expressions among a large number of uncertainty expressions included in accounting standards.

Practical Implications

As a policy recommendation, a list of seven uncertainty expressions is proposed to assist international and national standard-setters in the clarification of uncertainty expressions and their correspondent probability levels. This plausible list will help in supporting consistency in the application and interpretation of uncertainty expressions and hence enhance the comparability of financial reporting.

Originality/value

This study contributes to and extends previous literature by examining the interpretations of uncertainty expression in the Middle East region since most of the previous literature is based on Anglo/American context. In addition, this study contributes to the few accounting research that examine the impact of familiarity with IFRS, experience and gender on the interpretations of uncertainty expressions.

Keywords:

Uncertainty expressions, IFRS, Familiarity with IFRS, professional experience, gender, Middle East

دراسة تعبيرات عدم التأكد فى معايير التقارير المالية الدولية: حالة منطقة الشرق الأوسط

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هدف البحث

يهدف هذا البحث إلى دراسة تفسير تعبيرات/مصطلحات عدم التأكد المستخدمة فى معايير التقارير المالية الدولية. كما تهدف الدراسة إلى اختبار ما إذا كانت تفسيرات تعبيرات/مصطلحات عدم التأكد قد تختلف وفقاً للمعرفة بمعايير التقارير المالية الدولية، الخبرة و نوع الجنس. وأخيراً فإن اختبار التشابه فى تفسيرات بعض تعبيرات/مصطلحات عدم التأكد واعداد قائمة مقترحة لتعبيرات/مصطلحات عدم التأكد هو أحد أهم أهداف هذا البحث.

منهجية البحث

يستخدم هذ البحث قائمة الاستقصاء كطريقة لتجميع البيانات حيث تم توزيع قائمة استقصاء مكونة من ١٤ تعبير/مصطلح عدم التأكد واردة فى معايير النقارير المالية الدولية وتم تقديم تلك المصطلحات بشكل منعزل عن أى نصوص معايير التقارير المالية الدولية. تتكون عينة الدراسة من ١٠٠ محاسب لبنانى وكان معدل الاستجابة ٥٧%. تم القيام بعدد من الاختبارات الاحصائية للإجابة عن تساؤلات البحث. تم استخدام اختبار Mann Whitney U test لاختبار ما إذا الإختلافات فى تفسير تعبيرات/مصطلحات عدم التأكد يمكن إرجاعها إلى الاختلاف فى المعرفة بمعايير التقارير المالية الدولية، الخبرة و نوع الجنس. بالإضافة إلى ذلك تم استخدام Kendal agreement coefficient لاختبار مدى الاتفاق بين المحاسبين بشأن ترتيبهم لتعبيرات/مصطلحات عدم التأكد. وأخيراً تم استخدام اختبار Student-Newman-Keuls (SNK) لتحديد أى تعبيرات/مصطلحات عدم التأكد ذات نفس مستوى الاحتمال المتقارب وبالتالى فإنها تتشارك فى نفس المعنى.

نتائج البحث

تشير نتائج التحليل الاحصائى إلى ارتفاع درجة الاختلاف فى تفسيرات تعبيرات/مصطلحات عدم التأكد بين المحاسبين اللبنانيين. فتعبيرعدم التأكد "احتمال بعيد" حصل على أقل مستوى احتمالى بينما تعبير عدم التأكد "تأكيد معقول" حصل على أعلى مستوى احتمالى. وتتفق تلك النتائج من نتائج عدد من الدراسات السابقة. وقد أظهر المحاسبون اتفاقاً معقولاً بشأن ترتيب تعبيرات/مصطلحات عدم التأكد. بالإضافة إلى ذلك تشير النتائج إلى التشابه فى معانى عدد من تعبيرات/مصطلحات عدم التأكد. فعلى سبيل المثال فتعبير عدم التأكد "مؤكد بدرجة كبيرة"، "مؤكد بدرجة معقولة"، "محتمل بدرجة

كبيرة" تتشارك فى نفس المعنى وبالتالى فأن بعض تعبيرات/مصطلحات عدم التأكد تكون زائدة عن الحاجة. كما أن انخفاض فاعلية الاتصال قد تعكس انخفاض الاتفاق والوعى بين المحاسبين حول تطبيق معايير التقارير المالية الدولية وهو ما يوضح عدم الاتساق فى تفسير تعبيرات/مصطلحات عدم التأكد. وتشير نتائج الدراسة إلى تأثير محتمل للمعرفة بمعايير التقارير المالية الدولية، الخبرة و.نوع الجنس على تفسيرات تعبيرات/مصطلحات عدم التأكد.

حدود البحث

يعتمد هذا البحث على إدراك عينة صغيرة من المحاسبين لتفسيرات بعض تعبيرات/مصطلحات عدم التأكد الواردة فى معايير التقارير المالية الدولية. كما تختبر الدراسة الحالية فقط أربعة عشر تعبير/مصطلح عدم تأكد من بين عدد كبير من تعبيرات/مصطلحات عدم التأكد الواردة فى معايير التقارير المالية الدولية.

مقترحات البحث

تم اقتراح قائمة مكونة من سبع تعبيرات/مصطلحات عدم التأكد لمساعدة واضعى المعايير المحاسبية على المستوى الدولى والإقليمى فى تقديم توضيحات بشأن تعبيرات/مصطلحات عدم التأكد والمستوى الاحتمالى المرتبط بكل منها. تساعد هذه القائمة المقترحة فى تدعيم الإتساق فى تطبيق وتفسير تعبيرات/مصطلحات عدم التأكد وبالتالى تحسين قابلية القوائم المالية للمقارنة.

المساهمة العلمية

يساهم هذا البحث ويوسع من نطاق الدراسات السابقة من خلال اختبار تعبيرات/مصطلحات عدم التأكد فى منطقة الشرق الأوسط وشمال إفريقيا حيث أن معظم الدراسات السابقة يركز على البيئة الانجلو أميريكية. كما يدعم هذا البحث العدد القليل من الدراسات المحاسبية التى تختبر أثر المعرفة بمعايير التقارير المالية الدولية، الخبرة و نوع الجنس على تفسير تعبيرات/مصطلحات عدم التأكد.

كلمات البحث

تعبيرات/مصطلحات عدم التأكد، معايير التقارير المالية، المعرفة بمعايير التقارير المالية، الخبرة المهنية، الجنس، منطقة الشرق الأوسط وشمال إفريقيا.

1. Introduction

International Financial Reporting Standards (IFRS) became globally accepted in many countries and jurisdictions; more than 120 countries permit or require the adoption of IFRS for domestic listed companies. The main objectives of International Accounting Standards Board (IASB) are "to develop of a single set of high quality, *understandable*, enforceable and globally accepted financial reporting standards... these standards should require high quality, *transparent* and *comparable* information... to promote the use and rigorous application of these standards" (IASB, 2016, para 6, p.A10).

Users of financial statements should be provided with useful information. One of the enhancing qualitative characteristics of useful information is comparability. Comparability enables "users of financial statements to identify and understand similarities and differences among items" while consistency refers to "the use of the same methods for the same items, either from period to period within a reporting entity or in a single period across entities" (IASB, 2016, QC 21 and 22, p.A30). The adoption of a single set of accounting standards is a necessary condition to achieve comparability of financial statements but it is not sufficient without consistent application of accounting standards (Chand and White, 2006; Doupnik and Riccio, 2006; Wehrfritz and Haller; 2014).

IFRS use uncertainty expressions to explain conditions and events related to the recognition, measurement and disclosure of economic transactions (Lawad and Mak, 1997). For example, "remote", "probable[1]", "highly probable[2]" and "expected" are uncertainty expressions used in a number of IFRS. Those uncertainty expressions are vague and have multiple meanings (Du et al., 2011). However, accountants and auditors should give a meaning or a numeric probability level to those expressions (Doupnik and Richter, 2003). Accountants and auditors should consistently interpret

[1] Probable = more likely than not.
[2] Highly probable = significantly more likely than probable.

uncertainty expressions since the lack of consistency will impair comparability of financial statements and hence threat the quality of financial reporting (Doupnik and Riccio, 2006). Therefore, the accuracy of uncertainty expressions interpretations by the users of financial statements receives more attention from accounting research (Chesley, 1986). Zeff (2007, p. 297) argues that inconsistent interpretation of uncertainty expressions may form an obstacle to the convergence of IFRS. He indicates that:

> "As an example of different national interpretations placed on common terminology, an interesting question surrounds the term probability. The words 'probability' and 'probable' appear many times in IFRS, but do they mean a 60%, 80%, or 90% likelihood? The Germans may make a conservative estimate of probability, while others may adopt a lower, or less strict, percentage as the equivalent of probability. What is meant by 'probability' or 'probable'? 'More likely than not'? These terms can be defined or interpreted differently from country to country and therefore can impair international convergence and comparability."

Simon (2002) argues that consistent interpretation of uncertainty expressions is an important issue not only for users of financial statements but also for standard-setters and auditors. The lack of agreement about the meaning of uncertainty expressions may cause miscommunication among auditors and inconsistent application of accounting standards (Amer et al., 1994). Moreover, the misinterpretation of uncertainty expressions may negatively affect decision-making process of financial statements users and policy makers (Salleh et al., 2011). In the same vein, Amer et al. (1995) argue that the interpretation of uncertainty expressions may affect investors' wealth.

IFRS are principle-based standards that contain few rules, provide broad guidelines and depend on users' professional judgment in the application and interpretation of accounting standards (Chand and White, 2006; Du et al.,

2011; Psaros, 2007). Principle-based approach analyzes the economic substance of the transaction rather than the legal form and therefore professional judgment is a corner stone in the implementation and interpretation of IFRS (Psaros et al., 2003). This may result in improper application of IFRS by the preparers or conflict between the preparers of financial statements and auditors (Henry, 1999). Several studies report disagreement in the interpretation of uncertainty expression between different parties involved in financial reporting (Laswad and Mak, 2000; Simon, 2002) therefore cross-national comparability of financial reporting is questionable (Doupnik and Richter, 2003).

Most of the literature that examines uncertainty expressions focuses on Anglo/American settings such as Australia (Psaros et al., 2003), New Zealand (Laswad and Mak, 1997, 2000), US (Aharony and Dotan, 2004; Amer et al., 1995; Harrison and Tomassini, 1989) and UK (Salleh et al., 2011; Simon, 2002). In addition, some studies examine uncertainty expressions across nations such as Doupnik and Richter (2003) and Doupnik and Riccio (2006). Moreover, few studies examine variables that may explain the variation in uncertainty expressions interpretation such as professional experience (Davidson, 1991, Han et al., 2016; Psaros et al., 2003), familiarity with IFRS (Han et al., 2016), gender (Han et al., 2016) and auditor type (Psaros et al., 2003). To the best of our knowledge, there is no study examine this topic in emerging economies generally and the Middle East region specifically. Therefore, this study aims to fill this gap in the literature.

Lebanon is selected as a context for this research to avoid IFRS translation problem. Since 1996, International Accounting Standards (IAS) are mandated in the preparation of audited financial statements by the ministerial decree No. 1/6258 and the English version of the standards is the official reference for standards interpretations (ROSC, 2003) therefore there is no use for any other translation of IFRS. This is quite crucial to this research because

the adequacy of translated IFRS is questionable (Zeff, 2007). Kettunen (2011) argues that translation may affect the interpretation of the meanings of translated IFRS and therefore some translations of IFRS are misleading. In the same vein, Huerta et al. (2013) argue the use of IFRS in any language other than English may cause translation differences that in turn may lead to differences in accounting practices and consequently hinder financial reporting comparability. Hellmann et al. (2010) finds that the translation of selected IFRS to German is not equivalent to the original English version. Translation of IFRS is a merely compromization between parties involved in the translation process (Kettunen, 2011).

Lebanon is one of the important countries in the Middle East region, located in the Eastern Mediterranean seaboard and has strong political and economic ties with the European Union and France. According to ROSC (2003), The Act of Regularization of the Certified Public Accountants' Practice in Lebanon (1994) delegates the organization of accounting profession to the Lebanese Association of Certifies Public Accountants (LACPA). However, the LACPA is not able to supervise its members or implement ethical codes and disciplinary procedures due to limited resources and accounting education still needs more enhancements especially in IFRS teaching (ROSC, 2003).

According to Hofstede (1984), Arab countries including Lebanon are characterized by low individualism and high uncertainty avoidance. These societal values are correspondent to low professionalism and more conservatism as accounting values (Gray, 1988). However, Baydon and Willett (1995) argue that Lebanese society's value of individualism would lie at the top of Arab countries score and close to the score of France. This is related to the exercise of more professional judgment. The Middle East region shares a homogeneous set of societal and accounting values therefore it is expected that the results of this study may have some implications to other countries in the

Middle East region due to similarities in history, language, religion and societal and accounting values.

The objectives of this research are to examine the interpretation of uncertainty expressions in one of the emerging economies countries, Lebanon, and discover the potential similarity in meaning between some uncertainty expressions. In addition, the study aims to examine the impact of familiarity with IFRS, experience and gender on the interpretation of uncertainty expressions. Moreover, constructing a plausible list of uncertainty expressions as a guideline for the consistent interpretation of those expressions is a main objective of the current study.

This research aims to answer the following research questions:-

1) How are different IFRS-based uncertainty expressions interpreted by Lebanese accountants?
2) To what extent do Lebanese accountants agree about the ranking/ordering of uncertainty expressions?
3) Is there any similarity in meaning among uncertainty expressions?
4) What are the degrees of communication efficiency associated with different uncertainty expressions?
5) Does the interpretation of uncertainty expressions differ according to gender, familiarity with IFRS and experience?
6) What are uncertainty expressions that form a plausible list of uncertainty expressions?

This research contributes to our understanding of the interpretation of uncertainty expressions. The research contributes to the little research regarding the variables that may explain the variation in uncertainty expressions. The importance of this research is derived from its policy implications for standard-setters since it sheds the light on interpretation of uncertainty expressions in emerging economies and may assist standard-setters in reviewing the use of uncertainty expressions in the accounting standards. The result of this study

may enhance the consistent application of accounting standards and limit the use of uncertainty expression to a more robust group of expressions that supports the comparability of financial reporting.

This research is organized as follows. Section 2 is devoted to literature review and hypotheses development while section 3 discussed research methodology. Section 4 presents results and discussion and finally section 5 is devoted to the summary and conclusion.

2. Literature review and hypotheses development

This section is devoted to literature review (2.1) and hypotheses development (2.2).

2.1 Literature review

Word scale and probability scale are the two methods used in communicating uncertainty expressions (Piercey, 2009). Accounting standards use word or non-numerical scale to describe future events. On one hand, using word scale in accounting standards may be justified on the ground that it would be misleading to represent word scale precisely in order to leave a space for professional judgment and people may feel better understand words than numbers (Piercey, 2009; Wallsten et al., 1986). On the other hand, using probability or numerical scale can eliminate the ambiguity inherent in word scale but it has high degree of subjectivity (Beyth-Marom, 1982; Davidson, 1991; Piercey, 2009).

SFAS (5) issued by the Financial Accounting Standards Board (FASB) was the center of several accounting research that examines the interpretation of uncertainty expressions since 1980s using different groups of respondents including auditors, students, managers and financial analysts (Aharony and Dotan, 2004; Davidson, 1991; Harrison and Tomassini, 1989). SFAS (5) explains when a contingency should be recognized or disclosed. SFAS 5 uses three uncertainty expressions, namely, "remote", 'probable" and "reasonably

possible" to recognize and disclose contingency. According to SFAS (5) (FASB, 1975):-

- The event must be accrued in the financial statements (recognized and disclosed) if the likelihood of an event is (a) probable and (b) the amount of loss can be reasonably estimated.
- The event must be disclosed only as a note if the event cannot meet either or both of the two conditions abovementioned.
- No disclosure is required if the likelihood of the event is remote.

The requirement of SFAS (5) opens the door for a wide range of interpretations of those uncertainty expressions. Consequently, accounting researchers try to understand how professional accountants and other parties involved in financial reporting process interpret those expressions since a wide variation in disclosure and measurement practices can exist due to variation in interpretation of uncertainty expressions.

Harrison and Tomassini (1989) examine the threshold between three uncertainty expressions -remote, probable and reasonably possible- included in SFAS 5 and test whether the interpretation is affected by the type of loss. Three types of contingent loss are included in the study, namely; litigation cost, threat of expropriation of foreign assets and product warranty obligation. The result shows more consensus between auditors on the first threshold (remote-reasonably possible) than the second threshold (reasonably possible-probable) and the threshold interpretations are independent from the type of loss.

Davidson (1991) examines 21 uncertainty expressions including the three expressions related to SFAS (5) through providing out-of-context questionnaire to a sample of accountants and students. The result indicates significant differences in numerical probability assigned to uncertainty expressions between the two groups. In addition, the study finds high degree of overlapping between expressions "reasonably possible" and "probable" and highlights that those expressions are not an optimal set of uncertainty expressions. Aharony

and Dotan (2004) compare the interpretations of auditors, managers and financial analysts of SFAS (5) related uncertainty expressions threshold. The result shows significant differences in the interpretations of managers and financial analysts regarding uncertainty expressions threshold while auditors align their interpretations with those of the managers for the threshold remote-probable.

In New Zealand, Laswad and Mak (1997) examine the interpretations of 20 uncertainty expressions by New Zealand standard-setters. The results indicate that standard-setters interpret several uncertainty expressions as they reflect similar probability levels. In addition, the result highlights a lack of communication efficiency due to lack of consensus between standard-setters. Using the same set of uncertainty expressions, Laswad and Mak (2000) extend their previous study by comparing the responses of standard-setters with those of accountants. The result indicates overlapping in the interpretation of uncertainty expressions so some of them are redundant. In the UK, Simon (2002) examines the interpretations of uncertainty expressions of financial directors and auditors. The study uses a questionnaire that contains 30 out-of-context uncertainty expressions. Consistent with Laswad and Mak (1997, 2000), the result indicates that both financial directors and auditors provide similar ranking to the expressions. However, they interpret different uncertainty expressions as they share the same meaning.

Doupnik and Richter (2003) extend this stream of literature through the examination of language-culture effect and linguistic translation on the interpretation of IASs-related uncertainty expressions. The study uses a questionnaire that includes 11 isolated uncertainty expressions and two groups of certified public accountants: US CPA and German-speaking professional accountants. Four versions of the questionnaire are prepared. English version sent to US CPA, German version sent to German-speaking professional accountants and two mixed-language versions (English and German language together) send to German-speaking professional accountants. The results

indicate significant differences in German-speaking professional accountants' interpretations of uncertainty expressions. The study provides evidence that language-culture and translation may affect the interpretation of uncertainty expressions. In the same vein, Doupnik and Riccio (2006) examine the impact of conservatism and secrecy on the interpretation of verbal probability expressions in USA and Brazil as a proxy for Anglo and Latin cultures. The result reveals that Brazilian accountants (high secrecy context) provide higher numerical probability to uncertainty expressions compared to US accountants (low secrecy context). Moreover, Brazilian accountants (high conservative context) provide high (low) numerical probability to uncertainty expressions compared to US accountants (low conservative context) for accounting recognition of items that increase (decrease) income. This result confirms the impact of accounting values –secrecy and conservatism- on the interpretation of uncertainty expression.

In Australia, Psaros et al. (2003) investigate the interpretation of seven uncertainty expressions included in accounting and auditing standards. Using a sample of auditors, the result indicates significant differences in auditors' interpretation of uncertainty expressions. In addition, more experienced auditors show variability in their interpretation compared to less experienced auditors. More interestingly, the result shows non-significant differences in the interpretation between big 4 and non-big 4 auditors.

Based on IFRS, Teixeira and Silva (2009) examine the interpretations of nine out-of-context uncertainty expressions using a sample of Portuguese auditors. The result suggests that auditor differently perceived uncertainty expressions. In the same vein, Salleh et al. (2011) investigate the interpretations of 10 in-context uncertainty expressions between English and Chinese students. This study is different from the study of Doupnik and Richter (2003) because it selects Chinese and British students who share a common language and study in the same educational system. The result shows non-significant differences in

the interpretations of uncertainty expressions between the two groups of students.

Finally, Han et al. (2016) is the first study that explicitly examines the effect of some variables such as gender, experience, familiarity with accounting standards, among other variables, on the interpretation of uncertainty expressions. The result reports that female accountants assign higher (lower) numerical probability levels to verbal expressions compared to male accountants for positive (negative) expressions. In addition, auditor with more experience and more familiarity with accounting standards are likely to interpret uncertainty expressions more conservatively compared to their counterparts with less experience and less familiarity with accounting standards.

Reviewing the results of these studies highlights some gaps in the literature. First, these studies report significant differences in the interpretations of uncertainty expressions and a lack of consensus between the respondents regarding their interpretations. However, most of the evidence of these studies is based on Anglo/American contexts and little is known about the Middle East region and emerging economies where accounting practices have their own characteristics. Second, except for Han et al. (2016), there is a lack of evidence regarding the variables that may explain the variations in the interpretation of uncertainty expressions. In general, it seems that the interpretation of IFRS-based uncertainty expressions needs more investigation since few studies examined them (Doupnik and Riccio, 2006). Third, Laswad and Mak (1997) and Simon (2002) are the only studies that try to construct a plausible list of uncertainty expressions. This paper tries to extend their work by constructing this list in a different context. The application of accounting standards depends on the interpretation given to the uncertainty expressions and these interpretations may be affected by professional experience, familiarity with IFRS and gender.

2.2 Research hypotheses

Based on the discussion of previous literature, this subsection will discuss research hypotheses development regarding the effect of familiarity with IFRS, professional experience and gender on the interpretation of uncertainty expressions.

2.2.1 Familiarity with IFRS

Abdelsalam and Weetman (2003) argue that familiarity with IFRS is main a reason for compliance with accounting standards in Egypt. In the same vein, Weaver and Woods (2015) report that familiarity with IFRS requirements is a main challenge in the implementation of IFRS. Carmona and Trombetta (2008) claim that principle-based IFRS require radical changes in accountant and auditors' background knowledge. Therefore, the variation in IFRS knowledge may bring different professional judgment and hence different accounting disclosure and measurement practices.

Uyar and Güngörmüş (2013) argue that complexity of IFRS and shortage of implementation guidelines are key threats to convergence. For example, 52% of the auditors in Turkey report that they have little knowledge regarding IFRS while 14% report no knowledge about them. Doupnik and Richter (2003) provide evidence that U.S auditors and German auditors with different level of IFRS knowledge provide different interpretation to uncertainty expressions. The result indicates that 69.10% of the U.S auditors claim that they are not familiar with IFRS compared to 15.70% of the German auditors. Han et al. (2016) find negative relationship between familiarity with accounting standards and numerical probability assigned to verbal uncertainty expressions. Based on this discussion the following hypothesis is formulated:

H_{1a}: There a significant difference in the interpretation of uncertainty expressions between accountants with less and more familiarity with IFRS.

2.2.2 Professional Experience

Pflugrath et al. (2007, p.571) argue that "technical competency is an individual ability and has been shown to be an important determinant of decision-making preferences and judgment quality". They indicate that experience will provide the required skills to accomplish complex tasks and improve auditors' professional judgment. Ye et al. (2014) mention that more experienced auditors will perform better at different audit tasks. Libby (1995) adds that more experienced auditors are exposed to a variety of different engagements and have more opportunities to practice different audit tasks.

Hoogendoorm (2006, p.25) reveals that "IFRS is too complex, even for auditors and other specialists. Lin and Yen (2014) argue that principle-based accounting standards such as IFRS require more professional judgment to assess relevant accounting treatments and auditors' experience definitely affects their professional judgment. Hoogendoorm (2006) and Weaver and Woods (2015) indicate that, due to shortage of experience with IFRS, many firms will depend extensively on external auditors' recommendations or other IFRS consultants. These arguments support the importance of professional experience in the interpretation and application of uncertainty expressions. This is the case in Lebanon since professional experience may have a significant impact on the interpretation of uncertainty expressions.

Empirical studies show mixed results with regard to experience. Davidson (1991) reports that experience has no consistent effect on the perception of probability level conveyed by SFAS (5) uncertainty expressions. In contrast, Han et al. (2016) find positive relationship between experience and numerical probability assigned to positive uncertainty expressions and negative relationship between experience and numerical probability assigned to negative uncertainty expressions. Therefore, it is expected that auditors with more experience provide different interpretations to uncertainty expressions

compared to auditors with less experience. Consequently, the following hypothesis is formulated:

H_{1b}: There is a significant difference in the interpretation of uncertainty expressions between less and more experienced accountants.

2.2.3 Gender

Laswad and Mak (1997) call for examining the effect of risk attitude on the interpretations of uncertainty expressions. Several studies used gender to proxy for attitude towards risk. For example, Jianakoplos and Bernasek (1998) find that female investors are relatively more risk averse in financial decision-making compared to male investors. In addition, Olsen and Cox (2001) report that professional females prefer risk aversion in their investment decisions compared to professional males and they give more weight to security than gain in the investment decision. The result of Dwyer et al. (2002) confirms these results in mutual fund investment. Similarly, in the insurance industry, Powell and Ansic (1997) report that females are more risk averse than males regardless the familiarity with the task or the ambiguity of the situation. The main conclusion of these studies is that females and males have different risk attitude and therefore gender may affect investment decisions.

Han et al. (2016) find that gender may affect interpretation of uncertainty expressions. They conclude that male and female accountants show significant differences in the interpretation of uncertainty expressions. Female accountants assign higher (lower) numerical probability levels to positive (negative) uncertainty expressions than male accountants. The main conclusion of their study is that female accountants interpret uncertainty expressions more conservatively than male accountants do. Based on this discussion the following hypothesis is developed:

H_{1c}: There is a significant difference in accountants' interpretations of uncertainty expressions between female and male accountants.

3. Research design

This section discusses data collection method (3.1), population and sample (3.2), procedures (3.3) and statistical analysis (3.4).

3.1 Data collection method

Research in uncertainty expressions tends to use questionnaire as a data collection instrument (Amer et al., 1994, 1995; Davidson, 1991; Simon, 2002). Questionnaire is a relevant data collection method especially in descriptive and explanatory research (Saunders et al., 2009). A standardized self-administrated questionnaire has been used to in this research to elicit respondents' perception about the probability level correspondent to some IFRS-based uncertainty expressions (Appendix 1).

A standardized questionnaire has been used because it is relatively easy to use, inexpensive and effective tool in measuring unobserved constructs such as attitudes and preferences (Tharenou et al., 2007). The standardized questionnaire is a relevant data collection method to elicit respondents' beliefs, knowledge and allow rigor statistical analysis (de Vaus, 2002). Close-ended questions are used because they facilitate efficient statistical analysis (Tharenou et al., 2007). In addition, Close-ended questions are easy to be coded and they reduce the misclassification risk (de Vaus, 2002).

Clear instructions have been provided to make sure that the respondents thoroughly understand their task (de Vaus, 2002). Following Amer et al. (1994, 1995) and Doupnik, and Richter (2003), two examples have been used to explain the task to the respondents. The uncertainty expressions used in these two examples are not included in the uncertainty expressions final list provided to the respondents. The main objective of providing such examples is providing clarity to respondents about their task (de Vaus, 2002). The questionnaire used in this study is in a relevant length and layout to serve the study objectives and do not affect response rate (de Vaus, 2002; Saunders et al., 2009). The questionnaire has been reviewed and pre-tested by two academics to consider

instrument's internal validity (Bryman, 2012). Face and content validity are checked and uncertainty expressions used seemed to be valid. The internal validity of the instrument is supported because uncertainty expressions used in the questionnaire are derived from IAS/IFRS and were used in previous studies. The final list of 14 uncertainty expressions appears in Table (1).

Table (1): Uncertainty expression list

Uncertainty expression	IFRS	IAS
Remote	7,9,12,15	13,36,37,41
Unlikely	4,5,9,10	12,19,26,32,36,37,38,40
Possible	2,3,4,7,9,10,13,15	1,8,12,19,20,21,24,26,28,32,34,36,37 ,38,39,40,41
reasonably possible	4,7,9,13,15	1,19,36
Probable	3,5,9,15,	12,16,23,28,37,38,39,40,41
Likely	2,3,4,6,9,10,13,15,16	1,19,21,28,36,37,38,39,40,41
Expected	1,2,3,4,5,6,7,8,9,10,13,14,15,16	1,2,8,12,16,19,20,21,23,24,26,28,29, 32,34,36,37,38,39,40,41
Reasonably certain	16	17
Reasonably assured		16 18 17
Virtually certain		19,32,37,38
no longer probable		12,37
Highly probable	5,9,15	39
Reasonable certainty		17
Reasonable assurance		20

Source: prepared by the researcher based on IFRS

3.2 Population and sample

The size of accountants' population is not identified. Therefore, it is suggested to use the following equation (Eq 1) to estimate the relevant sample size (de Vaus, 2002, p.100; Saunders et al., 2009, p.581):

$$n = p\% * q\% * \left[\frac{z}{e\%}\right]^2 \qquad \text{(Eq 1)}$$

where:

n = the minimum sample size required.

p% = the proportion belonging to the specified category.

q% = the proportion not belonging to the specified category.

z = the z value corresponding to the level of confidence required. (e.g. z = 1.96 for confidence level of 95%)

e% = the margin of error required.

Based on this equation, assuming that p% = 50% which refers to high heterogeneity in the population and hence produce a large sample size, z = 1.96 and e% = 10%, the required sample size is about 100 respondents. Consequently, questionnaires are sent to 100 professional accountants. Only 61 questionnaires are returned and 4 questionnaires are excluded due to incomplete information. The final sample consists of 57 questionnaires with a response rate 57%. This response rate is considered reasonable compared to previous literature such as Psaros et al. (2003) and Han et al. (2016) that report a response rate of 24% and 35% respectively.

3.3 Procedures

Reviewing the literature on uncertainty expressions indicates that respondents are instructed to assess uncertainty expressions through assigning a numerical probability on a scale from zero percent to 100 percent (Doupnik and Richter, 2003; Houghton and Walawski, 1992; Laswad and Mak, 2000; Simon, 2002). To this point, following Amer et al. (1994, 1995), Laswad and Mak (1997, 2000), Simon (2002) and Teixera and Silva (2009), the researcher should make decisions regarding:

- The Use of a single point estimate or range estimate.
- The Use of in-context or out-of-context uncertainty expressions.
- The number of uncertainty expressions to be used.

Regarding the first point, providing a single point or range estimate, two distinctive points of view can be discussed. In a single point estimate, the respondents provide only one single estimate to the probability level associated with a specific uncertainty expression (see appendix 1, part 1). The main advantage of this procedure is providing a relevant indicator about the typical perception regarding uncertainty expressions (Teixera and Silva, 2009). In

addition, simplicity is another advantage to this procedure. In contrast, in a range estimate, the respondents are asked to provide a minimum and a maximum probability level correspondent to each uncertainty expression (see appendix 1, part 2). The main advantage of this procedure is that respondents better express their understanding of uncertainty expressions (Simon, 2002). In addition, providing a range estimate reduces the difficulties associated with using a single estimate in uncertainty expression assessment (Teixera and Silva, 2009). Another advantage of providing a range estimate is facilitating the measurement of communication efficiency between the respondent and his/her counterparts. Communication efficiency is first proposed by Laswad and Mak (1997, p.19) and measured as "the percentage of all other respondent's best numerical probability that fell within the range specified by the respondent... this is then repeated for each of the other respondents and the average of all percentages is an indication of the overall communication efficiency". Therefore, communication efficiency reflects the degree of agreement about the interpretation of uncertainty expressions (Laswad and Mak, 2000; Simon, 2002). Professional accountants communicate with each other and with other users of financial reporting such as investors, creditors and financial analysts therefore low communication efficiency may indicate potential serious misunderstanding in the interpretation of uncertainty expressions (Amer et al., 1994). Consequently, high variability in the agreement about the interpretation of uncertainty expressions may threat the quality of financial reporting (Simon, 2002). Consistent with Laswad and Mak, (1997, 2000) and Simon (2002), the current study uses both single point and range estimate to better answer the research questions and better achieve research objectives.

Regarding the second point, two situations could be used to elicit respondents' interpretations namely, in-context and out-of-context situations (Teixera and Silva, 2009). In out-of-context situation, the respondents are provided with uncertainty expressions isolated from any related context (Laswad and Mak, 2000; Doupnik and Richter, 2003; Simon, 2002) while in in-

context situation the respondents provided with some excerpts from accounting standards (Doupnik and Riccio, 2006; Han et al., 2016; Salleh et al., 2011) or hypothetical situation (Nu and Stevens, 2010; Wehrfritz and Haller; 2014). Although in-context situation assists in discovering patterns in the interpretation among different accounting situation, Teixeira and Silva (2009) argue that respondents tend to use their professional judgment in the interpretation of uncertainty expressions and implicitly considering a large number of scenarios. In the same vein, Amer et al. (1994) argue that out-of-context situation allows the researcher to insure that any observed differences are related to interpretation of uncertainty expressions rather than the situation itself. Empirical results support this point of view. For example, Harrison and Tomassini (1989) find that the thresholds of SFAS (5) probability expressions are not dependent on context (the type of loss). In addition, Reimers (1992) finds non-significant differences in the interpretation of uncertainty expressions between out-of-context and in-context situations. Furthermore, Amer et al. (1994, p. 131) argue "that phrases in the accounting context might not be as vulnerable to context effects as would be expected by previous research in psychology'. In addition, Davidson (1991, p.357) assumes that "context will affect the meaning of uncertainty expressions consistently". Simon (2002) argues that the context is not a major factor in the interpretation of uncertainty expressions. Based on this discussion and following Laswad and Mak (2000), Simon (2002) and Teixera and Silva (2009), the current study will use out-of-context situation to interpret uncertainty expressions.

Regarding the number of uncertainty expression to be examined, there is no theoretical basis for the number of expressions included in the examination. The number of expressions used in previous literature ranges from 3 uncertainty expressions in Aharony and Dotan, (2004), 7 expressions in Psaros et al. (2003) to 30 uncertainty expressions in Simon (2002). A long questionnaire of uncertainty expressions may affect the response rate (de Vaus, 2002). Therefore, the current study will use a list of 14 uncertainty expressions

that covers a relevant range of expressions and allows comparison with previous studies.

3.4 Statistical analysis

A variety of univariate and bivariate statistical analysis are used in order to analyze the collected data. Mean, median, standards deviation (SD), minimum (Min) and maximum (Max) value of each uncertainty expression will be presented. In addition, test of normality will be used to assist in selecting between t-test and Mann Whitney U test for testing research hypotheses. In addition, the Kendal agreement coefficient[1] will be used to test the agreement between the respondents regarding the ranking of uncertainty expressions. The Kendall coefficient of concordance (W) lies between 0 and 1 and is calculated using the following equation (Eq 2) (Siegel, 1956):

$$W = \frac{s}{\frac{1}{12}K^2(N^3 - N)} \qquad \text{(Eq 2)}$$

Where:

s = sum of squares of the observed deviations from the mean of R;, that is, s = $\sum (R_j - \frac{\sum R_j}{N})^2$

k = number of sets of rankings, e.g., the number of judges

N = number of objects (uncertainty expressions) ranked

R_j = gives the sums of the ranks assigned to each entities (objects or individuals).

Several studies point out the similarity in uncertainty expressions interpretations (Davidson, 1991; Laswad and Mak, 1997, 2000; Simon, 2002). This study aims to investigate which uncertainty expressions have equivalent level of probability and therefore share similar meaning. These similar meaning uncertainty expressions can be grouped together in homogeneous groups. Researchers tend to use pairwise comparisons to compare each uncertainty

[1] Kendall coefficient of concordance (W) is an "index of the divergence of the actual agreement shown in the data from the maximum possible (perfect) agreement" (Siegel, 1956, p.230).

expression with other expressions (Laswad and Mak, 1997, 2000; Simon, 2002). Laswad and Mak (1997, 2000) used Fisher's protected least significant differences test while Simon (2002) employed t-test to be performed between each pair of adjacent means. Using multiple t-test on the data cannot control for type I error (Field, 2005). This study will employ Student-Newman-Keuls (SNK) procedure to test for pairwise differences (Keppel, 2004). SNK test is based on a series of sequences tests with sequence different critical values to perform the comparison. The Student-Newman-Keuls (SNK) test becomes a popular procedure for pairwise comparison due to its greater power compared to other pairwise comparison procedures (Keppel, 2004). SNK test uses the Studentized range test statistic to compute a different value for each pair of means depending on how many means are intermediate between the two being compared (Page et al., 2003)). Critical value of SNK test is calculated using the following equation (Eq 3) (Keppel, 2004):

$$D_{NK} = Q_k \sqrt{MS_{S/A}/n} \qquad \text{(Eq 3)}$$

Q_k: quantity from the studentized range statistics table using the number of mean (a), the $df_{S/A}$ (calculated as N - a) and the desired level of error control α ($\alpha = 0.05$).

$MS_{S/A}$: means estimate of error variance.

n: number of contrast (pairwise comparison calculated as a*(a-1)/2).

4. Results and discussion

This section discusses the results of statistical analysis. Subsection (4.1) is devoted to descriptive statistics while subsection (4.2) discusses similarity in the interpretation of uncertainty expressions. Sub-section (4.3) reports the result of communication efficiency and finally sub-section (4.4) is devoted to test research hypotheses.

4.1 Descriptive statistics

Table (2) reports the mean, median, standard deviation, minimum and maximum value regarding the level of probability assigned to each uncertainty expression. On average, uncertainty expression "remote" received the lowest

probability level (15.91%) while uncertainty expression "reasonable assurance" received the highest probability level (85.65%). on the middle of the probability scale, uncertainty expressions "possible", "probable", "likely", "reasonably possible" and "expected" received probability level between 56% and 66%.

Table (2): Descriptive statistics of uncertainty expressions

	Mean	Median	SD	Min	Max
Remote	15.91%	10.00%	15.29%	0.00%	50.00%
No longer probable	23.11%	15.00%	19.91%	0.00%	95.00%
Unlikely	24.53%	20.00%	16.34%	0.00%	75.00%
Possible	56.02%	50.00%	19.06%	15.00%	90.00%
Probable	56.98%	50.00%	16.58%	25.00%	95.00%
Likely	62.58%	65.00%	18.05%	20.00%	99.00%
Reasonably possible	64.56%	65.00%	18.19%	20.00%	100.00%
Expected	66.25%	70.00%	18.56%	20.00%	95.00%
Virtually certain	73.74%	75.00%	11.91%	50.00%	97.00%
Reasonably certain	74.39%	75.00%	14.11%	40.00%	100.00%
Highly probable	77.19%	80.00%	13.09%	45.00%	100.00%
Reasonable certainty	79.91%	80.00%	14.85%	40.00%	100.00%
Reasonably assured	80.98%	80.00%	12.13%	50.00%	100.00%
Reasonable assurance	85.65%	90.00%	11.95%	60.00%	100.00%

Large standard deviation and wide rang e between the minimum and maximum values may highlight inconsistency in the interpretation of uncertainty expressions among respondents because the numerical probability assigned to each uncertainty expressions is not clustered around the mean. Expressions such as "no longer probable", "remote" and "unlikely" received a minimum value of zero while expressions such as "reasonably certain", "highly probable", "reasonable certainty", "reasonably assured" and "reasonable assurance" received a maximum value of 100%.

Comparing the current study's results with results of previous literature highlights some interesting findings (Table 3). For example, expression "remote" received a probability level 15.91% which is the highest among the previous studies. For expression "no longer probable", the current study reports a probability level of 23.11% which is close to that reported by Doupnik and

Richter (2003) but far from the result of Salleh et al. (2011) that report a probability level of 61.84% and 67.92% for two sub-samples. Regarding expression "unlikely", the average probability level in the current study is 24.53% which is close to probability level 21.43% reported by Laswad and Mak (2000). In the same vein, the average level of the expression "possible" is 56.02% which is similar to the result of Psaros et al. (2003) and Teixeira and Silva (2009). Similarly, the expression "reasonable certainty" has a probability level of 79.91% which is close to probability level of 77% reported in Teixeira et al. (2009). For the expressions "probable", "likely", "expected", "virtually certain", "reasonably certain" and "highly probable" the average probability level is 56.98%, 62.58%, 66.25% 73.74%, 74.39% and 77.19% respectively which is less than the average probability level reported in the previous studies. In contrast, expression "reasonable assurance" received an average probability level 85.65% which is higher than the average reported in Psaros et al. (2003) and Teixeira and Silva (2009). This comparison indicates the variation in the interpretation of uncertainty expressions across studies and highlights the potential effect of societal values and consequently accounting values on the interpretations of uncertainty expressions (Doupnik and Riccio, 2006; Huerta et al., 2016).

To this point, it is important to identify the extent of agreement between accountants regarding the ranking/ordering of uncertainty expressions. Kendall's coefficient of concordance (W) indicates an average agreement ($W= 0.589$, $p < 0.01$) between accountants about the ranks they give to the uncertainty expressions (Appendix 2). This is a reasonably relevant agreement compared to Psaros et al. (2003) where coefficient of agreement was 0.334.

Table (3): Comparison of current study's result with previous studies' results

	Current study (mean %)	Laswad and Mak (1997)	Laswad and Mak (2000)	Simon (2002)	Amer et al. (1994)	Remiers (1992)	Houghton and Walawski (1992)	Davidson (1991)	Psaros et al. (2003)	Teixeira and Silva (2009)	Doupnik and Richter (2003)	Salleh et al (2011)
Remote	15.91	7.06	14.1	6	12	9		10		10		
No longer probable	23.11										29.38	61.84/67.92
Unlikely	24.53	18.53	21.43	18	20			20				
Possible	56.02	33.47	48.87	42	50	52		51	56.11	54		
Probable	56.98	65	63.43	73	79	78	65	73		74		
Likely	62.58	67.18	67.93	74	75	78		73				
Reasonably possible	64.56	72.24	55.69	51	59	58		61		64		
Expected	66.25	72.24	77.31	78		84			70.63			
Virtually certain	73.74	96.12	93.85	94			91		88.04	92		
Reasonably certain	74.39	78.71	77.39	85		92				80		
Highly probable	77.19									88		
Reasonable certainty	79.91									77		
Reasonably assured	80.98											
Reasonable assurance	85.65								71.37	78		

4.2 Similarity in the interpretation of uncertainty expressions

Previous literature indicates some similarities among several uncertainty expressions (Laswad and Mak 1999, 2000; Simon, 2002) and highlights the necessity to review uncertainty expressions in accounting standards (Teixeira and Silva, 2009). To test this claim in the current study, Newman-Keuls procedure has been used to perform multiple comparisons to identify uncertainty expressions that share similar meanings and therefore can be grouped in homogeneous groups (Table 4). Six homogeneous groups have been identified. The expression "remote" represents group (1). The expressions "no longer probable" and "unlikely" represent group (2). Expressions "possible" and "probable" represent group (3) while expression "likely", "reasonably possible" and "expected" represent group (4). Group (5) includes expression "virtually certain", "reasonably certain" and "highly probable". Finally, Group (6) consists of expression "reasonable certainty", "reasonable assured" and "reasonable assurance". Those groups represent uncertainty expressions with non-significant differences between adjacent expressions at 5% level of significance. This result is consistent with the results of Amer et al. (1994), Laswad and Mak (1997) and Simon (2002) about the redundancy in uncertainty expressions. Based on the examination of 21 uncertainty expressions, Amer et al. (1994) identified 7 groups of similar meaning expressions while Laswad and Mak (1997) reported 6 groups of similar meaning expressions based on the examination of 20 uncertainty expressions. Finally, Simon (2002) concluded to 8 groups of similar meaning expressions based on the analysis of 30 uncertainty expressions. Those 6 groups could be a relevant base to construct a plausible list of uncertainty expressions.

Table (4): Homogenous groups of uncertainty expressions

	Mean	Median	Groups
Remote	15.91%	10.00%	1
No longer probable	23.11%	15.00%	2
Unlikely	24.53%	20.00%	2
Possible	56.02%	50.00%	3
Probable	56.98%	50.00%	3
Likely	62.58%	65.00%	3/4
Reasonably possible	64.56%	65.00%	4
Expected	66.25%	70.00%	4
Virtually certain	73.74%	75.00%	5
Reasonably certain	74.39%	75.00%	5
Highly probable	77.19%	80.00%	5
Reasonable certainty	79.91%	80.00%	5/6
Reasonably assured	80.98%	80.00%	5/6
Reasonable assurance	85.65%	90.00%	6

4.3 Communication efficiency

Communication efficiency is used in previous literature to measure the agreement between the respondent's point estimate and other respondents' range estimate. Communication efficiency is a measure of agreement between respondents about the probability level assigned to uncertainty expressions. Generally, there is a low communication efficiency of uncertainty expressions interpretation compared to the results of previous studies namely Laswad and Mak (1997, 2000) and Simon (2002). According to Table (5), the expression "no longer probable" received the least communication efficiency (28.54%) while expression "reasonably assured" recieved the highest communication efficiency (43.77%). The low communication efficiency may reflect the lack of consensus (Laswad and Mak, 1997) and awareness among respondents about the application of IFRS and highlights inconsistent interpretation of uncertainty expressions. Consequently, international and national standard-setters should encourage the preparation of guidelines on the interpretation of uncertainty expressions to facilitate consistent application of accounting standards and enhance comparability of financial reporting (Laswad and Mak, 2000).

Table (5): Communication efficiency of uncertainty expressions

	Mean	Median	SD	Min	Max
no longer probable	28.54%	28.57%	10.23%	0.00%	41.07%
Possible	30.86%	26.79%	14.05%	1.79%	50.00%
Unlikely	31.64%	33.93%	13.28%	1.79%	48.21%
reasonably possible	32.11%	26.79%	16.03%	0.00%	53.57%
Expected	32.49%	39.29%	12.35%	3.57%	44.64%
Likely	32.83%	37.50%	15.06%	1.79%	53.57%
Reasonably certain	33.33%	33.93%	9.79%	10.71%	44.64%
Reasonable certainty	33.55%	37.50%	11.82%	1.79%	48.21%
Probable	33.65%	37.50%	13.21%	0.00%	48.21%
Remote	34.18%	37.50%	14.47%	10.71%	53.57%
Virtually certain	36.69%	42.86%	10.40%	5.36%	46.43%
Highly probable	39.13%	48.21%	13.47%	7.14%	51.79%
Reasonable assurance	42.64%	39.29%	15.01%	16.07%	64.29%
Reasonably assured	43.77%	44.64%	15.04%	10.71%	58.93%

4.4 Testing research hypotheses

Before reporting the results of testing research hypotheses some descriptive statistics about familiarity with IFRS, experience and gender are provided (Table 6). Regarding the familiarity with IFRS, the accountants asked to express their familiarity with IFRS on a scale of four anchors, namely; very familiar, familiar, somewhat familiar and not familiar. For statistical analysis purposes, those four anchors and summarized into two levels of familiarity with IFRS, namely, accountants with more familiarity with IFRS (59.60%) and accountants with less familiarity with IFRS (40.40%). Regarding professional experience, the average of professional experience is 8.7 years with a maximum and a minimum of 33 and 1 year respectively. For statistical analysis purposes and based on the mean, the sample is divided into accountant with less experience (56.10%) and accountants with more experience (43.90%). Finally, regarding the gender, the sample consists of 40% female accountants and 60% male accountants.

Table (6): Descriptive statistics of familiarity with IFRS, gender and professional experience

		No	Percentage	
familiarity with IFRS	More familiarity with IFRS	34	59.60%	
	Less familiarity with IFRS	23	40.40%	
	Total	57	100%	
Gender	Female	34	60%	
	Male	23	40%	
	Total	57	100%	
Professional experience	More experience	25	43.90%	
	Less experience	32	56.10%	
	Total	57	100%	
	Mean (year)	Median	Min	Max
	8.74	6	1	33

Since most of the uncertainty expressions included in the analysis are not normally distributed (Table 7), non-parametric statistics test is used to test the research hypotheses. Mann-Whitney U test for independent samples is employed to test the differences in the interpretation of uncertainty expressions based on gender, familiarity with IFRS and experience.

Table (7): Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Remote	.229	57	.000	.852	57	.000
Unlikely	.176	57	.000	.888	57	.000
Possible	.156	57	.001	.948	57	.016
Reasonably possible	.103	57	.200*	.973	57	.230
Probable	.172	57	.000	.966	57	.108
Likely	.127	57	.022	.961	57	.062
Expected	.177	57	.000	.940	57	.007
Reasonably certain	.097	57	.200*	.972	57	.217
Reasonably assured	.157	57	.001	.951	57	.021
Virtually certain	.157	57	.001	.949	57	.018
No longer probable	.184	57	.000	.870	57	.000
Highly probable	.170	57	.000	.920	57	.001
Reasonable certainty	.142	57	.006	.932	57	.003
Reasonable assurance	.204	57	.000	.909	57	.000

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Regarding familiarity with IFRS, the sample has been divided into two groups based on level of familiarity with IFRS. Two groups are identified namely, low familiarity and high familiarity with IFRS groups. on one hand, descriptive statistics

(Table 8) indicate that accountants with less familiarity with IFRS assign higher probability levels to expressions "remote", "unlikely", "possible", "reasonably possible", "virtually certain" and "reasonable certainty" than accountants with more familiarity with IFRS do. On the other hand, accountants with more familiarity with IFRS assign higher probability levels to the rest of uncertainty expressions than accountants with less familiarity with IFRS.

Table (8): Uncertainty expression according to familiarity with IFRS

		Mean	Median
Remote	less Familiarity	23.17%	20.00%
	more Familiarity	11.00%	9.00%
Unlikely	less Familiarity	30.22%	25.00%
	more Familiarity	20.68%	20.00%
Possible	less Familiarity	58.39%	60.00%
	more Familiarity	54.41%	50.00%
Reasonably possible	less Familiarity	66.48%	65.00%
	more Familiarity	63.26%	62.50%
Probable	less Familiarity	56.65%	50.00%
	more Familiarity	57.21%	57.50%
Likely	less Familiarity	62.57%	65.00%
	more Familiarity	62.59%	60.00%
Expected	less Familiarity	66.76%	70.00%
	more Familiarity	76.00%	75.00%
Reasonably certain	less Familiarity	73.29%	75.00%
	more Familiarity	80.91%	80.00%
Reasonably assured	less Familiarity	80.91%	80.00%
	more Familiarity	81.03%	80.00%
Virtually certain	less Familiarity	75.35%	80.00%
	more Familiarity	72.65%	75.00%
No longer probable	less Familiarity	22.26%	20.00%
	more Familiarity	23.68%	15.00%
Highly probable	less Familiarity	75.65%	75.00%
	more Familiarity	78.24%	80.00%
Reasonable certainty	less Familiarity	80.74%	75.00%
	more Familiarity	79.35%	80.00%
Reasonable assurance	less Familiarity	84.65%	90.00%
	more Familiarity	86.32%	90.00%

Mann-Whitney U test (Table 9) indicates significant differences between accountants with less familiarity with IFRS and accountants with more familiarity with IFRS only for expressions "remote" and "unlikely" only. Consistent with Han et al. (2016), this result highlights the effect of familiarity with IFRS on the interpretations of uncertainty expressions.

Table (9): Differences in uncertainty expressions according to familiarity with IFRS

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Remote	231	826	-2.624	0.009***
Unlikely	270.5	865.5	-1.979	0.048**
Possible	338.5	933.5	-0.866	0.387
Reasonably possible	354	949	-0.606	0.545
Probable	378	654	-0.214	0.831
Likely	377	972	-0.229	0.819
Expected	388.5	664.5	-0.041	0.967
Reasonably certain	362.5	957.5	-0.466	0.641
Reasonably assured	387	663	-0.066	0.947
Virtually certain	345	940	-0.76	0.447
No longer probable	385.5	980.5	-0.09	0.928
Highly probable	316.5	592.5	-1.226	0.22
Reasonable certainty	378	654	-0.214	0.831
Reasonable assurance	358	634	-0.544	0.587

***Significance level < 0.01
**Significance level < 0.05

Regarding experience, the sample has been divided into two groups based on the mean of experience. The two groups are less experience and more experience accountants. Descriptive statistics (Table 10) show that less experienced accountants tend to assign high probability levels to expressions "remote", "unlikely", "no longer probable", "reasonable certainty", and "reasonable assured" than more experienced accountants do. In contrast, more experienced accountants assign higher probability levels to the rest of uncertainty expression than less experienced accountants do.

Table (10): Uncertainty expression according to experience

		Mean	Median
Remote	less experience	17.16%	10.00%
	more experience	14.32%	10.00%
Unlikely	less experience	27.88%	22.50%
	more experience	20.24%	20.00%
Possible	less experience	53.91%	50.00%
	more experience	58.72%	60.00%
Reasonably possible	less experience	60.41%	60.00%
	more experience	69.88%	75.00%
Probable	less experience	54.53%	50.00%
	more experience	60.12%	60.00%
Likely	less experience	60.91%	60.00%
	more experience	64.72%	70.00%
Expected	less experience	63.28%	70.00%
	more experience	70.04%	75.00%
Reasonably certain	less experience	71.88%	70.00%
	more experience	77.60%	80.00%
Reasonably assured	less experience	77.69%	75.00%
	more experience	85.20%	90.00%
Virtually certain	less experience	72.56%	70.00%
	more experience	75.24%	80.00%
No longer probable	less experience	24.28%	27.50%
	more experience	21.60%	10.00%
Highly probable	less experience	75.00%	77.50%
	more experience	80.00%	85.00%
Reasonable certainty	less experience	81.00%	80.00%
	more experience	78.52%	80.00%
Reasonable assurance	less experience	85.69%	90.00%
	more experience	85.60%	90.00%

Mann-Whitney U test (Table 11) reveals that the differences between less and more experienced accountants are significant only for "reasonably possible", "reasonably certain", "reasonably assured" and "highly probable" expressions. Therefore, consistent with Davidson (1991), Psaros et al. (2003) and Han et al. (2016), there is a potential effect, although that this effect is inconsistent, for experience on the interpretation of uncertainty expressions.

Table (11): Differences in uncertainty expressions according to experience

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Remote	389	714	-0.178	0.858
Unlikely	329	654	-1.153	0.249
Possible	341	869	-0.962	0.336
Reasonably possible	281	809	-1.927	0.054*
Probable	312.5	840.5	-1.424	0.154
Likely	342.5	870.5	-0.93	0.352
Expected	314	842	-1.393	0.163
Reasonably certain	277	805	-1.99	0.047**
Reasonably assured	256	784	-2.346	0.019**
Virtually certain	321	849	-1.29	0.197
No longer probable	328.5	653.5	-1.16	0.246
Highly probable	295.5	823.5	-1.701	0.089*
Reasonable certainty	371	696	-0.471	0.638
Reasonable assurance	387	712	-0.212	0.832

*Significance level < 0.10
**Significance level < 0.05

Regarding Gender, descriptive statistics (Table 12) showed that female accountants assign higher probability level to uncertainty expressions such as "remote", "unlikely", "possible", 'reasonably possible", "probable" and "likely" than male accountants do. In contrast, male accountants assign higher probability level to the rest of the uncertainty expressions compared to female accountants.

Table (12): Uncertainty expression according to gender

		Mean	Median
Remote	Male	13.06%	9.00%
	Female	20.13%	15.00%
Unlikely	Male	22.03%	20.00%
	Female	28.22%	25.00%
Possible	Male	53.91%	50.00%
	Female	59.13%	55.00%
Reasonably possible	Male	60.94%	60.00%
	Female	69.91%	65.00%
Probable	Male	56.71%	52.50%
	Female	57.39%	50.00%
Likely	Male	62.32%	60.00%
	Female	62.96%	65.00%
Expected	Male	67.97%	70.00%
	Female	63.70%	70.00%
Reasonably certain	Male	75.00%	75.00%
	Female	73.48%	75.00%
Reasonably assured	Male	81.09%	80.00%
	Female	80.83%	80.00%
Virtually certain	Male	73.91%	75.00%
	Female	73.48%	75.00%
No longer probable	Male	23.82%	17.50%
	Female	22.04%	15.00%
Highly probable	Male	78.97%	80.00%
	Female	74.57%	75.00%
Reasonable certainty	Male	83.03%	85.00%
	Female	75.30%	80.00%
Reasonable assurance	Male	87.12%	90.00%
	Female	83.48%	90.00%

However, according to Mann-Whitney U test (Table 13), the differences between female and male accountants are significant only for expressions "remote", "reasonably possible" and "reasonable certainty". Consistent with the results of Han et al. (2016), this result points to the potential effect of gender on the interpretation of uncertainty expressions.

Table (13): Differences in uncertainty expressions according to gender

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Remote	288	883	-1.689	0.091*
Unlikely	297	892	-1.544	0.123
Possible	341.5	936.5	-0.816	0.414
Reasonably possible	286.5	881.5	-1.711	0.087*
Probable	381	976	-0.165	0.869
Likely	380	975	-0.18	0.857
Expected	349.5	625.5	-0.68	0.496
Reasonably certain	375	651	-0.262	0.793
Reasonably assured	390.5	985.5	-0.008	0.993
Virtually certain	389.5	984.5	-0.025	0.98
No longer probable	345	621	-0.755	0.451
Highly probable	331.5	607.5	-0.979	0.327
Reasonable certainty	283	559	-1.774	0.076*
Reasonable assurance	315	591	-1.252	0.21

*Significance level < 0.10

4.5 Policy implications

Based on the results of the statistical analysis, some policy recommendations to international and national standard-setters can be provided to address the selection and assessment of uncertainty expressions. Providing a numeric-to-verbal guideline will assist the preparers of financial statement and different parties involved in financial reporting to have consistent understanding and application of the accounting standards (Nu and Stevens, 2010). There is no agreement in previous literature about the characteristics of the optimal list of uncertainty expressions therefore this literature aims to identify a plausible list of uncertainty expressions (Davidson, 1991). As suggested by previous literature, this plausible list should cover a full range of probabilities (Amer et al., 1994; Davisdon, 1991; Laswad and Mak, 1997), contain uncertainty expressions with high communication efficiency (Amer,et al., 1994; Laswad and Mak, 1997; Simon, 2002) and include a number of categories as much as human can reliably process (Miller, 1956 citied in Amer et al., 1994). Following those suggestions, a list of seven uncertainty expressions that are significantly different in meaning and have high communication efficiency could be constructed. Those expressions are a relevant number for human processing. The mean and median of each uncertainty expression are also considered in

constructing this list. The suggested list of uncertainty expressions is presented in Table (14).

Table (14): plausible list of uncertainty expression and related probability range

Uncertainty Expression	Probability Range
Remote	< 15%
Unlikely	15% : < 25%
Probable	25% : < 50%
Likely	50% : < 65%
Highly Probable	65% : < 75%
Reasonably assured	75% : < 80%
Reasonable assurance	> 80%

This list cannot remove entirely the inherited subjectivity in the interpretations of uncertainty expressions and the assessment of probability level assigned to each expression (Laswad and Mak, 1997). However, it may provide a useful guideline that assist the accountants and auditors in the interpretations of uncertainty expressions and achieve more consistency in the application of accounting standards.

5. Conclusion and Summary

This study examines the interpretation of IFRS-based uncertainty expressions. Uncertainty expressions are used in accounting standards to identify the measurement and disclosure of future events. Several studies discussed the interpretations of uncertainty expressions in Anglo/American context while little is known about the use of uncertainty expression in emerging economies. This paper fills the gap in the literature by examining the interpretations of uncertainty expressions in one of the Middle East countries namely Lebanon. A questionnaire consists of 14 uncertainty expressions was sent to a sample of 100 professional accountants to assign a point and range estimate for each expression. Only 57 valid questionnaires were included in the analysis with a response rate of 57%. The results of the statistical analysis reveal low agreement among the accountant about the probability level assigned to uncertainty expressions. This is evident by high standard deviation and low communication efficiency. In addition, there are non-significant differences in probability levels between some uncertainty expressions and hence they share similar meanings. However, there is a moderate

agreement among accountants about the ranking of uncertainty expressions. Finally, the statistical analysis indicates potential effect of gender, familiarity with IFRS and experience on the interpretations of some uncertainty expressions. As a policy recommendation, a list of 7 uncertainty expressions is proposed to assist international and national standard-setters in the clarification of uncertainty expressions and their correspondent probability levels. This plausible list will help in supporting consistency in the application and interpretation of uncertainty expressions and hence enhance the comparability of financial reporting. The result of the current study highlights the importance of providing detailed guidelines about the interpretations of uncertainty expressions by international standard-setters. The results of this research may extend to other countries the Middle East region due to similarities in history, societal values, accounting values and language.

This study suffers from some limitations. First, the results of this study are based on the perception of a small sample of accountants regarding the interpretation of some uncertainty expressions. Second, this study examines only 14 uncertainty expressions among a large number of uncertainty expressions included in accounting standards.

Future research may examine in-context uncertainty expressions since context may affect accountants' perception about the probability level correspondent to each expression. The use of regression analysis to examine the simultaneous effect of experience, gender and familiarity with IFRS is encouraged. Future research may examine the effect of auditor type on the interpretations of uncertainty expressions. The comparison between big 4 and non-big 4 auditors may highlight significant difference in their perception regarding the probability level correspondent to uncertainty expressions. In addition, future research may extend this literature by conducting a comparative study of uncertainty expressions interpretation between developing and developed countries. Finally, studying the effect of translation on the interpretation of uncertainty expressions may be a relevant avenue for future research.

References

Abd-Elsalam, O. H. and Weetman, P. (2003), "Introducing international accounting standards to an emerging capital market: Relative familiarity and language effect in Egypt", *Journal of International Accounting, Auditing and Taxation,* Vol. 12, pp. 63-84.

Aharony, J. and Dotan, A. (2004), "A comparative analysis of auditor, manager financial analyst interpretations of SFAS 5 disclosure guidelines", *Journal of Business Finance and Accounting,* Vol. 31 No. 3/4, pp. 475-504.

Amer, T., Karl Hackenbrack and Nelson, M. (1994), "Between-auditor differences in the interpretation of probability phrases", *Auditing: A Journal of Practice and Theory,* Vol. Spring, pp. 126-136.

Amer, T., Karl Hackenbrack and Nelson, M. (1995), "Context-dependence of auditors' interpretations of SFAS 5 probability expressions", *Contemporary Accounting Research,* Vol. 12 No. Fall, pp. 25-39.

Baydoun, N. and Willett, R. (1995), "Cultural relevance of western accounting systems to developing countries", *Abacus,* Vol. 31 No. 1, pp. 67-92.

Beyth-Marom, R. (1982), "How probable is probable? A numerical translation of verbal probability expressions", *Journal of Forecasting,* Vol. 1, pp. 257-269.

Bryman, A. (2012), *Social research methods*, Oxford University Press, Oxford.

Carmona, S. and Trombetta, M. (2008), "(2008). On the global acceptance of IAS/IFRS accounting standards: The logic and implications of the principles-based system. Journal of Accounting and Public Policy, 27, 455–461.", *Journal of Accounting and Public Policy,* Vol. 27, pp. 455-461.

Chan, P. and White, M. (2006), "The influence of culture on judgments of accountants in Fiji", *Australian Accounting Review,* Vol. 16 No. 3, pp. 82-88.

Chesley, G. R. (1986), "Interpretation of uncertainty expressions", *Contemporary Accounting Research,* Vol. 2 No. 2, pp. 179-199.

Davidson, R. A. (1991), "Practical difficulties encountered in selecting uncertainty words: The example of accounting standards", *Applied Psychology: An International Review,* Vol. 40 No. 4, pp. 353-363.

de-Vaus, D. A. (2002), *Surveys in social research*, Allen & Unwin, Crows Nest.

Doupnik, T. S. and Riccio, E. L. (2006), "The influence of conservatism and secrecy on the interpretation of verbal probability expressions in the Anglo and Latin cultural areas", *The International Journal of Accounting,* Vol. 41, pp. 237-261.

Doupnik, T. S. and Richter, M. (2003), "Interpretation of uncertainty expressions: A cross-national study", *Accounting, Organizations and Society,* Vol. 28, pp. 15-35.

Du, N. and Stevens, K. (2011), "Numeric-to-verbal translation of probability expressions in SFAS 5", *Managerial Auditing Journal,* Vol. 26 No. 3, pp. 248-262.

Du, N., Stevens, K. T. and McEnroe, J. E. (2011), "Improving consistency in interpreting SFAS 5 probability phrases", *Research in Accounting Regulation,* Vol. 23, pp. 67-70.

Dwyera, P. D., Gilkesonb, J. H. and Listc, J. A. (2002), "Gender differences in revealed risk taking: evidence from mutual fund investors", *Economics Letters,* Vol. 76, pp. 151-158.

FASB. (1975), "Accounting for contingencies", in *Statement of Financial Accounting Standards No. 5.* Financial Accounting Standards Board, Stamford.

Field, A. (2009), Discovering Statistics using SPSS, Sage Publications, London.

Gray, S. J. (1988), "Towards a theory of cultural influence on the development of accounting seystems internationally", *Abacus,* Vol. 24 No. 1, pp. 1-15.

Han, W., Hellmann, A. and Lu, M. (2016), "The impact of gender difference on the interpretation of uncertainty expressions", *Asian Review of Accounting,* Vol. 24 No. 2, pp. 1-31.

Harrison, K. E. and Tomassini, L. A. (1989), "Judging the probability of a contingent loss: An empirical study", *Contemporary Accounting Research,* Vol. 5 No. 2, pp. 642-648.

Hellmann, A., Perera, H. and Patel, C. (2010), " Equivalence of IFRS across languages: Translation issues from English to German", in *A paper presented at Asia-Pacific Interdisciplinary Research in Accounting (APIRA) Conference.*

Henry, B. (1999), "What constitutes control?", *Journal of Accountancy,* Vol. June, pp. 39.

Hofstede, G. (1984), "Cultural dimensions in management and planning.", *Asia-Pacific Journal of Management,* Vol. 1 No. 2, pp. 81-99.

Hoogendoorn, M. (2006), "International accounting regulation and IFRS implementation in Europe and beyond – experiences with first-time adoption in Europe", *Accounting in Europe,* Vol. 3, pp. 23-26.

Houghton, K. A. and Walawski, J. B. (1992), "Asset recognition and probabilistic judgments", *Australian Accounting Review,* Vol. XXX, pp. 2-9.

Huerta, E., Petrides, Y. and Braun, G. P. (2013), "Translation of IFRS: Language as a barrier to comparability", *Research in Accounting Regulation,* Vol. 25, pp. 1-12.

IASB. (2016), *IFRS Standards*, International Accounting Standards Board (IASB), London.

Jianakoplos, N. A. and Bernasek, A. (1998), "Are women more risk averse?", *Economic Inquiry,* Vol. XXXVI, pp. 620-630.

Kepple, G. and Wickens, T. D. (2004), *Design and analysis: A researcher's handbook,* Pearson Education Inc, New Jersey.

Kettunen, J. (2011), "Translation of IFRS standards into local languages: Understanding problematics of translation", in. Unpublished manuscript, University of Jyvaskyla, Jyvaskyla, Finland.

Laswad, F. and Mak, Y. T. (1997), "Interpretations of probability expressions by New Zealand standard setters", *Accounting Horizons,* Vol. 11 No. 4, pp. 16-23.

Laswad, F. and Mak, Y. T. (2000), "Interpretations of probability expressions: A Comparison between standard-setters and accountants", *Pacific Accounting Review,* Vol. 11 No. 2, pp. 241-254.

Libby, R. (1995), "The role of knowledge and memory in audit judgment:.", in Ashton, R. H. and Ashton, A. H. (Eds.), *Judgment and decision-making research in accounting and auditing.* Cambridge University Press, Cambridge, MA.

Lin, H.-L. and Yen, A.-R. (2014), "The effects of IFRS experience on audit fees for listed companies in China", *Asian Review of Accounting,* Vol. 24 No. 1, pp. 43-68.

Miller, G. A. (1956), "The Magical number seven, plus or mines two: Some limits on our capacity for processing information", *Psychological Review,* Vol. March, pp. 212-230.

Olsen, R. A. and Cox, C. M. (2001), "The influence of gender on the perception and response to investment risk: the case of professional investors", *Journal of Psychology and Financial Markets,* Vol. 2 No. 1, pp. 29-36.

Page, M. C., Braver, S. L. and MacKinnon, D. P. (2003), *Levine's guide to SPSS for analysis of variance*, Lawrence Erlbaum Associates Inc, New Jersey.

Pflugrath, G., Martinov-Bennie, N. and Chen, L. (2007), "The impact of codes of ethics and experience on auditor judgments", *Managerial Auditing Journal,* Vol. 22 No. 6, pp. 566-589.

Piercey, M. D. (2009), "Motivated reasoning and verbal vs. numerical probability assessment: Evidence from an accounting context", *Organizational Behavior and Human Decision Processes,* Vol. 108, pp. 330-341.

Powell, M. and Ansic, D. (1997), "Gender differences in risk behaviour in financial decision-making: An experimental analysis", *Journal of Economic Psychology,* Vol. 18, pp. 605-628.

Psaros, J. (2007), "Do principles-based accounting standards lead to biased financial reporting? An Australian experiment", *Accounting and Finance,* Vol. 47, pp. 524-550.

Psaros, J., Patel, C. and Warnakulasuriya, S. (2003), "A study of uncertainty expressions in Australian accounting and auditing standards", *Pacific Accounting Review,* Vol. 15 No. 2, pp. 1-28.

Reimers, J. (1992), "Additional evidence on the need for disclosure reform", *Accounting Horizons,* Vol. March No. 36-41.

ROSC. (2003), *Report on the observance of standards and codes (Rosc): Republic of Lebanon*, World Bank, Washington.

Salleh, S. I. M., Gardner, J. C., Sulong, Z. and McGowan, C. B. (2011), "The interpretation of "in context" verbal probability expressions used in international accounting standards:A comparison of English And Chinese students studying at English speaking universities", *Journal of International Education Research,* Vol. 7 No. 2, pp. 67-80.

Saunders, M., Lewis, P. and Thornhill, A. (2009), *Research methods for business students*, Pearson Education Limited, Essex.

Siegel, S. (1956), *Nonaromatic Statistics for the behavioral sciences*, McGraw-Hill Book Company Inc., London.

Simon, J. (2002), "Interpretation of probability expressions by financial directors and auditors of UK companies", *European Accounting Review*, Vol. 11 No. 3, pp. 601-629.

Teixeira, C. and Silva, A. F. (2009), "The interpretation of verbal probability expressions used in the IAS/IFRS: Some Portuguese evidence", *Polytechnical Studies Review*, Vol. VII No. 12, pp. 57-73.

Tharenou, P., Donohue, R. and Cooper, B. (2007), *Management research methods*, Cambridge University Press, Cambridge.

Uyar, A. and Güngörmüs, A. H. (2013), "Perceptions and knowledge of accounting professionals on IFRS for SMEs: Evidence from Turkey", *Research in Accounting Regulation*, Vol. 25, pp. 77-87.

Wallsten, T. S., Budescu, D. V., Rapoport, A., Zwick, R. and Forsyth, B. (1986), "Measuring the vague meanings of probability terms", *Journal of Experimental Psychology*, Vol. 115 No. 4, pp. 348-365.

Weaver, L. and Woods, M. (2015), "The Challenges Faced by Reporting Entities on Their Transition to International Financial Reporting Standards: A Qualitative Study", *Accounting in Europe*, Vol. 12 No. 2, pp. 197-221.

Wehrfritz, M. and Haller, A. (2014), "National influence on the application of IFRS: Interpretations and accounting estimates by German and British accountants", *Advances in Accounting, incorporating Advances in International Accounting*, Vol. 30, pp. 196-208.

Ye, K., Cheng, Y. and Gao, J. (2014), "How individual auditor characteristics impact the likelihood of audit failure: Evidence from China", *Advances in Accounting, incorporating Advances in International Accounting*, Vol. 30, pp. 394-401.

Zeff, S. A. (2007), "Some obstacles to global financial reporting comparability and convergence at a high level of quality", *British Accounting Review*, Vol. 39, pp. 290-302.

Appendices

Appendix (1): Questionnaire

Participation Invitation

Subject: Research survey invitation

Dear Participant

You are invited to participate in a research study titled "Examining uncertainty expressions in International Financial Reporting Standards".

In this study, you will be asked to complete a paper-based survey. Your participation in this study is voluntary and you are free to withdraw your participation from this study at any time. The survey should take only 15-20 minutes to complete.

The survey collects no identifying information of any respondent. All of the response in the survey will be recorded anonymously and it is impossible to trace this information back to any participant. Information collected in this study will be kept only for research purposes. It also confirmed that the survey contents and findings are the sole responsibility of the researcher.

While you will not experience any direct benefits from participation, information collected in this study may benefit the accounting research and profession by better understanding the interpretations of uncertainty expressions included in the accounting standards.

By completing and submitting this survey, you are indicating your consent to participate in the study. Your participation is appreciated.

The researcher

Part 1:

Listed below are selected verbal uncertainty expressions that are used in International Financial Reporting Standards (IFRS). Please indicate the level of probability that best corresponds, in your opinion, to each expression. There are no "right" or "wrong" answers. We are only interested in your perceptions. Please indicate the probability in percentage terms on a scale of 0% to 100%.

Example:

Highly likely----------75---------- %

If you believe that the uncertainty expression "Highly likely" related to a probability of 75%, indicate this value as your response in the space provided..

Please indicate the probability in percentage terms that best corresponds, in your opinion, to each of the following expressions:

Probability Expression	
Remote	%
Unlikely	%
Possible	%
Reasonably possible	%
Probable	%
Likely	%
Expected	%
Reasonably certain	%
Reasonably assured	%
Virtually certain	%
No longer probable	%
Highly probable	%
Reasonable certainty	%
Reasonable assurance	%

Part 2:

In this part, please indicate the range of probabilities that best corresponds, in your opinion, to each of the following expressions. Please indicate in percentage terms both the upper and lower limits to the probability range.

Example:

Highly likely ----------from-------65-----%-----to--------90--------- %

If you believe that the uncertainty expression "Highly likely" related to a probability range from 65% to 90%, indicate this value as your response in the space provided.

Probability Expression	Lower limit	Upper limit
Remote	From ___ %	to ___ %
Unlikely	From ___ %	to ___ %
Possible	From ___ %	to ___ %
Reasonably possible	From ___ %	to ___ %
Probable	From ___ %	to ___ %
Likely	From ___ %	to ___ %
Expected	From ___ %	to ___ %
Reasonably certain	From ___ %	to ___ %
Reasonably assured	From ___ %	to ___ %
Virtually certain	From ___ %	to ___ %
No longer probable	From ___ %	to ___ %
Highly probable	From ___ %	to ___ %
Reasonable certainty	From ___ %	to ___ %
Reasonable assurance	From ___ %	to ___ %

Part 3:

1- What is your gender?

☐ Male ☐ Female

2- How many years of professional experience do you have?

_____ Years (please indicate the number of years)

3- How familiar are you with international Financial Reporting Standards?

☐ Very familiar ☐ Familiar
☐ Somewhat familiar ☐ Not familiar

Appendix (2): Uncertainty expressions ranking

Expressions / Accountants	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	2	2	6	11.5	6	6	6	11.5	11.5	6	2	11.5	11.5	11.5
2	1	2	3	4	5	6	7	8	9	10	11	12	13	14
3	1	2	8	12.5	4.5	8	12.5	8	12.5	4.5	12.5	8	3	8
4	1	5.5	8.5	7	3.5	2	8.5	10	13	14	3.5	5.5	11.5	11.5
5	3.5	2	5.5	9	5.5	7	12	12	12	3.5	1	14	9	9
6	1	2	4	5.5	7	8	9	10.5	13	13	3	5.5	10.5	13
7	1	3.5	3.5	6.5	8.5	10	8.5	6.5	11	5	2	12	13	14
8	1	2	3	4	6	7	9	9	9	11	5	12	13	14
9	1	2	3.5	5	6	9	12.5	7	9	12.5	3.5	12.5	9	12.5
10	2	3.5	5.5	5.5	3.5	10	12.5	14	12.5	10	1	10	8	7
11	5.5	4	7	9	5.5	3	2	11.5	13	10	1	8	11.5	14
12	3.5	7	5.5	8.5	5.5	3.5	2	11.5	13	10	1	8.5	11.5	14
13	1	3	9	9	5.5	5.5	12.5	12.5	5.5	5.5	2	12.5	12.5	9
14	3	2	4.5	6	4.5	7	12	13	9.5	14	1	9.5	9.5	9.5
15	1	10	10	5	2	10	4	14	10	6	3	10	10	10
16	2	3	10.5	12.5	4	7	12.5	14	7	10.5	1	7	7	7
17	1	4	8	3	5.5	8	12	5.5	10.5	8	2	13	10.5	14
18	2	3.5	10	10	5.5	5.5	3.5	7.5	13	10	1	13	7.5	13
19	1	2	3.5	5	6	7	8	9	10	11	3.5	12	13	14

20	2	3	5.5	9.5	5.5	7	4	11	12.5	9.5	1	8	12.5	14
21	2	2	6	7	5	11	4	8	11	11	2	14	11	11
22	2.5	2.5	4	8.5	13	8.5	5	8.5	11	8.5	1	13	6	13
23	1	3	7	13	5	7	4	11.5	11.5	14	2	9.5	7	9.5
24	1	3	5	8	9	10	7	5	11.5	13.5	2	13.5	5	11.5
25	2	3	5	8	4	11	13	9.5	13	6	1	7	9.5	13
26	1	3	4.5	8.5	10	11.5	6.5	4.5	13	11.5	2	14	6.5	8.5
27	3	2	9	12	6	7.5	7.5	12	12	4.5	1	12	4.5	12
28	2	9	12	14	13	3	10	6.5	6.5	4	1	11	6.5	6.5
29	2	3	5.5	8	8	8	5.5	12.5	12.5	4	1	10	12.5	12.5
30	1	2.5	4.5	6.5	4.5	6.5	8	10.5	13	10.5	2.5	9	13	13
31	1	2	5.5	9	5.5	5.5	14	9	11.5	5.5	3	13	9	11.5
32	1	2	5.5	8.5	3.5	10	5.5	7	11	8.5	3.5	12	13	14
33	2	3	6	7.5	4	5	14	9.5	12	7.5	1	12	9.5	12
34	2	3	6	7	4	11	8.5	12	13	8.5	1	5	10	14
35	1	3	4	5	6	7	8	9	10	11	2	12	13	14
36	2	1	10.5	10.5	14	13	6	6	4	10.5	3	6	8	10.5
37	1	3	4	5	7	6	8.5	8.5	10	11	2	12.5	12.5	14
38	5	5	11.5	11.5	11.5	5	5	5	11.5	11.5	1	5	5	11.5
39	2.5	2.5	12	7	2.5	7	2.5	12	7	7	7	12	12	12
40	3.5	1	11	6	13.5	13.5	11	11	3.5	9	2	6	6	8
41	2	3	4	6.5	5	13.5	8	6.5	13.5	11.5	1	9	10	11.5
42	1.5	3	4	5	6.5	6.5	9.5	8	11.5	9.5	1.5	11.5	13.5	13.5
43	3	2	4.5	6.5	4.5	8	9.5	6.5	12.5	9.5	1	11	12.5	14

44	2	2	6.5	8.5	6.5	4.5	4.5	13.5	13.5	10	2	8.5	11.5	11.5
45	1	2	4	5	8	6	8	10	14	12	3	8	11	13
46	1	2.5	8	9.5	9.5	2.5	7	12.5	12.5	6	4.5	4.5	12.5	12.5
47	1	2	3	4.5	6	7.5	7.5	9	10	11.5	4.5	11.5	13.5	13.5
48	1	2	6	7.5	4.5	4.5	9	10.5	12	7.5	3	10.5	13.5	13.5
49	1	2	3	4.5	7	6	8	9.5	9.5	11.5	4.5	13	14	11.5
50	1	2	7.5	10	5	3	9	11	13	6	4	7.5	13	13
51	1	2	7.5	9	4.5	3	6	10.5	13	10.5	4.5	7.5	13	13
52	1.5	3	8.5	12	4	12	12	5	10	14	1.5	8.5	6.5	6.5
53	1	2	6	10	9	3	6	12.5	12.5	6	6	6	12.5	12.5
54	1	2	3.5	6	6	8	6	9.5	11	9.5	3.5	12	13.5	13.5
55	1	2	6	7	5	4	8.5	10.5	12	8.5	3	10.5	13.5	13.5
56	2	3	4	5	6.5	8.5	8.5	10	11.5	6.5	1	11.5	13.5	13.5
57	3	1.5	8.5	8.5	8.5	8.5	8.5	14	8.5	8.5	1.5	8.5	8.5	8.5
$\sum R_i$	100	164.5	357	443.5	360	412.5	459	552.5	625.5	520	152	572.5	592.5	673.5

Kendall's coefficient of concordance (W)	
K	14
N	57
w	0.589
$\chi 2$	436.568
df	13
p value < 0.001	

Uncertainty Expressions					
A	Remote	G	Reasonably possible	M	Reasonably assured
B	No longer probable	H	Expected	N	Reasonable assurance
C	Unlikely	I	Virtually certain		
D	Possible	J	Reasonably certain		
E	Probable	K	Highly probable		
F	Likely	L	Reasonable certainty		