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INSIGHTS ON CFOs’ PERCEPTIONS ABOUT IMPAIRMENT TESTING UNDER IAS 36

Francesco Mazzi*#

Giovanni Liberatore*

Ioannis Tsalavoutas **

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* Francesco Mazzi and Giovanni Liberatore are at The University of Florence, Dipartimento di Scienze per l’Economia e l’Impresa, Via delle Pandette 9, Building D6, 50127, Florence, Italy. E-mail address: francesco.mazzi@unifi.it and giovanni.liberatore@unifi.it respectively.

** Ioannis Tsalavoutas is at University of Glasgow, Adam Smith Business School, West Quadrangle, Main Building, Room G683, University Avenue, Glasgow, G12 8QQ, Scotland, UK. E-mail address: Ioannis.Tsalavoutas@glasgow.ac.uk

# Corresponding author.
Insights on CFOs’ perceptions about impairment testing under IAS 36

Abstract

We survey CFOs of Italian listed companies and examine their views on the complexities involved in implementing IAS 36 requirements and the perceived usefulness of national guidelines aiming at assisting preparers in this respect. We find that IAS 36 is perceived as an atypical standard among IFRS, it demands subjective interpretation, its requirements can be made adaptable to managerial needs and do not limit creative accounting. Further, respondents do not see a strong link between IAS 36 disclosure requirements and market variables, except for stock returns. Moreover, the impairment testing process became more difficult during the recent financial crisis and guidelines issued by the Italian authorities do not appear to assist in implementing the recoverable amount estimation process or compliance with mandatory disclosure. The respondents explicitly call for a revision in IAS 36 and/or issuance of separate guidance. These findings inter alia respond directly to the IASB’s current quest on financial statements preparers’ concerns about the application of the IAS 36 requirements.

Keywords: IFRS, IAS 36, Italy, survey, CFO.
1. Introduction

As a result of the Post-Implementation Review of IFRS 3 Business Combinations (PIR),¹ the International Accounting Standards Board (IASB) met on 20 February 2015 to discuss the follow-up work needed. The Board decided to add to its research agenda four issues, including how to improve the impairment test in International Accounting Standard (IAS) 36 Impairment of Assets. Following on from this, the report and feedback statement on the PIR, published in June 2015, discusses in more detail the four areas of focus that warrant further investigation, including the question whether ‘preparers’ [emphasis added], auditors or regulators expressed concerns about the application of the current requirements’ (IASB, 2015, p.7). As of January 2016, this topic is still in the IASB’s research agenda and no decision regarding any relevant actions have been made yet.

As implied by the specific research question that the IASB wishes to explore, there is very little primary evidence on the views of financial statements preparers about the requirements in IAS 36. Only the study of Petersen and Plenborg (2010) have surveyed preparers on the topic of goodwill impairment testing process in a European country. They look at the Danish environment, by analysing the responses in 58 completed questionnaires, in 2006. This is in direct contrast to the existence of numerous archival studies which examine companies’ reporting practices with regard to this topic (e.g., Glaum et al., 2013; Tsalavoutas et al., 2014) and/or the determinants and potential implications of these practices from the users’ perspective (e.g., Knauer & Wohrmann, 2015; Mazzi et al., 2016, Paugam & Ramond, 2015).²

We survey Chief Financial Officers (CFOs) of Italian listed firms and provide primary evidence on their perceptions of IAS 36 requirements. Moreover, we explore their views on the usefulness of reports and guidelines published by the Italian accounting regulators and professional bodies (i.e., OIC, 2009, 2011a, 2011b; OIV, 2012 – see details in sub-section
in their attempt to assist financial statements preparers on implementing the impairment testing process and thus meeting the IAS 36 requirements. Our questionnaire contained 50 closed questions with regard to both areas, most of them on a five-point Likert scale, and was administered to all the CFOs of the 268 Italian listed companies as of 31st December 2011. Forty-eight (48) usable questionnaires were returned.

Our results show that IAS 36 is perceived as a complex, detailed and atypical accounting standard among the IFRS, allowing for subjectivity in its application, being adaptable to managerial needs and unable to limit creative accounting. Furthermore, the requirements in IAS 36 are considered more difficult to apply, compared to other IFRS, because of differences from local accounting standards and that asset impairment testing became more difficult during the financial crisis. As a consequence, preparers explicitly state that they would welcome a revision of IAS 36 in this respect as well as with regard to the relevant disclosure requirements. Moreover, our respondents appear familiar with the additional Italian national guidelines (i.e., OIC, 2009, 2011a, 2011b; OIV, 2012) although these are not perceived as useful in assisting the recoverable amount estimation process or compliance with disclosures mandated by IAS 36. In fact, some CFOs pointed out that some non-Italian guidelines are useful in supporting them when implementing impairment test instead. Finally, the majority of respondents do not see a strong link between IAS 36 disclosure practices and implementation and the cost of equity, the cost of debt and stock volatility, although they support the view that accounting estimates and disclosure do relate to stock returns.

Our study contributes not only to academe but also to policy and regulation. First, we provide additional and more recent opinions and perceptions of financial statements preparers on the issue of impairment testing under IAS 36. The Danish socioeconomic environment on which Petersen and Plenborg (2010) conducted their study is substantially different from that of Italy. Additionally, given the time difference between the two studies, one can observe
whether the difficulties the Danish preparers highlighted during the second year of the mandatory implementation of IFRS in Denmark, continued to be encountered by preparers in Italy six years later. Second, reflecting on the preparers’ views that mandatory disclosures have very little economic consequences, we observe a misalignment with evidence from academic studies which focus on the user’s perspective, indicating that impairment testing disclosures are negatively associated with cost of equity capital (Mazzi et al., 2016; Paugam & Ramond, 2015). This contradictive evidence should be relevant to standard setters’ and regulators’ recent concerns about the usefulness of mandatory disclosures (e.g., EFRAG et al., 2012; ESMA, 2013; FRC, 2012; Hoogervorst, 2013; IASB, 2013). It suggests that there is need for addressing preparers’ lack of awareness of the usefulness of existing disclosure requirements in the standards. Third, receiving responses which shed more light on the problematic areas in IAS 36 in addition to the direct request for improvement in the standard should feed into the question the IASB posed in the report and feedback statement of the PIR published in June 2015 (see above). Fourth, although the guidelines for which we asked the survey participants to comment on are specific to the Italian context, their perception on the usefulness of these guidelines should provide useful insights not only to the Italian regulatory bodies but also to other regulatory bodies within the European Union (EU) and the IASB. More specifically, our findings indicate that there is need for further guidance in implementing IAS 36 and that national regulatory bodies try to assist in this respect. However, in the country we examine at least, these guidelines are not found to be useful. This could be considered as evidence that some regulatory bodies at a national level are not able to provide sufficient supplementary guidance required by preparers for this particular issue. Thus, the IASB itself could consider providing more detailed information on the implementation of IAS 36, if not amending the standard. Additionally, issuing national guidelines which are not useful may lead to even more uncertainty in the implementation of
IAS 36. Such guidelines could lead to a divergent application of the standard within the countries who adopt them, therefore resulting in less comparable annual reports, which is against the objectives of the IASB. In this case, the IASB and national regulatory bodies could consider a closer working relationship in the preparation and the issuance of national guidelines or, as suggested above, the IASB itself to publish additional guidance. On the other hand, in cases where the national guidelines are found to be useful, the IASB could consider encouraging the issuance, in cooperation or independently, of national guidelines also on other key areas (e.g., financial instruments; leases; post-retirement benefits). Finally, these findings and the relevant discussion could be also of particular relevance to the Financial Accounting Standards Board (FASB) and the European Financial Reporting Advisory Group (EFRAG) who are currently undertaking independent projects aiming at reducing the cost and complexity of the goodwill impairment testing process and effectively they are concerned with the same issues with the IASB.3

The remainder of the paper is organised as follows. Section 2 reviews the relevant literature on impairment testing and describes the Italian environment. Section 3 discusses the research methodology. Section 4 presents our findings and Section 5 draws conclusions.

2. Background

2.1. Impairment testing under IAS 36 and recent institutional debate

IAS 36 sets the procedures that a firm should apply to ensure that its assets are carried at no more than their recoverable amount. If an asset is carried at a value higher than its recoverable amount, it has to be impaired and an impairment loss immediately recognised in profit or loss, unless the asset is carried at revalued amount where an adjustment in other comprehensive income may have to take place first (IAS 36, par. 59-60). The Standard requires financial statements preparers to test goodwill and intangible assets with indefinite useful lives for
improvement at least once a year (IAS 36, par. 10). Other assets have to be tested for impairment if an indication that these have been impaired exists (IAS 36, par. 9).

The impairment testing process relies critically on the estimation of an asset’s recoverable amount. IAS 36 defines this as the higher between fair value less costs to sell and value in use, with the majority of the Standard’s content devoted on how to measure the recoverable amount with either of the two methods. Other critical topics covered by the Standard are the identification of Cash Generating Units (CGUs), the allocation of goodwill to CGUs, the recognition of an impairment loss and its reversal. Finally, IAS 36 requires preparers to disclose information mostly related to the assumptions made in estimating recoverable amount, to any reasonably possible changes in these estimates, and to the events and circumstances that led to the recognition or reversal of an impairment loss.

Accounting literature identifies two major arguments supporting the shift from amortisation towards impairment testing. First, the traditional amortisation method contains little or no information value for the users of financial statements (Jennings et al., 2001). Second, the impairment approach should provide users of financial statements with better, more accurate and more useful information (Bens & Heltzer, 2005; Colquitt & Wilson, 2002). According to Trottier (2013, p. 2), in the IFRS context, this happens inter alia because “standards such as IAS No. 36 theoretically improve the representational faithfulness of financial reporting by increasing the correspondence between the current value and book value of assets”.

Despite these improvements, there is a current debate whether intangible assets with indefinite useful lives and goodwill should continue to be tested for impairment or be amortised (e.g. ASBJ et al., 2014; FASB, 2015; FRC, 2014; KPMG, 2014), although the debate is focused primarily around goodwill, since it is considered as a ‘black box’ by investors. According to the PIR, some investors support the current impairment testing
method, mainly because it helps them in understanding whether a company achieves its original objectives with regard to an acquisition. On the contrary, other investors believe that the amount recognised as goodwill following the purchase price allocation from a business combination can be supported and replaced by internally generated goodwill over time, thus weakening its informative value around a business combination. These investors also believe that “amortising goodwill would decrease volatility in profit or loss when compared to an impairment model; and amortising goodwill would reduce pressure on the identification of intangible assets, because both goodwill and intangible assets would be amortised” (IASB, 2015, p. 21). Finally, exposing a more balanced view, some participants to the PIR suggest an amortisation and impairment approach, under which an impairment test would only be performed if specific impairment indicators arise. This approach would eliminate the drawbacks related to the discretion of the recoverable amount estimation, preserving the useful information conveyed via the impairment testing. In fact, IAS 36 requires disclosing the values assigned to, and the sensitivity of, each key assumption used during the impairment testing process. This information will probably not be disclosed on a voluntary basis, since it can cause significant commercial harm to an entity and may be used to initiate litigation against it in the event that these assumptions prove less than accurate (ASBJ et al., 2014). However, it could be critical for investors, analysts and lenders in their decision-making process (E&Y, 2010; FRC, 2014; KPMG, 2014). In fact, being able to predict the outcome of the impairment testing is an important input to their assessment of the amount, timing and uncertainty of (the prospect for) future net cash inflows (ASBJ et al., 2014).

Although the IASB (2015) supports the impairment testing approach, it is considering “whether a variation on an amortisation and impairment model could be developed with an amortisation method that does not undermine the information currently provided by the impairment-only approach” (IASB, 2015, p. 8). In doing so, the PIR calls for a better
understanding of why there are differences between participants’ (albeit not only preparers) feedback and academic evidence and whether some of the concerns are caused by poor application of the requirements. In addressing these calls, we review previous relevant academic literature on the subject matter. This highlights the lack of a comprehensive insight on preparers’ perception and opinion regarding the requirements of the Standard.

2.2. Academic evidence regarding the implementation of impairment testing

There is a long-standing debate in the literature, mainly related to the implementation and the outcome’s reliability of the impairment testing mechanism. IAS 36 requires managers to make substantial, subjective, and difficult to verify judgements and assumptions. These mainly relate to issues connected to recoverable amount estimation (e.g., cash flow projection periods, growth rates, discount rates) and circumstances leading to the recognition of an impairment loss (Glaum et al., 2013; Husmann & Schmidt, 2008, 2011; Kvaal, 2010; Petersen & Plenborg, 2010). Relevant literature argues that when accounting standards allow managers to apply such discretion, they will use it to their advantage and will pursue personal objectives (Trottier, 2013). In light of this, various issues around the implementation of IAS 36 have been investigated so far, with the majority of archival studies examining companies’ actual reporting practices and eventually their economic consequences.

More specifically, given that the assumptions required for measuring recoverable amounts are difficult to verify, related disclosure provided to financial statement users is considered a highly relevant topic. Thus, previous studies document a high level of non-compliance and a tendency towards boilerplating in the notes on accounting policies, leading to a lack of adequate justification in the assumptions made in estimating assets’ recoverable amounts. In the IFRS context, these conclusions are found both in academic studies (e.g., André et al., 2016a; Devalle & Rizzato, 2012; Glaum et al., 2013; Mazzi et al., 2016) and
studies from professional and other institutional bodies (e.g., ESMA, 2011, 2013; ICAEW, 2007; Ineum Consulting, 2008; Tsalavoutas et al., 2014). Many of these studies, also examined the determinants of these disclosure levels and have highlighted that non-compliant behaviour may be jointly determined by firm- and country-level variables, indicating that accounting traditions and other country-specific factors play a role, despite the use of common reporting standards under IFRS (e.g., Glaum et al., 2013; Tsalavoutas et al., 2014).

Other researchers concentrate on specific assumptions necessary to estimate assets’ recoverable amounts according to IAS 36 requirements. Carlin and Finch (2009) focus on evidence on the selection of discount rates for the purposes of goodwill impairment testing. They compare discount rates disclosed by Australian firms with independently generated discount rates based on the Capital Asset Pricing Model. Their results demonstrate the existence of variances between these two sets of discount rates, providing evidence consistent with opportunism on the part of financial statement preparers. They conclude that bias in the selection of discount rates may challenge the quality of reported earnings and the validity of goodwill valuations.4

More relevant to this study, Petersen and Plenborg (2010) focus on the way preparers in the Danish environment implement goodwill impairment tests. Their results, based on 58 completed questionnaires in 2006, indicate that practice varies considerably among firms, with some firms not even defining a CGU and thus not complying with IAS 36. They also document inconsistencies in the way firms estimate recoverable amounts, highlighting some critical areas, such as discount rate calculation, risk adjustment and cash flows estimation in the terminal period.

Finally, Trottier (2013) explores managers’ decision to record an impairment loss. Results from his experiment with managers of Canadian companies show that participants believe managers will be more keen on recognising an impairment if the loss can be reversed
upon value recovery, while they will be less keen if they have a bonus plan and reversals are not allowed. The above findings are in line with the stream of market-based research demonstrating that long-lived asset impairments are associated with big bath earnings (Riedl, 2004), while contracting and market incentives are capable of triggering companies’ impairment accounting choices (Beatty & Weber, 2006), especially in terms of the timeliness of goodwill impairment (Knauer & Wohrmann, 2015).

Reflecting on this review of the relevant literature, it becomes apparent that the majority of studies focus on some single aspects around the implementation of the impairment testing process, with none focusing on various areas of IAS 36 at the same time. Moreover, to the best of our knowledge, it is only the study of Petersen and Plenborg (2010) who surveyed preparers’ on the topic of goodwill impairment testing process in a European country. Thus, additional insights into IAS 36 accounting practices and financial statement preparers’ perceptions on its application are pertinent. This study fills this gap in the literature shedding more light on the preparers’ views on the matter, by surveying CFOs of Italian listed firms and asking them specific questions about the challenges related to various critical aspects related to the implementation of IAS 36. Thereby, we obtain unique and ‘first-hand’ information concerning how IAS 36 is perceived by financial statement preparers.

2.3. The Italian financial reporting environment

Many distinct features of the financial reporting environment in Italy allow for a setting which could shed more light on the difficulties encountered in implementing the requirements in IAS 36. First, Italy is usually classified as a country with an underdeveloped stock market (Mazzi et al., 2016), concentrated ownership (Djankov et al., 2006), weak investor protection and weak enforcement (Amiraslani et al., 2013; Leuz et al., 2003; Leuz, 2010). In such an environment, management incentives could prevail when it comes to implementation of IAS
36, which primarily deals with estimates and projections. In addition to this, Italian listed companies have been characterised as having great variation among their corporate governance structures. This results in large variation in the accounting practices they follow (Marra et al., 2011). Second, Italian listed companies experienced many difficulties in shifting from local GAAP to IFRS, because of significant differences between the two regimes. According to Ding et al. (2007), Italy is ranked as the ninth country (out of 30) with regard to the number of issues absent from local GAAP but covered by IFRS (“absence score”). Additionally, Italy is the second most “diverged” country (of 30) with regard to differences between national rules and IFRS (Ding et al., 2007). These differences lie in the different focus of the two sets of Standards: Italian GAAP is oriented towards creditor protection while IFRSs are market-oriented (Gavana et al., 2013; Jeanjean & Stolowy, 2008).

As far as goodwill and assets with indefinite useful lives are concerned, before 2005, these were subject to capitalisation and amortisation (as all other intangible assets) instead of being subject to an annual impairment testing. In general, although the Italian Civil Code required a company to impair an asset if its market value was durably lower than its amortised/depreciated value, an asset’s finite/indefinite useful life, the concepts of value in use, fair value, and recoverable amount were not referred to in this context (articles from 2423 to 2435-bis, Italian Civil Code). Thus, soon after the adoption of IFRS, the correct implementation of impairment testing relied primarily on companies’ own interpretation of the Standards’ requirements, on Italy’s national enforcement bodies and guidelines, rather than companies’ experience or persistence of previously followed practice.

As a *prima facie* confirmation of the weak enforcement in Italy in this respect, it was only in 2009 that the first comprehensive report on IFRS mandatory adoption and application was published. This was a joint effort by three national public organisations (Banca d’Italia, CONSOB & ISVAP, 2009). This document underlined the need to enhance compliance with
mandatory disclosure and, in particular, to disclose more information about the assumptions underlying the recoverable amount estimation process.

Moreover, the lack of guidance from the Italian authorities resulted in the Italian accounting and valuation professional bodies issuing two different guidelines on crucial aspects of impairment testing, particularly regarding goodwill. The first, ‘Application 2: Impairment and Goodwill’ (2009), was drawn up by the OIC. At a later stage, the OIC (2011a, 2011b) issued specific guidelines on impairment for banking and insurance companies. Finally, in 2012, the OIV published further guidance ‘Goodwill Impairment Testing in a Time of Economic and Financial Crisis - Guidance’ (2012).

Given these characteristics, Italy constitutes a distinct environment for exploring the views of preparers regarding IAS 36 implementation and disclosure practices. Italy’s preparers and professionals have encountered many difficulties, leading to poor impairment testing implementation and disclosure practices. Thus, their opinions and perceptions about the reasoning behind these practices are particularly useful in drawing a better picture of impairment testing and relevant reporting under IAS 36, which, as discussed above, is absent from the relevant literature.

3. Research design

3.1. Questionnaire design and administration

This study uses a direct method to investigate the factors that key preparers believe influence IAS 36 accounting and related disclosure and their consequences to financial markets. These aspects are usually studied through an indirect approach designed to quantify variables such as compliance, impairment losses and earnings management. A direct method, such as a questionnaire, permits the simultaneous investigation of many issues and avoids the need for discretionary choices in explaining the subject matter (Beattie & Smith, 2012).
We developed our questionnaire based on Graham et al. (2005), Navarro-Garcia and Bastida (2010), Petersen and Plenborg (2010) and Beattie and Smith (2012). We formulate each question while reflecting on prior literature discussions and findings (see studies discussed in Section 2). The questionnaire consists of five categories/themes across which the various questions are disaggregated.

In order to assess the validity of our research instrument, the questionnaire was discussed with five Certified Public Accountants (non-IFRS experts) (for face validity) and five IFRS experts (for content validity). Before submitting the survey to the target group, we discussed the issues arising from the validity check and revised the instrument accordingly.

The questionnaire was written in Italian and contained 50 closed questions. For most of the statements, we asked the respondents to express their opinion on a five-point Likert scale. Depending on the way we formulate the statement a score of 1 means totally disagree/low difficulty (easy)/not useful at all, while a score of 5 means totally agree/very difficult (problematic)/very useful. We perceive the mid-point 3 as representing a neutral view on the relevant question.

The questionnaire was e-mailed directly to all 268 CFOs of all firms listed on the Italian stock exchange’s main market (the Mercato Telematico Azionario, or MTA) as of December 31, 2011. Their email addresses were kindly provided by the Associazione Nazionale Direttori Amministrativi e Finanziari (ANDAF), one of the major Italian associations of CFOs, between 1st June and 15th July 2012. Although we contacted each CFO directly, we asked explicitly the questionnaire to be filled in by the person in charge for impairment testing. We assume that the opinions of the person who manually filled in the questionnaire reflect those of the CFOs.

To maximise the response rate, we used a two pages layout, a relatively small number of questions, piloting, and a signed institutional cover letter. The questionnaire could be
completed online through a website specifically designed for this study or returned via email, as an editable PDF or a scanned copy. Moreover, additional copies of the questionnaire were sent out 14, 28 and 42 days after the initial e-mail, as a follow-up. We confirmed receipt of the questionnaire through direct telephone calls to the companies’ investor relations departments and CFOs themselves.

To assess our research instrument’s reliability, we retested it on all the respondents in September 2012, receiving 18 completed questionnaires. We considered mid July 2012 to September 2012 an appropriate time interval over which to assess test-retest reliability (i.e. not so large as to allow variables to change over time; not so small as to allow the retest to be influenced by the primary test). The results showed no statistically significant difference between the two sets of answers, indicating that our research instrument was reliable.

3.2. Sample and respondent firms

Forty-eight completed questionnaires were received, resulting in a response rate of nearly 18%. This response rate can be considered adequate, since our target group is classified as ‘difficult’ in the current financial climate (Beattie & Smith, 2012; Simsek et al., 2009), and the typical response rate varies from 10% to 12% (Beattie & Smith, 2012; see also Graham et al., 2005; Mukherjee et al., 2004; Trottier, 2013).

Table 1 reports descriptive statistics for the sample firms and the participants’ characteristics. Panel A breaks down the sample and respondent firms across industries, and Panel B compares the firms on the basis of industry groupings. A goodness of fit test indicates that there is no statistically significant difference on the basis of industry ($\chi^2 = 5.368$, $p = 0.801$). Panel C shows descriptive statistics for participant and non-participant firms. T-test (Mann-Whitney test) compares mean (median) values across the two sub-samples. The results indicate that there is also no statistically significant difference across the two sub-
samples on the basis of some key company characteristics, such as total assets, net income, book value and market value.

**TABLE 1 ABOUT HERE**

Panel D reports the participants’ age and years of experience with their firms. The mean age of the respondents was 42 (from a range of 30 to 61), while the mean years of experience with their firms was 11. These participants’ characteristics suggest that, on average, they have considerable experience with the environment and accounting practices of the firms they work for, and are at a mid-career level; thus, arguably, they provided reliable answers which are not based on inexperience of junior CFOs.

3.3. **Statistical tests**

The literature does not agree on whether data from Likert-scaled questions should be analysed through parametric or non-parametric tests. Beattie and Pratt (2003) argue for the latter, while Beattie and Smith (2012) consider that the results infrequently differ. Thus, we employ both parametric and non-parametric tests.

For each question, we use a one-sample t-test and a one-sample sign rank Wilcoxon test in order to establish whether the participant mean or median answer was statistically different from the neutral mid-point of 3. Two-sample t-tests and two-sample rank sum Mann-Whitney tests were also carried out to compare different sets of answers.

4. **Findings**

4.1. **Perceptions regarding IFRS in general and IAS 36 in particular**

The relevant literature has highlighted some peculiarities of IAS 36, suggesting that this standard could be perceived as atypical compared to other IFRS (e.g. Amiraslani et al., 2013; Petersen & Plenborg, 2010; Trottier, 2013). Thus, participants were initially asked about their
perceptions of IFRS requirements in general and IAS 36 in particular, in terms of complexity and difficulty in application. The aggregate responses and the results from the tests described in subsection 3.3 are shown in Table 2.

** TABLE 2 ABOUT HERE **

The findings suggest that both IFRS and IAS 36 are generally perceived as appropriate for achieving their intended purpose, attaining a true and fair view of companies’ financial statements and conveying useful information to the financial markets (mean (median) scores in questions 1, 2 and 3 are above the neutral mid-point of 3, \( p<0.01 \)). Additionally, participants responded that IFRS, in general, are appropriate for assisting stakeholders’ decision making (mean (median) scores in question 5 are above the neutral mid-point of 3, \( p<0.01 \)). However, this appears not to hold for IAS 36 in particular, as neither the mean nor the median scores in question 5 are statistically different from the neutral mid-point of 3. Moreover, neither IFRS in general nor IAS 36 in particular are considered appropriate for managerial decision making (corresponding scores in question 4 are not statistically different from the neutral mid-point of 3). Thus, preparers only partially acknowledge the usefulness of IAS 36. They seem to believe that its requirements are useful for investment decision making, while they are unsure if these could help other stakeholders’ decision making process. These findings indicate a misalignment between preparers’ and investors’ view on the matter, given that the results from the PIR reveal that investors have mixed views on the usefulness of the impairment-only approach.

Furthermore, it appears that there is no consensus among participants on whether IFRS in general assist in the limitation of creative accounting and are subjective and adaptable to managerial needs. In questions 6, 8, and 9, the mean and median scores are not statistically different from the neutral mid-point of 3. However, respondents are of the view that IAS 36 in particular does not limit creative accounting, it requires subjective interpretation from
preparers and its requirements lend themselves to be adaptable to managerial needs (mean (median) scores in question 6 (8, 9) are well below (above) the neutral mid-point of 3, p<0.01). The non-consensus evidenced in relation to IFRS in general is in line with previous archival academic studies demonstrating that, under IFRS, firms generally engage in less earnings management (Barth et al., 2008), although IFRS allow for greater flexibility, which could lead to greater earnings management (Capkun et al., 2013). In addition, the results reporting preparers’ views on IAS 36 in particular are in line with the PIR and prior academic literature evidencing that the frequent judgements and discretion in calculating assets’ recoverable amount required in the impairment testing mechanism allow managers to pursue personal objectives (e.g. André et al., 2016b; IASB, 2015; Ramanna & Watts, 2012).

Further, our respondents express consensus in that both IFRS in general and IAS 36 in particular are complex and detailed (mean (median) scores in questions 7 and 10 are above the neutral mid-point of 3, p<0.01). However, IAS 36 is perceived as being generally more complex than other IFRS (the differences in higher mean and median scores regarding IAS 36 in question 7 are statistically different, p<0.05). Finally, IFRS requirements as a whole are not considered as difficult to apply as those in IAS 36 because of differences from local accounting standards (mean (median) scores in question 12 are not statistically different from the neutral mid-point of 3 for IFRS requirements, and are above 3 for IAS 36, p<0.01). It is noted that this perception is not influenced by the taxation system (scores in question 11 are below the neutral mid-point of 3 for both IFRS in general and IAS 36 in particular, p<0.01). These results are in line with the concerns expressed by prior academic literature regarding the complexities and difficulties faced by preparers’ in implementing the impairment testing (e.g. Petersen & Plenborg, 2010; Trottier, 2013). Not only they have been identified in Canada and in Denmark a few years ago, they still appear to be pertinent in Italy. Most
importantly, our findings are also in line with the PIR, highlighting that impairment test for goodwill is considered complex, time-consuming and expensive.

To investigate the above findings in greater depth, we perform an exploratory factor analysis on the 12 items related to IAS 36 so as to isolate some key aspects regarding perceptions of IAS 36. Table 3 reports our results for factor analysis.

**TABLE 3**

Four components are clearly identified through factor analysis, explaining 66.8% of the variance in responses received by Italian preparers. Table 3 shows the factor loadings after rotation (varimax); coefficients below 0.30 were deleted to improve readiness. The items clustering on the same components suggest that factor 1 represents appropriateness, factor 2 subjectivity, factor 3 complexity, and factor 4 taxation issues. Cronbach’s alpha is used to investigate factor reliability (except that of factor 4, for which this statistic cannot be computed) (see Field, 2009). Both factors 1 and 3 show high reliability, while factor 2 shows good reliability.

Factor analysis suggests that answers to the questionnaire can be grouped into meaningful key characteristics perceived by Italian CFOs with regard to IAS 36. Our responses are in line with previous concerns expressed in the literature highlighting that complexity (factor 3) and subjectivity (factor 3 and 2 respectively) characterise IAS 36 (Glaum et al., 2013; IASB, 2015; Petersen & Plenborg, 2010; Trottier, 2013). Thus, Italian preparers seem to share similar concerns expressed by various stakeholders in prior literature and consultations, although in implementing the impairment testing they may have faced specific difficulties due to the peculiar environment they operate in. The next subsections provide useful insights in this respect.

4.2. Informative value of the impairment testing process under IAS 36
As noted earlier, the informative value of the impairment test is expected to be applied and reported in two ways: a) by following as closely as possible the recoverable amount estimation process described in IAS 36; and b) by disclosing in the notes to the accounts the information required by the standard. On that basis, respondents were asked their perception of whether these two aspects were influenced by factors external or internal to their firms. Given that prior literature examining mandatory disclosures with regard to goodwill and impairment testing documents great variation in disclosure practices across firms (e.g., Glaum et al., 2013; Mazzi et al., 2016; Paugam & Ramond, 2015), we also asked specific questions applicable only to mandatory disclosure. The scores of the corresponding responses and the relevant statistical tests are shown in Table 4.

**TABLE 4 ABOUT HERE**

For the disclosure-specific questions, the answers show that there was no consensus among the respondents on whether mandatory information disclosed under IAS 36 is sufficient for stakeholders’ decision making, is too detailed or is redundant (only mean answers for questions 1 and 3 are weakly statistically different from the neutral mid-point of 3, \( p<0.10 \), while question 2 scores are not statistically different from the neutral mid-point of 3). Arguably, this finding provides some explanation of why high levels of non-compliance with the disclosures mandated by IAS 36 have been reported in prior literature (e.g., Glaum et al., 2013; Mazzi et al., 2016). If preparers are not convinced of the usefulness of such disclosures, they may not consider non-disclosure as non-compliance *per se*. Consistent with the answers to the first three questions, a strong consensus is revealed against the prospect of expanding the information required to be disclosed regarding impairment testing (mean (median) scores in question 4 are significantly lower than the neutral mid-point of 3, \( p<0.01 \)). This view is in line with the one expressed by the participants in the PIR, as they think that the IASB should
consider providing some relief from disclosure requirements given the practical limitations and significant effort required to adhere to them.

In additional responses, participants agree that neither the recoverable amount estimation process nor disclosure practices are influenced by any external or internal factors, such as audit committee and national regulators. For recoverable amount estimation questions (i.e. 5, 7 and 8), scores are lower than the neutral mid-point of 3, \( p<0.01 \), while the scores for question 6 are lower than the neutral mid-point of 3, \( p<0.10 \). For mandatory disclosure practices, the scores for question 5 are lower than 3, \( p<0.01 \); those for question 8 are lower than 3, \( p<0.10 \); and those for questions 6 and 7 are not statistically different from the neutral mid-point of 3. These findings indicate that what the extant literature suggests regarding the Italian financial reporting context (i.e. having weak enforcement, weak investor protection and weak auditing power (Brown et al., 2014; Leuz et al., 2003) is also perceived by financial statement preparers. The consensus that parties other than the management exercise no influence on the application of IAS 36 at the firm level may suggest that the standard’s application could be distorted to serve managerial needs. However, this seems not to be the case, since respondents argue that neither recoverable amount estimations nor mandatory disclosure practices are influenced by managers for reasons relating to performance, macroeconomics or the stock market (scores for questions 11, 12 and 13 are lower than the neutral mid-point of 3, \( p<0.01 \)). This finding reveals an intuitive contradiction between the finding in Table 1 that preparers believe that IAS 36 is adaptable to managerial needs and does not limit creative accounting.

Following the difficulties and complexities encountered by Italian financial statement preparers as discussed above, Italian accounting bodies have issued many guidelines (e.g. OIC, 2009, 2011a, 2011b; OIV, 2012) in order to assist them when it comes to the application of the requirements of IAS 36. Motivated by this, respondents were asked whether these
guidelines influence the recoverable amount estimations or disclosure practices. The aggregate answers show insignificant support of such influence on either of the two aspects (scores for question 9 are below the neutral mid-point of 3, \(p<0.10\)). In contrast, the responses to question 10 indicates that CFOs in Italy follow international (non-Italian) guidelines (scores for question 10 are above the neutral mid-point of 3, \(p<0.01\)), and some of them mentioned ‘IVS 300 Valuations for Financial Reporting’ (IVSC, 2011) and ‘Impairment of long-lived assets, goodwill and intangible assets’ (E&Y, 2011). We believe that such a finding is very useful to the Italian regulatory bodies.

Finally, the respondents believe that both recoverable amount estimation and disclosure should be revised in light of the recent financial crisis (the mean and median scores for question 14 is above the neutral mid-point of 3, \(p<0.01\)). This responds to the question in the PIR related to the main implementation challenges in testing goodwill or intangible assets with indefinite useful lives for impairment (IASB, 2015). Apparently the financial crisis was a major challenge in implementing impairment testing, thus we further investigate this matter in subsection 4.4.

4.3. Potential impact of the impairment testing process under IAS 36 on market variables

Prior academic literature has examined economic consequences of disclosure levels following indirect market-based methods (e.g., André et al., 2016a; Mazzi et al., 2016). In reporting some evidence supporting the economic usefulness of the impairment testing mechanism, the PIR calls for a better understanding why there are differences between participants’ feedback and academic evidence. In order to see whether results from the literature are confirmed by managers’ perceptions, we asked CFOs whether they believe the higher reliability of recoverable amount estimation or the higher level of mandatory disclosure has an impact on
any market variables. When an impact is foreseen, we ask them to specify whether it is positive or negative. The summary of the responses received is shown in Table 5.

TABLE 5 ABOUT HERE

Regarding cost of equity, only a small percentage of respondents (fewer than 20%) are of the view that a more reliable recoverable amount estimation process or better disclosure reduces the cost of capital, as posited by theory. On the contrary, some respondents (fewer than 15%) hold the view that more information provided under IAS 36 would increase the cost of capital. However, most participants either see no relation between these variables (about 40%) or cannot speculate on the matter (about 29%). Thus, these results are in line with the finding of Armitage and Marston (2008, p. 323), with regard to finance directors of UK listed firms, that “the majority of interviewees do not see a strong link between the level of disclosure and the cost of equity”. Nevertheless, these findings are in direct contrast to the existence of numerous archival studies which examine companies’ reporting practices with regard to this topic (e.g., Glaum et al., 2013; Tsalavoutas et al., 2014) and/or the determinants and potential implications of these practices from the users’ perspective (e.g., Knauer & Wohrmann, 2015; Mazzi et al., 2016, Paugam & Ramond, 2015).

The results for the costs of public and private debt are similar. Most respondents (more than 60%) either could not speculate or stated that no relation between IAS 36 accounting numbers and disclosure and the cost of debt exist. Hence, this finding also confirms Armitage and Marston (2008, p. 326), in which the “answers varied as they did for equity”.

As far as stock returns and stock volatility are concerned, the aggregate answers show that roughly one third of respondents believe that there is no relation between these variables and IAS 36 accounting requirements. However, almost 40% of participants believe that the higher the reliability of the recoverable amount estimation process, the higher the stock returns. The percentage is roughly the same (33.3%) regarding mandatory disclosure level.
In summary, these findings show a misalignment between preparers’ perception of the economic consequences of mandatory disclosure and results from market-based literature, as highlighted in the PIR. Our results provide useful additional insights as they show that the majority of the CFOs are of the view that there are no economic consequences related to impairment testing or they cannot speculate on this matter. These results indicate that Standard Setters need to work on transmitting to preparers that accounting and disclosure requirements in IAS 36 are beneficial. In fact, the perceived lack of importance of the disclosure for market variables may impact on the effort of the CFOs to implement IAS 36, thus reducing the reliability and usefulness of the entire impairment testing process and the corresponding disclosures.

4.4. Problematic areas in the impairment testing process as required by IAS 36

Previous academic studies highlighted that IAS 36 is a complicated standard, which requires specific knowledge of valuation techniques (e.g., Petersen & Plenborg, 2010). In the PIR of IFRS 3, the IASB acknowledges this perceived complexity and subjectivity and admit that “we could review IAS 36 and we could consider improvements to the impairment model; particularly whether there is scope for simplification” (IASB, 2015, p. 8). According to the OIV (2012), the financial crisis may have even exacerbated the difficulty of estimating recoverable amounts. Moreover, the financial crisis has certainly triggered impairment losses, one reason why this topic remains relevant (ESMA, 2013). In order to guide a possible revision of IAS 36 and to highlight any critical issue arisen from the financial crisis, we asked Italian CFOs to rate the level of difficulty encountered when estimating specific assumption required in calculating the recoverable amount of an asset before and during the financial crisis. The aggregate results are shown in Table 6, with answers varying from 1 (‘low difficulty/easy’) to 5 (‘very difficult/problematic’).
According to the CFOs, estimating recoverable amounts before the financial crisis was neither easy nor problematic (mean (median) scores in questions 2 to 8 are not statistically different from the neutral mid-point of 3). Additionally, identifying assets that had to be impaired was easy (answers to question 1 scored above the neutral mid-point of 3, \( p<0.01 \)), resulting in a standard use of human and financial resources (mean (median) scores in questions 9 and 10 are below the neutral mid-point of 3, at the 10% and 5% levels, respectively). This situation worsened dramatically during the financial crisis; in fact, the two-sample \( t \)-test and Mann-Whitney test are significant at the 1% level for all questions. The aggregate answers show that calculating variables for estimating recoverable amounts became more difficult (scores for questions 2 to 8 are statistically higher than the neutral mid-point of 3, \( p<0.01 \)). The most difficult tasks are estimating fair value, determining a projection basis and calculating discount and growth rates.

These findings result in an interesting contrast with the findings of Petersen and Plenborg (2010). Contrary to Danish preparers, Italian preparers do not appear to encounter many difficulties in implementing impairment tests before the crisis. However, they perceive the financial crisis as hindering the impairment testing implementation process. Additionally, finding that testing for assets’ impairment became more difficult during the financial crisis for Italian listed companies. It can also be considered a justification for the issuance of additional national (Italian) and international (non-Italian) guidelines.

Overall, the results arising from our survey indicate that there is indeed a clear need for the IASB to consider revising IAS 36 or the IFRS Interpretations Committee could issue a separate IFRIC document that would provide more guidance to preparers when they face difficulties in estimating assets’ recoverable amount.
4.5. *Usefulness of guidelines provided by Italian authorities on impairment testing under IAS 36*

The difficulties encountered in implementing IAS 36 in Italy lead OIC (2009) and OIV (2012) to issue two guidelines meant at assisting preparers in the impairment testing process. As far as the contents of these guidelines are concerned, the OIC (2009) document is a commentary on various related topics related to IAS 36. It intends to assist financial statements’ preparers by giving examples on the implementation of impairment testing process. Although issued four years after the mandatory adoption of IFRS in Italy, this guideline seems dedicated to users that are not familiar with IAS 36 and deal with the impairment test for the first time. OIC’s guideline also contains a specific and detailed section related to disclosure that companies are required to provide in the notes to the financial statement. Further, two supplementary documents have been issued with specific reference to the peculiarities related to the implementation of the impairment testing mechanism in banking and insurance industries (OIC 2011a, 2011b).

On the contrary, the OIV (2012) guideline is a far more complex document dedicated to the role of valuation experts in supporting CFOs when dealing with the impairment test procedure. The guideline intends to assist preparers in technicalities related to the estimations/assumptions needed for calculating fair value less cost to sell and value in use. Topics like growth rate, cost of equity, and sensitivity analysis receive detailed and meticulous attention, while some caveats related to these topics following the financial crisis are also highlighted.

Given the above differences in the two guidelines, the last section of the questionnaire asked the CFOs about the contribution of the OIC (2009) and OIV (2012) guidelines in addressing specific key-issues related to the implementation of recoverable amount estimation
for impairment test purposes. The aggregate results are shown in Table 7, with answers varying from 1 (‘not useful at all’) to 5 (‘very useful’).

**TABLE 7 ABOUT HERE**

First, all respondents are aware of the OIC (2009) guideline, and approximately 92% of them did use it. However, although the OIV (2012) guideline seems to be well-known (with approximately 85% of respondents stating awareness of it), only 69% of respondents had used it by the time of our survey. Yet, the fact that CFOs are aware of the existence of these documents does not lead automatically to the fact that they found it useful. In fact, the aggregate answers show that neither the OIC (2009) nor the OIV (2012) guidelines are useful in estimating recoverable amounts. And, most of the answers are not statistically different from the neutral mid-point of 3, and those differing positively are significant only at the 10% level. Moreover, respondents feel that none of the two guidelines is useful in identifying an active market for estimating fair value less the cost of disposal of an asset.

These findings confirm the answers to question 9 described in subsection 4.2 (i.e. that national guidelines do not influence the recoverable amount estimation process or compliance with mandatory disclosure) and show that national guidelines do not contribute to recoverable amount estimation or companies’ disclosure practices. Reflecting on both types of guidelines, we can see that the fact that CFOs are aware of the existence of a document does not lead automatically to the fact that they find it useful.

In the discussion of the results presented in Table 4, we show that Italian CFOs pointed out that some non-Italian guidelines are useful in supporting them when implementing impairment test. Some of them mentioned ‘IVS 300 Valuations for Financial Reporting’ (IVSC, 2011) and ‘Impairment of long-lived assets, goodwill and intangible assets’ (E&Y, 2011). The former was mentioned by three of our respondents and contains a very brief and limited presentation of the IAS 36 main topics and has to be read together with the technical
Guidance Note No. 16 ‘Valuation of Intangible Assets for IFRS Reporting Purposes’ (IVSC, 2009) containing more detailed information. The E&Y guideline (2011) was mentioned 11 times by our respondents and seems the most practical document, even if does not enter in very specific and technical aspects. This guide also provides a comparison between IFRS and US GAAP in terms of the most debated impairment test issues. Each topic related to impairment test is described in principle and in practice, thus probably assisting CFOs in the complex process of translating theoretical accounting principles’ requirements into practice. Compared to the Italian guidelines, the document from IVSC and especially the one from E&Y provide a balance between detailed description of key-issues and brevity. On the contrary, depending on the topic, guidelines from OIC and OIV appear to be too general or too detailed.

Results from this subsection highlight that it is highly probable that Italian CFOs prefer relying on practical and easy-to-read documents rather than on mostly theoretical documents albeit extremely meticulous. These results inform the Italian accounting and valuation professional bodies that they could consider revising their guidelines by simplifying their contents and make them more concise. Finally, although the guidelines for which we asked the survey participants to comment on are specific to the Italian context, their perception on the usefulness of these guidelines should provide useful insights not only to the Italian regulatory bodies but also to other regulatory bodies in EU countries and the IASB. For example, the IASB itself could consider providing more detailed information on the implementation of IAS 36, if not amending the standard itself.

5. Conclusions
There has been much debate over impairment testing, IAS 36 implementation and relevant disclosure practices. However, institutional bodies and academics call for further analysis in
this field. In contrast to most prior research in the area, which adopts indirect methods, this study uses a large-scale direct method to investigate the opinion of financial statements preparers on the requirements in IAS 36 in terms of conducting the impairment testing, the required disclosure practices and their informative value. A questionnaire instrument was used to collect the views of 48 Italian listed company CFOs (18% response rate). Italy constitutes a distinct environment, since it shows great variation among the corporate governance structures of its companies, which results in different accounting practices and implementation of IFRS standards. In addition, the capital market is of lowest development in the EU and Italian companies faced many challenges in transitioning from local GAAP to IFRS, because of significant differences between the two regimes. The above characteristics make opinions and perceptions of Italian preparers particularly useful in painting a clearer picture of IAS 36 reporting in continental European countries whose national accounting standards differ substantially from IFRS.

We find that IAS 36 is considered an atypical accounting standard among the IFRS in the Italian environment. Our findings demonstrate that IAS 36 requirements are perceived to be detailed, subjective, adaptable to managerial needs and unable to limit creative accounting. Moreover, exploratory factor analysis shows that four key aspects emerge in IAS 36 accounting perception: appropriateness, subjectivity, complexity and taxation. Financial statement preparers were also of the opinion that they do not see a strong link between IAS 36 disclosure practices and implementation and the cost of equity, the cost of debt and stock volatility, thus being in contrast with results from market-based literature which demonstrates that disclosure is useful to investors and is able to reduce cost of capital, analysts’ forecasts’ errors and is value relevant. Further, the requirements in IAS 36 are considered more difficult to apply, compared to other IFRS, because of differences from local accounting standards and that asset impairment testing became more difficult during the financial crisis. As a
consequence, preparers explicitly state that they would welcome a revision of IAS 36 in this respect as well as with regard to the relevant disclosure requirements. Finally, that Italian national guidelines do not influence the recoverable amount estimation process or compliance with mandatory disclosure. Our findings should be of interest to a number of parties, including firms, auditors, users of financial statements, and in particular standard setters and regulatory institutions.

With regard to the latter, the IASB is currently exploring the question whether ‘preparers’ [emphasis added], auditors or regulators expressed concerns about the application of the current requirements’ (IASB, 2015, p.7). As of January 2016, this topic is still in the IASB’s research agenda and no decision regarding any relevant actions have been made yet. In addition, the FASB and EFRAG are currently undertaking independent projects aiming at reducing the cost and complexity of the goodwill impairment testing process and effectively all three bodies are concerned with the same issues. Thus, our findings are not only pertinent to academic literature in which a direct method has been used very scarcely in relation to IAS 36 but they also feed in to regulators’ and standards’ setters research agenda.

Similar to all studies employing questionnaires, our study also could be limited from the following. We acknowledge that there is always the risk of not sufficient representation of the targeted population. Stemming from this, arguably, the response rate of 18% in our study is not very high (although typical for this target group). Moreover, examining the opinion of CFOs depending on their demographic background (e.g. age, gender and experience) would provide more in depth findings and relevant discussion. However, we do not have information about CFOs’ gender and splitting the sample across experienced/non-experienced CFOs or junior/senior CFOs results in a comparison of two relatively small sub-samples which does not allow for reaching reliable inferences from such tests. Future research could explore the causes and consequences of IAS 36 reporting in greater depth, as well as exploring incentives
and disincentives for misreporting, by looking at a variety of countries and hopefully with a
larger number of participants across countries.
References


Endnotes

1 Throughout the study, by PIR we mean the Report and Feedback Statement describing the IASB Post-Implementation Review of IFRS 3 Business Combinations.

2 See also Schatt et al. (2016), in this issue, for a review of the European literature.


4 See Husmann and Schmidt (2008, 2011) and Kvaal (2010) for an in depth and critical discussion about the guidance provided by IAS 36 on the discount rates to be used in the impairment testing process.

5 By Italian GAAP, we mean the accounting rules contained in the Italian Civil Code (i.e., code law) and the accounting principles, pronouncement, non-promulgated guidance or practices, issued by the OIC (Organismo Italiano di Contabilità) (i.e., the National Standard Setter). The latter are given a subservient, integrative and interpretative role to the former (Fox et al., 2013)

6 Absence is defined as “the extent to which the rules regarding certain accounting issues covered by IAS are missing in the Italian accounting standards” (Marra et al., 2011, p. 210). Divergence is defined as “the extent to which the Italian standards and IAS/IFRS differ with respect to measurement and reporting rules that apply to the same accounting items” (Marra et al., 2011, p. 210).

7 Given these substantial differences between Italian GAAP and IFRS, many studies have examined the effect of the mandatory adoption of IFRS by Italian listed firms (e.g., Cordazzo, 2013; Fox et al., 2013; Moscariello et al., 2014) although not focusing on IAS 36.

8 The Banca d’Italia is the Italian Central Bank. The CONSOB is the Commissione Nazionale per le Società e la Borsa, the Italian securities and markets authority. The ISVAP is the Istituto per la Vigilanza sulle Assicurazioni Private, the Italian insurance private contracts authority.

9 The OIC is the Organismo Italiano di Contabilità, the National Standard Setter.

10 The OIV is the Organismo Italiano di Valutazione, the national valuation professional body.

11 We provide further details on the contents of these two guidelines, along with other non-Italian guidelines on the subject, in subsection 4.5 while reflecting on our findings.

12 As discussed in the Introduction and in subsection 2.2, Petersen and Plenborg (2010) surveyed preparers from Danish firms on how they implement goodwill impairment tests. However, our study differs in two ways. First, Petersen and Plenborg (2010) do not ask for preparers’ views on IAS 36. Instead, they collect technical information necessary in implementing the impairment tests (e.g., CGUs identified, discount rates applied, etc.). Then, they compare the responses obtained with the Standard and they identify complexities
in implementing IAS 36 and key critical areas. On the contrary, we directly ask preparers’ views on some critical matters, allowing them to scale their opinion from 1 to 5. Second, the Italian and Danish environments differ in many respects. For example, Italy is a country with more perceived corruption than Denmark (Transparency International, http://www.transparency.org/cpi2014/results). Additionally, Denmark is a country in which there is less divergence between IFRS and national GAAP (Ding et al., 2007). Finally, Denmark is a country with higher market development (World Bank, http://data.worldbank.org/indicator/CM.MKT.LCAP.GD.ZS), anti self-dealing (Djankov et al., 2006), and lower earnings management (Leuz, 2003).

13 A test can be said to have face validity if it appears it is going to measure what it is supposed to measure. Face validity is commonly assessed by a review of the survey items by untrained judges. Content validity refers to the extent to which a measure represents all facets of a given topic. Content validity is commonly assessed by the use of recognised subject matter experts who ensure that a survey contains everything it should and doesn’t include anything that it shouldn’t.

14 A copy of our instrument is available upon request. We acknowledge that the statements translated in English for presentation and discussion herein may suffer from some terminology non-equivalence across the two languages (c.f., Baskerville & Evans, 2011). Nevertheless, every effort is made to ensure that every word's/statement's meaning is as close as possible to the corresponding ones in Italian.

15 A test can be said to be reliable depending on how well or poorly it performs in a given population. Test-retest reliability is the most commonly used indicator of survey instrument reliability (Litwin, 1995). The retest reliability tests are based on Kendall’s Tau (i.e. rank correlation coefficient intended for use on small- and moderate-sized datasets). Both the retest data and reliability results are available upon request.

16 Each of the subsections below is entitled with the corresponding title of each category/theme in the questionnaire. The objective is the discussion of the findings to flow along with the structure of the questionnaire.

17 We perform a factor analysis, relying on Kaiser’s criterion (1960) of retaining all factors with eigenvalues greater than 1. We then improve the factors’ interpretation through varimax orthogonal rotation (see Field, 2009). Before interpreting the results of the factor analysis, we perform two preliminary tests to ensure that our results are not biased. Given that factor analysis relies on sample size, we note that the Kaiser-Meyer-Olkin test proves that our sample is adequate for performing a factor analysis on 12 items (those related to IAS 36) (KMO = 0.596 is acceptable according to Kaiser (1974)). Moreover, correlation among variables is also a crucial factor when performing factor analysis (i.e. low correlations lead to poor results). Bartlett’s test of sphericity ($\chi^2 = 173.83, p < 0.01$) indicates that the correlation between items is sufficiently large for factor analysis.

18 We did not specify the beginning of the financial crisis, which impacted industries at various points in time.
Table 1 – Descriptive statistics for sample firms and details about participants

**PANEL A – REPRESENTATION OF FIRMS ACROSS INDUSTRY GROUPS**

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>FTSE ITA n (%)</th>
<th>SAMPLE FIRMS n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Materials</td>
<td>5 (1.9%)</td>
<td>1 (2.1%)</td>
</tr>
<tr>
<td>Consumer Goods</td>
<td>49 (18.3%)</td>
<td>10 (20.8%)</td>
</tr>
<tr>
<td>Consumer Services</td>
<td>32 (11.9%)</td>
<td>6 (12.5%)</td>
</tr>
<tr>
<td>Financials</td>
<td>63 (23.5%)</td>
<td>9 (18.7%)</td>
</tr>
<tr>
<td>Health Care</td>
<td>8 (3.0%)</td>
<td>2 (4.2%)</td>
</tr>
<tr>
<td>Industrials</td>
<td>62 (23.1%)</td>
<td>8 (16.6%)</td>
</tr>
<tr>
<td>Oil &amp; Gas</td>
<td>7 (2.6%)</td>
<td>3 (6.3%)</td>
</tr>
<tr>
<td>Technology</td>
<td>20 (7.5%)</td>
<td>3 (6.3%)</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>4 (1.5%)</td>
<td>1 (2.1%)</td>
</tr>
<tr>
<td>Utilities</td>
<td>18 (6.7%)</td>
<td>5 (10.4%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>268 (100.0%)</strong></td>
<td><strong>48 (100.0%)</strong></td>
</tr>
</tbody>
</table>

**PANEL B – GOODNESS OF FIT**

<table>
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<tr>
<th>STATISTICS</th>
<th>COEFFICIENT</th>
<th>P-VALUE</th>
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<tr>
<td>Pearson’s chi-squared</td>
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<td>0.801</td>
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<td>Log likelihood ratio</td>
<td>4.625</td>
<td>0.866</td>
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**PANEL C – FIRM DESCRIPTIVE STATISTICS**

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<tr>
<th>VARIABLE</th>
<th>SUB SAMPLE</th>
<th>n</th>
<th>MEAN</th>
<th>SD</th>
<th>T-TEST</th>
<th>MEDIAN</th>
<th>MANN-WHITNEY TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>BV</td>
<td>part 5</td>
<td>48</td>
<td>731.78</td>
<td>1,166.73</td>
<td>1.091</td>
<td>215.03</td>
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<td></td>
<td>non-part e</td>
<td>216</td>
<td>1,827.26</td>
<td>6,925.88</td>
<td></td>
<td>120.90</td>
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<tr>
<td>MV</td>
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<td>821.20</td>
<td>1,965.47</td>
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<td>1,344.64</td>
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<td>NI</td>
<td>part 4</td>
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**PANEL D – PARTICIPANTS’ CHARACTERISTICS**

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<th>VARIABLE</th>
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<th>MEDIAN</th>
<th>ST DEV</th>
<th>MIN</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>40</td>
<td>42</td>
<td>43</td>
<td>8.612</td>
<td>30</td>
<td>61</td>
</tr>
<tr>
<td>Experience</td>
<td>41</td>
<td>11</td>
<td>11</td>
<td>6.922</td>
<td>1</td>
<td>25</td>
</tr>
</tbody>
</table>

a Industry groupings are identified according to the International Classification Benchmark (ICB) industries.
b All listed firms in the Italian Stock Exchange as of December 2011.
c Goodness of fit describes how well sample firms fit the population. This test computes goodness of fit tests for the distribution of a discrete (categorical or multinomial) variable.
d T-test (two sample Mann-Whitney test) is used to test the statistical difference between mean (median) fundamental characteristics of participant and non-participant firms.
e Part (non-part) represents the group of firms which participate (not participate) to the survey among all listed firms in the Italian Stock Exchange as of December 2011.

Data is extracted from DataStream. BV is book value of equity (WC03501); MV is market value of equity (WC08001); TOTASSET is total assets (WC02999); INTASSNET is net intangible assets (WC02649); SALES is sales WC(01001); NI is net income (WC01751); Age is self-declared participants’ age; Experience is the self-declared number of years the participant has been employed in that firm.

*, **, *** denote significance at the 10%, 5% and 1% level respectively.
Table 2 – General perceptions regarding IFRS requirements in general and IAS 36 in particular

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>IFRS MEAN</th>
<th>IFRS ST DEV</th>
<th>IFRS MEDIAN</th>
<th>IFRS N</th>
<th>IAS 36 MEAN</th>
<th>IAS 36 ST DEV</th>
<th>IAS 36 MEDIAN</th>
<th>IAS 36 N</th>
<th>COMPARISON MEAN</th>
<th>COMPARISON MEDIAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. They are generally appropriate for achieving their intended purpose</td>
<td>3.688***</td>
<td>0.657</td>
<td>4***</td>
<td>48</td>
<td>3.521***</td>
<td>0.875</td>
<td>4***</td>
<td>48</td>
<td>1.478*</td>
<td>1.520</td>
</tr>
<tr>
<td>2. They are appropriate for attaining a true and fair view</td>
<td>3.458***</td>
<td>0.683</td>
<td>3***</td>
<td>48</td>
<td>3.375***</td>
<td>0.789</td>
<td>3***</td>
<td>48</td>
<td>0.942</td>
<td>0.943</td>
</tr>
<tr>
<td>3. They are appropriate for conveying useful information to the financial markets</td>
<td>3.646***</td>
<td>0.758</td>
<td>4***</td>
<td>48</td>
<td>3.417***</td>
<td>0.942</td>
<td>3***</td>
<td>48</td>
<td>2.040**</td>
<td>1.853*</td>
</tr>
<tr>
<td>4. They are appropriate for assisting managerial decisions</td>
<td>3.167*</td>
<td>0.883</td>
<td>3</td>
<td>48</td>
<td>3.021</td>
<td>0.934</td>
<td>3</td>
<td>48</td>
<td>1.309*</td>
<td>1.140</td>
</tr>
<tr>
<td>5. They are appropriate for assisting decisions made by stakeholders</td>
<td>3.375***</td>
<td>0.761</td>
<td>3***</td>
<td>48</td>
<td>3.042</td>
<td>0.944</td>
<td>3</td>
<td>48</td>
<td>3.188***</td>
<td>3.009***</td>
</tr>
<tr>
<td>6. They assist in limiting creative accounting</td>
<td>3.000</td>
<td>1.092</td>
<td>3</td>
<td>48</td>
<td>2.458***</td>
<td>1.184</td>
<td>2***</td>
<td>48</td>
<td>3.642***</td>
<td>3.489***</td>
</tr>
<tr>
<td>7. They are complex</td>
<td>3.854***</td>
<td>0.945</td>
<td>4***</td>
<td>48</td>
<td>4.104***</td>
<td>0.805</td>
<td>4***</td>
<td>48</td>
<td>-2.205**</td>
<td>-2.253***</td>
</tr>
<tr>
<td>8. They require subjective interpretations from preparers</td>
<td>3.125</td>
<td>0.914</td>
<td>3</td>
<td>48</td>
<td>3.792***</td>
<td>0.898</td>
<td>4***</td>
<td>48</td>
<td>-5.092***</td>
<td>-4.340***</td>
</tr>
<tr>
<td>9. They lend themselves to be adaptable for managerial needs</td>
<td>3.167</td>
<td>0.953</td>
<td>3</td>
<td>48</td>
<td>3.813***</td>
<td>0.842</td>
<td>4***</td>
<td>48</td>
<td>-4.913***</td>
<td>-4.168***</td>
</tr>
<tr>
<td>10. They are detailed</td>
<td>3.708***</td>
<td>0.922</td>
<td>4***</td>
<td>48</td>
<td>3.813***</td>
<td>0.867</td>
<td>4***</td>
<td>48</td>
<td>-1.000</td>
<td>-0.780</td>
</tr>
<tr>
<td>11. The national taxation system influences their application</td>
<td>2.333***</td>
<td>1.059</td>
<td>2***</td>
<td>48</td>
<td>2.250***</td>
<td>1.082</td>
<td>2***</td>
<td>48</td>
<td>0.850</td>
<td>0.371</td>
</tr>
<tr>
<td>12. They are difficult to apply due to differences in local accounting standards</td>
<td>3.021</td>
<td>1.194</td>
<td>3</td>
<td>48</td>
<td>3.500***</td>
<td>1.220</td>
<td>4***</td>
<td>48</td>
<td>-2.802***</td>
<td>-2.871***</td>
</tr>
</tbody>
</table>

* T-test (two sample Mann-Whitney test) is used to test the statistical difference between IFRS mean (median) answer and IAS 36 mean (median) answer.
* Asterisks denote that mean (median) answer is significantly different from neutral mid-point of 3 under T-test (one sample Wilcoxon test).
* Number of responses received
* *, **, *** denote significance at the 10%, 5% and 1% level respectively.
Table 3 – Factor analysis of perceptions of IAS 36 requirements

<table>
<thead>
<tr>
<th>Item</th>
<th>Appropriateness</th>
<th>Subjectivity</th>
<th>Complexity</th>
<th>Taxation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. They are generally appropriate for achieving their intended purpose</td>
<td>0.709</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. They are appropriate for attaining a true and fair view</td>
<td>0.779</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. They are appropriate for conveying info to the financial markets</td>
<td>0.772</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. They are appropriate for making managerial decisions</td>
<td>0.739</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. They are appropriate for the decisions made by stakeholders</td>
<td>0.794</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. They appropriately limit creative accounting</td>
<td>-0.787</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. They are complex</td>
<td></td>
<td>0.849</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. They are subjective</td>
<td>0.761</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. They lend themselves to be adaptable for managerial needs</td>
<td>0.702</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. They are detailed</td>
<td></td>
<td></td>
<td>0.672</td>
<td>0.854</td>
</tr>
<tr>
<td>11. The national taxation system influences their application</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. They are difficult to apply due to differences in local accounting standards</td>
<td></td>
<td>0.570</td>
<td>0.535</td>
<td></td>
</tr>
</tbody>
</table>

Eigenvalues  
% of variance  
Cronbach’s alpha  
Bartlett test  
KMO test

<table>
<thead>
<tr>
<th>Eigenvalues</th>
<th>% of variance</th>
<th>Cronbach’s alpha</th>
<th>Bartlett test</th>
<th>KMO test</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.074</td>
<td>0.256</td>
<td>0.826</td>
<td>173.83***</td>
<td>0.596</td>
</tr>
<tr>
<td>1.880</td>
<td>0.157</td>
<td>0.547</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.712</td>
<td>0.143</td>
<td>0.636</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.345</td>
<td>0.112</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

n of responses received  

<table>
<thead>
<tr>
<th>n of responses received</th>
<th>Bartlett test</th>
<th>KMO test</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>173.83***</td>
<td>0.596</td>
</tr>
</tbody>
</table>

b Cronbach’s alpha tests factor reliability.
c Bartlett’s measure tests the null hypothesis that the original correlation matrix is an identity matrix (Field, 2009).
d Kaiser-Mayer-Olkin (KMO) test for sample adequacy. KMO statistic above 0.5 is acceptable (Field, 2009).
Table 4 – Informative value of the impairment testing process under IAS 36 and required disclosures

**QUESTION:** The informative value of the impairment test is produced by following the recoverable amount estimation process laid in the Standard (first column) and by disclosing the mandatory information in the notes to the accounts (second column). Please, express your agreement on the following statements regarding the above said aspects of the impairment testing process carried under IAS 36 using a scale from 1 (totally disagree) to 5 (totally agree).

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>RECOVERABLE AMOUNT ESTIMATION</th>
<th>MANDATORY DISCLOSURE</th>
<th>COMPARISON a</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEAN b ST DEV MEDIAN b N c</td>
<td>MEAN b ST DEV MEDIAN b N c</td>
<td>MEAN MEDIAN</td>
</tr>
<tr>
<td>1. It is considered to be sufficient for stakeholders’ decisions</td>
<td>NA</td>
<td>3.229* 1.016 3 48</td>
<td>NA NA</td>
</tr>
<tr>
<td>2. It is too detailed</td>
<td>NA</td>
<td>2.938 1.019 3 48</td>
<td>NA NA</td>
</tr>
<tr>
<td>3. It is redundant (some requested information is repeated)</td>
<td>NA</td>
<td>2.792* 1.091 3 48</td>
<td>NA NA</td>
</tr>
<tr>
<td>4. It should be expanded</td>
<td>NA</td>
<td>2.271*** 0.893 2*** 48</td>
<td>NA NA</td>
</tr>
<tr>
<td>5. It is influenced by the internal audit committee</td>
<td>2.542*** 1.288 2** 48</td>
<td>2.104*** 1.372 2*** 48</td>
<td>2.687*** 2.705***</td>
</tr>
<tr>
<td>6. It is influenced by the independent external auditing firm</td>
<td>2.729* 1.349 2 48</td>
<td>3.125 1.299 3 48</td>
<td>-3.156*** -2.803***</td>
</tr>
<tr>
<td>7. It is influenced by the vigilance organism (CONSOB)</td>
<td>2.563*** 1.219 2** 48</td>
<td>3.083 1.200 3 48</td>
<td>-3.431*** -3.177***</td>
</tr>
<tr>
<td>8. It is influenced by the consequences foreseen by the Law regarding missing or incorrect reporting</td>
<td>2.583*** 1.200 3** 48</td>
<td>2.750* 1.101 3 48</td>
<td>-1.741** -1.880*</td>
</tr>
<tr>
<td>9. It is influenced by the presence of national (Italian) guidelines</td>
<td>2.792* 1.051 3 48</td>
<td>2.792* 1.071 3 48</td>
<td>0.000 0.000</td>
</tr>
<tr>
<td>10. It is influenced by the presence of international (non-Italian) guidelines</td>
<td>3.396*** 0.984 4*** 48</td>
<td>3.417*** 0.964 4*** 48</td>
<td>-0.240 -0.045</td>
</tr>
<tr>
<td>11. It is influenced by the management for performance reasons</td>
<td>2.667** 1.155 3* 48</td>
<td>2.292*** 1.071 2*** 48</td>
<td>2.591*** 2.295**</td>
</tr>
<tr>
<td>12. It is influenced by the management due to macroeconomic reasons</td>
<td>2.563*** 0.965 3*** 48</td>
<td>2.417*** 1.069 2*** 48</td>
<td>1.096 0.773</td>
</tr>
<tr>
<td>13. It is influenced by the management for needs tied to the stock market</td>
<td>2.375*** 1.160 2*** 48</td>
<td>2.125*** 1.064 2*** 48</td>
<td>2.133** 2.088**</td>
</tr>
<tr>
<td>14. It should be revised in light of the recent financial crisis</td>
<td>3.458*** 1.237 4** 48</td>
<td>3.396** 1.162 3** 48</td>
<td>0.621 0.559</td>
</tr>
</tbody>
</table>

a - t-test (two sample Mann-Whitney test) is used to test the statistical difference between Evaluation process mean (median) answer and Mandatory disclosure mean (median) answer.
b - Stars denote that mean (median) answer is significantly different from neutral mid-point of 3 under T-test (one sample Wilcoxon test).
c - Number of responses received

* 10%, ** 5%, *** 1% level respectively.
Table 5 – Potential impact of the impairment testing process under IAS 36 and required disclosures on market variables

**QUESTION:** Please express an opinion on the relation between the informative value of the recoverable amount estimation process and related mandatory disclosure and market variables listed below. The concept of “negative relation”, for example, means that when one variable rises the other variable tends to diminish. Given this, express your opinion on the relation between a higher reliability of the valuation process or a higher level of mandatory disclosure requested by the IAS 36 and market variables listed below.

<table>
<thead>
<tr>
<th>VARIABLE (n=48)</th>
<th>HIGHER RELIABILITY OF RECOVERABLE AMOUNT ESTIMATION n (%)</th>
<th>HIGHER LEVEL OF MANDATORY DISCLOSURE n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NO RELATION</td>
<td>DON'T KNOW</td>
</tr>
<tr>
<td>Cost of equity</td>
<td>19 (39.5%)</td>
<td>14 (29.2%)</td>
</tr>
<tr>
<td>Cost of public debt (e.g. bonds)</td>
<td>15 (31.2%)</td>
<td>18 (37.5%)</td>
</tr>
<tr>
<td>Cost of private debt (e.g. banking loans)</td>
<td>21 (43.7%)</td>
<td>10 (20.9%)</td>
</tr>
<tr>
<td>Stock returns</td>
<td>15 (31.2%)</td>
<td>13 (27.1%)</td>
</tr>
<tr>
<td>Stock volatility</td>
<td>19 (39.5%)</td>
<td>16 (33.3%)</td>
</tr>
</tbody>
</table>
Table 6 – Problematic areas in the impairment testing process as required by IAS 36

**QUESTION:** Please rate the level of difficulty encountered in the following aspects of the estimation of the recoverable amount following the requirements in IAS 36 using a scale from 1 (low difficulty/easy) to 5 (very difficult/problematic). The first column refers to the pre-financial crisis period while the second refers to the crisis period.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>PRE-CRISIS</th>
<th>CRISIS</th>
<th>COMPARISON</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEAN **</td>
<td>ST DEV</td>
<td>MEDIAN **</td>
</tr>
<tr>
<td>1. Identifying an asset that should be impaired</td>
<td>2.583***</td>
<td>0.895</td>
<td>3***</td>
</tr>
<tr>
<td>2. Estimating the fair value</td>
<td>3.146</td>
<td>0.799</td>
<td>3 * 48</td>
</tr>
<tr>
<td>3. Estimating the value in use</td>
<td>2.979</td>
<td>0.699</td>
<td>3 * 48</td>
</tr>
<tr>
<td>4. Determining a projection basis</td>
<td>3.021</td>
<td>0.699</td>
<td>3 * 48</td>
</tr>
<tr>
<td>5. Determining a discount rate</td>
<td>2.979</td>
<td>0.729</td>
<td>3 * 48</td>
</tr>
<tr>
<td>6. Determining a growth rate</td>
<td>2.979</td>
<td>0.565</td>
<td>3 * 48</td>
</tr>
<tr>
<td>7. Identifying an active market</td>
<td>3.042</td>
<td>0.824</td>
<td>3 * 48</td>
</tr>
<tr>
<td>8. Mandatory information to be conveyed in the notes to the accounts</td>
<td>2.938</td>
<td>0.836</td>
<td>3 * 48</td>
</tr>
<tr>
<td>9. Human resources used</td>
<td>2.833*</td>
<td>0.808</td>
<td>3 * 48</td>
</tr>
<tr>
<td>10. Financial resources used</td>
<td>2.729**</td>
<td>0.792</td>
<td>3**</td>
</tr>
</tbody>
</table>

* t-test (two sample Mann-Whitney test) is used to test the statistical difference between Pre-crisis mean (median) answer and Crisis mean (median) answer.
+ Stars denote that mean (median) answer is significantly different from neutral mid-point of 3 under T-test (one sample Wilcoxon test).
- Number of responses received
* *, **, *** denote significance at the 10%, 5% and 1% level respectively.
Table 7 – Usefulness of guidelines provided by Italian authorities on IAS 36 reporting

**QUESTION:** In Italy two guidelines have been emanated for measuring recoverable amount under IAS 36. The first was drawn up by the Organismo Italiano di Contabilità (OIC) and is titled “Application 2 Impairment and Goodwill”. The second was recently proposed in draft form by the Organismo Italiano di Valutazione (OIV) and is titled “Impairment Test in the Context of Real and Financial Crisis: Guidelines”. Please, rate the level of usefulness that the two documents have in the following aspects regarding the estimation of the recoverable amount in the IAS 36 using a scale from 1 (not useful at all) to 5 (very useful).

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>OIC</th>
<th>OIV</th>
<th>COMPARISON a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the firm aware of the existence of this guideline?</td>
<td>YES n (%)</td>
<td>NO n (%)</td>
<td>YES n (%)</td>
</tr>
<tr>
<td></td>
<td>48 (100.0%)</td>
<td>0 (0.0%)</td>
<td>41 (85.4%)</td>
</tr>
<tr>
<td>Does the firm use this guideline?</td>
<td>44 (91.7%)</td>
<td>4 (8.3%)</td>
<td>33 (68.7%)</td>
</tr>
</tbody>
</table>
| 1. Identifying an asset that should be impaired | **3.167** 0.883 3* 48 | 3.077 0.739 3 39 | 0.215 0.498  
| 2. Estimating the fair value | 3.167 0.953 3 48 | 3.077 0.839 3 39 | 0.443 0.961  
| 3. Estimating the value in use | 3.188* 0.891 3 48 | 3.128 0.801 3 39 | 0.274 0.367  
| 4. Determining a projection basis | 2.917 0.895 3 48 | 2.974 0.903 3 39 | -0.723 -0.876  
| 5. Determining a discount rate | 3.167* 0.859 3 48 | 3.231** 0.742 3** 39 | 0.000 -0.209  
| 6. Determining a growth rate | 3.000 0.799 3 48 | 3.026 0.843 3 39 | 0.000 0.607  
| 7. Identifying an active market | 2.792** 0.874 3 48 | 2.769** 0.842 3 39 | 0.495 0.092  
| 8. Mandatory information to be conveyed in the notes to the accounts | 3.208* 0.922 3* 48 | 3.026 0.873 3 39 | 1.062 0.427  
| 9. Identifies at-hand resolutions of verifiable issues within the context of the crisis | 2.792* 0.944 3 48 | 2.872 0.864 3 39 | -0.206 -0.451  

*, **, *** denote significance at the 10%, 5% and 1% level respectively.

a t-test (two sample Mann-Whitney test) is used to test the statistical difference between OIC mean (median) answer and OIV mean (median) answer.

b Stars denote that mean (median) answer is significantly different from neutral mid-point of 3 under T-test (one sample Wilcoxon test).

c Number of responses received