

# Repositório ISCTE-IUL

#### Deposited in Repositório ISCTE-IUL:

2019-02-23

#### Deposited version:

Post-print

#### Peer-review status of attached file:

Peer-reviewed

#### Citation for published item:

Lopes, A. I. & Lopes, M. (2019). Effects of adopting IFRS 10 and IFRS 11 on consolidated financial statements: an exploratory research. Meditari Accountancy Research. 27 (1), 91-124

#### Further information on publisher's website:

10.1108/MEDAR-12-2017-0253

#### Publisher's copyright statement:

This is the peer reviewed version of the following article: Lopes, A. I. & Lopes, M. (2019). Effects of adopting IFRS 10 and IFRS 11 on consolidated financial statements: an exploratory research. Meditari Accountancy Research. 27 (1), 91-124, which has been published in final form at https://dx.doi.org/10.1108/MEDAR-12-2017-0253. This article may be used for non-commercial purposes in accordance with the Publisher's Terms and Conditions for self-archiving.

Use policy

Creative Commons CC BY 4.0

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a link is made to the metadata record in the Repository
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

# Effects of adopting IFRS 10 and IFRS 11 on consolidated financial statements: an exploratory research

#### **Abstract**

Purpose: This paper investigates how the adoption of IFRS 10 and IFRS 11 affected consolidated financial statements. Specifically, the paper explores whether entities adopted mandatorily or voluntarily both IFRS, whether expressly declared effects, whether considered those effects as material and whether those effects had impacts on selected items of financial statements and on selected financial ratios.

Design/methodology/approach: The research is an exploratory study using public entities from France, Germany and the United Kingdom. The majority of the data are manually collected from financial statements.

Findings: The results suggest that the adoption of the new IFRS 10 affected the composition of a large number of entity groups but that their financial information and economic-financial indicators do not present material changes. There is also evidence of a large and material impact on the changes in the classification and accounting for interests in arrangements under joint control through the new IFRS 11. The evidence thus suggests unequal effects of the adoption of IFRS 10 and IFRS 11 on the proportion of entities declaring materiality of effects, on the quantitative effects on selected items of financial statements, and on financial ratios. A comparison between the pre-adoption and post-adoption periods reveals that the majority of the effects are driven by the adoption of IFRS 11.

Originality/value: This exploratory paper is the first presenting the effectiveness of adopting the most important standards under the "consolidation package" and opens an avenue for future research by academics, for future post-implementation reviews by IASB, and for analysis of peer reviews between accounting practitioners.

**Key words:** IFRS 10 adoption; IFRS 11 adoption; consolidation package adoption; effects of adopting IFRS; restated information.

JEL Classification: M41, M48.

# 1. Introduction

Several reasons are provided by the International Accounting Standards Board (IASB) to issue new, and to amend existing, standards about consolidations and reporting of interests in other entities. Removing inconsistencies and reducing diversity in accounting practices are the two reasons most offered. The consolidation package was published in 2011, with the European Commission establishing 2014 as the year of the first mandatory adoption, but permitting early adoption. The new International Financial Reporting Standard (IFRS) 10 Consolidated Financial Statements and IFRS 11 Joint Arrangements came to light. At least theoretically, IFRS 10 would change the way the company defines their scope of consolidation based on a new concept of control. Besides that, IFRS 11 would modify the classification of joint control interests and eliminate one of the accounting options to record the arrangement.

Academics are engaged with empirical research based on the application of IFRS. The consideration of that research in the process of creating or revising standards is robustly defended (e.g. Schipper, 1994; Barth, 2000, 2006, 2007, 2008; Fülbier *et al.*, 2009; Larson *et al.*, 2011; Abela and Mora, 2012; Ewert and Wagenhofer, 2012; Trombetta *et al.*, 2012). Earlier studies suggest that the process of revising standards can benefit entities, investors, and other stakeholders (e.g. Mulford and Quinn, 2008; So and Smith, 2009a, 2009b; Fiechter, 2011; Hsu *et al.*, 2015; Hsu and Pourjalali, 2015). However, other studies find no effects of some specific changes (e.g. Lopes *et al.*, 2013) or no positive benefits (e.g. Mitra and Hossain, 2009; Houmes and Boylan, 2010; Amlie, 2012; Paananen *et al.*, 2012).

The literature surrounding the effects of the adoption of IFRS 10 and IFRS 11 is still scarce. The effects of the adoption of these standards have already been preliminarily assessed in France, Germany and the United Kingdom, but: i) with few entities per country and without disclosing the conclusions for each country (e.g. EFRAG,2012a, 2012b; ESMA, 2016); ii) for only one industry (e.g. Priscilla and Ariyanto,2014; Demerens *et al.*, 2014; Leitner-Hanetseder and Stockinger, 2014); or iii) based on the annual reports for 2013 (e.g. Mazars, 2014), and the results are still foreseeable (in whole or in part). Moreover, the effects of adopting IFRS 10 in these countries have been evaluated only for some items in the consolidated accounts and not at all in financial ratios (e.g. EFRAG, 2012b; Mazars, 2014; Priscilla and Ariyanto, 2014). On the effects of adopting IFRS 11 in these countries, research is limited to the preadoption period, and focused only on the elimination of the accounting options in the reporting of interests in target agreements of joint control (e.g.Demerens *et al.*,2014; Leitner-Hanetseder and Stockinger, 2014). Thus, as far as is known, there is still no robust post-adoption analysis

(at the level of the global sample, by country and by industry) of the effects of adopting these standards in these three countries.

In addition, there is no consensus on the effects of adopting the two standards. In fact, the few studies on the effects of IFRS 10 are divided between evidence of effects in a few groups and immaterial (e.g. IASB 2011g; EFRAG 2012a,2012b; Mazars 2014; Priscilla and Ariyanto 2014; Vašek and Gluzová, 2014; Gluzová, 2015, 2017) and of material effects and in a larger number of groups (e.g. Büdy-Rózsa, 2012; ESMA, 2014, 2016). On IFRS 11, some authors claim effects on a few jointly controlled target agreements (e.g. IASB, 2011h; BDO, 2013a), but others claim effects in more cases and possibly materials (e.g Büdy-Rózsa 2012; Demerens et al., 2014; ESMA, 2014, 2016; Leitner-Hanetseder and Stockinger, 2014; Mazars, 2014).

The main objective of this research is to contribute to the debate surrounding the effects of adopting new standards exploring how the adoption of IFRS 10 and IFRS 11 affected the consolidated financial statements. More precisely, this papers intends: i) to discover whether the new concept of control introduced by IFRS 10 has significantly affected the scope of consolidation, ii) to ascertain whether the classification of, and the accounting for, joint controlled arrangements have significantly changed with the adoption of IFRS 11, iii) to determine if the effects of adopting IFRS 10 and IFRS 11 have significantly affected the amounts of items presented in consolidated financial statements and, then, financial ratios.

Our sample includes consolidated entities from three European countries: France, Germany, and the United Kingdom. These three countries were included in earlier research but mainly with expected (and not observed) effects and with a small number of entities. Our research questions have an exploratory nature. Our main results suggest that the adoption of the new IFRS 10 consolidation model affected the composition of a large number of entity groups but made no statistically material changes in their financial information and economic-financial indicators. Furthermore, the study also identifies a considerable number of cases with changes in the classification and accounting for interests in arrangements under joint control due to the adoption of IFRS 11 and the effects tend to be statistically material, both in the selected items of consolidated financial statements and in the consequent entities' financial ratios. Altogether, the evidence suggests unequal effects of the adoption of IFRS 10 and IFRS 11 concerning the proportion of entities declaring materiality of those effects as well as the quantitative effects on selected items of financial statements and on financial ratios. Diversity also exists among countries and industries, and the comparison between the pre-adoption and the post-adoption period reveals that the majority of the effects result from IFRS 11 adoption.

This study contributes to the scarce literature on the effects of adopting IFRS 10 and IFRS 11 in several ways. First, as far as we know, it is the first large exploratory study (in the detail of the analysis on the effects of the adoption of the standards and in the sample size), following the standards adoption. Second, it is the first analysis of the real effects in France, Germany, and the United Kingdom through a robust sample covering all Industry Classification Benchmark (ICB) industries and analysing all possible years of adoption of the standard (which was considered a limitation of past studies). Third, the findings show evidence of the effects of the adoption of IFRS 10 and IFRS 11 in a considerable number of cases, but are immaterial in the former and material in the latter, with differences by country and by industry, thereby opening an avenue for future research around the effects of adopting these standards.

The structure of the paper is as follows. Section 2 presents the literature review and the research questions. In Section 3 the research design is detailed. Section 4 offers the results and the discussion. Directions for future research are highlighted in Section 5. Section 6 concludes.

# 2. Literature review and research questions

# 2.1. Background of the new "Consolidation Package"

In May 2011 the IASB published a new and revised set of standards that is still currently known as "package of five" or "consolidation package" (e.g. BDO, 2013a, 2013b; Mazars, 2014; Priscilla and Ariyanto, 2014). The goal was to address the accounting for consolidation, involvements in joint arrangements, and disclosure of involvements with other entities. The "package of five" includes the following: i) IFRS 10, Consolidated Financial Statements (IASB, 2011a), ii) IFRS 11, Joint Arrangements (IASB, 2011b), iii) IFRS 12, Disclosure of Interests in Other Entities (IASB, 2011c), iv) IAS 27, Separate Financial Statements (IASB, 2011d) and v) IAS 28, Investments in Associates and Joint Ventures (IASB, 2011e). The IASB has several publications explaining the reasons for issuing new standards (IFRS 10, 11 and 12), to review standards (IAS 27 and 28), or to supersede standards (IAS 31). A detailed analysis of all the process can be seen in IASB (2011f, 2011g).

All five standards have an effective date for annual periods beginning on or after 1 January 2013 in the original version of each standard. However, the effective date in the

<sup>&</sup>lt;sup>1</sup> The objective of this paper is not to summarize or to present critical perspectives about the new consolidation package, but an understanding of the process between 2003 (when the project was added to the IASB's agenda) until 2011 (when the project was completed), which can be important to regulators, investors, and academia.

European Union is after 1 January 2014, with earlier application permitted if all the standards are early applied (EFRAG, 2016).

The theoretical effects of the five can be summarized as follows. The IFRS 10 replaces the "consolidation guidance" that was included in the previous IAS 27 (Consolidated and Separate Financial Statements) (IASB, 2008) and in the previous SIC-12 (Consolidation – Special Purpose Entities) (SIC, 1998). It introduces a single consolidation model for all entities based on control, regardless of the nature of the investee (IASB, 2011a). In practice, the direct effects of adopting the IFRS 10 are analysed through changes in the scope of consolidation and resulting impacts in items of consolidated financial statements.

The IFRS 11 replaces the IAS 31, Interests in Joint Ventures (IASB, 2003a) (superseded). Methods and classifications of joint arrangements are changed, eliminating jointly controlled assets and highlighting the distinction between *joint operations* and *joint ventures* (IASB, 2011b). In practice, the direct effects of adopting the IFRS 11 are analysed through changes in the classification and changes in accounting methods, which also impact the items of consolidated financial statements.

The IFRS 12 brings enriched disclosures about both consolidated and unconsolidated entities in which an entity has an involvement. It does not change previous recognition or measurement criteria, but requires higher level of disclosure. Both IAS 27 and IAS 28 still exist but in a revised form to be in accordance with the new IFRS 10, IFRS 11, and IFRS 12. Changes in recognition and measurement of accounting elements in the consolidated financial statement after adopting the new "consolidation package" arise basically from the adoption of IFRS 10 and of IFRS 11.

## 2.2. Effects of adopting IFRS 10 and IFRS 11 and research questions

Generally, the IASB will assess the likely effects throughout the development of a new or amended Standard and any revision process should start two years after its effective date (IFRS Foundation, 2016), which is known as Post-implementation Review (PIR). The PIR is the basis for assessing if a standard is achieving its objectives or if it should be revised (Ewert and Wagenhofer, 2012).

The debate around the inclusion of academic research on the PIR process is ongoing, and its advantages (e.g. Barth, 2006, 2007, 2008; Larson *et al.*, 2011; Ewert and Wagenhofer, 2012; Trombetta *et al.*, 2012) or weaknesses (e.g. Leisenring and Johnson, 1994; Ewert and Wagenhofer, 2012; Trombetta *et al.*, 2012) have been discussed over time. In general, there

are a great many researchers defending the benefits for standards boards if they consider the outputs of academic research in the process of amending or creating new standards (e.g. Schipper, 1994; Barth, 2000, 2006, 2007, 2008; Fülbier *et al.*, 2009; Larson *et al.*, 2011; Abela and Mora, 2012; Ewert and Wagenhofer, 2012; Trombetta *et al.*, 2012). So, researchers have long been interested in the effects of adopting new accounting standards in several topics from different geographies and with different effects (e.g. Mulford and Quinn, 2008; Mitra and Hossain, 2009; So and Smith 2009a,2009b; Houmes and Boylan, 2010; Amlie, 2012; Fiechter, 2011; Lopes *et al.*, 2013; Paananen *et al.*, 2012; Hsu *et al.*, 2015; Hsu and Pourjalali, 2015).

The analysis of adopting IFRS 10 and IFRS 11 is an opportunity for research. A prevision for the likely effects of the adoption of the new IFRS 10 and IFRS 11 were anticipated by IASB (2011h, 2011i), based on estimates (*ex ante*). Effective (*ex post*) effects (Demerens *et al.*, 2014) are also important, usually supported in academic research. Attention to these topics was called by IASB with the public announcement of the PIR, in which the academic research could be important to take into consideration (IFRS Foundation, 2016), inviting the academia to contribute (IASB, 2011h, 2011i). However, scarce literature is found. Gluzová (2015, 2016, 2017) attributes this scarcity to the recent adoption of the consolidation package (becoming mandatory only in 2014 with financial statements published in 2015). In fact, the number of studies that covered effective (*ex post*) effects of the adoption of both IFRS 10 and IFRS 11 is limited and do not provide a complete picture.

The main objective of this research is to identify genuine (*ex post*) effects on the financial statements adopting IFRS 10 and IFRS 11. This objective can be divided into more detailed purposes as follows: i) to discover whether the new concept of control introduced by IFRS 10 has significantly affected the scope of consolidation, ii) to ascertain whether the classification of, and the accounting for, joint controlled arrangements have significantly changed with the adoption of IFRS 11, and iii) to determine if the effects of adopting IFRS 10 and IFRS 11 have significantly affected the amounts of items presented in consolidated financial statements and, consequently, financial ratios.

The focus of this study is limited to three countries: France, Germany, and the United Kingdom. These three countries were analysed in earlier research, but with an extremely small number of entities (e.g. EFRAG 2012a,2012b; ESMA, 2016), focused only on a given industry (e.g. Priscilla and Ariyanto, 2014), developed in pre-adoption periods (e.g. Demerens *et al.*, 2014; Leitner-Hanetseder and Stockinger, 2014), or used financial statements from 2013 and, accordingly, some effects were based on estimates (e.g. Mazars, 2014). Consequently, we

believe there is still a gap to fill regarding the real effects of IFRS 10 and IFRS 11 that could be of interest to standards boards (e.g. due to the PIR), investors (e.g. to understand changes on the scope of consolidation based on a change in standards and not in investments), and to academia (e.g. due to the complexity and understanding of both standards in practice).

Previous research documented that the majority of entities adopted these standards only when they became mandatory (e.g. Mazars, 2014; Vašek and Gluzová, 2014; Gluzová, 2015, 2017). Vašek and Gluzová (2014) clearly state that the real effects of adopting the package of five can be observed only after 2015. So, our first research question is the following:

*RQ*<sub>1</sub>: Have most entities applied the consolidation package voluntarily (before 2014) or mandatorily (in 2014)?

*Ex post* effects of adopting the package of consolidation will then be explored. Past reports and research are mainly about *ex ante* effects (e.g. IASB, 2011h, 2011i; Büdy-Rózsa, 2012; EFRAG, 2012a, 2012b; BDO, 2013a; Demerens *et al.*, 2014; ESMA, 2014; Leitner-Hanetseder and Stockinger, 2014) and only very few have covered *ex post* effects (e.g. Priscilla and Ariyanto, 2014; ESMA, 2016; Gluzová, 2015, 2017).

Concerning IFRS 10, previous studies on adopting the standard can be split into two groups, namely, those defending limited and immaterial effects of the adoption (e.g. IASB, 2011h; EFRAG, 2012a, 2012b; Mazars, 2014; Priscilla and Ariyanto, 2014; Vašek and Gluzová, 2014; Gluzová, 2015, 2017) and those defending material effects (e.g. Büdy-Rózsa, 2012; ESMA, 2014, 2016). The IASB (2011h) foresaw that the majority of the entities would have no impacts, notwithstanding the possible new inclusion or exclusion of subsidiaries previously included in the pre-adoption period, especially in complex groups. Vašek and Gluzová (2014) revealed that 10 entities (out of 13) listed on the Prague Stock Exchange (Czeck Republic) did not register or foresee any effect, as IASB (2011h) also predicted. Therefore, our second research question, based on *ex post* effects, is to identify whether companies expressed the existence of effects of the adoption, namely:

*RQ*<sub>2</sub>: *Did the entities self-declare effects of adopting IFRS 10?* 

Not just the existence but also the type of effects is of interest. EFRAG (2012a) invited 27 companies from the European Union and Turkey to apply the new IFRS 10 in a sample of their investees in order to identify estimated benefits and challenges, and the majority did not foresee a material change in the items of financial statements. The EFRAG (2012b) also

performed a study focusing on expectations of adopting IFRS 10 but in special purpose entities and, in this case, 14 European entities confirmed the expectations of significant effects.

Minor effects were also highlighted by Priscilla and Ariyanto (2014). They sought to assess the real effects of adopting IFRS 10 (and not expectations) but their sample includes only 7 financial services entities listed in three countries (Australia, Austria, and the United Kingdom) from 2012 to 2014. All the entities had effects in the scope of consolidation, but the increase in the amount of total assets, total liabilities, shareholders' equity, and net income was less than 1% and not significant. Limited and not significant effects were also documented by Gluzová, who analysed the scope of consolidation and total assets of 40 entities listed in the Czech Republic and Poland (Gluzová, 2015) and 19 in the Czech Republic (Gluzová, 2017). Results were that only four (in 2015) and two (in 2017) groups presented a change in the number of consolidated subsidiaries, and minor differences in total consolidated assets.

Similar findings are observed by Mazars (2014), who analysed a sample of 54 entities of CAC40 and Euro Stoxx50. Concerning IFRS 10, the results highlighted just one entity with changes on their list of subsidiaries and more than 75% of the entities with not significant effects (real or expected) on shareholder's equity and total assets (changes always lower than 1%). Financial services entities were not included in this study, which may explain the results. The possibility that the adoption of IFRS 10 has had different effects, depending on the industries, has been assumed. In fact, some authors suggest that banks, insurers, and other financial institutions may have been more affected than non-financial entities (e.g. European Commission, 2012; EFRAG, 2012a; Mazars, 2014; Priscilla and Ariyanto, 2014; Vašek and Gluzová, 2014; Gluzová, 2015, 2017).

As far as we know, the *European Securities and Markets Authority* (ESMA) (2014) is one of the small number of organizations predicting significant changes in accounting policies affecting the scope of consolidation of parent companies. They concluded that the consolidation method used by about one third of 103 listed entities from 26 European Union countries changed in 2014 due to the adoption of IFRS 10 (ESMA, 2016). Büdy-Rózsa (2012) also estimated (in an illustrative example) that the new standards could significantly affect the qualification of an investment as a subsidiary, joint arrangement or an associate, the scope of consolidation of parent companies and the liquidity, profitability and solvency of groups.

Consequently, we can split the effects of adopting IFRS into two direct categories: on the scope of consolidation and on the amounts of elements presented in consolidated financial statements, and we added two research questions: RQ3: Has the scope of consolidation of groups changed with the adoption of IFRS 10? RQ4: Did the adoption of IFRS 10 have material effects on the amounts of elements presented in consolidated financial statements and in financial ratios?

A similar approach is now applied to IFRS 11. Previous studies on adopting the standard can also be split into two groups, namely, those claiming effects on few arrangements (e.g. IASB, 2011i; BDO, 2013a) and those suggesting material effects on the adoption of IFRS 11 (e.g. Büdy-Rózsa, 2012; EFRAG, 2012a; Demerens *et al.*, 2014; ESMA, 2014, 2016; Leitner-Hanetseder and Stockinger, 2014; Mazars, 2014). Accordingly:

RQ5: Did the entities declare effects of adopting IFRS 11?

In analysing the expected effects of adopting IFRS 11, the IASB (2011i) predicted that many joint arrangements would not be affected, because: i) most were jointly controlled assets or operations in IAS 31 (2003) and would become joint operations under IFRS 11 (which would not affect their accounting); ii) most jointly controlled entities in IAS 31 (2003) would become joint ventures under IFRS 11 and about half would already be accounted for by the equity method (with no accounting effects). However, the IASB (2011i) assumed that some (but few) jointly controlled entities under IAS 31 (2003) could become joint operations under IFRS 11. The IASB forecasts are in part supported by KPMG (2011), EY (2011) and BDO (2013a), all defending that effects would not significantly change the accounting of interests in joint arrangements of many entities. However, contrary to the idea of minor effects of IFRS 11, ESMA (2014) predicted significant changes of accounting policies, which could affect the accounting of interests in joint arrangements.

In the process of endorsing the "consolidation package", EFRAG (2012a) also inquired into the benefits and challenges of the requirements of IFRS 11 amongst 26 European Union and Turkey entities, which applied them on a trial basis, and concluded about the existence of estimated effects more pronounced than other organizations and studies. Also, Mazars (2014) assessed more effects of the adoption of IFRS 11 than of the adoption of IFRS 10, surpassing the IASB (2011i) forecast on both. Mazars (2014) appoints the transition from proportional consolidation to equity method, and the transition from equity method to the reporting of assets, liabilities, revenues, and expenses (by the reclassification of jointly controlled entities under IAS 31 (2003) into joint operations under IFRS 11), as the main effects.

The Leitner-Hanetseder and Stockinger (2014) study included the materiality of the effects of the adoption of IFRS 11 on consolidated financial statements' items and financial ratios using the DuPont model. They focused on the transition from proportional consolidation to the equity method<sup>2</sup> in entities with securities listed in Austria, France, Germany, and the United Kingdom in the year 2010, and higher (estimated) effects of the adoption of IFRS 11 were foreseen. The comparison between the amounts reported by proportional consolidation and its estimates by the equity method also led the authors to predict the material effects of the change in certain consolidated financial statements' items and financial ratios. In a similar study (between 2008-2009, for listed entities of France, Germany, Spain, and the United Kingdom), Demerens *et al.* (2014) also foresaw significant and larger effects than those anticipated by the IASB (2011i), in several accounting items and in DuPont's financial ratios.

Accordingly, we can again split the effects of adopting IFRS 11 into two direct categories: on the classification of and accounting for joint controlled arrangements and on the amounts of items presented in consolidated financial statements, and we added two research questions:

 $RQ_6$ : Has the classification of and accounting for joint controlled arrangements changed with the adoption of IFRS 11?

RQ7: Did the adoption of IFRS 11 have material effects on the amounts of elements presented in consolidated financial statements and in financial ratios?

# 3. Exploratory research

# 3.1. Methodologic approach

Earlier research on the effects of the adoption of IFRS 10 and IFRS 11 is still limited. We will thus use an explorative methodology (Ryan *et al.*, 2002; Sekaran, 2003; Smith, 2014) in order to examine entities' real effects of adopting IFRS 10 and IFRS 11 on the scope of consolidation, classification of, and accounting methods for reporting joint arrangements, and material changes on items of financial statements and on selected financial ratios. The research questions are presented, but they should be understood as an initial step for future research.

Descriptive and inferential statistics are used. First, univariate descriptive analysis is used to characterize the sample and the type of adoption of the "consolidation package", to

<sup>&</sup>lt;sup>2</sup> Literature on the reporting of interests in arrangements classified as joint ventures includes, e.g., Reklau (1977), Dieter and Wyatt (1978), Davis and Largay (1999), Milburn and Chant (1999), Bauman (2003, 2007), Graham *et al.* (2003), Kothavala (2003), Stoltzfus and Epps (2005) and Richardson *et al.* (2012).

observe the number of entities that self-declared effects from moving to IFRS 10, and/or that self-declared effects from adopting IFRS 11. Second, inferential statistics are used to examine the association between some variables and the industry and country [independent test of Chisquared ( $\chi^2$ ) and Cramer's V]. We use non-parametric tests, as well as tests to differences of averages or medians for the same group of entities before and after the adoption<sup>3</sup>. In summary, RQ<sub>1</sub>, RQ<sub>2</sub>, RQ<sub>3</sub>, RQ<sub>5</sub>, and RQ<sub>6</sub> required the use of the t-test for one sample,  $\chi^2$  and *Cramer's V*, while Wilcoxon test and t-test for paired samples were used in RQ<sub>4</sub> and RQ<sub>7</sub>. The small number of studies and the scarce theory on the effects of IFRS 10 and IFRS 11 adoption gave us the opportunity to identify a pattern based on our sample and create space for future research to develop deductive hypotheses, as in an exploratory study.

## 3.2. Sample characteristics and data collection

We used a sample of European firms from France, Germany, and the United Kingdom. We limited the sample to only three countries due to the data-collection cost (e.g. Wieczynska, 2016). We chose these countries since they i) are European Union countries and consolidated financial statements are mandatorily prepared under IFRS, ii) have developed and large stock exchanges (ESMA, 2016), iii) are in different legal regimes and levels of regulatory regime strength (e.g. La Porta *et al.*, 1998; Nobes, 2008) and iv) have been included in earlier research on group entities and consolidation topics (e.g. Lourenço *et al.*, 2012; Lopes *et al.*, 2013).

The initial sample is retrieved from Datastream Worldscope® based on the indexes with the largest entities listed in Euronext Paris (France), in Frankfurt (Germany), and in London (United Kingdom) stock exchanges, namely, SBF 120, HDAX, and FTSE 100. The weight of entities from each country in the total sample is similar (France 120; Germany 110; U.K. 101).

We downloaded the consolidated financial statements prepared by the entities between 2011-2015. Then, we selected those prepared at the end of the fiscal year of the first effective adoption of IFRS 10 and IFRS 11 and matched them with the immediately preceding year (comparative). We hand-collected the data needed.

A content analysis was then made to Notes in order to assess: i) the confirmation that IFRS were used to prepare consolidated financial statements; ii) the date of adoption of the "consolidation package"; (iii) whether they had interests in joint ventures in the last year of use of IAS 31 (2003) and/or interests in joint arrangements in the year of initial application of

<sup>&</sup>lt;sup>3</sup> The effects of the adoption are then replicated but use t-test for paired samples after removing outliers and assuring the normality of the distribution. These tests were performed and confirmed all our results.

IFRS 11; iv) information disclosed by the entities on the effects of the adoption of IFRS 10 and IFRS 11; and v) the final balances of selected items at the end of the year before the IFRS 10 and/or IFRS 11, restated. We removed the observations with no sufficient information. The final sample includes 254 entities, totaling 508 reports analysed in the time window of 2011-2015. Table 1, Panel A summarizes the sample selection procedures, and Appendix 1 provides an illustration of the hand-collected data and the interpretation done. Furthermore, Chart 1 is helpful to follow the changes in the sample throughout the successive phases of our study.

(Table 1)

(Chart 1)

Panel B of Table 1 presents the sample distribution by country, in which 89 entities (35.04%), 88 entities (34.65%), and 77 entities (30.31%) come from Germany, France, and the U.K., respectively. Panel C presents the sample distribution by industry, in which the most representative ones are Industrials (48 entities, 18.90%), Financials (44 entities, 17.32%), Consumer goods (37 entities, 14.57%), and Consumer services (36 entities, 14.17%).

Panel C of Table 1 also shows the distribution of entities by industries in each country. Industrials is the predominant sector in Germany (20 entities, 22.47%) and in France (19 entities, 21.59%) whereas in the U.K. it is the Financials (21 entities, 27.27%). Consumer goods take the second place in France and in the U.K. (18.18%) but in Germany the second most important is Technology (15.73%). Oil & Gas, Telecommunications, and Utilities have the lowest weight. A weak association between the variable "Industry" and the variable "Country" was obtained ( $\chi^2 = 39.284^{**}$  and Cramer's V = 0.278\*\*).

## 4. Results and discussion

Our first research question (RQ<sub>1</sub>) asks whether the entities applied the consolidation package voluntarily (before 2014) or mandatorily (in 2014). Diversity is visible. The first step in answering this RQ was to perform a content analysis to find the date of the adoption of the consolidation package (IFRS 10, 2011, §C2B) and to show if the adoption was taken as voluntary or mandatory. Table 2, Panel A, reports the output. The majority of the entities (188 out of 254, around 74%) waited for 2014, the year of the effective adoption of IFRS 10 and IFRS 11, to mandatorily apply the new version of both standards. The other 65 entities (around 26%) adopted in 2013 and only 1 in 2012. There is sufficient evidence to conclude that the

two populations differ significantly in terms of their decision to adopt the "package of five" before (voluntary) or after (mandatory) the effective date ( $t = 8.710^{***}$ ).

#### (Table 2)

Table 2, Panel B, shows the number of entities that mandatorily and voluntarily adopted the consolidation package in each country. More than 80% of French and German entities adopted only in 2014, when mandatory, which is statistically significant when compared with the number of entities who voluntarily adopted in earlier periods (Germany:  $t = 10.729^{***}$ ; France:  $t=8.694^{***}$ ). The United Kingdom followed a different pattern with the majority (53%) adopting voluntarily, but no statistical significance in the different proportions of entities adopting voluntarily or mandatorily in this country (t = -0.567). Globally, there is a moderate association between the influence of the country over the adoption of IFRS 10 and IFRS 11 ( $\chi^2 = 42.992^{***}$  and Cramer's  $V = 0.411^{***}$ ).

Table 2, Panel C presents the distribution of mandatory adopters and voluntary adopters by industry. Financial services and Basic materials are the industries in which the voluntary adoption mainly occurred. Tests reveal a moderate association between the influence of the industry over the adoption of the "package of five" ( $\chi^2 = 25.382^{**}$  and Cramer's  $V = 0.316^{**}$ ).

Our findings corroborate conclusions of earlier studies (e.g. Mazars, 2014; Vašek and Gluzová, 2014; Gluzová, 2015, 2017), namely, most entities adopted the "package of five" in 2014, when mandatory for European Union countries (Table 2, Panel A). However, our study extends and demonstrates that this behaviour is more pronounced in France and Germany, as opposed to entities from the United Kingdom, where the voluntary adoption stands out (Table 2, Panel B). Thus, it seems pertinent to assess in more detail what the real motivations were behind the choice between early adoption and mandatory adoption of the "package of five".

The second (RQ<sub>2</sub>) and fifth (RQ<sub>5</sub>) research questions will be presented simultaneously. Both RQ question whether or not the entities declared real effects of adopting IFRS 10 and IFRS 11, respectively. Table 3 reveals the output<sup>4</sup>.

#### (Table 3)

Panel A (B) of Table 3 displays whether the adoption of IFRS 10 (11) was self-declared as having effects or not. Panel A shows that the majority (154 entities, 62.60%) declared the

<sup>&</sup>lt;sup>4</sup> Considering the total of 254 (181) entities applying IFRS 10 (IFRS 11), 8 (4) did not mention whether or not they had effects of adopting the standard. Those entities were excluded from the subsequent analysis.

existence of effects, while 92 entities (37.40%) reported no effects of IFRS 10 adoption. Panel B reveals that the majority (140 entities, 79.10%) expressed the existence of effects, while 37 entities (20.90%) revealed no effects from IFRS 11. The number and proportion of entities self-declaring the existence of effects from voluntary adoption of both standards is higher than from mandatory adoption (Panels C and D).

The cases of self-declared effects of the adoption of IFRS 10 and IFRS 11 significantly exceed the cases with no effects ( $t = 4.077^{***}$  and  $t = 9.493^{***}$ , respectively). The difference of adopting IFRS 10 is more pronounced in France ( $t = 2.472^{**}$ ) and in the United Kingdom ( $t = 4.098^{***}$ ), and both have also showed a greater tendency for the voluntary adoption of the "consolidation package" (especially in the U.K.). German entities follow a different pattern, since no significant differences between existence and non-existence of effects of adopting IFRS 10 are found (t = 0.851). The pattern differs in IFRS 11. The number of entities self-declaring effects far exceeds the number of entities not claiming effects in all three countries (Germany:  $t = 3.112^{**}$ , France:  $t = 8.157^{***}$ , U.K:  $t = 5.667^{***}$ ). However, results reveal that there is no association between the country and the existence of effects of both standards (IFRS 10:  $\chi^2 = 5.020$  and Cramer's V= 0.143; IFRS 11:  $\chi^2 = 4.377$  and Cramer's V= 0.158).

Table 4 also details the trend of self-declaring existence or non-existence of effects, but focusing on industry. The majority of Oil & Gas and Basic Materials entities reported no effect with the adoption of IFRS 10 (Panel A), as opposed to all the other industries. These two industries are included in the group with a higher tendency for voluntary adoption of the "consolidation package" (see Panel C, Table 2). On the contrary, Utilities and Financials are the two industries with a higher trend for stating the existence of effects of adopting IFRS 10. In turn, Table 4, Panel B shows that the number of entities reporting the existence of effects of adopting IFRS 11 is always higher than the number of entities self-declaring no effect. Furthermore, the pattern of adopting IFRS 11 is again different since all the entities in Telecommunications and Utilities declared the existence of effects, while Financials and Technology are the industries with lower percentage of effects declared (but above 66%).

#### (Table 4)

Earlier studies suggest that the effects of IFRS 10 adoption were more evident in Financial services (e.g. European Commission, 2012; EFRAG, 2012a; Mazars, 2014; Priscilla and Ariyanto, 2014; Vašek and Gluzová, 2014; Gluzová 2015, 2017), but we add also Utilities. Furthermore, our study corroborates earlier studies concluding that entities within Industrials,

Basic materials, Utilities and Financial services would declare effects of adopting IFRS 11 (e.g. Leitner-Hanetseder and Stockinger, 2014). We also find that the great majority of entities in Oil & Gas and all in Telecommunications' industries self-stated the existence of effects, as suggested by IASB (2011h), KPMG (2011), and BDO (2013a). Nonetheless, no association was found between the industry and the existence of effects of adopting both standards (IFRS 10:  $\chi^2 = 9.139$  and *Cramer's V* = 0.193; IFRS 11:  $\chi^2 = 7.046$  and *Cramer's V* = 0.200).

After identifying the number of entities self-declaring effects of the adoption (IFRS 10: 154 entities; IFRS 11: 140 entities), the third (RQ<sub>3</sub>) and sixth (RQ<sub>6</sub>) research questions seek to present a classification (supported in a content analysis to the Notes) of the direct categories of effects that are possible to identify after the adoption of IFRS 10 and IFRS 11. We classify two direct effects of the adoption of IFRS 10 and four of IFRS 11. This classification is our own (see the example in Appendix 1). The two effects from the comparison between the older and the newer version of IFRS 10 are: i) Effect #1: first time consolidation of a subsidiary not included in consolidation under pre-IFRS; ii) Effect #2: exclusion from consolidation of a subsidiary previously included under pre-IFRS 10. The four direct effects of IFRS 11 are: i) Effect #3: reclassification from jointly controlled operation and/or assets in IAS 31 to joint ventures under IFRS 11; ii) Effect #4: reclassification from jointly controlled entity using equity method in IAS 31 to joint operation under IFRS 11; iii) Effect #5: reclassification from jointly controlled entity using proportionate consolidation in IAS 31 to joint operation under IFRS 11; iv) Effect #6: change of methods from jointly controlled entity using proportionate consolidation in IAS 31 to joint venture using equity method under IFRS 11. However, the number of entities self-declaring the existence of effects is larger than the number of entities disclosing sufficient information that would help users identify the specific effect underlined. Results are presented in Table 5.

#### (Table 5)

Panel A of Table 5 reveals that only 28 out of the 154 entities (18.18%) reported that after adopting IFRS 10 they included as subsidiaries under control some entities that were not included in consolidation before IFRS 10 (Effect #1), while 13 entities (8.44%) reported loss of control of some subsidiaries after IFRS 10 adoption (Effect #2). A total of 35 entities

(22.73%) had changes to the scope of consolidation due to at least one of the analysed effects<sup>5</sup>. British entities seem to be the ones with more direct effects.

Panel B of Table 5 discloses that Effect #3, Effect #4 and Effect #5 were observed in 2 (15.38%), 11 (19.30%), and 18 (26.09%) entities, respectively. Effect #6 is the most reported, observed in 58 (84.06%) entities. In general, 75 entities (53.57%) revealed at least one of the effects. French entities seem to have more direct effects than the German or British entities.

Our results based on Tables 3 and 5 seem not to support the expectation of IASB (2011g) on limited effects of adopting IFRS 10 and on the lower number of joint arrangements affected by the adoption of IFRS 11 (IASB, 2011h). In fact, a statistically significant and higher number of entities expressly self-stated the existence of effects as compared with the non-existence (Table 3). However, only a minor number of companies then disclosed clear information to analyse the type of effect on the scope of consolidation and on the classification of joint arrangements. An exception is related with the change from proportional consolidation to equity method in the reclassification to joint ventures (Effect #6), which is the main effect as expected in IASB (2011h), but we can add that the number of reclassifications from joint ventures to joint operations is higher than expected (Effects #4 and #5).

Materiality of the effects of adopting IFRS 10 and IFRS 11 are evaluated through the fourth (RQ4) and seventh (RQ7) research questions, respectively. Usually, companies restate financial information when the effects are considered material. Materiality is, however, subjective in nature, conditional on judgement by preparers of financial statements, who then detail in the Notes the comparatives and the restated information. We do not intend to judge the criteria used by companies in choosing what to restate and disclose. Instead, we assumed that an effect is material if that fact was clearly self-declared by the entity in the Notes of consolidated financial statements or if the entity presented those reports with comparative restatements<sup>6</sup>. So, the answers to RQ4 and to RQ7 are derived in two steps: first, identifying whether those entities declaring the existence of effects classified them as material; second, calculating quantitative effects on selected items of financial statements and on some financial ratios. The results of the first step are presented in Tables 6 and 7, while those of the second step are in Tables 8 to 12. The number of companies in first step is not exactly the same as the second since sometimes the information disclosed was not completely clear and could not be

<sup>&</sup>lt;sup>5</sup> Some entities had Effect #1 alone or simultaneously with Effect #2 (and vice versa), thus, the 35 entities are not the sum of the entities affected, but instead, the number of entities that declared at least one of the effects.

<sup>&</sup>lt;sup>6</sup> When a change is applied retrospectively, restatements must be presented according to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors (IASB, 2003b), and are used in this paper to measure some of the effects of adopting IFRS 10 and IFRS 11.

retrieved (reason why the number of companies self-declaring/suggesting the materiality of the effects does not match those disclosing the underlined quantitative impacts - Appendix 2).

Table 6 (Panel A and B) shows that the number of companies declaring the effects of adopting IFRS 10 and IFRS 11 as "material" is lower than the number of companies declaring them as "non-material" (IFRS 10: 26 out of 154; IFRS 11: 56 out of 140). The t-test for the difference on the proportions is statistical significant (IFRS 10:  $t = -10.935^{***}$ ; IFRS 11:  $t = -2.407^{**}$ ). This pattern in the number of companies for the pooled sample is similar in each country. The t-test for the difference on proportions is statistically significant for IFRS 10 (Germany:  $t = -8.883^{***}$ ; France:  $t = -5.738^{***}$ ; U.K.:  $t = -5.200^{***}$ ), but not for IFRS 11 (Germany: t = -1.505; France: t = -0.785; U.K.: t = -2.002). Also, material effects of adopting IFRS 10 were more declared in the U.K. and France, as compared to Germany, while German and French entities declared more effects of adopting IFRS 11 than British entities. However, findings do not suggest that the existence of material effects is influenced by country (IFRS 10:  $\chi^2 = 2.145$  and Cramer's V = 0.118; IFRS 11:  $\chi^2 = 1.006$  and Cramer's V = 0.085).

#### (Table 6)

Panels C and D reveal the trend of material effects between mandatory and voluntary adopters. The number and the proportion of entities declaring that the effects are not material is greater than those declaring they are material (in both groups).

Table 7 details the number of entities declaring the effects of adopting IFRS 10 and IFRS 11 as material or not, by industry. Panel A reveals that Financials (43.75%), Basic materials (27.27%) and Technology industries (20.00%) are the ones declaring more material effects from IFRS 10. A different pattern was found for IFRS 11 (Panel B) showing that the number of entities stating material effects is greater than or equal to the number of entities stating no material effects in Utilities (58.33%), Basic materials (56.25%), and Oil & Gas (50.00%). There is a moderate influence of industry in the existence of material effects of adopting IFRS 10 ( $\chi^2 = 27.072^{**}$ ; *Cramer's V* = 0.419\*\*), but we cannot conclude that the materiality of adopting IFRS 11 is influenced by industry ( $\chi^2 = 9.990$ ; *Cramer's V* = 0.267).

#### (Table 7)

In the second step we assess the *quantitative* effects of the adoption of IFRS 10 and IFRS 11 to answer RQ4 and RQ7, respectively. We do so through the restated information that the entities made using the retrospective restatement on the year preceding the adoption of

those standards. In fact, we hand-collected the adjustments (restatements) disclosed by entities self-declaring effects (an example of hand-collected data and the adjusted comparative figures from the old IFRS to the new IFRS is presented in Appendix 1). However, only 85 disclosed restated information for at least one of the accounting items collected and the number of entities were not equal for both standards. We excluded 9 entities reporting monetary effects aggregated for IFRS other than just IFRS 10/11. Only 76 entities are used in further analysis<sup>7</sup>.

Table 8 discloses whether or not restatements due to the adoption of IFRS 10 and IFRS 11 in selected items on consolidated financial statements occurred. Column A (B) includes the 20 (51) entities under IFRS 10 (IFRS 11) for which separate data about the presentation of restated information were possible to collect. Column C includes all 76 entities for which either separated or aggregated information was hand-collected. Monetary effects arising from the specific adoption of IFRS 10 are mainly included in the restatement of total assets (90% of the entities), total liabilities (85%), and total cash and cash equivalents (50%). On the specific adoption of IFRS 11, the monetary effects are mostly included in the restatement of total assets (88.24%), total liabilities (86.27%) and revenues (76.47%), and this pattern is similar for the entities adopting at least one of the standards (Column C).

#### (Table 8)

Additional analysis is performed to see not just if the entity presents monetary effects of the transition but to analyse the magnitude (in euros) of those restatements, by comparing the pre-adoption amounts with the post-adoption amounts. Consequently, we hand-collected the *amount* of the monetary effects in the accounting items mentioned and disclosed by those 76 entities. The process used to collect the information assures that we capture exactly the effect of adopting IFRS 10 and/or IFRS 11 and that we can isolate it from any other effect (see Appendix 1). The data are presented in Table 9: i) the magnitude of the monetary effects of adopting IFRS 10 (Column A); ii) the magnitude of the monetary effects of adopting IFRS 11 (Column B); and iii) the magnitude of the combined effect of adopting at least one standard (Column C). We present the average and the median of post-adoption amount (as restated, in millions of euros) and of the pre-adoption amount (original, in millions of euros).

#### (Table 9)

<sup>&</sup>lt;sup>7</sup> Comparison between voluntary and mandatory adopters is not done from this point on since the number of cases hand-collected is too short to allow a robust detailed analysis.

Concerning the adoption of IFRS 10 exclusively, column A of Table 9 shows that the average and the median of the post-adoption amounts are higher than of the pre-adoption amounts for the most of the selected items of consolidated financial statements. Column B displays an opposite pattern followed in the exclusive adoption of IFRS 11, and Column C behaves similarly to column B. In all cases, the standard deviation shows a high level of dispersion in the comparison of the monetary effects (not tabulated).

Next, we perform tests to determine if the differences between post and pre-adoption amounts were statistically significant (regardless of having being considered as material by each entity). Tests to the normality of distributions advises the use of the Wilcoxon nonparametric statistics to compare groups on those 15 selected items. Results are presented in Table 10. Regarding IFRS 10 exclusively (Column A), post-adoption amounts are statistically significantly different (higher) from pre-adoption amounts only in total assets, total liabilities, and earnings before taxes. Concerning IFRS 11 only (Column B), and the effects of at least one of the standards (Column C), results show that post-adoption amounts are statistical significantly different from pre-adoption in the great majority of selected items. Thus, the effects of adopting IFRS 10 and IFRS 11 have impacts on total assets and total liabilities, but the effects of adopting IFRS 11 are more visible and statistically different in other items of financial statements than those resulting from IFRS 10.

#### **(Table 10)**

The impact of adopting both standards can also be analysed in terms of the materiality effects on some economic and financial ratios. Based on earlier studies that also analysed the effects of adopting these accounting standards on financial indicators (e.g. IASB, 2011i; KPMG, 2011; Demerens *et al.*, 2014; Leitner-Hanetseder and Stockinger, 2014) we selected 9 financial ratios and one indicator for the size of the entities, which is a control variable commonly used in earlier investigations (e.g. So and Smith, 2009a, 2009b; Houmes and Boylan, 2010; Paananen *et al.*, 2012; Lopes *et al.*, 2013; Hsu *et al.*, 2015; Hsu and Pourjalali, 2015). Table 11 presents the results (definition of columns is similar to Table 9).

Column A of Table 11 expresses the impact of adopting IFRS 10 exclusively on those selected ratios. The averages and medians of post-adoption values are very similar to the averages and medians of pre-adoption values in the great majority of indicators. Column B shows the impact of IFRS 11 only. The average of the post-adoption values is greater than the values in the pre-adoption in only some indicators, and the median is higher in a small number.

Column C reflects the joint effect of adopting at least one standard. The average and median of the majority of the indicators are higher in the post-adoption period.

#### **(Table 11)**

Table 12 presents the results for the Wilcoxon nonparametric test. Concerning IFRS 10, Column A shows that, except for size, the difference between post and pre-adoption amounts are not statistically significant. Related with IFRS 11, Column B reveals that the post-adoption amounts are statistically significantly different from pre-adoption amounts in the great majority of ratios except for return on assets, current liquidity and cash ratio. Post-adoption amounts are statistically significantly higher than pre-adoption amounts in profit margin and financial autonomy, but lower in the return-on-equity, debt-to-equity, debt-to-assets, total asset turnover and size. Finally, Column C, with the joint effect of adopting at least one IFRS, shows that post-adoption amounts are significantly higher than pre-adoption in profit margin, financial autonomy and size, and lower in debt-to-equity, debt-to-assets and total turnover.

#### **(Table 12)**

Summarizing the answers to RQ4, only one quarter of the entities declaring effects of IFRS 10 disclosed the adjustments (restatements) to consolidated financial statements of the year previous to the adoption and only half considered it relevant to present the effects of IFRS 10 isolated from any other effect (not tabulated). A small number disclosed those adjustments in all of the selected items. Descriptive and inferential statistics enable us to conclude that the effects of adopting IFRS 10 on selected items of financial statements and financial ratios are generally reduced and not significant. In only four variables (total assets, liabilities, earnings before taxes and size), the impact was significant. Thus, our results in fact appear to corroborate previous studies and reports foreseeing weak and immaterial effects of the initial application of IFRS 10 (e.g. EFRAG, 2012a, 2012b; Mazars, 2014; Priscilla and Ariyanto, 2014; Gluzová, 2015, 2017).

The answers to RQ<sub>7</sub> are considerably different. More than half of the entities declaring effects of IFRS 11 disclosed the adjustments (restatements) to consolidated financial statements of the year previous to the adoption, and more than 70% considered it relevant to present the effects of IFRS 11 isolated from any other effect (untabulated). The number of entities disclosing effects on selected items is usually higher than the number not disclosing. Descriptive and inferential statistics enable us to conclude that the effects of adopting IFRS

11 in selected items of financial statements and financial ratios are generally stronger and more statistically significant than the effects of IFRS 10. Thus, the analysis of the effect of adopting IFRS 10 and IFRS 11 simultaneously demonstrates that the most important changes to selected items and financial ratios are probably related with effects of IFRS 11 (due to similarities of results compared with effects isolating IFRS 10 and 11). This seems to validate previous research (e.g. Büdy-Rózsa, 2012; EFRAG, 2012a; Demerens *et al.*, 2014; Leitner-Hanetseder and Stockinger, 2014; Mazars, 2014; ESMA, 2016) but does not necessarily corroborate in the specific items and financial ratios that were significantly affected. More specifically, the effects extracted are of a lower dimension than Demerens *et al.* (2014) and Leitner-Hanetseder and Stockinger (2014), but close to the effects collected by Mazars (2014).

### 5. Directions for future research

The results achieved with the present study suggest several avenues for future research<sup>8</sup>. We especially wish to point out that IASB will soon begin the Post-implementation Review (PIR) of IFRS 10 and IFRS 11 (including IFRS 12). The PIR usually uses evidence to support the IASB's decisions, giving confidence in making the appropriate decision, from which evidence on diversity in the practice of implementation of new procedures is welcomed. Thus, we suggest a deep analysis on the identification of determinants of voluntary *versus* mandatory adoption of the "consolidation package".

Notwithstanding the relative small number of companies that adopted these standards before the mandatory date, analyses of firm and country<sup>9</sup> characteristics, as well as incentives and motivations for that behaviour, could be of interest for regulators, standard-setters, and market participants. Another direction would be the identification of the reasons why some firms declare that the effects of applying the new IFRS 10 and IFRS 11 are material, but then do not disclose the amounts separately from simultaneous adoption of other standards, or do not justify why the impacts are material. In a similar approach, investigating whether and why

\_

<sup>&</sup>lt;sup>8</sup> Results could be expanded to include more firms from other countries where IFRS are mandatory since 2005.

<sup>&</sup>lt;sup>9</sup> It may be relevant to assess the characteristics of the country of origin of the entities (including the dynamic continental European countries *versus* Anglo-Saxon countries) and if these entities anticipated or not effects of the adoption of the five standards. For example, Maroun and Zijl (2016) and Zijl and Maroun (2017), interviewed preparers, audit partners, analysts, and academics in the area of Financial Accounting, examining how the IFRS 10 was interpreted and adopted. The first one supported their results in the institutional isomorphism model of DiMaggio and Powell (1983) to evaluate the influence of normative, coercive and mimetic pressures and the existence of a logic of resistance in the application of the standard. The second one related the Foucault's (1977) power and control theories in the compliance with IFRS 10. The perspective of pressures and resistances used in both studies may be relevant for explaining IFRS 10 adoption and extending then to IFRS 11.

all the companies should have impacts in the same direction (e.g. including *versus* excluding subsidiaries, increasing *versus* decreasing in assets) would increase the attention to the impacts of future changes on the package of consolidation standards. Quantitative or qualitative research would be appropriate and would help i) standards-setters to identify the appropriate level of disclosures, and ii) market participants to interpret financial statements and restatements.

Finally, a third line of research would be supported on new information provided to the market beyond the one presented in the face of financial statements, comparing the pre- with post-adoption of the IFRS Consolidation Package. Research on i) value relevance of new accounting figures, ii) economic and capital market consequences, and iii) impacts of changes on key financial ratios (e.g., on firm performance and leverage), would stress the global impact of adopting the new "consolidation package", and would be of importance for a wide range of users of consolidated financial statements.

## 6. Conclusion

Given the small and still scarce analysis of the effects of adopting IFRS 10 and IFRS 11, this study is explorative. We illustrate and analyse the real effects on consolidated financial statements with the adoption of those standards, which can be an avenue for future research.

The focus of this study was France, Germany, and the United Kingdom, countries not yet widely analyzed regarding the real effects of the adoption of IFRS 10 and IFRS 11. These countries have many complex groups of entities listed in European stock exchanges applying IFRS, and are countries favourable to the analysis of the topic. An analysis by industry was also considered.

Our results are supported in hand collected information, examining the content of consolidated financial statements in the year of the adoption of the "consolidation package" and the immediate preceding year. Qualitative and quantitative results are thus based on actual disclosures by the entities. Our results on real effects support expectations of earlier studies, since the great majority of entities adopted the IFRS 10 and IFRS 11 only after becoming mandatory in European Union. However, we found the same trend between Germany and France (mandatory adoption) but distinct from the United Kingdom (voluntary adoption), where the proportion of entities with effects from adopting IFRS 10 is greater. Oil & Gas,

Basic Materials, and Telecommunications are the industries with a greater tendency for early adoption, but Financial services is the industry most affected by this adoption.

Our findings suggest that the adoption of IFRS 10 affected more cases than the IASB (2011g) predicted, but that these effects assumed minor and not significant impacts. Among the entities adopting IFRS 10, evidence indicates that a significant majority expressly declared the existence of effects but only about 20% considered those effects as being material. In addition, the statistical significance of the effects of the adoption of IFRS 10 (comparing the pre-adoption with the post-adoption amount) was observed in only a minor number of accounting items and financial ratios.

Our research also shows the effects of adopting IFRS 11 on a larger number of arrangements than the IASB (2011h) had anticipated, and tends to be significant. Among the entities adopting IFRS 11, evidence indicates that a significant majority expressly declared the existence of effects and about 40% considered those effects as being material. The statistical significance of the effects of the adoption of IFRS 11 (comparing the pre-adoption with the post-adoption amount) was observed in the majority of the items and financial ratios. This study corroborates the idea that the abolition of the proportional consolidation and the mandatory use of the equity method would have been the most notable effect of the IFRS 11. However, evidence of jointly controlled entities under IAS 31 reclassified as joint operations under IFRS 11 seems to be potentially higher than that forecasted by the IASB (2011h), which may have contributed to the effects of the adoption of IFRS 11. Our study shows more significant effects in French entities (whose preference for the use of proportional consolidation was known), and in Industrials, Basic Materials, Utilities, and Financial industries, which is in line with expectations of earlier studies.

Our study suffers from some limitations associated with content analysis. The main data are retrieved from information disclosed in consolidated financial statements and hand-collected. This information was sometimes not easy to interpret and some assumptions were made. Prudence and conservatism were used, but the effect of the adoption could be different from the one we report. Our suggestions for future research may solve and mitigate some of these concerns.

## Acknowledgment

This work was supported by Fundação para a Ciência e a Tecnologia, grant UID/GES/00315/213. The authors gratefully acknowledge the insightful comments of the anonymous referees.

# References

- Abela, M., and Mora, A. (2012), "Understanding the consequences of accounting standards in Europe: The role of EFRAG", *Accounting in Europe*, 9 (2): 147-170.
- Amlie, T. T. (2012), "Discount rate changes subsequent to adoption of SFAS-158: The effect of the new liability reporting requirements", *Academy of Accounting and Financial Studies Journal*, 16 (3): 65-73.
- Barth, M. E. (2000), "Valuation-based accounting research: Implications for financial reporting and opportunities for future research", *Accounting and Finance*, 40 (1): 7-31.
- Barth, M. E. (2006), "Research, standard setting, and global financial reporting", *Foundations and Trends in Accounting*, 1 (2): 71–165.
- Barth, M. E. (2007), "Standard-setting measurement issues and the relevance of research", *Accounting and Business Research*, 37: 7-15.
- Barth, M. E. (2008), "Global financial reporting: Implications for U.S. academics", *The Accounting Review*, 83 (5): 1159-1179.
- Bauman, M. P. (2003), "The impact and valuation of off-balance-sheet activities concealed by equity method accounting", *Accounting Horizons*, 17 (4): 303-314.
- Bauman, M. P. (2007), "Proportionate consolidation versus the equity method: Additional evidence on the association with bond ratings", *International Review of Financial Analysis*, 16 (5): 496-507.
- BDO (2013a), *Need to know: IFRS 11 Joint Arrangements*, available at: https://www.bdo.global/engb/services/audit-assurance/ifrs/need-to-know (accessed 10 October 2015).
- BDO (2013b), *Need to know: IFRS 10 Consolidated Financial Statements*, available at: https://www.bdo.global/en-gb/services/audit-assurance/ifrs/need-to-know (accessed 10 October 2016).
- Büdy-Rózsa, I. (2012), "New trends in consolidation Challenging the changes of new IFRS rules", *Periodica Polytechnica Social and Management Sciences*, 20 (1): 11-22.
- Davis, M. L., and Largay, J. A. (1999), "Financial reporting of 'significant-influence' equity investments: Analysis and managerial issues", *Journal of Managerial Issues*, 11 (3): 280-298.
- Demerens, F., Le Manh, A., Devaille, P. and Paré J.L (2014), "An ex ante analysis of change in reporting methods: The example of joint ventures", *Gestion 2000*, 31 (4): 65-89.
- Dieter, R., and Wyatt, A. R. (1978), "The expanded equity method An alternative in accounting for investments in joint ventures", *The Journal of Accountancy*, 145 (6): 89-94.
- EFRAG (2012a), Feedback report on field-tests on IFRS 10, IFRS 11 and IFRS 12, available at: http://old.efrag.org/files/EFRAG%20public%20letters/Consolidation/Feedback\_report\_on\_field tests on IFRS 10 IFRS 11 and IFRS 12.pdf (accessed 10 April 2016).

- EFRAG (2012b), Supplementary study Consolidation of special purpose entities (SPEs) under IFRS 10, available at: https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FProject%2 0Documents%2F244%2FSPE\_Supplementary\_study\_-\_EFRAG\_secretariat\_report.pdf (accessed 10 April 2016).
- EFRAG (2016), *The EU endorsement status report: Position as at 23 September 2016*, available at: https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FLists%2F Public%20News%2FAttachments%2F77%2FEFRAG%20Endorsement%20Status%20Report %2023%20September%202016.pdf (accessed 1 April 2017).
- ESMA (2014), Public statement: European common enforcement priorities for 2014 financial statements (ESMA/2014/1309), available at: https://www.esma.europa.eu/sites/default/files/library/2015/11/2014\_1309\_esma\_public\_state ment\_-\_2014\_european\_common\_enforcement\_priorities.pdf (accessed 2 April 2017).
- ESMA (2016), Report: ESMA report on enforcement and regulatory activities of accounting enforcers in 2015 (ESMA/2016/410), available at: https://www.esma.europa.eu/sites/default/files/library/2016-410\_esma\_report\_on\_enforcement\_and\_regulatory\_activities\_of\_accounting\_enforcers\_in\_20 15.pdf (accessed 7 July 2017).
- European Commission (2012), Endorsement of IFRS 10 Consolidated Financial Statements (IFRS 10), IFRS 11 Joint Arrangements (IFRS 11), IFRS 12 Disclosure of Interests in Other Entities (IFRS 12), IAS 27 Separate Financial Statements (IAS 27 (2011)) and IAS 28 Investments in Associates and Joint Ventures (IAS 28 (2011)) Introduction, background and conclusions, available at: https://ec.europa.eu/info/sites/info/files/effect-study-ifrs10\_11\_12\_ias27\_en.pdf (accessed in 10 September 2016).
- Ewert, R., and Wagenhofer, A. (2012), "Using academic research for the post-implementation review of accounting standards: A note", *Abacus*, 48 (2): 278-291.
- EY (2011), "Applying IFRS IFRS 11 Joint Arrangements: Challenges in adopting and applying IFRS 11", available at: http://www.ey.com/Publication/vwLUAssets/Applying\_IFRS\_11/\$FILE/Applying\_IFRS\_11.p df (accessed in 1 October 2016).
- Fiechter, P. (2011), "Reclassification of financial assets under IAS 39: Impact on European banks' financial statements", *Accounting in Europe*, 8 (1): 49-67.
- Fülbier, R. U., Hitz, J. M., and Sellhorn, T. (2009), "Relevance of academic research and researchers' role in the IASB's financial reporting standard setting", *Abacus*, 45 (4): 455-492.
- Gluzová, T. (2015), "The adoption of IFRS 10 and its impact on the scope of consolidation", *Acta Academica Karviniensia*, 15 (4): 18-27.
- Gluzová, T. (2016), "Disclosure of subsidiaries with non-controlling interest in accordance with IFRS 12: Case of materiality", *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 64 (1): 275-281.
- Gluzová, T. (2017), "The revised control concept in the consolidated financial statements of Czech companies", in D. Procházka (Ed.), New trends in finance and accounting: Proceedings of the 17th annual conference on finance and accounting (Springer proceedings in business and economics): 433-441. Cham: Springer.

- Graham, R. C., King, R. D., and Morrill, C. K. J. (2003), Decision usefulness of alternative joint venture reporting methods", *Accounting Horizons*, 17 (3): 123-137.
- Houmes, R., and Boylan, B. (2010), "Has the adoption of SFAS 158 caused firms to underestimate pension liability? A preliminary study of the financial reporting impact of SFAS 158", *Academy of Accounting and Financial Studies Journal*, 14 (4): 55-66.
- Hsu, A. W., Jung, B., and Pourjalali, H. (2015), "Does international accounting standard no. 27 improve investment efficiency?", *Journal of Accounting, Auditing & Finance*, 30 (4): 484-508.
- Hsu, A. W., and Pourjalali, H. (2015), "The impact of IAS no. 27 on the market's ability to anticipate future earnings", *Contemporary Accounting Research*, 32 (2): 789-813.
- IASB (2003a), International accounting standard 31: Interests in Joint Ventures.
- IASB (2003b), International accounting standard 8: Accounting policies, changes in accounting estimates and errors.
- IASB (2008), International accounting standard 27: Consolidated and Separate Financial Statements.
- IASB (2011a), International financial reporting standard 10: Consolidated Financial Statements.
- IASB (2011b), International financial reporting standard 11: Joint Arrangements.
- IASB (2011c), International financial reporting standard 12: Disclosure of Interests in Other Entities.
- IASB (2011d), International accounting standard 27: Separate Financial Statements.
- IASB (2011e), International accounting standard 28: Investments in Associates and Joint Ventures.
- IASB (2011f), Project summary and feedback statement: IFRS 10 Consolidated Financial Statements and IFRS 12 Disclosure of Interests in Other Entities (updated January 2012), available at: http://archive.ifrs.org/Current-Projects/IASB-Projects/Consolidation/Consoldisclosure/Documents/IFRS1012\_ConsolidatedFinStatementsDisclosure\_UpdatedJanuary201 2.pdf (accessed 1 December 2016).
- IASB (2011g), *Project summary and feedback statement: IFRS 11 Joint Arrangements*, available at: http://archive.ifrs.org/Current-Projects/IASB-Projects/Joint-Ventures/IFRS-11-Joint-Arrangements/Documents/Joint\_Arrangements\_FeedbackstatementMay2011.pdf\_(accessed 1 December 2016).
- IASB (2011h), Effect analysis: IFRS 10 Consolidated Financial Statements and IFRS 12 Disclosure of Interests in Other Entities (updated July 2013), available at: http://archive.ifrs.org/Current-Projects/IASB-Projects/Consolidation/Consol-disclosure/Documents/Effect-Analysis-IFRS%2010-and-IFRS-12-Updated-July-2013.pdf (accessed 1 December 2016).
- IASB (2011i), Effect analysis: IFRS 11 Joint Arrangements and disclosures for joint arrangements included in IFRS 12 Disclosure of Interests in Other Entities, available at: http://archive.ifrs.org/Current-Projects/IASB-Projects/Joint-Ventures/IFRS-11-Joint-Arrangements/Documents/IFRS11 Effectanalysis.pdf (accessed 1 December 2016).
- IFRS Foundation (2016), Due process handbook Approved by the Trustees January 2013 and incorporating: IFRS® taxonomy due process and consequential amendments, approved by the Trustees May 2016, available at: http://www.ifrs.org/-/media/feature/about-us/legal-and-

- governance/constitution-docs/due-process-handbook.pdf?la=en&hash=7E38E5977AC11F2AC1BFE541F8463683CC8B746F (accessed 7 April 2017).
- Kothavala, K. (2003), "Proportional consolidation versus the equity method: A risk measurement perspective on reporting interests in joint ventures", *Journal of Accounting and Public Policy*, 22 (6): 517-538.
- KPMG (2011). First impressions: Joint arrangements (publication number: 314669), available at: https://home.kpmg.com/content/dam/kpmg/pdf/2011/05/First-Impressions-O-1105-Joint-arrangements.pdf (accessed 1 December 2016).
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. (1998), "Law and finance", *Journal of Political Economy*, 106 (6): 1113-1155.
- Larson, R. K., Herz, P. J., and Kenny, S. Y. (2011), "Academics and the development of IFRS: An invitation to participate", *Journal of International Accounting Research*, 10 (2): 97-103.
- Leisenring, J. J., and Johnson, L. T. (1994), "Accounting research: On the relevance of research to practice", *Accounting Horizons*, 8 (4): 74-79.
- Leitner-Hanetseder, S., and Stockinger, M. (2014), "How does the elimination of the proportionate consolidation method for joint venture investments influence European companies?" *ACRN Journal of Finance and Risk Perspectives*, 3 (1): 1-18.
- Lopes, A. I., Lourenço, I., and Soliman, M. (2013), "Do alternative methods of reporting non-controlling interests really matter?" *Australian Journal of Management*, 38 (1): 7-30.
- Lourenço, I., Fernandes, S., and Curto, J. D. (2012), "How does the market view interests in jointly controlled entities?" *Revista Española de Financiación y Contabilidad*, 41 (153): 119-142.
- Maroun, W., and Zijl, W. (2016), "Isomorphism and resistance in implementing IFRS 10 and IFRS 12", *The British Accounting Review*, 48 (2): 220-239.
- Mazars (2014), L'application des nouvelles norms sur la consolidation (IFRS 10, IFRS 11 et IFRS 12) dans la communication financiere des corporates: A l'occasion de l'arrêté au 31 décembre 2013, available at: https://www.mazars.fr/Accueil/News/Publications/Cahiers-techniques/Lapplication-des-nouvelles-normes-IFRS-10-11-12 (accessed 5 December 2016).
- Milburn, J. A., and Chant, P. D. (1999), Special report Reporting interests in joint ventures and similar arrangements (no.201-E), Financial accounting series, available at: https://dart.deloitte.com/resource/1/6270d8a9-3f68-11e6-95db-a386555f614e (accessed 3 December 2016).
- Mitra, S., and Hossain, M. (2009), "Value-relevance of pension transition adjustments and other comprehensive income components in the adoption year of SFAS no. 158", *Review of Quantitative Finance and Accounting*, 33 (3): 279-301.
- Mulford, C. W., and Quinn, E. (2008), "The effects on measures of profitability and leverage of recently enacted changes in accounting for minority interests, Financial analysis lab reports", available at https://smartech.gatech.edu/bitstream/handle/1853/23905/FinAnLab\_noncontrolling\_interests 2008-April.pdf?sequence=1&isAllowed=y (accessed 18 November 2016).
- Nobes, C. W. (2008), "Legal systems", in C. W. Nobes and R. B. Parker (Authors), *Comparative international accounting* (10th ed.): 28-29. Harlow: Pearson Education Limited.

- Paananen, M., Renders, A., and Shima, K. M. (2012), "The amendment of IAS 39: Determinants of reclassification behavior and capital market consequences", *Journal of Accounting, Auditing & Finance*, 27 (2): 208-235.
- Priscilla, M., and Ariyanto, S. (2014), "Analysis on the impact of IFRS 10 and IFRS 12 adoption (Case study: Listed banking companies in the Australia, London, and Vienna stock exchange)", Working paper, BINUS University, Jakarta.
- Reklau, D. L. (1977), "Accounting for investments in joint ventures A re-examination", *The Journal of Accountancy*, 144 (3): 96-103.
- Richardson, A. W., Roubi, R. R., and Soonawalla, K. (2012), "Decline in financial reporting for joint ventures? Canadian evidence on removal of financial reporting choice", *European Accounting Review*, 21 (2): 373-393.
- Ryan, B., Scapens, R., Theobald, M. and Beattie, V. (2002), *Research methods and methodology in finance and accounting* (2nd ed.). London: Thomson Learning.
- Schipper, K. (1994), "Academic accounting research and the standard setting process", *Accounting Horizons*, 8 (4): 61-73.
- Sekaran, U. (2003), Research methods for business: A skill-building approach (4th ed.). New York: John Wiley & Sons, Inc.
- Smith, M. (2014), Research methods in accounting (3rd ed.). London: Sage Publications Ltd.
- So, S. and Smith, M. (2009a), "Value-relevance of presenting changes in fair value of investment properties in the income statement: Evidence from Hong Kong", *Accounting and Business Research*, 39 (2): 103-118.
- So, S. and Smith, M. (2009b), "Value relevance of IAS 27 (2003) revision on presentation of non-controlling interest: Evidence from Hong Kong", *Journal of International Financial Management and Accounting*, 20 (2): 166-198.
- SIC (1998), SIC interpretation 12: Consolidation Special Purpose Entities.
- Stoltzfus, R. L., and Epps, R. W. (2005), "An empirical study of the value-relevance of using proportionate consolidation accounting for investments in joint ventures", *Accounting Forum*, 29 (2): 169-190.
- Trombetta, M., Wagenhofer, A., and Wysocki, P. (2012), "The usefulness of academic research in understanding the effects of accounting standards", *Accounting in Europe*, 9 (2): 127-146.
- Vašek, L., and Gluzová, T. (2014), "Can a new concept of control under IFRS have an impact on a CCCTB?" *European Financial and Accounting Journal*, 9 (4): 110-127.
- Wieczynska, M. (2016), "The 'Big' Consequences of IFRS: How and When Does the Adoption of IFRS Benefit Global Accounting Firms", *The Accounting Review*, 91 (4): 1277-1283.
- Zijl, W., and Maroun, W. (2017), "Discipline and punish: Exploring the application of IFRS 10 and IFRS 12". *Critical Perspectives on Accounting*, 44: 42-58.

# **Appendix 1**

We use one of the French entities included in our sample to illustrate how the entities presented their qualitative and quantitative effects of the adoption of IFRS 10 and IFRS 11 and to clarify how we gather the data used in this study. We exemplify the adjusted comparative figures and effects hand-collected for some of the items of consolidated financial statements analysed in our study and demonstrate how we calculated the pre-adoption amounts used to statistically evaluate the material effects of the standards.

The entity "Société Générale", one of the largest financial services groups in Europe, is used to illustrate how the information was hand-collected from its annual financial report of 2014, since the entity adopted the Consolidation Package as of 1<sup>st</sup> January 2014, when it became mandatory in the European Union. Figure 1 summarizes this illustration. Information provided by the company is posted, and the analysis made by the authors is presented.

(Figure 1)

# Appendix 2

Content analysis to the annual consolidated financial statements revealed that the entities do not always seem to be completely clear when reporting the effects of standards adoption, as we would like them to be (worries between what entities declared about the effects of a standard adoption, and how they disclosed those effects). We were not able to hand-collect the impacts from all the entities that self-declared material effects of IFRS 10 and/or IFRS 11 adoption, but we also did not ignore the effects disclosed by companies that considered the effects of the adoption as being non-material. The following cases exemplify:

- Some entities declared the existence of material effects of IFRS 10 and/or IFRS 11 adoption, but presented the quantitative impacts together with the effects of changes to other standards or events not contemplated in this study → we were not able to isolate the effects of adopting IFRS 10 and/or IFRS 11 → we did not collect the effects.
  - o Example: Vodafone Group declares: "The previously reported comparative periods have been restated in the consolidated financial statements for the amendments to IAS 19 and IFRS 11" → Effects of IAS 19 and IFRS 11 disclosed together → we classified the effects of adopting IFRS 11 as material but could not obtain the isolated impacts of its adoption.
- Some entities declared immaterial effects of IFRS 10 and/or IFRS 11 adoption, but disclosed those impacts → we considered the effects of the standards as non-material, but hand-collected the effects disclosed to evaluate its materiality from a statistical perspective, which contributes for the difference between the number of material effects and effects hand-collected.
  - o Example: Veolia Environment declares: "The procedures performed did not identify any material impact of the first-time application of this [IFRS 10] standard" → Effects were disclosed → we hand-collected.
- Some entities suggested a material effect from adopting IFRS 10 and/or IFRS 11, but disclosed the effect together, preventing us from isolating the individual effects of the adoption of each standard→ we consider the effects of IFRS 10 and/or 11 as material for the purpose of Table 7, but the effects are only presented in column C of Table 8, as no individual effect could be hand-collected for the purpose of columns A or B.
  - o Example: AXA reports: "The retrospective application of these standards and amendments by AXA resulted in: the change in the consolidation method of a limited number of investment funds and real estate companies (with the full consolidation of some entities previously accounted for under the equity method or not consolidated, and, in contrast, the deconsolidation of others); the change from the proportionate consolidation method to the equity method for joint ventures" → Despite the effects of adopting both IFRS 10 and IFRS 11, the entity presented the restatements in prior consolidated financial statements together → we included in aggregate.

Table 1: Sample characteristics

PANEL A: Sample selection procedures	Sample
Entities included in HDAX, SBF 120, and FTSE 100	331
Less:	
- Entities from other countries except Germany, France, and the United Kingdom	-1
- Entities from SBF 120 not listed in <i>Euronext</i> Paris	-5
- Entities with financial statements in languages other than English	-3 -3
- Entities not preparing consolidated financial statements	-3
- Entities not using IFRS to prepare their consolidated financial statements	-1
= Entities that effectively adopted the new "consolidation package"	318
Less:	
- Entities not indicating the year of the adoption of the new "consolidation package"	-10
- Entities applying "consolidation package" prospectively	-2
- Entities with lack of consistency in the application of the new standards	-8
- Entities created, ceased, or restructured during the sample period	-22
- Entities changing the end of reporting period during the sample period	-1
- Entities with lack of information	-21
= Final sample	254
Time window:	
2011 and 2012	1 (0.39%)
2012 and 2013	51 (20.08%)
2013 and 2014	155 (61.02%)
2012/2013 and 2013/2014	14 (5.51%)
20123/2014 and 2014/2015	33 (12.99%)
= Final Sample	254 (100.00%)

PANEL B: Distribution	by country			
Country	Stock Exchange	Index	n	%
Germany	Frankfurt	HDAX	89	35.04
France	Euronext Paris	SBF 120	88	34.65
United Kingdom	London	FTSE 100	77	30.31
Total			254	100.00

PANEL C: Distribution by industry in each country											
Industry	То	Total		Germany		rance	United Kingdom				
Industry	n	%	n	%	n	%	n	%			
Oil & Gas	7	2.76	2	2.25	4	4.55	1	1.30			
Basic Materials	23	9.06	12	13.48	3	3.41	8	10.39			
Industrials	48	18.90	20	22.47	19	21.59	9	11.69			
Consumer Goods	37	14.57	11	12.36	14	15.91	12	15.58			
Healthcare	21	8.27	10	11.24	7	7.95	4	5.19			
Consumer services	36	14.17	6	6.74	16	18.18	14	18.18			
Telecommunications	6	2.36	3	3.37	1	1.14	2	2.60			
Utilities	12	4.72	2	2.25	5	5.68	5	6.49			
Financials	44	17.32	9	10.11	14	15.91	21	27.27			
Technology	20	7.87	14	15.73	5	5.68	1	1.30			
Total	254	100.00	89	100.00	88	100.00	77	100.00			

Association between *industry* and *country*:  $\chi^2 = 39.284^{**}$  and *Cramer's*  $V = 0.278^{**}$ 

Industry Classification Benchmark (ICB) is used in the study: Oil & Gas (ICB 0001); Basic Materials (ICB 1000); Industrials (ICB 2000); Consumer Goods (ICB 3000); Healthcare (ICB 4000); Consumer services (ICB 5000); Telecommunications (ICB 6000); Utilities (ICB 7000); Financials (ICB 8000); Technology (ICB 9000).

<sup>\*\*\*</sup>  $p \le 0.001$ , \*\*  $p \le 0.01$ , \*  $p \le 0.05$ 

Table 2: Adoption of the new "consolidation package" by country and by industry

PANEL A: Date and	type	of	adoption
-------------------	------	----	----------

This Edit. But and type of adopted			
Date	Туре	n	%
2012/2013	Voluntary	66	26.00
2014	Mandatory	188	74.00
		254	100.00

T-test based on the differences in proportions between mandatory adoption and voluntary adoption: 8.710\*\*\*

PANEL B: Type of adoption by country

	Type of adoption										
	Man	datory	Voluntary		7	Total	T-test				
	n	%	n	%	$\overline{n}$	%					
Germany	78	87.64	11	12.36	89	100.00	10.729***				
France	74	84.09	14	15.91	88	100.00	8.694***				
United Kingdom	36	46.75	41	53.25	77	100.00	-0.567				
Total	188	74.02	66	25.98	254	100.00					

Association between type of adoption and country:  $\chi^2 = 42.992^{***}$ ; Cramer's  $V = 0.411^{***}$ 

PANEL C: Type of adoption by industry

	Mandatory		ory Voluntary		Total	
	n	%	$\overline{n}$	%	n	%
Oil & Gas	3	42.86	4	57.14	7	100.00
Basic Materials	11	47.83	12	52.17	23	100.00
Industrials	42	87.50	6	12.50	48	100.00
Consumer Goods	31	83.78	6	16.22	37	100.00
Healthcare	16	76.19	5	23.81	21	100.00
Consumer services	27	75.00	9	25.00	36	100.00
Telecommunications	2	33.33	4	66.67	6	100.00
Utilities	9	75.00	3	25.00	12	100.00
Financials	30	68.18	14	31.82	44	100.00
Technology	17	85.00	3	15.00	20	100.00
Total	188	74.02	66	25.98	254	100.00

Association between type of adoption and industry:  $\chi^2 = 25.382^{**}$ ; Cramer's  $V = 0.316^{**}$ 

Note: Entities have different fiscal years, which were adjusted to separate between voluntary and mandatory adoption. Among voluntary: 1 entity adopted in January 2012, 51 in January 2013, 6 in April, 3 in June, 2 in August and in December, and 1 in September 2013. Among mandatory: 155 in January 2014, 4 in February, 3 in March, and 1 in April, May, July, September, October, and December.

<sup>\*\*\*</sup>  $p \le 0.001$ , \*\*  $p \le 0.01$ , \*  $p \le 0.05$ 

Table 3: Existence of effects expressly self-stated by country and by type of adoption

PANEI	A. Effects	of adopting	IFRS 10	by country
FANEL	A. Lincus	or auobung	TIND IV.	DV COUIIII V

			Any	T-test based on the differences			
Country	Yes		No		Total		in proportions between Yes
	n	%	$\overline{n}$	%	$\overline{n}$	%	and <i>No</i> , by country
Germany	48	54.55	40	45.45	88	100.00	0.851
France	53	63.10	31	36.90	84	100.00	2.472**
United Kingdom	53	71.62	21	28.38	74	100.00	4.098***
Total <sup>a)</sup>	154	62.60	92	37.40	246	100.00	4.077***

Association between Any effect and country:  $\chi^2 = 5.020$ ; Cramer's V = 0.143

PANEL B: Effects of adopting IFRS 11, by country

			Any	T-test based on the differences			
Country	Yes		No		Total		in proportions between Yes
-	n	%	$\overline{n}$	%	$\overline{n}$	%	and No, by country
Germany	37	69.81	16	30.19	53	100.00	3.112**
France	58	85.29	10	14.71	68	100.00	8.157***
United Kingdom	45	80.36	11	19.64	56	100.00	5.667***
Total <sup>b)</sup>	140	79.10	37	20.90	177	100.00	9.493***

Association between Any effect and country:  $\chi^2 = 4.397$ ; Cramer's V = 0.158

PANEL C: Effects of adopting IFRS 10, by type of adoption

			Any	effect?		
Type of Adoption	Yes		No		Total	
	n	%	n	%	n	%
Voluntary	46	73.02	17	26.98	63	100.00
Mandatory	108	59.02	75	40.98	183	100.00
Total <sup>a)</sup>	154	62.60	92	37.40	246	100.00

PANEL D: Effects of adopting IFRS 11, by type of adoption

		Any effect?								
Type of Adoption	Y	es	N	o	Total					
	n	%	$\overline{n}$	%	n	%				
Voluntary	40	85.11	7	14.89	47	100.00				
Mandatory	100	76.92	30	23.08	130	100.00				
Total <sup>b)</sup>	140	79.10	37	20.90	177	100.00				

 <sup>8</sup> entities did not mention the existence or non-existence of effects of IFRS 10, and were excluded.
 4 entities did not mention the existence or non-existence of effects of IFRS 11, and were excluded.

<sup>\*\*\*</sup>  $p \le 0.001$ . \*\*  $p \le 0.01$ . \*  $p \le 0.05$ 

Table 4: Existence of effects expressly self-stated by Industry

PANEL A: Effects of adopting IFRS 10, by industry

	Any effect?											
Industry		Yes	1	No	Т	otal						
	$\overline{n}$	%	$\overline{n}$	%	n	%						
Oil & Gas	3	42.86	4	57.14	7	100.00						
Basic Materials	11	47.83	12	52.17	23	100.00						
Industrials	28	63.64	16	36.36	44	100.00						
Consumer Goods	23	63.89	13	36.11	36	100.00						
Healthcare	14	66.67	7	33.33	21	100.00						
Consumer services	19	55.88	15	44.12	34	100.00						
Telecommunications	4	66.67	2	33.33	6	100.00						
Utilities	10	83.33	2	16.67	12	100.00						
Financials	32	72.73	12	27.27	44	100.00						
Technology	echnology 10		9	47.37	19	100.00						
Total	154	62.60	92	37.40	246	100.00						

Association between Any effect and industry:  $\chi^2 = 9.139$ ; Cramer's V = 0.193

PANEL B: Effects of adopting IFRS 11, by industry

	Any effect?												
Industry		Yes	1	No	Т	otal							
	n	%	$\overline{n}$	%	$\overline{n}$	%							
Oil & Gas	4	80.00	1	20.00	5	100.00							
Basic Materials	16	80.00	4	20.00	20	100.00							
Industrials	24	75.00	8	25.00	32	100.00							
Consumer Goods	23	85.19	4	14.81	27	100.00							
Healthcare	10	76.92	3	23.08	13	100.00							
Consumer services	21	75.00	7	25.00	28	100.00							
Telecommunications	5	100.00	0	0.00	5	100.00							
Utilities	12	100.00	0	0.00	12	100.00							
Financials	23	71.88	9	28.13	32	100.00							
Technology	2	66.67	1	33.33	3	100.00							
Total	140	79.10	37	20.90	177	100.00							

Association between Any effect and industry:  $\chi^2 = 7.046$ ; Cramer's V = 0.200

<sup>\*\*\*</sup>  $p \le 0.001$ . \*\*  $p \le 0.01$ . \*  $p \le 0.05$ 

Table 5: Classification of the direct effects of adopting IFRS 10 and IFRS 11

PANEL A: Effects of IFRS 10 in the scope of consolidation

	Any effect?											
Classification		Yes	No (or not	mentioned)	Total							
	N %		n	%	n	%						
Effect # 1	281	18.18	126	81.82	154	100.00						
Effect # 2	$13^{2}$	8.44	141	91.56	154	100.00						
At least one of the effects	$35^{3}$	22.73	119	77.27	154	100.00						

PANEL B: Effects of IFRS 11 in the classification of joint arrangements

	Any effect?											
Classification		Yes	No (or not	mentioned)	Total							
	N	%	$\overline{n}$	%	$\overline{n}$	%						
Effect # 3	24	15.38	11	84.62	13	100.00						
Effect # 4	$11^{4}$	19.30	46	80.70	57	100.00						
Effect # 5	$18^{4}$	26.09	51	73.91	69	100.00						
Effect # 6	$58^{4}$	84.06	11	15.94	69	100.00						
At least one of the effects	75 <sup>5</sup>	53.57	65	46.43	140	100.00						

<sup>&</sup>lt;sup>1</sup> Distribution of the 28 entities including subsidiaries, by country: Germany (7), France (10), United Kingdom (11). Distribution by industry: Oil & Gas (0); Basic Materials (4); Industrials (5); Consumer Goods (0); Healthcare (0); Consumer services (1); Telecommunications (0); Utilities (1); Financials (16); Technology (1).

<sup>&</sup>lt;sup>2</sup> Distribution of the 13 entities excluding subsidiaries, by country: Germany (5), France (2), United Kingdom (6). Distribution by industry: Oil & Gas (0); Basic Materials (2); Industrials (0); Consumer Goods (1); Healthcare (0); Consumer services (1); Telecommunications (0); Utilities (1); Financials (8); Technology (1).

<sup>&</sup>lt;sup>3</sup> Distribution of the 35 entities: 22 increased the scope of consolidation with subsidiaries not consolidated under the previous version of IFRS 10 (Effect #1); 7 decreased the scope of consolidation by excluding subsidiaries included in that scope under the previous version of IFRS 10 (Effect #2); 6 had both effects simultaneously.

<sup>&</sup>lt;sup>4</sup> Given the small number of firms, the distribution of the effects by country and by industry is presented just for the 75 entities having at least one of the direct effects of adopting IFRS 11.

<sup>&</sup>lt;sup>5</sup> Distribution of the 75 entities, by country: Germany (20), France (39), United Kingdom (16). Distribution by industry: Oil & Gas (2); Basic Materials (15); Industrials (14); Consumer Goods (9); Healthcare (3); Consumer services (9); Telecommunications (3); Utilities (7); Financials (12); Technology (1).

Table 6: Materiality of the effects of adopting IFRS 10 and IFRS 11

		V	Vere the e	T-test based on the differences			
Country	7	Yes	N	lo	T	otal	in proportions between Yes
	n	%	n	%	and No, by country		
Germany	5	10.42	43	89.58	48	100.00	-8.883***
France	10	18.87	43	81.13	53	100.00	-5.738***
United Kingdom	11	20.75	42	79.25	53	100.00	-5.200***
Total	26	16.88	128	83.12	154	100.00	-10.935***

Association between material effects of adopting IFRS 10 and country:  $\chi^2 = 2.145$ ; Cramer's V = 0.118

PANEL B: Materiality of effects of adopting IFRS 11, by country

		V	Vere the e	T-test based on the difference			
Country		Yes	]	No	7	Γotal	in proportions between Yes
	$\overline{n}$	%	$\overline{n}$	%	$\overline{n}$	%	and <i>No</i> , by country
Germany	14	37.84	23	62.16	37	100.00	-1.505
France	26	44.83	32	55.17	58	100.00	-0.785
United Kingdom	16	35.56	29	64.44	45	100.00	-2.002
Total	56	40.00	84	60.00	140	100.00	-2.407***

Association between material effects of adopting IFRS 11 and country:  $\chi^2 = 1.006$ ; Cramer's V = 0.085

Panel C: Materiality of effects of adopting IFRS 10, by type of adoption

Type of Adoption	Were the effects material?											
	Y	es	N	o	Total							
	n	%	$\overline{n}$	%	n	%						
Voluntary	10	21.74	36	78.26	46	100.00						
Mandatory	16	14.81	92	85.19	108	100.00						
Total	26	16.88	128	83.12	154	100.00						

PANEL D: Materiality of effects of adopting IFRS 11, by type of adoption

	Were the effects material?											
Type of Adoption	Y	es	N	0	Total							
	n %		n	%	n	%						
Voluntary	14	35.00	26	65.00	40	100.00						
Mandatory	42	42.00	58	58.00	100	100.00						
Total	56	40.00	84	60.00	140	100.00						

<sup>\*\*\*</sup>  $p \le 0.001$ , \*\*  $p \le 0.01$ , \*  $p \le 0.05$ 

Table 7: Materiality of the effects of adopting IFRS 10 and IFRS 11, by industry

PANEL A: Materiality of effects of adopting IFRS 10

			Were the effe	ects material?			
Industry	<u> </u>	l'es	-	No	Т	otal	
	$\overline{n}$	%	n	%	n	%	
Oil & Gas	0	0.00	3	100.00	3	100.00	
Basic Materials	3	27.27	8	72.73	11	100.00	
Industrials	4	14.29	24	85.71	28	100.00	
Consumer Goods	2	8.70	21	91.30	23	100.00	
Healthcare	0	0.00	14	100.00	14	100.00	
Consumer services	0	0.00	19	100.00	19	100.00	
Telecommunications	0	0.00	4	100.00	4	100.00	
Utilities	1	10.00	9	90.00	10	100.00	
Financials	14	43.75	18	56.25	32	100.00	
Technology	2 20.00		8	80.00	10	100.00	
Total	26	16.88	128	83.12	154	100.00	

Association between material effects of adopting IFRS 10 and industry:  $\chi^2 = 27.072^{**}$ ; Cramer's  $V = 0.419^{**}$ 

PANEL B: Materiality of effects of adopting IFRS 11

	Were the effects material?											
Industry	<u></u>	/es		No	T	otal						
	n	%	$\overline{n}$	%	n	%						
Oil & Gas	2	50.00	2	50.00	4	100.00						
Basic Materials	9	56.25	7	43.75	16	100.00						
Industrials	9	37.50	15	62.50	24	100.00						
Consumer Goods	8	34.78	15	65.22	23	100.00						
Healthcare	1	10.00	9	90.00	10	100.00						
Consumer services	7	33.33	14	66.67	21	100.00						
Telecommunications	2	40.00	3	60.00	5	100.00						
Utilities	7	58.33	5	41.67	12	100.00						
Financials	11	47.83	12	52.17	23	100.00						
Technology	0.00		2	100.00	2	100.00						
Total	56	40.00	84	60.00	140	100.00						

Association between material effects of adopting IFRS 11 and *industry*:  $\chi^2 = 9.990$ ; *Cramer's V* = 0.267

<sup>\*\*\*</sup>  $p \le 0.001$ . \*\*  $p \le 0.01$ . \*  $p \le 0.05$ 

Table 8: Disclosure of the restatements due to the adoption of IFRS 10 and IFRS 11, in selected items of consolidated financial statements

					COLUMN A: Restatements due to the adoption of IFRS 10, exclusively						COLUMN B: Restatements due to the adoption of IFRS 11, exclusively					COLUMN C: Restatements due to the adoption of at least one of the standards					
Items on consolidated financial	Monetary impacts?					Monetary impacts?						Monetary impacts?									
statements	-	Yes	]	No	-	Гotal		Yes	No		Total		Yes		No		Total				
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%			
Total assets	18	90.00	2	10	20	100.00	45	88.24	6	11.76	51	100.00	67	88.16	9	11.84	76	100.00			
Current assets	5	25.00	15	75	20	100.00	30	58.82	21	41.18	51	100.00	37	48.68	39	51.32	76	100.00			
Non-current assets	5	25.00	15	75	20	100.00	30	58.82	21	41.18	51	100.00	37	48.68	39	51.32	76	100.00			
Total liabilities	17	85.00	3	15	20	100.00	44	86.27	7	13.73	51	100.00	65	85.53	11	14.47	76	100.00			
Current liabilities	5	25.00	15	75	20	100.00	30	58.82	21	41.18	51	100.00	37	48.68	39	51.32	76	100.00			
Non-current liabilities	5	25.00	15	75	20	100.00	28	54.90	23	45.10	51	100.00	33	43.42	43	56.58	76	100.00			
Shareholders' equity	8	40.00	12	60	20	100.00	17	33.33	34	66.67	51	100.00	31	40.79	45	59.21	76	100.00			
Revenues	4	20.00	16	80	20	100.00	39	76.47	12	23.53	51	100.00	47	61.84	29	38.16	76	100.00			
Operating result	2	10.00	18	90	20	100.00	31	60.78	20	39.22	51	100.00	38	50.00	38	50.00	76	100.00			
Earnings Before Taxes	6	30.00	14	70	20	100.00	31	60.78	20	39.22	51	100.00	41	53.95	35	46.05	76	100.00			
Net income	8	40.00	12	60	20	100.00	13	25.49	38	74.51	51	100.00	26	34.21	50	65.79	76	100.00			
Cash flows operating activities	9	45.00	11	55	20	100.00	27	52.94	24	47.06	51	100.00	39	51.32	37	48.68	76	100.00			
Cash flows investing activities	6	30.00	14	70	20	100.00	27	52.94	24	47.06	51	100.00	36	47.37	40	52.63	76	100.00			
Cash flows financing activities	2	10.00	18	90	20	100.00	22	43.14	29	56.86	51	100.00	27	35.53	49	64.47	76	100.00			
Cash and cash equivalents	10	50.00	10	50	20	100.00	22	43.14	29	56.86	51	100.00	35	46.05	41	53.95	76	100.00			

Table 9: Monetary effects (in million Euros) of adopting IFRS 10 and IFRS 11 in selected items of consolidated financial statements

	COLUBAL A IEDG 10						COLUMN C: IFRS 10 & 11				
	C	OLUMN A: 1	IFRS 10	CO	LUMN B: IF	RS 11	COL	UMN C: IFR	S 10 & 11		
Items of consolidated	n	Average	Median	n	Average	Median	n	Average	Median		
financial statements		Tiverage	Wiedian		Tiverage	Wicaian		Tiverage	Wicaian		
Total Assets											
Pre-adoption	18	582,709	193,471	45	136,358	14,757	67	219,091	26,708		
Post-adoption	18	585,687	198,136	45	135,225	14,951	67	218,689	26,421		
Current assets											
Pre-adoption	5	11,713	12,934	30	10,003	4,320	37	9,044	4,299		
Post-adoption	5	11,733	13,611	30	9,721	4,248	37	8,810	4,242		
Non-current assets											
Pre-adoption	5	28,465	21,573	30	17,467	8,822	37	15,775	8,221		
Post-adoption	5	28,889	21,313	30	17,370	8,770	37	15,751	8,207		
Total liabilities											
Pre-adoption	17	556,263	155,154	44	114,451	10,531	65	201,850	19,798		
Post-adoption	17	559,171	159,087	44	113,304	10,552	65	201,373	19,470		
Current liabilities	17	223,171	100,007		115,501	10,552	- 05	201,575	17,170		
Pre-adoption	5	9,379	14,159	30	8,719	3,183	37	7,901	2,712		
Post-adoption	5	9,358	14,462	30	8,509	3,170	37	7,723	2,692		
Non-current liabilities		7,550	14,402	30	0,507	3,170	31	1,123	2,072		
Pre-adoption	5	13,499	15,221	28	8,033	5,078	33	7,680	4,992		
Post-adoption	5	13,529	15,121	28	7,867	4,947	33	7,535	4,903		
Shareholders' equity		13,329	13,121	20	7,807	7,277	33	7,333	7,903		
1 2	0	20 200	42,210	17	22.504	9 077	21	24.620	0.601		
Pre-adoption	8	38,288		17	22,504	8,977	31	24,629	9,681		
Post-adoption	8	38,480	42,261	17	22,478	8,498	31	24,675	9,658		
Revenues	1	50.000	24 271	20	10.012	0.244	47	21.662	11 225		
Pre-adoption	4	50,980	34,271	39	18,913	9,244	47	21,663	11,335		
Post-adoption	4	51,493	35,301	39	18,527	9,310	47	21,267	11,241		
Operating result	•	<b>5.504</b>	<b>5.50.4</b>	2.1	2 104	000	20	2.216	0.60		
Pre-adoption	2	7,734	7,734	31	2,194	893	38	2,216	869		
Post-adoption	2	8,369	8,369	31	2,145	884	38	2,207	868		
Earnings before taxes											
Pre-adoption	6	2,861	888	31	2,048	498	41	1,879	588		
Post-adoption	6	3,182	945	31	2,029	491	41	1,909	762		
Net income											
Pre-adoption	8	2,119	1,397	13	2,439	2,034	26	1,624	718		
Post-adoption	8	2,289	1,398	13	2,420	2,026	26	1,662	723		
Cash flows operating											
activities											
Pre-adoption	9	1,812	1,591	27	3,532	1,128	39	2,604	1,128		
Post-adoption	9	1,938	1,635	27	3,502	1,117	39	2,596	1,117		
Cash flows investing											
activities											
Pre-adoption	6	-3,471	-394	27	-2,433	-690	36	-2,479	-622		
Post-adoption	6	-3,574	-393	27	-2,385	-706	36	-2,440	-605		
Cash flows financing				-	<i>)</i>			, -			
activities											
Pre-adoption	2	-1,291	-1,291	22	-531	-269	27	-409	-255		
Post-adoption	2	-1,464	-1,464	22	-563	-253	27	-454	-228		
Cash and cash equivalents		1,101	1,101		505	200		15 1			
Pre-adoption	10	26,208	4,399	22	7,501	1,468	35	11,034	2,320		
Post-adoption	10	26,246	4,407	22	7,301	1,397	35	10,901	2,320		
1 ost-adoption	10	20,240	7,40/		7,508	1,37/	33	10,501	4,470		

Table 10: Wilcoxon Test results concerning the effects of IFRS 10, IFRS 11, and both standards, in selected items of consolidated financial statements

	COLUMN A: IFRS 10						COLUMN B: IFRS 11						COLUMN C: IFRS 10 & IFRS 11					
Items of consolidated financial		Nun	Number of Cases			xon Test		Number of Cases			Wilcox	Wilcoxon Test		Number of Cases			Wilcoxon Test	
statements	n	Post < Pre	Post > Pre	Post = Pre	Statistic	Conclusion	n	Post < Pre	Post > Pre	Post = Pre	Statistic	Conclusion	n	Post < Pre	Post > Pre	Post = Pre	Statistic	Conclusion
Total Assets	18	7	11	0	-2.156*	a)	45	36	9	0	-3.369***	a)	67	48	19	0	-2.211*	a)
Current assets	5	4	1	0	-0.674	c)	30	22	8	0	-2.931***	b)	37	29	8	0	-3.342***	b)
Non-current assets	5	3	2	0	-0.135	c)	30	19	11	0	-1.347	c)	37	21	16	0	-1.109	c)
Total liabilities	17	6	11	0	-2.059*	a)	44	34	10	0	-3.198***	b)	65	47	18	0	-2.539**	a)
Current liabilities	5	3	2	0	-0.405	c)	30	25	5	0	-3.527***	b)	37	31	6	0	-3.885***	b)
Non-current liabilities	5	3	2	0	-0.135	c)	28	23	5	0	-3.279***	b)	33	27	6	0	-3.618***	b)
Shareholders'equity	8	6	2	0	-0.840	c)	17	12	5	0	-1.065	c)	31	21	10	0	-1.372	c)
Revenues	4	2	2	0	< 0.001	c)	39	35	4	0	-5.010***	b)	47	44	3	0	-5.624***	b)
Operating result	2	0	2	0	-1.342	c)	31	23	8	0	-3.175***	b)	38	27	11	0	-2.959***	b)
Earnings before taxes	6	1	5	0	-1.782*	a)	31	24	7	0	-2.273*	a)	41	27	14	0	-0.965	c)
Net income	8	4	4	0	-0.420	c)	13	10	3	0	-1.748*	b)	26	16	10	0	-0.610	c)
Cash flows operating activities	9	4	5	0	-0.770	c)	27	19	8	0	-1.646	c)	39	25	14	0	-1.319	c)
Cash flows investing activities	6	1	5	0	-0.943	c)	27	11	16	0	-0.913	c)	36	11	25	0	-1.885*	b)
Cash flows financing activities	2	1	1	0	-0.447	c)	22	14	8	0	-1.007	c)	27	18	9	0	-1.550	c)
Cash and cash equivalents	10	3	7	0	-1.478	c)	22	17	5	0	-2.581**	b)	35	24	11	0	-2.408**	b)

<sup>\*\*\*</sup>  $p \le 0.001$ . \*\*  $p \le 0.01$ . \*  $p \le 0.05$ 

Conclusion: a) Post-adoption amounts are statistically significantly higher than pre-adoption amounts b) Post-adoption amounts are statistically significantly lower than pre-adoption amounts

c) There are no statistically significantly differences between post and pre-adoption amounts

Table 11: Effects of adopting IFRS 10 and IFRS 11 in selected financial ratios

	C	OLUMN A: I	FRS 10	COI	UMN B: IF	RS 11	COL	COLUMN C: IFRS 10 & 11			
Financial ratios	n	Average	Median	n	Average	Median	n	Average	Median		
Return on Equity (ROE)											
Pre-adoption	7	0.0709	0.0602	10	0.1400	0.1130	22	0.0840	0.0781		
Post-adoption	7	0.0728	0.0603	10	0.1390	0.1131	22	0.0841	0.0784		
Return on Assets (ROA)											
Pre-adoption	7	0.0184	0.0103	11	0.0192	0.0187	22	0.0121	0.0111		
Post-adoption	7	0.0192	0.0101	11	0.0195	0.0186	22	0.0125	0.0107		
Profit Margin											
Pre-adoption	4	0.1023	0.1024	11	0.0646	0.0387	17	0.0560	0.0406		
Post-adoption	4	0.1045	0.1023	11	0.0662	0.0401	17	0.0584	0.0436		
Current liquidity ratio											
Pre-adoption	5	1.0273	0.9264	30	1.2597	1.1063	37	1.3250	1.0798		
Post-adoption	5	1.0074	0.9411	30	1.3172	1.1153	37	1.3694	1.0891		
Cash Ratio											
Pre-adoption	3	0.2502	0.2826	17	0.3309	0.2520	20	0.3189	0.2547		
Post-adoption	3	0.2505	0.2814	17	0.3841	0.2255	20	0.3636	0.2368		
Financial Autonomy											
Pre-adoption	8	0.2006	0.1442	15	0.3645	0.3617	28	0.2777	0.2780		
Post-adoption	8	0.2015	0.1437	15	0.3703	0.3615	28	0.2815	0.2809		
Debt to Equity											
Pre-adoption	8	14.0326	8.6094	15	3.0974	1.7644	28	7.4168	2.5980		
Post-adoption	8	14.1611	8.7828	15	3.0498	1.7663	28	7.3853	2.5605		
Debt to Assets											
Pre-adoption	17	0.8525	0.9319	44	0.6675	0.6745	65	0.7161	0.7208		
Post-adoption	17	0.8526	0.9335	44	0.6633	0.6605	65	0.7130	0.7186		
Total Asset Turnover											
Pre-adoption	4	0.4967	0.5370	35	0.7476	0.6547	42	0.7090	0.6568		
Post-adoption	4	0.4982	0.5389	35	0.7383	0.6345	42	0.7007	0.6193		
Size											
Pre-adoption	18	25.7246	26.0023	45	23.8693	23.4150	67	24.1592	23.9974		
Post-adoption	18	25.7154	25.9786	45	23.8579	23.4281	67	24.1658	24.0082		

Return on Equity (ROE) = Net income/Shareholders' equity; Return on Assets (ROA) = Net income/Assets; Profit Margin = Net income/Revenues; Current liquidity ratio = current assets / current liability; Cash ratio = cash and cash equivalents / current liabilities; Financial autonomy = Shareholders' equity / Total assets; Debt to Equity = Total liabilities / Shareholders' equity; Debt to Assets = Total liabilities / Total assets; Total Asset Turnover = Revenues / Total assets; Size = Log(total assets)

Table 12: Wilcoxon Test results concerning the effects of IFRS 10, IFRS 11, and both standards, in selected financial ratios

	COLUMN A: IFRS 10						COLUMN B: IFRS 11						COLUMN C: IFRS 10 & IFRS 11					
		Nun	ber of (	Cases	Wilco	xon Test		Num	ber of C	Cases	Wilcox	Wilcoxon Test		Number of Cases			Wilcoxon Test	
Financial Ratios	n	Post < Pre	Post > Pre	Post = Pre	Statistic	Conclusion	n	Post < Pre	Post > Pre	Post = Pre	Statistic	Conclusion	n	Post < Pre	Post > Pre	Post = Pre	Statistic	Conclusion
Return on Equity (ROE)	7	4	3	0	-0.169	c)	10	8	2	0	-1.988*	b)	22	14	8	0	-0.893	c)
Return on Assets (ROA)	7	5	2	0	-0.338	c)	11	4	7	0	-0.889	c)	22	10	12	0	-1.088	c)
Profit Margin	4	2	2	0	-0.365	c)	11	1	10	0	-2.667**	a)	17	4	13	0	-2.627**	a)
Current liquidity ratio	5	3	2	0	-0.405	c)	30	16	14	0	-0.319	c)	37	22	15	0	-0.671	c)
Cash Ratio	3	2	1	0	< 0.001	c)	17	7	10	0	-0.308	c)	20	10	10	0	-0.112	c)
Financial Autonomy	8	4	4	0	-0.700	c)	15	3	12	0	-2.897***	a)	28	8	20	0	-3.438***	a)
Debt to Equity	8	4	4	0	-1.120	c)	15	12	3	0	-3.067***	b)	28	20	8	0	-2.368**	b)
Debt to Assets	17	7	10	0	-0.639	c)	44	33	11	0	-3.910***	b)	65	45	20	0	-3.774***	b)
Total Asset Turnover	4	2	2	0	-0.365	c)	35	31	4	0	-4.390***	b)	42	37	5	0	-4.858***	b)
Size	18	7	11	0	-1.982*	a)	45	36	9	0	-3.956***	b)	67	48	19	0	-2.699**	a)

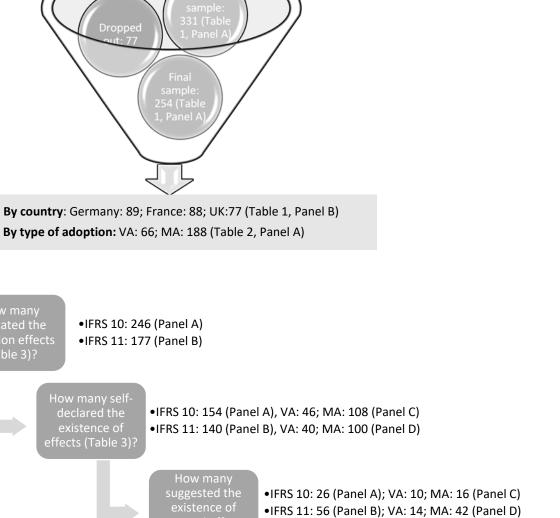
<sup>\*\*\*</sup>  $p \le 0.001$ . \*\*  $p \le 0.01$ . \*  $p \le 0.05$ 

Return on Equity (ROE) = Net income/Shareholders' equity; Return on Assets (ROA) = Net income/Assets; Profit Margin = Net income/Revenues; Current liquidity ratio = current assets / current liability; Cash ratio = cash and cash equivalents / current liabilities; Financial autonomy = Shareholders' equity / Total assets; Debt to Equity = Total liabilities / Shareholders' equity; Debt to Assets = Total liabilities / Total assets; Total Asset Turnover = Revenues / Total assets; Size = Log(total assets)

Conclusion: a) Post-adoption amounts are statistically significantly higher than pre-adoption amounts

- b) Post-adoption amounts are statistically significantly lower than pre-adoption amounts
- c) There are no statistically significantly differences between post and pre-adoption amounts

Chart 1: Changes in the sample during the several phases of the study



Legend: VA: Voluntary Adopters; MA: Mandatory Adopters

(Table 8)?

•Total of 76 (Column C)
•IFRS 10: 20 (VA: 8; MA:12)
•IFRS 11: 51 (VA: 12; MA: 39)
• At least one: 76 (VA: 21; MA: 51)

#### → Information provided by the company and hand-collected:

#### Note 1. Significant accounting principles - Introduction, pages 354-355

"IFRS and IFRIC Interpretations applied by the Group as of 1 January 2014:

• (...); IFRS 10 Consolidated Financial Statements; IFRS 11 Joint Arrangements; (...)."

#### Note 2. Changes in consolidation scope - 1. Normative Changes, pages 372-374

"Following the retrospective application of IFRS 10 Consolidated Financial Statements and IFRS 11 Joint Arrangements, the main changes to the consolidation scope are listed below:

- Two securitization special purpose vehicles on behalf of third parties, Antalis SA and Barton Capital LLC, were fully consolidated;
- 77 entities meeting the definition of joint ventures, previously proportionately consolidated, were retrospectively
  accounted for using equity method;
- 2 mortgage financing entities meeting the definition of joint operations, previously proportionately consolidated, were retrospectively consolidated for the assets, liabilities, revenues and expenses relating to the Group's interest in those entities."

(millions ourse)	31.12.2013	Impact
(millions euros)	After IFRS 10 & 11	IFRS 10 & 11
Total assets	1,214,193	-21,069
Total liabilities	1,160,223	-20,938
Total equity	53,970	-131
Operating income	2,337	-43
Earnings before tax	2,922	-136
Consolidated net income	2,394	-131

#### → Interpretation by the Authors:

- The entity adopted the Consolidation Package in 2014 (mandatory adoption);
- Main effects:
  - o IFRS 10 Adoption consolidation of entities previously not consolidated;
  - o IFRS 11 Adoption 1) change from proportionate consolidation for equity method in entities previously classified as jointly controlled entities, but now reclassified as joint ventures; 2) change in the classification of entities previously considered as jointly controlled entities, but now classified as joint operations.
- The entity does not indicate whether the effects presented were material. But restated consolidated financial statements of preceding year, both standards contributed to this restatement and revealed the impact of both standards → we considered these effects as material.

(millions euros)	31.12.2013 After IFRS 10 & 11	Impact IFRS 10 & 11	Pre Adoption Amounts (Calculated by Authors)
Total assets	1,214,193	-21,069	= 1,214,193 - (-21,069)
			= 1,235,262
Total liabilities	1,160,223	-20,938	1,181,161
Total equity	53,970	-131	54,101
Operating income	2,337	-43	2,380
Earnings before tax	2,922	-136	3,058
Consolidated net income	2,394	-131	2,525