Accounting and Management Information Systems
Vol. 13, No. 4, pp. 719–738, 2014

Bearer plants: Stakeholders' view on the appropriate measurement model

Maria Ionela Damian[a], Sorana Mihaela Mănoiu[a], Carmen Giorgiana Bonaci[a] and Jiří Strouhal[b,1]

[a] *Babes-Bolyai University, Romania,*
[b] *University of Economics, Czech Republic*

Abstract: While the importance of agriculture to the global economy seems to be generally acknowledged, financial reporting in the agricultural sector still generates intense debates. Our paper contributes to the debate on fair value measurement of biological assets by focusing on the proposed amendments to IAS 16 and IAS 41 (through the Exposure Draft Agriculture: Bearer Plants – International Accounting Standards Board (IASB) (2013)). The IASB is faced with analyzing whether applying IAS 16 would lead to more decision-useful financial reporting information on bearer biological assets compared to the current requirements in IAS 41. It therefore becomes interesting, at this stage, to analyze the feedback received by the IASB (through the stakeholders' comment letters involved in its due process) to the recently published Exposure Draft. After discussing the proposed amendments and putting them into context, we develop a quantitative and qualitative analysis of the point of view of stakeholders responding to IASB's call for comment letters. The implications of IASB's forthcoming decision in relation to the proposed amendments, as well as stakeholders' involvement, should be considered in the light of International Financial Reporting Standards' (IFRS) widespread around the world.

Keywords: Bearer plants, agriculture, biological assets, fair value, historical cost, comment letters

JEL codes: M41

1 *Corresponding authors*: Maria Ionela Damian, Accounting and Audit Department, Babes-Bolyai University of Cluj Napoca, Faculty of Economics and Business Administration; 58-60 Teodor Mihali Street, 400591 Cluj Napoca; tel. (+40) 264 418 652; email addresses: maria.damian@econ.ubbcluj.ro, sorana.manoiu@econ.ubbcluj.ro, carmen.bonaci@econ.ubbcluj.ro, strouhal@vse.cz.

1. Introduction

Thorbecke (1970) emphasizes the evolution in both economists and policy-makers's perception of the role agriculture plays in economic development, shifting from a passive partner to an active and co-equal partner with the industrial sector. Johnston and Mellor (1961) also examine the interrelationships between agricultural and industrial development, dismissing the dichotomy of agricultural versus industrial development and emphasizing the role of agriculture in the process of economic growth. Three decades ago, in his acceptance speech for the Nobel Prize in Economics, Theodore Schultz emphasized the importance of understanding the economics of agriculture:

> "Most of the people in the world are poor, so if we knew the economics of being poor we would know much of the economics that really matters. Most of the world's poor people earn their living from agriculture, so if we knew the economics of agriculture we would know much of the economics of being poor" (Shultz, 1979 cited by Cervantes-Godoy and Dewbre (2010)).

While the importance of agriculture to the global economy seems to be generally acknowledged, financial reporting in the agricultural sector still generates intense debates, many researchers emphasizing that its importance is underestimated (Athanasios *et al.*, 2010; Feleagă *et al.*, 2012; Marsh & Fischer, 2013). It was the International Accounting Standards Committee (IASC) that ventured into approaching accounting in the agricultural sector only by the late 1990s, issuing *International Accounting Standard (IAS) 41 Agriculture* in February 2001 despite strong opposition coming from major professional accountancy bodies in the UK, USA, Australia and Canada, accounting practitioners and many agricultural enterprises (Elad, 2004).

Argilés and Slof (2001) see IAS 41 (together with the Farm Accountancy Data Network (FADN)) as a potential key element when considering the objective of improving the use of accounting in European farms. Elad (2004) revisits their paper in a wider international context, highlighting some major theoretical problems associated with IAS 41 which are likely to impact farm accounting practices. Among the most controversial aspects in IAS 41, we find its requirement for biological assets to be measured at fair value. This is in line with accounting standard setters current shift from the traditional historical cost model towards the fair value approach.

A significant part of the fair value accounting literature focuses on financial instruments. Meanwhile, our paper contributes to the debate on fair value measurement of biological assets by focusing on the proposed amendments to IAS 16 *Property, Plant and Equipment* and IAS 41 (through the Exposure Draft

Agriculture: Bearer Plants – International Accounting Standards Board (IASB) (2013)). As IAS 41 has a single accounting treatment for both bearer and consumable biological assets (separation only being made for disclosure purposes - paragraph 44), stakeholders pointed out that fair value measurement is not appropriate for mature bearer biological assets as they are no longer undergoing biological transformation. This triggered the view that their operation is rather similar to that of manufacturing and should therefore be accounted for like property, plant and equipment, under IAS 16, thereby permitting use of a cost model.

As Luthardt and Zimmermann (2009) emphasize, "accounting rules affect fundamental areas of social interaction encompassing groups that have diverse and conflicting interests regarding financial reporting". Deciding whether applying IAS 16 would lead to more decision-useful financial reporting information on bearer biological assets compared to the current requirements in IAS 41, imposes the consideration of users of financial statements. It therefore becomes interesting, at this stage, to analyze the feedback received by the IASB (through the stakeholders' comment letters involved in its due process) to the recently published Exposure Draft. In our study we closely analyze the point of view of stakeholders responding to IASB's call for comment letters on the proposed amendments to IAS 16 and IAS 41 with regard to bearer plants. Our paper contributes to the debate that should lead to clarifying the issue of accounting for bearer plants and the suitable measurement model. The implications of IASB's forthcoming decision in relation to the proposed amendments, as well as stakeholders' involvement, should be considered in the light of International Financial Reporting Standards' (IFRS) widespread around the world.

The remainder of the paper is organized as follows. The literature review section mainly synthesizes studies dealing with IAS 41. We also make brief references to previous studies looking into IASB's due process. The second section of the paper discusses the proposed amendments to IAS 16 and IAS 41 which are at the core of our analysis and puts them into context. Section three explains the employed research design and methodology, while section four develops a quantitative and qualitative analysis of the received comments letters, interpreting stakeholders' reactions. The final section of the paper concludes upon the obtained results while presenting research limitations and perspectives for future developments.

2. Literature review

Considering the purpose of our paper, the literature review section mainly focuses on briefly discussing studies in the area of accounting in the agricultural sector (more precisely focusing on IAS 41), while also making reference to studies dealing with IASB's due process of standard setting.

2.1. International accounting standard 41: Agriculture

As Pitulice and Gorgan (2013) emphasize, the particularities of agricultural entities impose the providing of specific information and corporate farm accounting practices. Furthermore, Athanasios *et al.* (2010) argue that there is a gap between accounting practices and the role that accounting information should play in the agricultural sector due to accounting rules not reflecting the particularities of farming (as also noted by Argilés and Slof (2001), together with being difficult and expensive to implement), the needs of farm management and rural development and sustainability. Argilés and Slof (2001) also make reference to the gap between the importance of accounting and the low level of accounting practice in the agricultural sector, seeing IAS 41 issued by the IASC as providing a strong conceptual framework. While applauding the IASC for venturing into unconventional areas (through IAS 41), Elad (2004) brings to attention the existence of theoretical problems which are likely to generate implementation bottlenecks.

As mentioned earlier, most of the IAS 41 debates relate to the fair value measurement of biological assets. Increases or decreases in the fair value of biological assets, less estimated point-of-sale costs, are therefore to be recognized as revenues or expenses in the income statement for the financial year in which they occur (Elad, 2004). The shift in accounting paradigms taking place around the world over the last decade or so, as standard setters seem to embrace fair value in the detriment of the traditional historic cost model, naturally has supporters as well as opponents. While Barlev and Haddad (2003) argue that fair value accounting has the ability to contribute to alleviating social conflict (by providing relevant information to stakeholders and therefore enhancing the stewardship function), Elad (2007) finds the fair value approach to be far from reducing conflict and alienation in the agricultural sector. The later findings are documented in the context of fair trade coffee and forestry companies adopting fair value accounting under domestic rules following the World Bank's structural adjustment reforms. Elad and Herbohn (2011) go further and argue that successful implementation of the fair value model in IAS 41could promote social conflict. This mainly relates to cases where fair values as generated by the market forces do not reflect the real value of agricultural commodities. The authors cover the case of tropical countries and commodities such as coffee, tea, banana, or cocoa and also draw attention to biological assets' value in the context of heavily subsidized 'market' prices under the European Union's Common Agricultural Policy (Elad and Herbohn, 2011: x).

Analyzing the implementation of fair value accounting in the agricultural sector of UK, France and Australia, Elad and Herbohn (2011) conclude upon a potential impact on the harmonization of corporate farm accounting practices, supporting the idea that differences in accounting practices might still exist despite IFRS adoption. Their findings document historical cost as the most common valuation basis for biological assets (in cases where it is argued that fair values cannot be determined with reliability), while, where being used, fair value measurement employing a variety of proxies. This naturally impacts accounting practices' comparability in the agricultural sector (Elad & Herbohn, 2011). A similar conclusion is drawn by Marsh and Fischer (2013) in relation to international and US accounting recognition and reporting guidance for the agricultural sector generating dissimilar reporting through guidance interpretation. The possibility of the fair value model to be used for taxation purposes is also documented as an argument for the opponents of IAS 41 in some jurisdictions (Elad & Herbohn, 2011). Vladu (2013) discusses the use of the fair value model in agriculture by considering its potential to generate creative accounting demarches.

Argilés *et al.* (2011) develop an empirical study comparing Spanish farms using historical cost and respectively fair value in measuring biological assets, finding no significant differences in relation to assessing future cash flows. Future earnings exhibit more predictive power under the fair value model (Argilés *et al.*, 2011), while the historical cost model is documented to accommodate flawed accounting practices (Argilés *et al.*, 2011; Argilés Bosch *et al.*, 2012). Analyzing the difficulties arising when using one of the two valuation models for biological assets (based on an experiment involving students, farmers, and accountants operating in the agricultural sector) Argilés Bosch *et al.* (2012) document that the historical cost brings more difficulties. Gonçalves and Lopes (2014) develop an index of mandatory disclosure for biological assets and document some of its determinants such as biological assets intensity, ownership concentration and size.

2.2. IASB's due process of standard setting

Similar to Jorissen *et al.* (2012), we respond to existent calls for academics to look into the details of constituents' participation in IASB's due process of standard setting. Analyzing constituents' participation in terms of representation and drivers to participate, Jorissen *et al.* (2012) document that proposals heaving a major impact on accounting numbers (such as the proposed amendments which are at the core of our analysis) generate significant reaction in the case of preparers, accountants and standard setters. Tiron-Tudor and Müller (2009) analyze the reactions to IASB's proposed changes to accounting for joint ventures with the purpose of highlighting its implications from the viewpoint of different categories of organizations. Our study draws from both Tiron-Tudor and Müller (2009) and Jorissen *et al.* (2012) in being based on comment letters received by the IASB.

3. IASB's proposed amendments to IAS 16 and IAS 41[1]

Based on the principle that biological transformation is best reflected by fair value measurement, IAS 41 requires the same accounting treatment (measurement at fair value less costs to sell) for both bearer and consumable biological assets (see Appendix 1 for the current treatment under IAS 41). Related to this treatment, some interested parties highlight the fact that bearer biological assets are no longer subject to biological transformation and therefore fair value measurement is no longer appropriate and accounting under IAS 16 would be preferable.

Consequently, in September 2012 IASB added to its agenda a limited-scope project for bearer biological assets, with the goal to decide whether bearer biological assets should be accounted like property, plant and equipment. There were several reasons for starting this project such as: it addresses the main concerns raised to the IASB 2011 Agenda Consultation, it is supported by standard setters and other interested parties, the project met the request of a period of calm for IASB as it only affects agriculture industry and can use the research already being done (IASB, 2013).

Before it could even consider accounting for bearer biological assets under IAS 16, the IASB discussed the scope of the amendments by taking into consideration four possible options (IASB, 2013):

1. Option 1 (no alternative use model) limits the scope to biological assets that are only used in production or supply of agricultural produce and are expected to be used for more than one period;
2. Option 2 (predominant-use model) restrict the scope to biological assets predominantly used in production or supply of agricultural produce and are expected to be used for more than one period;
3. Option 3 (no-alternative-use model—plants only) is similar to option 1, but includes only plants;
4. Option 4 (predominant-use model—plants only) is similar to option 2, but includes only plants.

The IASB considered that a predominant model would be difficult to apply because it requires additional judgment for establishing the predominant use. Also livestock was excluded from the scope because there is usually an active market for livestock and fair value can be determined easier than cost. Therefore, the IASB decided on option 3 and issued the exposure draft *Agriculture: Bearer plants, proposed amendments to IAS 14 and IAS 41*.

Starting from the premises that a) mature bearer plants would not suffer any significant biological transformation, and b) on maturity bearer plants are used to grow produce over several periods, IASB concluded that the use of bearer plants to produce agricultural produce is very similar to manufacturing. From the cost-benefit perspective, the IASB noted based on the 2011 Agenda Consultation conclusions that the cost of measuring bearer plants at fair value should exceed the benefits.

In case the amendments proposed within the Exposure Draft would be applied by the IFRS adopters, the therefore generated main changes affecting the financial position and income statement are summarized in the table below:

Table 1. The main effects of the Exposure Draft proposed amendments on financial position and income statement

Effect	Fair value model under IAS 41	Cost model under the proposals	Impact
Financial position	Measured at fair value less costs to sell.	Measured at cost less any accumulated depreciation and any accumulated impairment losses.	Proposals are expected to reduce net assets.
Profit or loss	Changes in fair value less costs to sell are recognised in profit or loss.	The depreciation charge for each period, and any impairment loss, will be recognised in profit or loss.	The change in the fair value of bearer plants is often a significant amount so the proposals will reduce the volatility of profit or loss from the remeasurement of bearer plants.

(*Source*: IASB, Exposure Draft Agriculture: Bearer Plants, proposed amendments to IAS 16 and IAS 41, 2013: 27)

The IASB invited comments to the Exposure Draft (issued in June 2013) between June and October 2013 to be made on specific questions. Ten research questions (one extra question resulted from the split of topic six) which are considered in our analysis draw from the Exposure Draft as presented below (IASB, Exposure Draft Agriculture: Bearer Plants, proposed amendments to IAS 16 and IAS 41, 2013):

Q1: Do you agree with the scope of the amendments?

Q2: Accounting for bearer plants before maturity should be measured at accumulated cost?

Q3: Is additional guidance needed for accounting perennial plants under IAS16?

Q4: Should bearer plants be accounted in accordance with IAS 16?

Q5: Does IAS 16 require additional guidance in order to be applied to bearer plants?

Q6: a) Should disclosure of the total fair value of the bearer plants (valuation techniques, key inputs/assumptions) be required if they are accounted under IAS 16?

Q6: b) If bearer plants are accounted under IAS 16 should be required disclosure of the significant inputs that would be required to determine the fair?

Q7: Do you think any disclosures for bearer plants, apart from those covered in Q6, should be required in addition to those in IAS 16?

Q8: Do you agree with the proposed transition provisions?

Q9: Do you agree with the proposed transition provisions for first-time adopters?

Section four includes a detailed analysis of the comment letters being received by the IASB, therefore allowing an in depth discussion of the above mentioned questions.

4. Research design and methodology

This study is based on the analysis of the comment letters being received by IASB to the proposed amendments to IAS 16 and IAS 41. The employed research methodology is similar to that in Tiron-Tudor and M*üller* (2009). Content analysis of both the Exposure Draft and corresponding comments letters being received was first undertaken.

The initial sample comprised a number of 77 comment letters, but we had to eliminate 3 letters which were duplicates (a possible explanation might be that the submitters improved their comments and sent another letter). In all the cases we selected the latest version of the comment letter. We must also mention that three agriculture companies (Syngenta International AG, KWS SAAT AG, Bayer) submitted the same comment letter that expressed their common approach. The same happened with two professional accounting bodies (CPA Australia Ltd and ICA Australia). In both cases, we kept all these comment letters in our performing our analysis because, despite the fact that they submitted the same letter, the approach belongs to different organizations.

Finally, the sample was formed by a number of 74 comment letters that answered to the ten requests raised by the IASB in the Exposure Draft published on its website. From these ten questions written on the Exposure Draft we chose only those which we considered representative for our study, so we kept nine research questions. The question number six was split into two separate questions because it presents two alternatives of additional fair value disclosure.

In developing the **quantitative analysis** we considered four possibilities of answers that were codified as follows: "yes" (affirmative answer), "n/a" (no answer or non-conclusive answer), "alternative view" (another point of view of the submitter) and "no" (negative answer). The "alternative view" in our study does not necessary refers to the alternative view expressed by Finnegan and Patricia McConnell and presented in the Exposure Draft, but to any different opinion that is argued and consistent with the current economic reality.

Furthermore, we analyzed all the comment letters in our sample and recorded the answers to the questions presented in section 2 of this paper. The next step in our analysis was to group the companies by their field of activity and their interest on bearer biological assets valuation as follows: Agriculture companies (AGR) – 20 companies; Audit and consultancy companies (ACC) - 11 companies; Professional accounting and financial organizations (PAFC) - 17 companies; Standards setters (SST) – 20 companies and Others (OTH) - 6 companies. In order to approach the insights of these comments we considered it opportune to also develop a **qualitative analysis**. The following section of the paper develops both the quantitative and qualitative proposed analysis and interprets the obtained results.

5. Developing the analysis and interpreting the obtained results

In this section we first develop a quantitative analysis of the comment letters received by the IASB regarding its bearer biological assets related proposal. Furthermore, we considered it necessary to also conduct a qualitative analysis in order to get some insights on the alternative views and arguments expressed by the respondents.

5.1. Quantitative analysis

As we already mentioned in the methodology section, an important step was to group the respondents by their interest on bearer biological assets valuation. In the following chart we can observe the distribution of submitters among the groups being considered. The largest groups are the agriculture companies and standard setters with a percentage of 20,27% , followed by the professional accounting and financial organizations with 17,23%, audit and consultancy companies (11,15%) and others (6,8%). The "others" group includes individuals, researchers and another types of organizations.

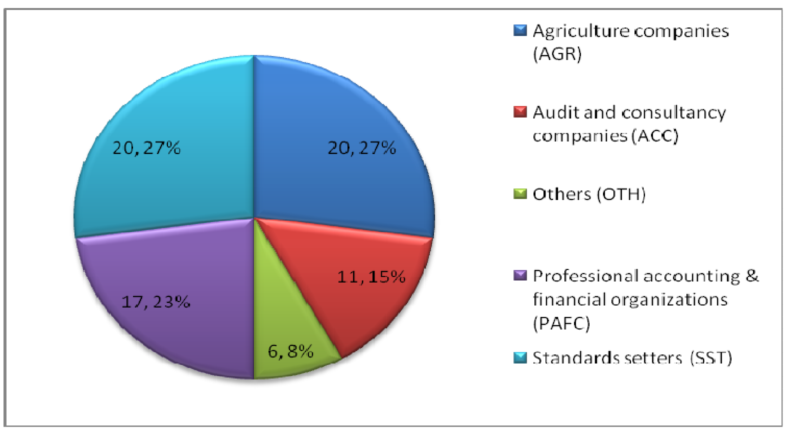


Figure 1. Distribution of respondents among the groups considered

In the next chart we present the structure of the responses for **question 1** received by IASB regarding the Exposure Draft. We can observe that 40 out of 74 respondents have an alternative view about the scope of the amendments, which intend to include bearer plants within the scope of IAS 16 rather than IAS 41. Only 6 respondents did not agree with this proposal and the rest of them totally agreed. All the respondents answered to this first question, as we can see in the below presented chart. The highest number of alternative view opinion has been recorded for the standards setters (13 respondents), followed by professional accounting & financial organizations (9 respondents), agricultural companies (8 respondents), audit and consultancy companies (7 respondents) and others (3 respondents). In the case of agricultural companies, an important group for our study, the most respondents (9 respondents) agreed with the scope of the amendments and 3 respondents did not, while in the standards setters group 13 out of 20 respondents gave an alternative view answer and only 2 did not agree.

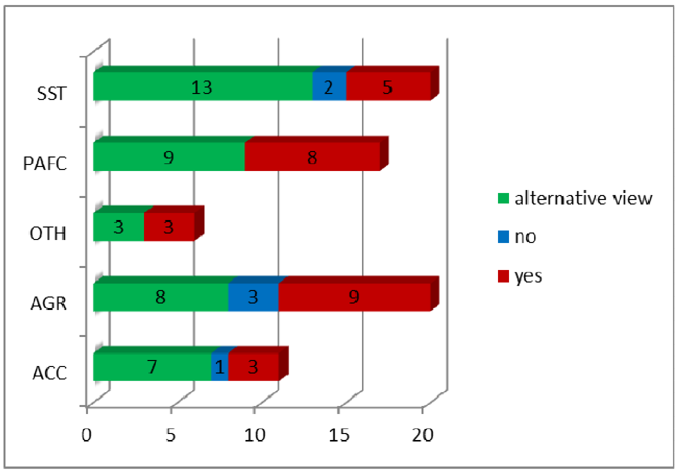


Figure 2. The graphical representation of responses to Question 1 (scope of the amendments)

As shown in the below presented chart, the responses to the **second question** are in strong agreement with accounting treatment for bearer plants (before are placed into production) at accumulated cost. Agriculture companies agree in a proportion of 90% (18 from 20 respondents) with this accounting treatment. The other groups, even if they agree in most part with this content, some alternative views or no answers were recorded. We have only one negative response received from the "other" group, which includes the individuals, researchers and another types of organizations.

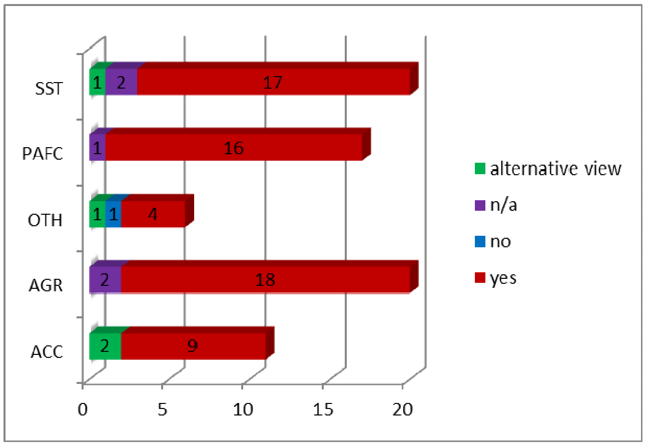


Figure 3. The graphical representation of responses to Question 2

Responses to question 3 that refers to the need for additional guidance for the perennial crops are negative in proportion of 50% (37 out of 74 respondents). The other 50% is formed by the affirmative answer with 35,13% (26 from 74 respondents) and "no answer" with 14,86% (11 from 74 respondents) responses. Agricultural companies have the largest rate of "no" answers (15 respondents), four "no answers" and only one respondent considers that the perennial crops need additional guidance. Only the category of "other" does not have any affirmative response to this question. Also we can observe that at this question we do not have "alternative view" responses.

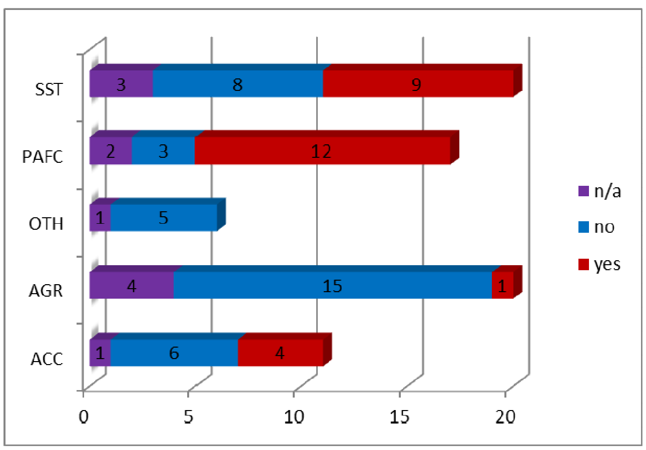


Figure 4. The graphical representation of responses to Question 3

The predominant answer to **question 4** is the affirmative one, with 59 out of 74 responses. They agree with the IASB Exposure Draft proposing that bearer plants should be accounted in accordance with IAS 16 and that the entities should be able to choose the cost model or the revaluation model for mature bearer plants.

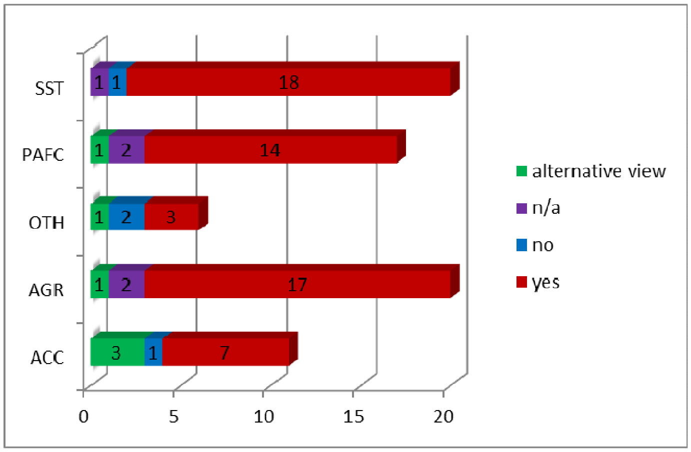


Figure 5. The graphical representation of responses to Question 4

The responses to **question 5** split the group into two approximately equal clusters, 31 respondents disagree and 32 respondents agree with the IASB proposal. Standards setters (SST), audit and consultancy companies (ACC) and other (OTH) groups each have one alternative view response.

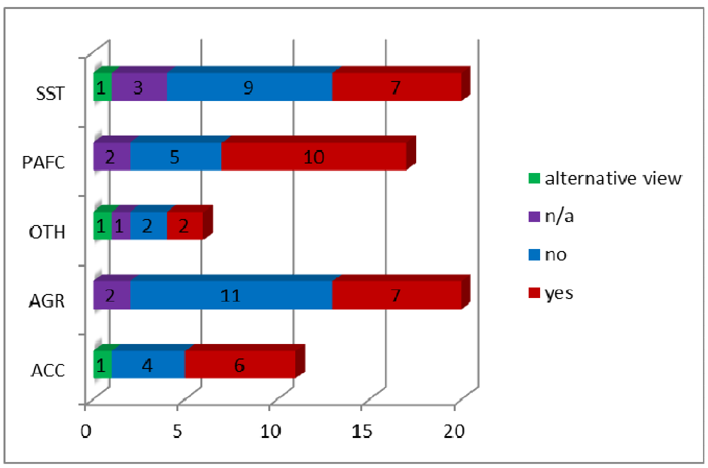
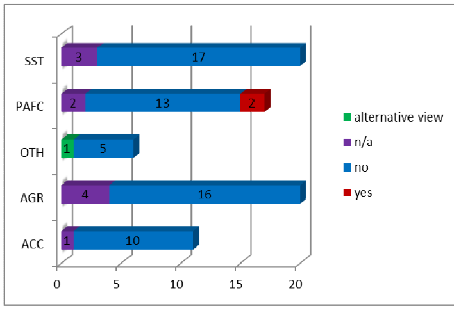


Figure 6. The graphical representation of responses to Question 5

Question 6 was split in two separate **questions** (**6a)** and **6b)**) because it presents two alternatives of additional fair value disclosure. We can observe if we take a look at these two charts that the responses are very similar and the respondents predominantly indicated that there is no need to present fair value measurements and/or other disclosures regarding fair value.



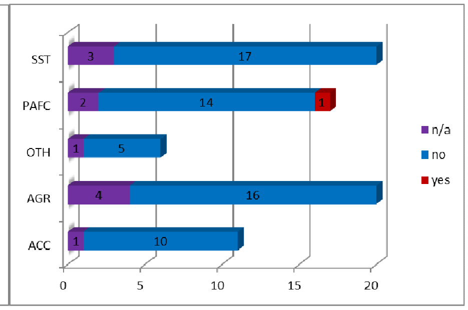


Figure 7. The graphical representation of responses to Question 6 a)

Figure 8. The graphical representation of responses to Question 6 b)

Question 7 regarding the additional disclosure for bearer plants that should be required in IAS 16, apart from those covered in question 6, generate answers that have generally recorded a high level of negative ('no") responses (55 out of 74 respondents). The highest level of disagreement was found within the "other" (OTH) group responding in a proportion of 83% with "no", followed by audit & consultancy companies with 81%, agriculture companies with 80% and standards setters with 75%, while the professional accounting & financial companies response with "no" in proportion of 58%. Also we can observe that some of the groups did not answer this question.

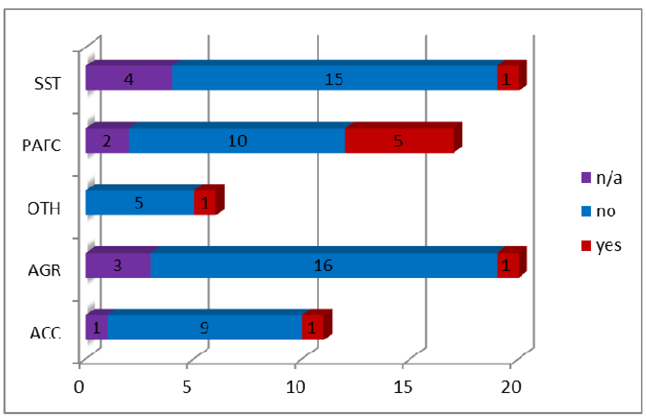


Figure 9. The graphical representation of responses to Question 7

We observed that responses to **questions 8** and **9** were very similar. The highest occurrence was obtained by the affirmative response with 65 out of 74 responses for question 8 and 60 out of 74 responses at the question 9. Also we did not record any negative responses, so we can asses that most of the respondents agree with the IASB proposal that entities could use fair value as its deemed cost (Q8) and the first-time adopters could apply the deemed cost exemption (Q9).

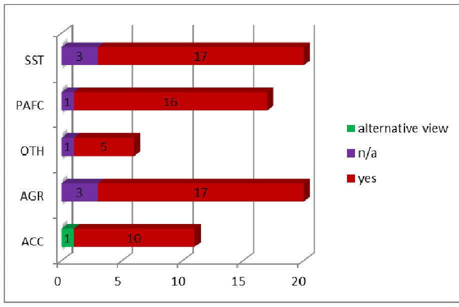


Figure 10. The graphical representation of responses to Question 8
Source: Authors' computation

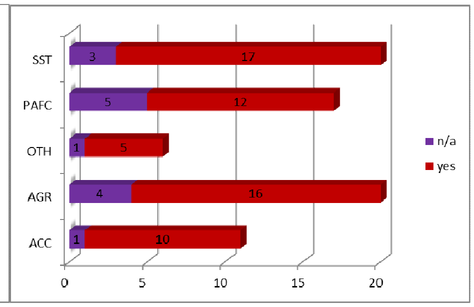


Figure 11. The graphical representation of responses to Question 9
Source: Authors' computation

5.2. Qualitative analysis

Given the fact that most of the respondents did not just answer with a simple "agree" or "not agree", but thoroughly expressed their view on the Exposure Draft, we considered that also developing a qualitative analysis of the received comments letters would benefit our study in providing a more comprehensive approach on respondents' views.

Analyzing the distribution of the responses on the scope of the IASB's proposal to amend IAS 16 and IAS 41 it can be observed that the largest majority (40 respondents) had an "alternative view". From the remaining 6 respondents totally disagree with the scope proposed by IASB and the others 28 totally agree. We strongly emphases here that "alternative view" in our study does not necessary refers to the alternative view expressed by Finnegan and Patricia McConnell and presented in the Exposure Draft, but to any different opinion that is argued and consistent with the current economic reality.

Some of the respondents (Mazars, ICAEW, Baker Tilly, Deloitte, NZICA, IOSCO, BDO) argued that bearer livestock should be included within the scope of these amendments as this *would limit distortions between financial statements of companies within the same industry* (Mazars, 2013) and eliminate income volatility that arises from changes in fair value when the owner has no intention to change the use of the asset (Deloitte, 2013). NZICA (New Zeeland Institute of Chartered Accountants) emphases the fact that significant changes in fair value of livestock held for agricultural produce can affect the financial statements ability to provide eloquent information to the users, especially given the fact that dairy farming is a major part of New Zeeland's economy and place them among the world's top dairy exporters.

ICAEW's approach on extending the scope of Exposure Draft to bearer livestock takes into consideration the difficulties that appear when determining the cost of this assets and the fact that fair value measurements are easier to obtain as the market is more active for livestock. In this situation ICAEW (2013) argue that the considerations above should be *balanced against the wider benefits of adopting a common approach to the accounting for bearer biological assets since business models which include bearer biological assets tend to be economically similar, whether they involve plants or livestock.* Furthermore, IOSCO view highlights the same idea, that certain types of livestock (e.g. sheep raised for wool or milk or milk cows) have similar economic characteristics as bearer plants and measuring them differently can lead to inconsistency in financial statements.

Another strong disagreement regarding the scope of the IASB's proposal refers to the exclusion of the produce growing on the bearer asset, which should continue to be accounted in accordance with IAS 41. Many of the respondents (Société International de Plantations d'Hévéas – SIPH, BDO, AOSSG, SIPEF, Camellia PLC) expressed their concern regarding this issue. SIPH highlighted this problem by stating that it seems to be technically impossible to measure the latex forming inside the trees. AOSSG argue that measuring separately the produce growing on bearer plants at fair value less costs to sell would lead to more complex and subjective financial statements, which will not be practical or useful neither for the financial statements preparers nor for their users. AOSSG view is that the produce growing should not be measured separately from the bearer plant until the harvest.

SIPEF (an agriculture company listed on NYSE Euronext Brussels) is one of the respondents that strongly disagree with the IASB's proposed treatment for produce growing on a bearer plant. They consider that a much more practical solution would be to recognize the produce at fair value less costs to sell at the point of harvest and give the following reasons: *a) the separate measurement of bearer plants and its produce will not improve the quality of financial statements; b) none of the companies in their industry (palm oil, rubber and tea) recognizes growing produce separately from the bearer plant in their internal management reporting; c) recognizing the produce at6 fair value less costs to sell at point of harvest will result in a more practical accounting treatment.*

Another respondent which disagrees with IASB's proposal that produce growing on bearer biological assets should be measured at fair value argue that IAS 41 establish a threshold too higher and should be amended so that fair value measurement is only required when the produce is sold in an active market (level 1) in the produce's current condition at the reporting date (BDO, 2013).The Institute of Chartered Accountants of India (ICAI) highlights the issue of measuring separately the produce of bearer biological assets from a practical perspective. ICAI presented the case of the crops that produce continuously for harvest throughout the year. There are bearer plants (e.g. coffee beans) that have a long ripening period (i.e. approximately 8-9 months) and if level 1 fair value aren't available during this time the use of some other methodology might lead to a high volatility in the fair values.

Among the comments letters being received, we encountered respondents that totally disagree with the IASB's proposal. What we found interesting is that this approach comes from different categories (standards issuers, agriculture companies and audit and consultancy field of activity). PricewaterhouseCoopers is one the opponents of IASB's proposal and argue there is no conceptual basis for treating bearer plants differently from other biological assets. Also, they consider that IASB may want to reconsider IAS 41 in its entirety. PricewaterhouseCoopers sustain that moving bearer plants within the scope of IAS 16 while its produce stays within IAS 41 without additional guidance would lead to multiple practical issues.

6. Conclusions, limitations and future research

The aim of our paper is to study the reaction of different stakeholders to the IASB's proposed amendments regarding bearer plants. Some of the respondents welcomed the proposal to account bearer plants under the scope of IAS 16 (currently bearer plants are accounted under IAS 41). One of those is Michael A. St. Clair-George (former Managing Director of a quoted plantation company) which stated that:

> "Listed companies resorted to publishing figures before the effects of IAS 41 just to introduce some sort of sanity into the accounts for their readers. Management, and I was one of them, found it an expensive distraction and useless as a tool for anything. This has all since been verified by the IASB's own staff. Asking the directors to fair value anything is like asking a fox to count the chickens in a hencoop. Yet despite the evidence, obdurately and quite cloud-cuckoolandishly, Mr. Finnegan and Ms. McConnell continue ploughing their discredited course" (Michael A. St. Clair-George, 2013).

Firstly we conducted a quantitative analysis of the comments letters received by the IASB, but given the fact that most of the respondents expressed an alternative view opinion on the scope of the proposed amendments, we decided to also develop a qualitative analysis of these responses. Our research yields that many interested parties propose to also include under the scope of the Exposure Draft proposal the bearer livestock and are against separately measuring the bearer plants and its produce until the harvest. As the silver lining of the proposed amendments lies in measurement related consequences, our paper contributes to the debate on fair value measurement of biological assets by focusing on the case of bearer biological assets. Similar to previous studies in literature (Elad, 2004; Elad & Herbohn, 2011), summing up the analysis performed on stakeholders' view on the proposed amendments to IAS 16 and IAS 41, we conclude that significant clarifications remain necessary on accounting for biological assets before betting on the benefits of fair value accounting.

The main limitation of our study relates to the fact that stakeholders' view is reflected based on the perspective of those choosing to actively participate in IASB's due process of standard setting. This makes it difficult to assess their relevance in relation to the comprehensive group of stakeholders. Constituents' drivers to participate in the due process are outside the scope of our paper (for more details in this regard see Jorissen *et al.*, 2012). Depending on the decision made by the IASB, the potential to apply the proposed amendments generates a series of future research questions related to their effect on the comparability of financial statements, compliance costs for preparers, whether they lead to improved financial reporting and consequently decision making process, etc.

Acknowledgement

This work was supported from the project "IGA VSE F3/2/2014 registered at Internal Grant Agency of University of Economics Prague". This work was cofinanced from the European Social Fund through Sectoral Operational Programme Human Resources Development 2007-2013, project number POSDRU/159/1.5/S/134197 „Performance and excellence in doctoral and postdoctoral research in Romanian economics science domain"

References

Argilés, J. & Slof, E. (2001) "New opportunities for farm accounting", *European Accounting Review*, Vol. 10, No. 2: 361–383

Argilés, J., Garcia-Blandon, J. & Monllau, T. (2011) "Fair value versus historical cost-based valuation for biological assets: predictability of financial information", *Spanish Accounting Reiew*, Vol. 14, No. 2: 87-113

Argilés Bosch, J., Aliberch, A.S. & Garcia-Blandon, J. (2012) "A comparative study of difficulties in accounting preparation and judgment in agriculture using fair value and historical cost for biological assets valuation", *Spanish Accounting Reiew*, Vol. 15, No. 1: 109-142

Athanasios, V., Stergios, A. & Laskaridou, E.C. (2010) "The Importance of Information through Accounting Practice in Agricultural Sector-European Data Network", *Journal of Social Sciences*, Vol. 6, No. 2: 221-228

Barlev, B. & Haddad, J.R., (2003) "Fair value accounting and the management of the firm", *Critical Perspectives on Accounting*, Vol. 14, No. 4: 383-415

BDO (2013) Comment Letter to Exposure Draft: *Agriculture: Bearer Plants, proposed amendments to IAS 16 and IAS 41*: 1-10

BDO (2014) IFRS at a glance - IAS 41 Agriculture: 1-4

Cervantes-Godoy, D. & Dewbre, J. (2010) "Economic Importance of Agriculture for Poverty Reduction", OECD Food, Agriculture and Fisheries Working Papers, No. 23, OECD Publishing, available at doi: 10.1787/5kmmv9s20944-en

Deloitte Touche Tohmatsu Limited (2013) Comment Letter to Exposure Draft: *Agriculture: Bearer Plants, proposed amendments to IAS 16 and IAS 41*: 1-8

Elad, C. (2004) "Fair Value Accounting in the Agricultural Sector: Some Implications for International Accounting Harmonization", *European Accounting Review*, Vol. 13, No. 4: 621–641

Elad, C. (2007) "Fair Value Accounting and Fair Trade: An Analysis of the Role of International Accounting Standard No. 41 in Social Conflict", *Socio-Economic Review*, Vol.5, No. 4: 755-777

Elad, C. & Herbohn, K. (2011) *Implementing fair value accounting in the agricultural sector, Institute of Chartered Accountants of Scotland*, Edinburgh: 1-152

Feleagă, L., Feleagă, N. & Răileanu, V. (2012) "Consideraţii teoretice privind implementarea standardului IAS 41 în România", *Economie teoretică şi aplicată*, Vol. XIX, No. 2(567): 11-19

Gonçalves, R. & Lopes, P. (2014) "Firm-specific Determinants of Agricultural Financial Reporting", *Procedia - Social and Behavioral Sciences*, Vol. 110: 470-481

International Accounting Standards Board (IASB) (2013) Exposure Draft *Agriculture: Bearer Plants, proposed amendments to IAS 16 and IAS 41*: 1-34

International Accounting Standards Board (IASB) (2014) IASB issues amendments to IAS 16 and IAS 41 available at http://www.ifrs.org/Alerts/Publication/Pages/IASB-issues-amendments-to-IAS-16-and-IAS-41-for-bearer-plants-June-2014.aspx

International Organisation of Securities Commissions (IOSCO) Comment Letter to Exposure Draft: *Agriculture: Bearer Plants, proposed amendments to IAS 16 and IAS 41*: 1-6

Johnston, B.F. and Mellor, J.W. (1961) "The Role of Agriculture in Economic Development", *The American Economic Review*, Vol. 51, No. 4: 566-593

Jorissen, A., Lybaert, N., Orens, R. & Tas, L.G. van der (2012) "Formal participation in the IASB's due process of standard setting: A multi-issue/multiperiod analysis", *European Accounting Review*, Vol. 21, No. 4: 693-729

Luthardt, U. & Zimmermann, J. (2009) "A European view on the legitimacy of accounting procedures: Towards a deliberative-accountability framework for analysis", *Research in Accounting Regulation*, 21: 79-88

Marsh, T. & Fischer, M. (2013) "Accounting for Agricultural Products: US Versus IFRS GAAP", *Journal of Business & Economics Research*, Vol. 11, No. 2: 79-87

Mazars (2013) Comment Letter to Exposure Draft: *Agriculture: Bearer Plants, proposed amendments to IAS 16 and IAS 41*: 1-6

Michael A. St. Clair-George (2013) Comment Letter to Exposure Draft: *Agriculture: Bearer Plants, proposed amendments to IAS 16 and IAS 41*: 1-2

New Zealand Institute of Chartered Accountants (NZICA) (2013) Comment Letter to Exposure Draft: *Agriculture: Bearer Plants, proposed amendments to IAS 16 and IAS 41*: 1-7

Pitulice, I.C. & Gorgan, C. (2013) "The use of statistical information for financial reporting purposes – the case of FADN", *Annales Universitatis Apulensis Series Oeconomica*, Vol. 15, No. 1: 67-80

PricewaterhouseCoopers LLP (PwC) (2013) Comment Letter to Exposure Draft: *Agriculture: Bearer Plants, proposed amendments to IAS 16 and IAS 41:* 1-6

SIPEF (2013) Comment Letter to Exposure Draft: *Agriculture: Bearer Plants, proposed amendments to IAS 16 and IAS 41:* 1-4

Société International de Plantations d'Hévéas (SIPH) (2013) Comment Letter to Exposure Draft: *Agriculture: Bearer Plants, proposed amendments to IAS 16 and IAS 41:* 1-6

The Asian-Oceanian Standard-Setters Group (AOSSG) (2013) Comment Letter to Exposure Draft: *Agriculture: Bearer Plants, proposed amendments to IAS 16 and IAS 41:* 1-8

The Institute of Chartered Accountants of India (ICAI) (2013) Comment Letter to Exposure Draft: *Agriculture: Bearer Plants, proposed amendments to IAS 16 and IAS 41:* 1-5

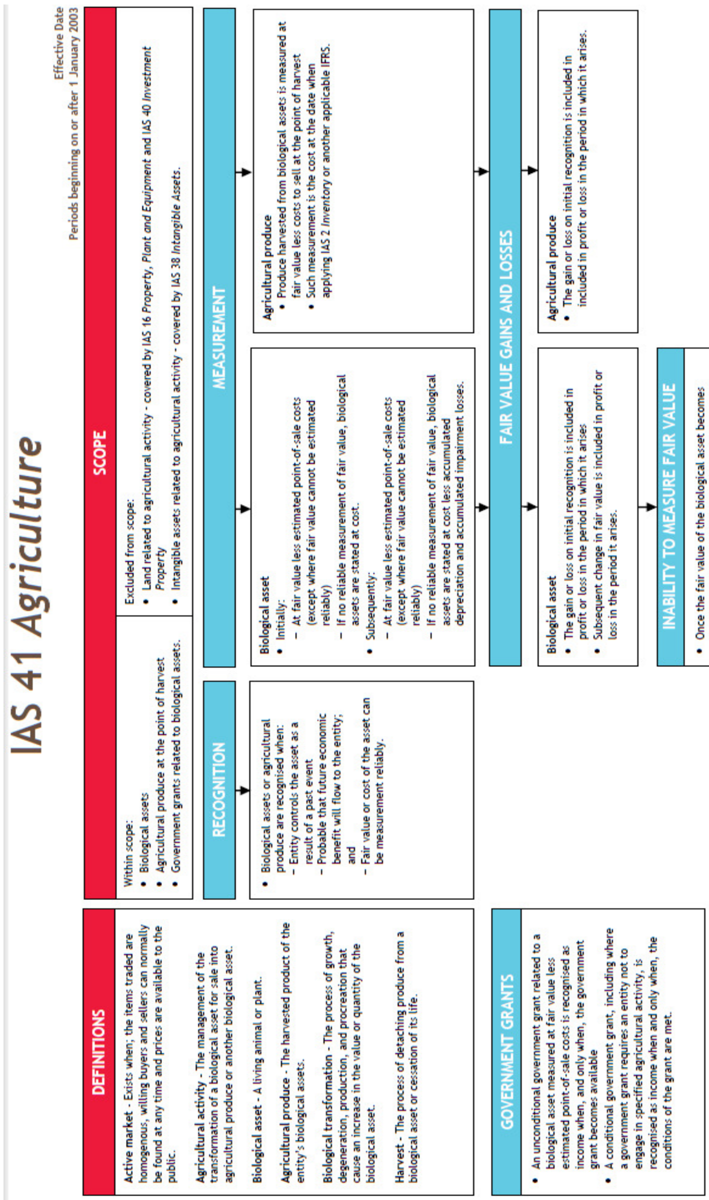
The Institute of Chartered Accountants in England and Wales (ICAEW) (2013) Comment Letter to Exposure Draft: *Agriculture: Bearer Plants, proposed amendments to IAS 16 and IAS 41:* 1-7

Thorbecke, E. (1970) "Introduction to The Role of Agriculture in Economic Development" in Thorbecke, E. (ed), (1970), *The Role of Agriculture in Economic Development*, National Bureau of Economic Research, available at http://www.nber.org/chapters/c3360

Tiron-Tudor, A. & Müller, V., (2009) "Agreement and disagreement regarding the IASB's proposed changes to accounting for joint ventures", *Accounting and Management Information System*, Vol. 8, No. 1: 7-26

Vladu, A.B. (2013) "Fair value measurement in agriculture and the potential to mislead", *Annals of the „Constantin Brâncuşi" University of Târgu Jiu*, Economy Series, No. 5: 95-9

Appendix 1



Source: BDO, IFRS at a glance - IAS 41 Agriculture, 2014: 3

[1] Meanwhile the amendments have been issued by the IASB (June 30, 2014).