La consolidation des co-entreprises en IFRS : étude de l’impact du changement de méthodes pour les sociétés européennes

Reporting methods for Joint Ventures: which consequences for European listed companies?

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Résumé

La nouvelle norme IFRS 11 impose l’utilisation de la mise en équivalence, contrairement à l’ancienne norme IAS 31 et aux pratiques de nombreuses sociétés. Après avoir examiné les éléments conceptuels sous-jacents à la consolidation des contreprises, nous proposons une analyse des lettres de commentaires reçues par l’IASB en réponse à son exposé-sondage de 2007, puis nous commentons l’étude d’impact menée par l’IASB. Nous présentons ensuite une étude empirique menée sur un échantillon de sociétés européennes simulant l’impact sur les états financiers des changements requis par IFRS 11. Nos résultats mettent en évidence des faiblesses tant dans l’argumentation de l’IASB que dans la mesure des impacts du changement de méthode que le normalisateur propose.

Mots-clés: co-entreprises, IFRS 11, intégration proportionnelle, étude d’impact, convergence.

Abstract

This paper explores the conceptual and regulatory arguments concerning financial reporting for joint ventures under IFRS. The new IFRS 11 requires the equity method for joint ventures, this latter being against the preferences of IAS 31 and against recent practice in many entities. After a theoretical exploration of the issues and a summary of the history of the various regulations, we present a content analysis of comment letters on the 2007 Exposure Draft, and an investigation of the IASB Effect Analysis. We then present an original empirical survey of practice, and implications of required changes, across four European countries. Our results suggest a lack of logical clarity in much of the debate and argument, and doubts about the rigour and effectiveness of the IASB Effect Analysis.

Key words: joint ventures, IFRS 11, proportionate consolidation, effect analysis, convergence.

1. Introduction

International joint ventures represent an increasingly attractive way to expand into foreign markets while minimizing political and economic risks (Goldberg and Wolf, 1993; Freedman, 1996). Half of the equity investments in the United States represent investments in joint ventures (Stoltzfus and
Epps, 2005). The high percentage of joint ventures underscores the need to understand accounting issues related to joint ventures. Soonawalla (2006) noted there was little literature on accounting for joint venture investments but during recent years a debate among international accounting standards setters focuses on identifying the appropriate method of reporting investments in joint ventures. There are basically two methods of reporting investment in joint ventures: the equity method and the proportionate consolidation method. The literature on joint ventures provides mixed results on the relevance of one method over the other. Despite this unclear view, the IASB requires in its new standard IFRS 11, issued in May 2011 and which supersedes the old IAS 31, the exclusive use of proportionate consolidation for joint ventures. Making this decision, the IASB seems to favor a conceptual view as compared with the importance of relevance to users.

The paper first describes arguments in favor and against the two accounting methods for joint ventures representation. The third section proposes a short history of the IASB’s joint ventures project. In the fourth section, we analyse the reactions of constituencies to this project. The fifth section is focused on the effect analysis documents published by the IASB. The sixth section presents the results of our empirical study on a sample of French, German, Spanish and UK firms in order to better understand the effects on the financial statements of a move from the proportionate method to the equity method. The final section concludes.

2. Relevance of accounting treatment for joint ventures

We begin with a brief summary of IFRS 11. The IFRS is to be applied by all entities that are a party to a joint arrangement, i.e. an arrangement of which two or more parties have joint control. Control is to be understood as newly defined in IFRS 10: ‘An investor controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee’ (IASB, 2011d). Joint control is defined as the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities (i.e. activities that significantly affect the returns of the arrangement) require the unanimous consent of the parties sharing control.

IFRS 11 classifies joint arrangements into two categories: joint operations and joint ventures. A joint operation is a joint arrangement such that the parties that have joint control of it (i.e. the joint operators) have rights to the assets, and obligations for the liabilities, relating to the arrangement. A joint venture is a joint arrangement such that the parties that have joint control (i.e. the joint venturers) have rights to the net assets of the arrangement.

The IFRS requires a joint operator to recognize and measure the assets and liabilities (and to recognize the related revenues and expenses) in relation to its interest in the arrangement in accordance with relevant IFRSs applicable to the particular assets, liabilities, revenues and expenses.

It requires a joint venturer to recognize an investment and to account for that investment using the equity method in accordance with IAS 28, unless IAS 28 exempts the entity from applying the equity method. Thus, the option to use proportionate consolidation, as permitted by IAS 31, is removed.

As stated above, the two methods of reporting an investment in joint ventures are basically the equity method and the proportionate consolidation method. Under the equity method a venturer’s
net investment in the joint venture is shown as a single line item on the venturer’s balance sheet as an asset and the venturer’s net income or loss appears as a single line item on the venturer’s income statement as a financial gain or loss. Under proportionate consolidation method, the need for the equity method’s single line items disappears as the venturer’s share of each of the joint venture’s financial statements items is combined on a line-by-line basis with its counterpart in the venturer’s financial statements. These methods lead to different amounts being presented in the balance sheet, as assets and liabilities, as well as in the income statement, as revenues and expenses.

During its July 2006 meeting, the IASB explained that the main objective of the elimination of the proportionate consolidation was to ‘converge with the US accounting literature for joint ventures […] rather than to harmonise with existing US practice generally’ (IASB, 2006), suggesting that the literature provided evidence of the superiority of the equity method over the proportionate method.

However, it seems that the literature provides mixed views on the relevance for users of each method. Main contributions are briefly presented in this section and Appendix 1 provides a more complete view of the literature on joint ventures.

Several researchers take the view that proportionate consolidation is the best representation method because it provides better predictions of future return on equity (Graham et al., 2003), it reflects the substance while the equity method gives a legal view (Stoltzfus and Epps, 2005) or because the equity method fails to reflect liabilities of investees (Bierman, 1992; Lourenço and Curto, 2010).

Other researchers express mixed views. Kothavala (2003) finds that both methods are relevant depending what is measured. Lim et al. (2003), whose research is the only one to be quoted by the IASB in all its published documents, show that, with additional information in the notes, the equity method provides relevant information for users. Milburn and Chant (1999) in a study sponsored by the FASB, totally support the view that a single venturer in a joint venture cannot control its pro rata share of joint venture assets.

Hence, the literature provides no convincing evidence of the superiority of one method over another one and cannot really be used to support or oppose the IASB’s position on the elimination of proportionate consolidation. The joint ventures project has been controversial and the IASB needed 4 years to produce the final standard from the ED. It seems that constituencies anticipate strong adverse effects from the use of the equity method. In this paper, we intend to understand if the use of the equity method will indeed have little effect on the financial statements, as purported by the IASB. Just after the publication of its new IFRS 11, the IASB issued an effect analysis document (IASB, 2011a, see section 5) explaining that moving to the equity method would have little effect on the financial statements of preparers currently using the proportionate method for their joint ventures. The objective of our research is threefold. In the first place, we aim to understand the positions expressed by participants in the due process and to identify the arguments used by the opponents to the equity method. In the second place, we intend to validate the assertions of the

1 Obviously, the use of different methods across the world has been of great influence on the debate. Specifically the equity method is applied in USA, Australia and United Kingdom whereas the proportionate consolidation has been commonly used in Canada and some European countries; under the Seventh directive (and old IAS) member states had the option to allow either approach.
IASB in its effect analysis document, through an extended empirical study. Finally, we give a brief summary appraisal of the pros and cons of IFRS 11.

3. Proportionate consolidation in the IAS/IFRS: from a recommended alternative to its elimination

IAS 31 ‘Joint Ventures’ (IASC, 1990), originally issued in November 1990, recommended the use of proportionate method as the preferred accounting treatment for joint ventures but admitted the use of the equity method. The last version of IAS 31 (IASB, 2009), while following the recent policy of not referring to a ‘preferred’ method, explicitly described the equity method as the ‘alternative’ to proportionate consolidation. Its argument in favour of proportionate consolidation was given in paragraph 32, which we quote:

When recognising an interest in a jointly controlled entity, it is essential that a venturer reflects the substance and economic reality of the arrangement, rather than the joint venture’s particular structure or form. In a jointly controlled entity, a venturer has control over its share of future economic benefits through its share of the assets and liabilities of the venture. This substance and economic reality are reflected in the consolidated financial statements of the venture when the venture recognises its interests in the assets, liabilities, income and expenses of the jointly controlled entity by using one of the two reporting formats for proportionate consolidation described in paragraph 34.

This was the ‘official’ explanation. The real explanation is given in Ernst and Young (2004, p.488), as follows:

Joint ventures comprise a major part - sometimes all - of the activities of entities in some sectors (particularly extractive industries, property and construction). Over the years, these sectors have developed generally accepted 'industry GAAPs'.... Any attempt to standardise the accounting at this stage could have led to industry opposition so strong as to have seriously impeded the harmonisation programme.

So the issue was pragmatic rather than conceptual. Further, and in a sense more importantly, paragraph 32 is logically invalid. The statement that in a joint venture a 'venturer has control over its share of future economic benefits through its share of the assets and liabilities of the venture' is necessarily wrong, since, by prior definition, the venturer does NOT have control over its share of future economic benefits! As the IASB correctly puts it (IASB, 2011b§14): 'In the case of an interest in a joint venture, none of the individual venturers has control of the activities of the venture'.

Soon after the emergence of the IASB, the question of the elimination of the choices proposed in different standards, among them IAS 31, was raised (IASB, 2001).

In its September 2002 meeting, the Board considered the possibility to eliminate the proportionate method for joint ventures and asked the Australian standard-setter to work on the subject (IASB, 2002a). In September 2002, it was decided to consider the revision of IAS 31 as a part of the short-term convergence project with the FASB (IASB, 2002b). From September 2002 to July 2004, the joint ventures project was discussed several times during Board meetings and members expressed dissent views on the equity method. In particular, some members noted that (IASB, 2003):

The expanded equity method and the gross equity method might suffer from the same criticisms often made of proportional consolidation […] Under equity accounting, the balance sheet and income statement effectively ‘shrink’ due to the netting that occurs in the application of the equity method and information is lost.
In spite of these criticisms, the Board agreed in December 2005 to remove the proportionate consolidation method (IASB, 2005).

In September 2007 the IASB published for public comment ED 9 (IASB, 2007) proposing to replace IAS 31 'Interests in Joint Ventures' with a new standard to be titled ‘Joint Arrangements’. The ED 9 proposed that a party to a joint operation should recognize its contractual rights and obligations in accordance with applicable IFRSs and should recognize both the individual assets to which they have rights and the liabilities for which they are responsible, even if the joint arrangement operates in a separate legal entity. Finally it should recognize an interest in a joint venture, i.e. an interest in the share of the outcome generated by the activities of a group of assets and liabilities subject to joint control, using the equity accounting. The proportionate consolidation would not be permitted. The elimination of the proportionate method was mainly justified by its inconsistency with the definitions of assets and liabilities given by the conceptual framework (BC, 8) even if the argument of a better information for users (BC 12 and BC 24) and a better convergence with US GAAP are put forward. Indeed, the Board regards the arguments of some constituents arguing that proportionate consolidation was a practical way to present a venturer’s interest in a joint venture as relatively less important than the conceptual consistency (BC 12):

> Despite its conceptual flaw, their view is that proportionate consolidation better meets the information needs of users of financial statements by providing a better representation of the performance of an entity’s management and an improved basis for predicting cash flows. The Board noted these arguments but concluded that the practical argument does not refute the fundamental inconsistency with the Framework.

This proposition is an unsubstantiated value judgment.

As explained in the next section, the ED 9 received a majority of not supportive comment letters which disagreed with the elimination of proportionate consolidation which appeared to be the most problematic area.

In May 2011, a slightly different version of the ED 9 has been issued as the new IFRS 11 which confirms the elimination of the proportionate consolidation. Interestingly, the Board does not refer directly to the consistency/inconsistency with the conceptual framework in the Basis for Conclusions of IFRS 11. Instead, it refers to the principles-based approach to accounting for joint ventures established by the new standard (BC 3 and BC 73), to the better convergence with US GAAP even if not complete (BC 3), and to a better verifiability, comparability and understandability of financial statements (BC 73).

It seems that the IASB has implicitly admitted that the conceptual consistency argument, much debated by participants in the due process as explained in section 4, was not defensible any more and recognizes that the main argument for the elimination of the proportionate consolidation is a convergence one.

4. Constituents’ reactions to the IASB’s proposals.

According to the IASB’s due process handbook (IASCF, 2008), comment letters received after the publication of an Exposure Draft are important in the decision-making process of the Board. The joint ventures project has been a very slow one, presumably because it was controversial and part of a larger project related to consolidation. In its project summary and feedback statement (IASB,
the IASB recognizes that many respondents were against the elimination of proportionate consolidation but does not provide more details about the nature of respondents and about their geographical origin. We hypothesize that preparers would be more opposed to this proposal than other respondents. We also assume that constituents from countries where proportionate consolidation used to be the more common method under local GAAP would be the most opposed to its elimination.

4.1. Methodology

We undertook a content analysis of the 111 comment letters received by the IASB after the publication of ED 9. Content analysis has been used in previous studies based on submissions on ED or DP (MacArthur, 1988; Tuticci et al., 1994; Weetman et al., 1996; Yen et al., 2007). In ED 9, constituents were asked to answer 6 questions. We limited our analysis to the answers to question n°3 only, which was about the elimination of proportionate consolidation. For each comment letter, we identified the nature of the respondent, its geographical origin and its position on proportional consolidation.

Seven groups of respondents were identified: (1) Preparers (including individual preparers and professional associations), (2) The Accounting Profession, (3) Investors, (4) National standard setters (included the EFRAG), (5) Market regulators (included IOSCO), (6) Government agencies, and (7) Other interested parties. This classification is very close to the list of constituents involved in the due process given by the IASB in its Preface to IFRS (§ 18).

Each letter was attributed one of the following codifications, depending on the position expressed by the respondent: agree when the respondent supported the elimination of proportionate consolidation, disagree when he/she disapproved it and neutral when a mixed view was expressed or the question ignored.

Finally, we identified the different arguments used by opposed respondents to support their view. Consistently with previous studies (Tuticci et al., 1994, Yen et al., 2007), two main types of arguments had been used: economic arguments and conceptual ones.

Economic arguments refer to the consequences of the standards for the users of the financial statements and also for the preparers (implementation costs and potential effects on the contracts). Conceptual arguments refer to the inconsistency of the standard proposed: internal inconsistency, contradiction with other standards or with the conceptual framework and divergence with the objectives proclaimed by the standard setter. Table I proposes a synthesis of the different arguments used by opponents to the elimination of proportionate consolidation.

<table>
<thead>
<tr>
<th>Economic arguments</th>
<th>Conceptual arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>A2</td>
</tr>
<tr>
<td>A3</td>
<td>A4</td>
</tr>
</tbody>
</table>

2 Exact terms of question 3 were: ‘Do you agree that proportionate consolidation should be eliminated, bearing in mind that a party would recognize assets, liabilities, income and expenses if it has contractual rights and obligations relating to individual assets and liabilities of a joint arrangement? If not, why?’

3 We did not identify any ‘Academics’ group as the IASB did not receive any letter from academics in this case.
- The equity method does not provide relevant and transparent information to users.
- The elimination of proportionate consolidation would have significant impacts for preparers: decrease in net sales, restructuring of deals...

The elimination of proportionate consolidation would lead to major inconsistencies between the internal reporting and the published financial statements (especially with segment reporting)

- The equity method is not conceptually justified.
- The justification given by the IASB is inconsistent with its precedent explanation in favour of the proportionate consolidation in IAS 31.

While the convergence with US GAAP is one of the justifications given by the IASB, its proposals are not fully convergent with US standards. Convergence must not override the quality of financial reporting

4.2. Results

Table II presents the position expressed by respondents depending on their nature. Our analysis confirms the results of previous studies in what concerns the high participation of preparers, which form 53.1% of the respondents and the very low participation of users (Jorissen et al., 2010).

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Agree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Preparers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>23.3</td>
<td>42</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>6.7</td>
<td>60</td>
<td>53.1</td>
</tr>
<tr>
<td>The Accounting Profession</td>
<td>8</td>
<td>34.8</td>
<td>14</td>
<td>60.9</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>4.3</td>
<td>23</td>
<td>20.3</td>
</tr>
<tr>
<td>Investors</td>
<td>1</td>
<td>50</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>National Standard Setters</td>
<td>9</td>
<td>45</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>20</td>
<td>20</td>
<td>17.7</td>
</tr>
<tr>
<td>Market Regulators</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Government agencies</td>
<td>2</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Other interested parties</td>
<td>2</td>
<td>50</td>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>3.5</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>31.9</td>
<td>69</td>
<td>61.7</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>7.1</td>
<td>113</td>
<td>100</td>
</tr>
</tbody>
</table>

A large majority of respondents (61.7%) disapproved of the elimination of proportionate consolidation. As hypothesized, preparers are the most opposed to the IASB’s proposals but the accounting profession also expressed a strong opposition.

The distribution of preparers depending on their geographical origin and their position on the IASB’s proposals presented in table III confirms the assumption of a stronger opposition in countries where proportionate consolidation is more frequently used: France, Germany, Spain and Australia. The case of UK is more unexpected, as the use of the proportionate method was not authorized before the implementation of IFRS. Interestingly, the IASB does not mention this information either in its effect analysis (IASB, 2011a) or in its feedback statement (IASB, 2011b).

Table III: Geographical origin of preparers

<table>
<thead>
<tr>
<th>Geographical origin</th>
<th>Agree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Australia</td>
<td>1</td>
<td>33.3</td>
<td>2</td>
<td>66.7</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>28.6</td>
<td>4</td>
<td>57.1</td>
</tr>
</tbody>
</table>

4 Before IFRS, proportionate consolidation was mandatory for joint ventures in France. In Germany, Spain and Australia, both methods were accepted even if proportionate consolidation was more frequent. Sweden, Belgium and Denmark also appear to be strongly opposed to the elimination of proportionate consolidation but the low involvement of preparers from these countries makes it difficult to draw conclusions.
It could be assumed that opponents to the IASB’s proposals use proportionate consolidation in their financial statements. For the 42 firms included in the group of preparers\(^5\), we identified the method used for the consolidation of joint ventures in the 2010 financial statements in order to confirm any correlation between the method used and the position expressed.

The results presented in table IV confirm this assumption but it also interestingly makes clear that some users of the equity method do not support the elimination of proportionate consolidation.

Table IV: Correlation between position expressed and consolidation method used

<table>
<thead>
<tr>
<th>Consolidation method used for joint ventures</th>
<th>Agree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Proportionate consolidation</td>
<td>3</td>
<td>11.1</td>
<td>23</td>
<td>85.2</td>
</tr>
<tr>
<td>Equity method</td>
<td>8</td>
<td>61.5</td>
<td>3</td>
<td>23.1</td>
</tr>
<tr>
<td>Not mentioned</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>26.2</td>
<td>27</td>
<td>64.3</td>
</tr>
</tbody>
</table>

In its feedback statement (IASB, 2011b), the IASB admits that the elimination of proportionate consolidation was ‘the most controversial change brought about by the new IFRS\(^5\)’. The IASB explains that many respondents support the proportionate consolidation because it provides a better reflection of the economic substance, it gives useful information for users and also because the superiority of the equity method has not been demonstrated. Our analysis, synthesized in table V, provides a more detailed and accurate picture of the argumentation used by opponents to the IASB’s proposals.

Table V: Arguments used by opponents to the elimination of proportionate consolidation (% of occurrences)

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Economic arguments</th>
<th>Conceptual arguments</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
</tr>
<tr>
<td>Preparers</td>
<td>42.1</td>
<td>10.3</td>
<td>27.1</td>
</tr>
<tr>
<td>The Accounting Profession</td>
<td>22.6</td>
<td>3.2</td>
<td>45.2</td>
</tr>
<tr>
<td>Investors</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>National Standard Setters</td>
<td>33.3</td>
<td>7.4</td>
<td>33.3</td>
</tr>
</tbody>
</table>

\(^5\) The group of preparers includes 42 firms and 18 professional associations.
While the IASB seems to insist more on the economic arguments put forward by opponents, they refer more frequently to conceptual arguments except in the case of preparers and users. Moreover, the argument about the convergence with US GAAP (A4) which often comes back (23.1%) is never mentioned by the IASB. In their content analysis of the comment letters received by the Australian standard setter after the publication of ED 49 about the accounting for identifiable assets, Tuttici et al. (1994) detect a majority of conceptual arguments, which coincided, according to them, with the development of the conceptual framework project. The IASB undertook the revision process of its conceptual framework in 2004 and has confirmed its important role since. The use of conceptual arguments could result from a strategy of participants to the due process who may anticipate a stronger influence of these arguments on the Board decision-making process. Putting forward adverse economic consequences of the new standard could be seen as a self-interest strategy which does not meet the public interest objective stated by the IASB (IFRS Foundation, 2010).

However, the methodology used in the IASB’s effect analysis is not without critics as explained in the next section.

5. Effect analysis (discussion on the IASB effect analysis for IAS 11)

The effect analysis for IFRS 11 ‘Joint Arrangements’ was published by the IASB in July 2011, together with the effect analysis for IFRS 10 ‘Consolidated Financial Statements’ and IFRS 12 ‘Disclosure of Interests in Other Entities’, (both standards focusing on consolidation, respectively on control and disclosures (IASB, 2011a). Surprisingly, we see that the effect analysis document was issued 2 months after the standard IFRS 11 and its accompanying ‘papers’ (such as project summary and feedback statement).

After an explanation of the need for an effect analysis and a short summary of its content, we will comment on the process and the main conclusions of the IFRS 11 effect analysis.

Many preparers and organisations involved in the process of IFRSs’ changes underline the importance of an effect analysis. For example, the group of associations AFEP-MEDEF-ACTEO (whose main members are large companies) has written, in its ‘collective’ comment letter to the ED 9 (AFEP, 2008):

We believe that the change from proportionate consolidation to equity method should not be imposed on entities without any analysis that the change would result in improved Financial Reporting.
The subject is also of great importance at the European level. On January 2011, EFRAG issued a discussion paper whose main objective is ‘to stimulate discussion and to use the consultation process to assess support for the proposals, with a view to then assisting the IASB in implementing the proposals within its due process’ (EFRAG, 2011)

At the end of September 2011, in the light of its initial assessment of the new and revised standards for the endorsement in the European Union, EFRAG invited companies to participate in the field tests about the application of the new standards IFRS 10, 11 and 12. All companies are invited and particularly, for IFRS 11 and 12, the ones from the main industries using joint venture like telecom, extractive (oil and gas, mining) industries, real estate and construction companies.

The main aspects of IFRS 11 effect analysis are discussed in the following sub-sections.

5.1. Joint venture activity review

The items developed in this section are respectively, the joint venture activity for the period 1990-2010 (a), the incidence of joint ventures by country and by industry (b), and the joint venture structures (c).

(a) Firstly, using a study from two researchers (Moskalev and Svensen, 2007) and an update from the Thomson Financial SDC Platinum Alliances/Joint Ventures database, IASB shows that over the last two decades, the number of international joint agreements has fallen from around 8,000 deals to fewer than 1,000, which means a drop of 87%.

We would underline that this point may be discussed. It is true, and particularly for the perimeter of the study, that IASB makes precautions as it explains, but only in a footnote, that ‘the population of joint ventures referred to in this section might not necessarily refer to Arrangements that would be within the scope of IFRS 11. [...] As a result, the reader needs to consider that the population that IFRS 11 (IASB, 2011 p.8) will potentially affect is likely to be smaller than the population referred to in this section.

6 Among the responses to this DP, the EAA reply is the longest one. It develops a proposal for a ‘post implementation review’ and the use of ‘professional’ researchers.
7 Source: www.efrag.org
8 Coming back to the IFRS 11 and IFRS 12 effect analysis document, we note that it is a 46 pages document that contains an explanation of the IASB’s approach to effect analysis (2 pages), a summary (2 pages), four sections for analysing the possible consequences of the changes required by the standards, both for accounting and disclosure of Joint arrangements, respectively:
- joint venture activity review (8 pages)
- Financial statements effects (9 pages)
- Cost and benefit analysis (10 pages)
- Convergence with US GAAP (5 pages).
These sections are summarised in the IFRS 11 feedback statement (page 23 for the first three sections and page 20 for the fourth one).
The last content deals with the ‘resources’ that is the additional information about the joint ventures project available on the IASB website: ED 9, comment letters, audio recordings, written summaries of the decisions taken at public meetings, feedback statement.
9 More precisely from 1995 to 2009, that is 15 years.
10 These numbers are also included in the IFRS 11 (Project Summary and) Feedback Statement, page 23.
(b) Secondly, the total number of joint venture transactions over the period 1990-2010 is 86,135, the main geographical presence being US and China that represent respectively 37% and 7%, whilst, in the same time, ten countries account for 66% of all worldwide joint venture transactions.

Here again, it is possible to discuss these results because, even if the number of deals is important, it should be interesting to know also the size of these joint ventures, for example the total amount of their assets and revenues.

The concentration of joint ventures in a relatively small number of industries is also shown, based on the data for the period 1990-2010. Here, the main categories are: Business Services, Software, Wholesale trade (respectively 20%, 8% and 7% of the total number of joint venture deals) whereas Mining, Oil and Gas, Real Estate represent 2.7%, 2.5% and 2%.

Still here there is a matter of discussion because the split between industry categories (such as ‘Business Services’ or ‘Investment and Commodity firms’) does not permit relevant comparisons.

(c) Thirdly, the two tables that classify joint venture deals by country or by industry also split them into two forms: ‘strategic alliances’ (63% of total number of joint venture deals) and ‘Independent firms’ (37%)\(^1\). From the definition given in the database\(^2\), the difference between the two types of joint venture depends upon their form. In a ‘strategic alliance’ there is no creation of an independent business entity whereas we can observe the creation of a new independent business entity in the case of a joint venture classified as ‘independent firm’. The IASB will then use this database of the period 1990-2010 for its analysis of IFRS 11 potential effects, adding that Oil and Gas and Real Estate are the only two industries in which there is a clear predominance of joint ventures structured through independent firms (p.14).

5.2. Financial statements effects.

In its feedback statement (IASB, 2011b, p.23) the IASB emphasizes the likely effect of the change from proportionate method to the equity method for preparers that sent it comment letters. As we have already written, these respondents were mainly applying proportionate consolidation.

First, the feedback statement highlights the significant diversity in the accounting methods used by companies even if approximately half of them apply the equity method and half the proportionate method. The table that details these accounting choices by country in the effect analysis document (page 16) is based on a relatively small sample of 144 companies (out of which more than 80% are

\(^{11}\) We can mention here that if we exclude US that represent 37% of the deals and where 4 out of 5 deals are ‘strategic alliances’, the respective proportion would be 52% for strategic alliances and 48% for Independent firms.

\(^{12}\) ‘Strategic alliance’ are defined as ‘a cooperative business activity, formed by two or more separate organizations for strategic purpose(s), which does not create an independent business entity, but allocates ownership, operational responsibilities, and financial risks and rewards to each member, while preserving each member’s separate identity/autonomy’.

The database defines ‘independent firm’ as ‘a cooperative business activity, formed by two or more separate organizations for strategic purpose(s), which creates an independent business entity, and allocates ownership, operational responsibilities, and financial risks and rewards to each member, while preserving each member’s separate identity/autonomy’.
registered in Europe, the main other ones being Hong Kong and South Africa). Nevertheless, it shows the predominant use of proportionate consolidation for companies listed in France and in Spain\textsuperscript{13}.

We think that it should be interesting to benefit from other available studies, for example coming from national databases, in order to have a more accurate understanding of the current situation.

Secondly, in order to measure the effects of IFRS 11 on the accounting for joint arrangements and on entities’ main financial ratios, the IASB combines both the studies presented above. It assumes first, that the population of joint venture transactions (with 37\% of independent firms) is equivalent to the population of arrangements within the scope of IAS 31, and second, that half of the ‘jointly controlled entities’ were proportionately consolidated. Our reaction to this methodology is that, for example, it should have been more logical to adapt the proportion of joint venture transactions by country to a larger sample of listed companies (perhaps all) by country.

IASB analysed the effect of IFRS 11 on the financial statements of 19 companies that commented on ED 9 and used proportionate consolidation, mentioning in a caveat that their analysis is ‘likely to significantly overstate the average effect of IFRS’ (IASB, 2011a, p.24). On the basis of this sample, the effect analysis details the change from proportionate method to equity method for 3 financial indicators: assets, revenues and profitability, but only for the industry sub-samples (effect analysis). Only the impact on y=total revenue is mentioned in the feedback statement. The feedback statement is mentioning a potential decrease of 16\% in revenues for respondents from the energy sector (that represent around 15\% of the comment letters) whereas the median loss for respondents from the food and beverages sector would be 3\% of total revenue\textsuperscript{14}. For us, this information is not really reliable because, if we read more precisely the effect analysis document we see that only two companies from the Food and Beverages industry are included in the sample analysed!

We have chosen to comment further on these results later, in the discussion of the results of our study (see part 6.2).

\textbf{5.3. Convergence with US GAAP}

The IASB expects that convergence will increase for arrangements structured in separate vehicles (such as corporations), for which US GAAP require the use of the equity method. The argument of the IASB, which we find unpersuasive, is that it expects the majority of such arrangements to be joint ventures. On the other side, in its feedback statement, the IASB responds to some ED 9 respondents’ comment letters, about the use of proportionate consolidation permitted by US GAAP for unincorporated entities in specific industries such as the construction industry. In this case, the IASB expects that most arrangements established through unincorporated legal entities will be classified as joint operations under IFRS 11 and, as a result, accounted for using the proportionate method.

\textsuperscript{13} Respectively 16 companies out of 20 for France and 13 companies out of 15 for Spain at the end of December, 2005. Countries, such as Australia, in which companies had not prepared their IFRS consolidated financial statements at that date were excluded from the study.

\textsuperscript{14} These numbers are more detailed in the effect analysis document.
It seems to us that these conclusions could be somewhat hopeful. Furthermore, we think that these differences could lead to opportunistic classification and accounting treatment of joint arrangements.

Consequently, it is obvious that convergence will not be completely achieved and that there would remain differences between companies of the same industry but applying IFRS or US GAAP. As the IASB writes in its feedback statement in the case of some arrangements established through legal entities that will be classified as joint operations under IFRS 11 with the parties accounting for assets, liabilities, revenues and expenses, while parties that report under US GAAP will account for them using the equity method: ‘IFRS 11 requirements provide a more faithful representation of those arrangements and the benefits of providing better information outweigh the disadvantage of lack of convergence with US GAAP’ (IFRS, 2011b, p. 20). It will certainly be interesting to know what will be the reaction of the users of the financial statements in the future.

Lastly, we would add that IASB gives several ideas that we could analyse as limitations in its effect analysis process. In particular, the Board writes in its introduction that its evaluations of costs and benefits are necessarily qualitative because quantifying costs and, particularly, benefits, is inherently difficult. It justifies this point by the lack of sufficiently well established and reliable techniques for quantifying this analysis. Furthermore, the effect analysis document is part of an evolving process. Consequently, the Board encourages academic researchers to perform empirical research into the way the standards are incorporated into economic decisions (i.e. share prices and/or management’s behaviour) and ‘expect to consider relevant research as part of their post-implementation review’ (IASB, 2011a, p. 3).

6. Empirical study

Considering the limitations of the effect analysis, we have undertaken an empirical study on a larger sample in order to obtain more convincing results on the effects of a transition from proportionate consolidation to the equity method.

6.1. Methodology and sample description

We use the methodology used by Graham et al. (2003). We create pro forma equity balance sheets from proportionate consolidation balance sheets by subtracting joint venture liabilities from the venturer’s total assets and from the venturer’s total liabilities. Similarly, we create equity method income statements from proportionate consolidation income statements by eliminating joint ventures revenues and expenses, and adding the difference between joint venture revenues and expenses to the venturer’s other revenues and expenses. Then we calculate the effect of the conversion from proportionate consolidation to the equity method on the venturers’ financial statements and on the DuPont Model which disaggregates the rate of return on equity (ROE = Profit

15 However, the effect analysis document gives an example of quantification of the costs already expensed by two companies (one from the construction industry and one from the mining industry) when changing from proportionate consolidation to the equity method. The number of hours of employees’ time needed (respectively 130 hours and 32 hours for these big companies) seems to us particularly low.
Appendix 2 presents the restatement process used in our methodology.

We focus on European firms reporting under IFRS and using proportionate consolidation in 2008 and 2009. We extract those companies from four European indexes: CAC 40 (French index), DAX 30 (German index), FTSE 100 (British index) and IBEX 35 (Spanish index). In order to balance the sample we limit our study to the first 50 FTSE capitalizations. The initial sample is then composed of 155 European firms.

Analysing the annual reports for FY 2009 we looked for the firms that use proportionate consolidation and that disclose financial information (assets, liabilities, revenues and expenses) about joint ventures. Table VI shows the sample distribution. A large majority of the firms disclose information about joint ventures, but 24 firms do not. In the sample, joint venture’s accounting remains a real issue at stake. Among the firms that disclose information about joint ventures the two accounting methods are quite balanced: 67 firms are using the equity method and 64 firms are using the proportionate consolidation. In the sample, proportionate consolidation is not that marginal. Only 35 firms using proportionate consolidation disclose enough financial details about joint ventures to restate financial statements and create pro forma equity method financial statements. This proportion is comparable to the proportion found by Graham et al. (2003): 78 firms over 158 using proportionate consolidation disclosed financial details about joint ventures.

<table>
<thead>
<tr>
<th>INDEX</th>
<th>No joint venture Information</th>
<th>No joint venture Information</th>
<th>Equity Method</th>
<th>Proportionate Consolidation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Total</td>
<td>NO joint venture Information Final Sample</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>CAC40</td>
<td>2</td>
<td>9</td>
<td>29</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>DAX30</td>
<td>7</td>
<td>20</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>FTSE100</td>
<td>9</td>
<td>29</td>
<td>12</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>IBEX35</td>
<td>6</td>
<td>9</td>
<td>20</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>67</strong></td>
<td><strong>64</strong></td>
<td><strong>29</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

The final sample is composed of 35 European firms (see companies’ names in Appendix 3) using proportionate consolidation and observed for FY 2008 and 2009: this represents 70 observations.

---

16 Where:
ROE = Net Income / Equity (at the end of FY)
Profit Margin = Net Income / Revenues
Total Assets Turnover = Revenues / Total Assets
Leverage Ratio = Total Assets / Equity (at the end of FY)

17 For the Spanish subsample we found that 69% of the listed companies that disclosed information about their accounting methods for joint ventures chose the proportionate consolidation. The comparative study of Catuogno and Allini (2011) on the multiple evaluation options of equity investments in Italy and Spain gives the following results:
Disclosures about joint venture’s revenues, expenses and profit are heterogeneous. The disclosure of joint venture’s operating profit information (operating revenues and expenses, and/or operating profit) is not systematical. Only 18 firms using proportionate consolidation disclose such information (Appendix 4). In order to keep a more significant sample we focus on global data of the income statement: total revenues, total expenses and net income.

Appendix 5 and Appendix 6 show the part of joint venture in the venturer’s financial statements. Even if the purpose of some joint ventures is mainly to share costs (e.g. prospection costs) and not to generate revenues, most of the joint ventures of our sample provide revenues and profits to the venturer. Joint venture’s revenues, on average, represent almost 11% of the venturer’s total revenues. Compared to the total net income of the venturer, joint venture’s profit is quite important (mean of 22.4%). Appendix 6 reports that most of the joint ventures (95.7%) and most of the venturers (94.3%) report positive earnings (net income). These findings are consistent with, but higher than, those of Graham et al. (2003). Respectively, they found a proportion of 79.4% and 84.9%. Globally, joint ventures boost the earnings of their venture. On average, joint venture’s assets represent more than 9% of total assets of the venturer and more than 8% of venturer’s total liabilities. Extreme figures for IBEX 35 mainly come from the venturing activity of Acciona Group and Enel SPA about Endesa S.A.

6.2. Results

In this section we present the effects of joint venture accounting method conversion on the financial statements and on the ROE ratios of the venturers.

The effects of joint venture accounting method conversion on the financial statements of the venturers

As Graham et al. (2003) found, and as we can expect, conversion from proportionate consolidation to the equity method reduces assets and liabilities of the venturers. Table VII reports that on average, assets are reduced by 6.19% and liabilities are reduced by 8.46%18. We notice that there are some very large effects among each index and the range of the differences (min. to max.) is usually great. Firms from DAX 30 and FTSE 100 are less impacted than firms within CAC 40 and IBEX 35.

<table>
<thead>
<tr>
<th></th>
<th>Difference in Total Assets (as a % of reported Assets)</th>
<th>Difference in Total Liabilities (as a % of reported Liabilities)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min.</td>
<td>Mean</td>
</tr>
<tr>
<td>CAC40</td>
<td>16.32%</td>
<td>-5.00%</td>
</tr>
<tr>
<td>DAX30</td>
<td>-2.87%</td>
<td>-0.96%</td>
</tr>
<tr>
<td>FTSE100</td>
<td>-5.60%</td>
<td>-1.79%</td>
</tr>
<tr>
<td>IBEX35</td>
<td>-13.58%</td>
<td>-13.58%</td>
</tr>
</tbody>
</table>

a sample of 98 listed companies 80% of Spanish companies used the proportionate method (29 out of 35 that disclosed this information).

18 Graham et al. (2003) found respectively -7.35% and -14.18%.
We can add that the conversion from proportionate consolidation to the equity method can also affect the calculation of the working capital of the venturer. Difference in current assets and difference in current liabilities are great (respectively -9.69% and -10.43% on average) and frequently higher than the differences in non-current assets and in non-current liabilities (Table VIII).

Table VIII: Differences in non-current and current components (as a % of reported item) (n=70)

<table>
<thead>
<tr>
<th></th>
<th>Difference in Non-Current Assets</th>
<th>Difference in Current Assets</th>
<th>Difference in Non-Current Liabilities</th>
<th>Difference in Current Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>CAC40</td>
<td>-6.29%</td>
<td>-7.86%</td>
<td>-3.99%</td>
<td>-9.20%</td>
</tr>
<tr>
<td>DAX30</td>
<td>-1.59%</td>
<td>-1.64%</td>
<td>-1.21%</td>
<td>-2.01%</td>
</tr>
<tr>
<td>FTSE100</td>
<td>-7.22%</td>
<td>-4.64%</td>
<td>-2.65%</td>
<td>-4.56%</td>
</tr>
<tr>
<td>IBEX35</td>
<td>-13.44%</td>
<td>-19.34%</td>
<td>-11.31%</td>
<td>-20.29%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>-8.20%</strong></td>
<td><strong>-9.69%</strong></td>
<td><strong>-5.46%</strong></td>
<td><strong>-10.43%</strong></td>
</tr>
</tbody>
</table>

Conversion of joint venture accounting method has no impact on net income but it does affect revenues and expenses of the venturer’s income statements. Table IX reports that on average revenues are reduced by 10.85%. Results are consistent with the findings of Graham et al. (2003)\(^{19}\). Thus, the profit margin of the venturers as defined in Appendix 2 necessarily increases after conversion.

Table IX: Differences in income statements (%)(n=70)

<table>
<thead>
<tr>
<th></th>
<th>Difference in Revenues (as a % of reported Revenues)</th>
<th>Difference in Expenses (as a % of reported Expenses)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min. Mean Median Max. Min. Mean Median Max.</td>
<td></td>
</tr>
<tr>
<td>CAC40</td>
<td>23.71% -8.15% -5.77% -0.73% 21.94% -7.83% -5.82% -0.61%</td>
<td></td>
</tr>
<tr>
<td>DAX30</td>
<td>-8.65% -2.83% -0.40% -0.15% -8.86% -2.82% -0.38% -0.15%</td>
<td></td>
</tr>
<tr>
<td>FTSE100</td>
<td>18.86% -6.40% -5.09% 0.00% 17.86% -5.62% -4.59% -0.22%</td>
<td></td>
</tr>
<tr>
<td>IBEX35</td>
<td>84.21% -20.95% 10.35% -1.96% 71.96% 20.01% 10.32% -1.90%</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>84.21%</strong> -10.85% -5.62% 0.00% <strong>71.96%</strong> 10.25% -5.28% -0.15%</td>
<td></td>
</tr>
</tbody>
</table>

Globally, firms from the German index and the English index are again less impacted than firms from the Spanish index and the French index.

The effects of joint venture accounting method conversion on ROE ratios of the venturers

Table X reports the results and the distribution of the calculations of the different ratios for the proportionate consolidation data and for the equity method data (pro forma). Conversion of the joint

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\(^{19}\) Graham et al. (2003) found -13.5%.
venture reporting method generates an increase of 1.67 points of the profit margin ratio of the venturers: the ratio increases from 10.99% to 12.66% on average. This progression is statistically significant (t-test). Contrary to Graham et al. findings, the standard deviation of the profit margin ratio of the sample does not increase very much. In our case, this signifies that conversion from proportionate consolidation to equity method does not affect extreme observations. The difference between Graham et al. findings and ours must probably stem from the composition of the sample (nature of industries observed for example). Firms from the French and the German indexes are less impacted than firms from English and Spanish indexes.

Total assets turnover and leverage ratios are not that much impacted by the conversion of the joint venture accounting method. Their decrease is significant but not very strong on average. Within indexes differences can be deeper. The standard deviations of these two ratios are not very impacted by the conversion.

Table X: Descriptive Statistics of ROE ratios and T-Test (n=70)

<table>
<thead>
<tr>
<th>Proportionate Consolidation</th>
<th>Profit Margin</th>
<th>Total Assets Turnover</th>
<th>Leverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Perc. 25%</td>
<td>Median</td>
<td>Perc. 75%</td>
</tr>
<tr>
<td>CAC40</td>
<td>5.34</td>
<td>3.02</td>
<td>5.46</td>
</tr>
<tr>
<td>DAX3</td>
<td>2.69</td>
<td>1.43</td>
<td>3.81</td>
</tr>
<tr>
<td>FTSE1</td>
<td>16.02</td>
<td>3.86</td>
<td>13.89</td>
</tr>
<tr>
<td>IBEX3</td>
<td>15.23</td>
<td>7.17</td>
<td>12.05</td>
</tr>
<tr>
<td>Total</td>
<td>10.99</td>
<td>3.93</td>
<td>7.05</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equity Method (Pro-Forma)</th>
<th>Profit Margin</th>
<th>Total Assets Turnover</th>
<th>Leverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Perc. 25%</td>
<td>Median</td>
<td>Perc. 75%</td>
</tr>
<tr>
<td>CAC40</td>
<td>5.81</td>
<td>3.28</td>
<td>6.31</td>
</tr>
<tr>
<td>DAX3</td>
<td>2.82</td>
<td>1.44</td>
<td>3.94</td>
</tr>
<tr>
<td>FTSE1</td>
<td>17.09</td>
<td>4.13</td>
<td>15.18</td>
</tr>
<tr>
<td>IBEX3</td>
<td>19.39</td>
<td>12.37</td>
<td>15.77</td>
</tr>
<tr>
<td>Total</td>
<td>12.66</td>
<td>4.30</td>
<td>9.04</td>
</tr>
</tbody>
</table>

Mean | -0.01666 |
Std. Deviation | 0.0381 |
Sig. (2-tailed) | 0.0007 |

Page 17
Those results supplement the results of the effect analysis done by the IASB (see supra). Sample is larger and indicators are more numerous. From this first contribution we can argue that the conversion from proportionate consolidation to equity method is not insignificant. The conversion should affect the structure of the balance sheet as much as the profit margin ratio of many venturers.

Nevertheless, this research faces some limitations. First, sample size is small and could be improved. Second, the research can be detailed by industries. We suppose that results could be more significant in some industries where joint ventures are strategically and economically predominant. Third, a larger sample could lead to more detailed restatements (operating margins, taxes…).

This research could also be supplemented by the analysis of some users’ behavior concerning joint ventures’ financial analysis. Financial analysts should be considered as privileged users.

We briefly summarise the key results of our work regarding the three objectives given at the end of section 2. The first one was to identify, understand and consider the positions and arguments of the IASB, and those involved in the due process. Standards of analytical rigour are not uniformly high. The logic of the IASC in IAS 31 fails to withstand scrutiny, leading to a necessary volte face, which nevertheless invites a charge of inconsistency. Adherence to the way the management actually manages (i.e. its business model) is claimed as an argument by both supporters and opponents of proportionate consolidation (which is of course possible; different entities may well have different business models, even within, let alone across, different industries). We have found quotations relating to value relevance, coherence with the conceptual framework, and convergence between IASB and FASB claiming, separately and incompatibly, that each and every one of these three is/should be the overriding criterion, as against the others, in determining the regulatory outcome.

A point not particularly emphasised in our findings, but which may be of some importance, would be the benefits of consistency with internal accounting systems used by management. How does management actually manage the joint venture, appraise its results, and integrate those results with the overall group activities? A further point, perhaps slightly cynical, is to note that joint operations are to use proportionate consolidation, and only joint ventures are to use the equity method. Over time, management may be able, by means of minor restructuring of organisation with its partners, to move from one type of joint arrangement to another!

Our second objective was to appraise the validity of the IASB effect analysis. Our empirical investigation does not support the IASB conclusion that the effects are generally insignificant. Since the effects will be one-off, and are internal to profit and loss account and balance sheet, with no effect on earnings or equity, this is not of itself an argument against change. But it is important general evidence about the process of the effect analysis itself. Duplication of our investigation for other cases/scenarios would be desirable.

Our third objective requires a brief overall, necessarily subjective, comment on the various arguments. Since a joint venture involves joint control over the net assets of the entity (in contrast to a joint operation, which involves joint control over the separate assets and liabilities of the operation), there can be no doubt that, if the definition of control in IFRS 10 is accepted, conceptual logic, and consistency with the Conceptual Framework, supports the rejection of proportionate consolidation. This argument is strong, but not of itself conclusive. Coherence with the economic
substance of the business operations of and between the venture and its venturers, and a fair presentation (true and fair view) of that substance, is the determining factor. We attach little importance to convergence with the FASB. If the US gets the logic wrong, or needs to obfuscate rationality for local lobbying/political reasons, that is surely a purely American problem.

We could extend our research with responses and commentaries from preparers, auditors and other users of financial reporting. We could also prepare a questionnaire, sent by email to those responsible for the financial communication of consolidated financial statements, enlarging our sample to other listed companies. Further, it might be worth interviewing managers, auditors and analysts on the subject, in order to try to establish a richer understanding of thinking and motivation.
REFERENCES
BIERMAN, H. (1992). Proportionate consolidation and financial analysis, Accounting Horizons, 6, 5-17


### Appendix 1: Literature review

<table>
<thead>
<tr>
<th>Reference</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bauman (2003)</strong></td>
<td>The Bauman’s study uses a sample of 150 US firms for the years 2000 and 2001 to examine the value relevance to investors in the investor firm of disclosures of the liabilities of equity-accounted investees, which it terms off-balance-sheet activities concealed by the equity method of accounting.</td>
</tr>
<tr>
<td><strong>Bauman (2007)</strong></td>
<td>The study suggests that the use of proportionate consolidation has greater value relevance than equity method for explaining bond ratings.</td>
</tr>
<tr>
<td><strong>Bierman (1992)</strong></td>
<td>The study suggests that the use of equity accounting rather than proportionate consolidation, by failing to reflect liabilities of investees, may allow those investees to be used as an off-balance-sheet-financing device.</td>
</tr>
<tr>
<td><strong>Davis and Largay (1999)</strong></td>
<td>This study contrasts the information provided by proportionate consolidation, the expanded equity method and the conventional equity method for reporting and analyzing significant-influence equity investments. It evaluates whether these methods facilitate sound ratio approaches to assessing an entity’s profitability, short-term liquidity risk and long-term solvency risk. The study recommends replacing the equity method with proportionate consolidation when an investor and investee are operationally related.</td>
</tr>
<tr>
<td><strong>Graham King and Morrill (2003)</strong></td>
<td>The Graham et al. study compares the information content of alternative accounting treatments for a sample of Canadian firms reporting joint ventures under proportionate consolidation. After restating their financial statements using the equity method, the study compares the information content of the two accounting methods in predicting accounting return on common shareholders’ equity. The study finds evidence consistent with the view that financial statements prepared under proportionate consolidation provide better predictions of future return on shareholders’ equity than do financial statements prepared under the equity method. As a consequence proportionate consolidation provides information with greater predictive ability and greater relevance than does the equity method.</td>
</tr>
<tr>
<td><strong>Kothavala (2003)</strong></td>
<td>The Kothavala’s study, using a sample of Canadian firms, investigates the relative information content of equity method and proportionally consolidated financial statement amounts for explaining market risk. The findings are quite surprising in that whereas proportionally consolidated financial statements are more risk relevant than equity method statements for explaining price volatility, equity method statements are more risk relevant than proportionally consolidated ones for explaining bond ratings. These findings suggest that different market participants use financial statement information differently. The study also finds that failure to disclose disaggregated joint venture accounting amounts masks information that could help market participants assess risk.</td>
</tr>
<tr>
<td><strong>Lim Yeo and Liu (2003)</strong></td>
<td>This study examines the impact of the disclosure of supplementary information for joint ventures on information asymmetry among market participants as measured by relative bid–ask spreads. The results show that the disclosure of supplementary information for joint ventures is associated with a significant decline in bid–ask spreads. This decline in information asymmetry is larger when the investment in joint ventures is significant. The implication of this study to policymakers is that the provision of supplementary information about joint ventures could reduce information asymmetry and has the potential to level the playing field among participants in the equity market. These conclusions should be of interest to standard setters who have recently changed reporting requirements and are discussing harmonization of financial reporting for joint ventures.</td>
</tr>
<tr>
<td><strong>Lourenco and Curto (2010)</strong></td>
<td>The study investigates what determines the venturer’s accounting choice to report interests in jointly controlled entities using the equity method or proportional consolidation. They conclude that the type of JCE plays an important role in the management’s choice to report interests in JCE by alternative methods: their fundings provide evidence that link venturers are more likely to apply proportionate consolidation. The contribution suggests that requiring all ventures to report interests in JCE using one method (the equity method wanted by IASB) would tend to reduce the reliability of financial statements not representing the substance of JCE.</td>
</tr>
<tr>
<td><strong>Nobes (2002)</strong></td>
<td>This study traces the developments of equity method across time and space, and criticizes several of the past and present applications of this method.</td>
</tr>
<tr>
<td><strong>Soonawalla (2006)</strong></td>
<td>Using comparative analysis of Canadian, UK and US data, the Soonawalla’s study investigates the potential loss of forecasting and valuation relevant information from aggregating joint venture accounting amounts. Findings show that aggregating joint venture revenues and expenses leads to loss of forecasting and valuation relevant information. Thus, aggregations likely mask information that financial statement users could use to predict future earnings and explain share prices.</td>
</tr>
<tr>
<td><strong>Stoltzfus and Epps (2005)</strong></td>
<td>The study examines bond risk premiums to determine whether creditors of companies with investments in joint ventures reflect legal or implicit measures of the debts of joint ventures. The legal view suggests that the amount of potential loss from an investment in a joint venture is limited to the investment. The implicit view suggests that the operations of the joint venture and the venturer are interdependent. The equity method accounting reflects the legal view and proportionate consolidation reflects the implicit view.</td>
</tr>
</tbody>
</table>
Appendix 2: Restatement’s process

The 3 steps of the restatement of the financial statements are explained below. We begin with the balance sheet, then the statement of income and finish with the computation of several ratios.

To illustrate this process, we give the example of L’Oréal, the well known cosmetic company.

First step: the balance sheet

The initial step consists in establishing a simplified balance sheet from the consolidated balance sheet of the company (Column 1 of the balance sheet’s restatement). In order to prepare a pro-forma balance sheet, we look for additional information on balance sheet items in note 29 « Information on jointly controlled entities » (joint venture ’s data column). We then deduct these items from the initial simplified balance sheet, (respectively the non-current assets, the current assets, the non-current liabilities, the current liabilities) before adding a heading ‘Investments in Associates/ joint ventures’, the amount of which equals the difference between joint venture assets and joint venture liabilities.

### Condensed Balance Sheet’s restatement: L’Oréal (in millions of euro)

<table>
<thead>
<tr>
<th></th>
<th>2009 Proportionate Consolidation</th>
<th>joint venture ’s Data (Note29)</th>
<th>2009 Equity Method (pro forma)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-current Assets (NCA)</td>
<td>17,350</td>
<td>451</td>
<td>17,167</td>
</tr>
<tr>
<td>Included joint venture ’s share</td>
<td>5,941</td>
<td>184</td>
<td>5,757</td>
</tr>
<tr>
<td>TOTAL Assets</td>
<td>23,291</td>
<td>22,924</td>
<td></td>
</tr>
<tr>
<td>Shareholders Equity</td>
<td>13,598</td>
<td></td>
<td>13,598</td>
</tr>
<tr>
<td>Non-current Liabilities</td>
<td>4,307</td>
<td>63</td>
<td>4,244</td>
</tr>
<tr>
<td>Current Liabilities</td>
<td>5,387</td>
<td>304</td>
<td>5,083</td>
</tr>
<tr>
<td>TOTAL Liabilities</td>
<td>23,292</td>
<td>22,925</td>
<td></td>
</tr>
</tbody>
</table>

Second step: the statement of income

As previously done for the balance sheet, we establish a simplified statement of income from the consolidated statement of income and completed with the information disclosed in note 29 (Columns 1 and 2 of the condensed statement of income’s restatement). Pro forma data are obtained by reducing joint venture’s figures from the original revenues and expenses of the venturer (column 3). Joint venture’s profit (or loss) to the venturer is presented separately. Of course, net income of the group is not altered.

### Condensed Statement of Income’s restatement: L’Oréal, (Profit & Loss Account)

<table>
<thead>
<tr>
<th></th>
<th>2009 Proportionate Consolidation</th>
<th>joint venture ’s Data (Note29)</th>
<th>2009 Equity Method (pro forma)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Revenues</td>
<td>17,473</td>
<td>517</td>
<td>16,956</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>(15,678)</td>
<td>(434)</td>
<td>(15,244)</td>
</tr>
<tr>
<td>joint venture ’s Profit (Loss)</td>
<td></td>
<td></td>
<td>83</td>
</tr>
<tr>
<td>Net Income</td>
<td>1,795</td>
<td></td>
<td>1,795</td>
</tr>
</tbody>
</table>
Third step: Computation of ratios

In the last step, we measure the impact of change of method by using different ratios. We identify three main categories and six ratios.

**Return on investment ratio:** the ROE (Return On Equity) ratio that we divide into three other ratios as suggested by the Dupont de Nemours model:

- Net profit margin: Net profit / Sales
- Asset turnover: Sales / Total assets
- Financial leverage: Total assets / Equity

### Appendix 3: Companies’ names

<table>
<thead>
<tr>
<th><strong>CAC 40</strong></th>
<th><strong>DAX 30</strong></th>
<th><strong>FTSE 100</strong></th>
<th><strong>IBEX 35</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCOR</td>
<td>BASF</td>
<td>VODAFONE GROUP</td>
<td>ACCIONA</td>
</tr>
<tr>
<td>AIR LIQUIDE</td>
<td>BAYER AG</td>
<td>BHP BILLITON</td>
<td>ACS CONST.</td>
</tr>
<tr>
<td>BOUYGUES</td>
<td>DHL DEUTSCHE POST</td>
<td>ANGLO AMERICAN</td>
<td>BOLSAS Y MER</td>
</tr>
<tr>
<td>EADS</td>
<td></td>
<td>XSTRATA</td>
<td>GAS NATURAL</td>
</tr>
<tr>
<td>EDF</td>
<td></td>
<td>STANDARD CHARTERED</td>
<td>IBE.RENOVABL</td>
</tr>
<tr>
<td>GDF SUEZ</td>
<td></td>
<td>DIAGEO</td>
<td>IBERDROLA</td>
</tr>
<tr>
<td>L'OREAL</td>
<td></td>
<td>IMPERIAL TOBACCO</td>
<td>INDITEX</td>
</tr>
<tr>
<td>LAFARGE</td>
<td></td>
<td>GROUP</td>
<td>REPSOL YPF</td>
</tr>
<tr>
<td>SAINT GOBAIN</td>
<td></td>
<td>PRUDENTIAL</td>
<td>TECNICAS REUNIDAS</td>
</tr>
<tr>
<td>TECHNIP</td>
<td></td>
<td>ANTOFAGASTA</td>
<td>TELEFONICA</td>
</tr>
<tr>
<td>VEOLIA ENV. VINCI</td>
<td></td>
<td>COMPASS GROUP</td>
<td></td>
</tr>
</tbody>
</table>


Appendix 4: Disclosure of joint venture’s operating profit information

<table>
<thead>
<tr>
<th>joint venture Operating Profit Information</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDEX CAC40</td>
<td>4</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>DAX30</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>FTSE100</td>
<td>5</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>IBEX35</td>
<td>7</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>18</td>
<td>35</td>
</tr>
</tbody>
</table>

Appendix 5: Part of joint venture in the income statement (n=70)

<table>
<thead>
<tr>
<th>Part of joint venture in Total Revenues</th>
<th>Part of joint venture in Total Expenses</th>
<th>Part of joint venture in Net Income (Abs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min.</td>
<td>Mean</td>
<td>Median</td>
</tr>
<tr>
<td>CAC40</td>
<td>0.73%</td>
<td>8.15%</td>
</tr>
<tr>
<td>DAX30</td>
<td>0.15%</td>
<td>2.83%</td>
</tr>
<tr>
<td>FTSE100</td>
<td>0.00%</td>
<td>6.40%</td>
</tr>
<tr>
<td>IBEX35</td>
<td>1.96%</td>
<td>20.95%</td>
</tr>
<tr>
<td>Total</td>
<td>0.00%</td>
<td>10.85%</td>
</tr>
</tbody>
</table>

Appendix 6: Part of joint venture in the balance sheet (n=70)

<table>
<thead>
<tr>
<th>Part of joint venture in Total Assets</th>
<th>Part of joint venture in Total Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min.</td>
<td>Mean</td>
</tr>
<tr>
<td>CAC40</td>
<td>0.98%</td>
</tr>
<tr>
<td>DAX30</td>
<td>0.05%</td>
</tr>
<tr>
<td>FTSE100</td>
<td>0.54%</td>
</tr>
<tr>
<td>IBEX35</td>
<td>0.11%</td>
</tr>
<tr>
<td>Total</td>
<td>0.05%</td>
</tr>
</tbody>
</table>

Appendix 7: Percentages of joint ventures and venturers with positive Earnings (n=70)

<table>
<thead>
<tr>
<th>Joint Ventures</th>
<th>Venturers</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAC 40</td>
<td>95.8%</td>
</tr>
<tr>
<td>DAX 30</td>
<td>100%</td>
</tr>
<tr>
<td>FTSE 100</td>
<td>90%</td>
</tr>
<tr>
<td>IBEX 35</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>95.7%</td>
</tr>
</tbody>
</table>