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How Close Are Romanian Regulations and the IFRS for SMEs?- An In-depth Analysis for Inventories

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Research on accounting harmonization/convergence also implies measuring how close IFRS and specific standards/regulations are. In the context of a potential application of the IFRS for SMEs, the magnitude of these differences is an indicator about the cost of IFRS for SMEs implementation/application and of the success of this process. The aim of this paper is to measure and discuss the convergence between the current national regulations applicable to inventories and the IFRS for SMEs in the context of an emerging economy, i.e., Romania. We find that accounting for inventories in the Romanian regulations is not as close to the IFRS for SMEs as previous general studies indicated. On the other hand, we have identified in the national regulations elements which have more implications on the management of inventories and the organization of accounting than on measurement issues. We consider that these additional details are necessary and useful in the context of emerging economies, characterized by an under-developed accounting profession.

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1. Introduction

The process of accounting convergence and the issues related to the implementation of International Financial Reporting Standards (IFRSs) world-wide are topics of much interest recently for standard setters, researchers and practitioners. The International Accounting Standards Board (IASB) issued in July 2009 the IFRS for Small and Medium-sized Entities (IFRS for SMEs) (IASB 2009) with a view to increasing the comparability and quality of SMEs accounting information world-wide.

On the other hand, the national characteristics, i.e., each country's accounting culture and traditions, the political, social and economic environment, influence the national accounting system and the way in which IFRSs are applied (Alexander, Britton & Jorisson 2006; Nobes & Parker 2008). Consequently, research is needed in different settings to measure the convergence with IFRSs and the challenges associated with the process of change. Only a few studies were published on emerging economies. The economic interest and the lack of previous studies on

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emerging economies make a call for research in this area. The aim of this paper is to measure and discuss the convergence between the national regulations applicable to inventories and the IFRS for SMEs in the context of an emerging economy, i.e., Romania. Therefore, our research questions are: (1) What is the degree of convergence between national regulations and IFRS for SMEs?; (2) What is the nature of differences between national regulations and IFRS for SMEs?.

We argue that large, complex studies are useful, but sometimes they hide significant issues related to the convergence process. Therefore, our research complements the findings of large studies indicating that for specific issues an in-depth analysis indicates a more nuanced situation. We find that accounting for inventories in the Romanian regulations is not as close to the IFRS for SMEs as previous general studies indicated in the context of Romania (CECCAR 2010), the value of the convergence index we obtain being only 0.51. Also, we find that in the context of emerging economies besides analyzing convergence and divergence, it is also useful to measure the additional guidance necessary for the general improvement of accounting practice. We develop the literature on the measurement of the convergence/harmonization (Ding et al. 2007; Qu & Zhang, 2010) by proposing a methodology adapted to the situation of emerging economies.

The remainder of the paper is organized as follows: after a literature review, the methodology of the study is detailed. We continue with the results and finalize with the conclusions of the study.

2. Literature Review

There is an enormous literature concerning the process of accounting harmonization and, more recently, those of convergence. Besides analyzing the effects of IFRS implementation in terms of information quality, value relevance or impact of change, research on accounting harmonization/convergence also implies measuring how close IFRS and specific standards/regulations are.

Many countries intend to adopt IFRSs or make their national regulations converge with IFRSs (Larson & Street 2004, p. 91). On the other hand, Nobes and Zeff (2010) underlined significant differences in the way a country (jurisdiction) implemented or might implement IFRS. On the other hand, differences exist not only between the national rules and IFRSs, but also in the various approaches in which accounting rules are used. Consequently, a distinction has been made between *de jure* convergence (comparing the standards) and *de facto* convergence (comparing the practices) (Tay & Parker 1990 cited in Larson & Street 2004, p. 93). Studies have been conducted on both types of convergence. However, before researching the degree of convergence in practices, a formal convergence should be analyzed.

There is also a rich body of literature on accounting convergence using different methods to measure convergence. The measurement methods were previously used to measure, for example, the relation between accounting and taxation and we might consider these studies as a general background on how to measure and interpret the differences/similarities between different sets of rules. A seminal study was released by Lamb et al. (1998) which identifies the following cases of linkage between tax and financial reporting: disconnection, identity, accounting leads, tax leads and tax dominates. Nobes and Schwencke (2006) continued and developed the methodology.

Qu and Zhang (2010) identified relevant studies on methods to measure formal harmonization, critically analyzing the use of Euclidian distances, Jaccard's coefficient and Spearman's coefficient. The authors propose the use of fuzzy clustering and discuss the complete convergence, substantial convergence, substantial difference and complete difference. Ding et al. (2007) measure the differences between IAS and domestic accounting standards using two indices: absence (a particular item is covered only by IAS) and divergence (a particular item is covered by IAS and national standard, but the treatment is different). Peng and van der Laan Smith (2010) calculated on Chinese data a standardized convergence score assessing a list of items for full convergence, substantial convergence or non-convergence with IFRS.

Ding et al. (2007) consider that there still is room for improvement in the existing measurement of international accounting differences. Consequently, research is still necessary in this area. If studies with comparative analyses or longitudinal analyses were published, a more focused analysis is necessary because single standards/topics achieve different degrees of convergence than others (Qu & Zhang 2010). These results have implications for users, preparers and regulators.

We are interested in this context to conduct an analysis on the differences between the IFRS for SMEs and the Romanian national regulations. In the context of a possible application of the IFRS for SMEs, the magnitude of these differences is an indicator about the cost of IFRS for SMEs implementation/application and of the success of such a process.

Romania is a member of the European Union since 2007, thus enacting the European Directives in the national regulations. Paying attention to the newly issued IFRS for SMEs, the European Commission started a consultation and an analysis of this standard and its suitability in the European Union. EFRAG analyzed recently the compatibility between the IFRS for SMEs and the European Directives (EFRAG 2010), and identified only a few incompatibilities. However, there are several limitations of this analysis, as reported, for example, by Flores (2010): it does not take into consideration how EU Directives are implemented in different countries, and no consideration is given to whether the incompatibilities were likely to arise in practice. More than that, the analysis is based on the concept of 'incompatibility', understood as the situation in which an accounting treatment required by the IFRS for SMEs would not be permitted under EU Directives. For example, with respect to the objective of financial statements, such an objective is provided by the IFRS for SMEs but not by the European Directives. This is not reported as an incompatibility by the EFRAG (EFRAG 2010, p. 2). A second example is the case of substance over form – the principle is required by the IFRS for SMEs, while the European Directives allow EU members to permit or require its application. This is not viewed as an incompatibility either by the EFRAG analysis (EFRAG 2010, p. 4). Thus, this comparative analysis provides a general overview, but it is not very useful in order to assess the differences between the European Directives and the IFRS for SMEs, that are specific to different countries.

3. Research Methodology

We are interested in the differences and similarities between the IFRS for SMEs and the Romanian regulations. A general analysis was released by a professional body (CECCAR, 2010), providing in a comparative manner excerpts from the IFRS for SMEs and national regulations. Other general analyses were conducted by Albu et al. (2011a, 2011b). Their results provide a general overview of the differences and similarities between the IFRS for SMEs and the Romanian regulations. However, they do not provide a methodology for measuring the differences or similarities, in a comparable manner with studies on Romania addressing the issue of full IFRS (Mustaţă, 2008).

While general studies are useful, analyses focused on specific topics are necessary to understand the mechanisms of convergence. We will focus on inventories, an item with a significant impact on the financial statements of many entities. Previous studies in Romania report that the treatment of inventories is generally in line with that of the IFRS for SMEs. However, we will carry out an in-depth analysis. General studies focused on a few items for inventories. For example, Peng and van der Laan Smith (2010) study four measurement items: inventory costs, cost formulas, ending inventory costs and recognition and reversal of impairment. On the other hand, advocating the need for in-depth analyses, Qu and Zhang (2010) use in their study 27 items for inventories.

Based on previous literature and on the textual analysis of the Section 13 Inventories of the IFRS for SMEs and of the national accounting regulations (OMFP 2009), we have identified 20 items related to inventories. To measure the convergence/harmonization, we developed two methodologies used in previous studies: (1) the measures of absence and divergence proposed by Ding et al. (2007) (the authors do not take into consideration similarities or convergence); and (2) complete or substantial convergence/divergence measures proposed by Qu and Zhang (2010).

We further the analysis included in previous studies by investigating the following situations.

I. Complete convergence – the same provisions are included in the IFRS for SMEs and the national regulations;

II. Absence - differences in the provisions exist, with different implications for convergence and divergence, as follows:
   II.1 Incomplete – the provisions of the standard are not included in the national regulations;
   II. 2 Over detailed leading to convergence – the national regulations provide more details, but the end-result is in line with the IFRS for SMEs;
   II. 3 Over detailed leading to divergence – the national regulations provide more details, but with the result of being in divergence with the Standard;
   II.4 Over detailed with no implications for convergence or divergence - the national regulations provide more details, but they do not impede or contribute to the convergence;

III. Divergence - there are conflicting provisions in the IFRS for SMEs and the national regulations.

Subsequently, we compute a score for each type of relationship between the IFRS for SMEs and the national regulations by assigning for each item discussed 1 if the situation involves only one type of relationship to the type identified, and splitting 1 among various types if the item involves more than one type of relations. Subsequently we will discuss the implications for practice and regulators.

4. Results

We have applied the methodology described above to the provisions for inventories (Section 13 Inventories of the IFRS for SMEs) and of the national accounting regulations (OMFP 2009). Because of the previous influence of IAS on Romanian accounting reforms, some definitions, principles and rules from IAS have similarities (Ionaşcu et al. 2007; Albu, Albu & Fekete 2010). For example, the definition of inventories and the general principles regarding the evaluation are the same (type I), thus justifying the conclusion of general studies (CECCAR 2010; Albu et al., 2011a, 2011b) that there is a significant degree of convergence in the case of inventories.

However, there are some areas providing sources for divergence. For example, the scope of the Section 13 (paragraph 13.3) mentions that some inventories (held by producers of agricultural and forest products, commodity brokers and dealers) might be measured at fair value less costs to sell and are outside the measurement principles of the section. Similar provisions are not included in the national regulations (type II.1). On the other hand, the national regulations include a specific item with fiscal connotations (type II.3). In accordance with the Romanian fiscal regulations, a fixed asset (ro. mijloc fix) is recognized if it used more than a year and its value exceeds the value established by the law. If the item does not meet these criteria, it is a specific type of inventory called “inventory objects” (literal translation of the Romanian *obiecte de inventar*). However, the national regulations do not define this category nor do they present any recognition criteria, although they make reference to it. The explanation provided above is based on fiscal regulations. Consequently, we estimate that in respect of the scope of the provisions issues related to convergence (type I), divergence (type III) and over-detailed leading to divergence situations (type II.3) occurring..

Romania does not have a long experience with substance over form-type judgments and principles. Rules and especially fiscal rules (the form) prevailed in accounting. Therefore, we consider that details provided for the recognition of inventories in relation with the transfer of benefits and risks are in line with the spirit of the IFRS for SMEs, even if they are not explicitly included in the standard (type II.2). Also, the national regulations include some detailed provisions about the management of inventories, cost techniques (standard costing etc.), inventory systems (periodic or perpetual), costing the work in process. These provisions are generally in line with accounting for inventories as presented in accounting textbooks, therefore aiming at a common understanding by practitioners. This might be explained by the under-development of the accounting profession in Romania (as an emerging economy). For the purpose of our analysis, these provisions fall in the types I (for the general principles) and II.4 (additional guidance).

The main sources of divergence are related to some details regarding the cost of purchase. Some of the details of the IFRS for SMEs concerning deferred settlement terms are not included in the national regulations (type II.1). Also, the national regulations detail the accounting for trade discounts subsequent to the purchase which do not affect the cost of purchase (hence resulting in a type III relationship). In the IFRS for SMEs all borrowing costs are expensed in profit or loss of the period (paragraph 25.2), while in the national regulations there is an option regarding their capitalization in the cost of inventories (type I for the non-capitalization and type III for capitalization). Also, the national regulations allow the use of LIFO (type I for FIFO and WAC, and type III for LIFO). In terms of impairment and derecognition, the general provisions of the national regulations are in line with those in the IFRS for SMEs, but the latter provides additional principles (type I and II.1). The disclosures of the IFRS for SMEs are not entirely included in the national regulations (type II.1) while some additional disclosures are required (fiscal implications for example) (type II.3).

Table 1: Provides the Detailed Analysis of the Comparison: Inventories Items and Comparison with the IFRS for SMEs

	Type I	Type II.1	Type II.2	Type II.3	Type II.4	Type III
Definition	1					
General scope	0.5			0.25		0.25
Exclusion of the measurement scope (fair value measurement)		1				
Recognition			1			
Management of inventories					1	
Measurement (general principle)	1					
Cost – general principle	1					
Cost of purchase – details	0.5	0.25				0.25
Cost of production – general principles	1					
Joint products and by-products		1				
Cost of work in process			1			
Borrowing costs	0.5					0.5
Costs excluded	1					
Costs of inventories of a service provider	1					
Techniques for measuring cost	0.5				0.5	
Cost formulas	0.66					0.33
Inventory systems					1	
Impairment	0.5	0.5				
Derecognition	0.5	0.5				
Disclosure		0.5			0.5	
Total	**9.66**	**3.75**	**2**	**0.25**	**3**	**1.33**

We note a significant degree of convergence regarding the provisions for inventories. Types I and II.2 (with values of 9.66 and 2 respectively) indicate the convergence, and types II.1, II.3 and III (with values of 3.75; 0.25 and 1.33 respectively) indicate the divergence. The main sources for divergence come from the provisions of the

IFRS for SMEs which are not included in the national regulations, therefore being more a matter of absence than of divergence (in the sense of a conflict).
In order to provide a general overview, we subsequently regrouped the items analyzed on the main topics usually discussed (as for example in Peng & van der Laan Smith 2010) and we have eliminated the composition effect (more or less components in a general topic). For example, we have included in the general score of “Definition of scope” the scores of 5 items. Then, we have divided the total obtained (i.e., 1.5) by the number of items in the topic (i.e., 5) to get to a score comparable across topics. The results are presented in Table 2:

Table 2: Index Calculations for Inventories Items

	Type I	Type II. 1	Type II.2	Type II.3	Type II.4	Type III
I. Definition and scope						
Definition	1					
General scope	0.5			0.25		0.25
Exclusion of the measurement scope (fair value measurement)		1				
Recognition			1			
Management of inventories					1	
Total	**1.5**	**1**	**1**	**0.25**	**1**	**0.25**
Total recalculated	***0.3***	***0.2***	***0.2***	***0.05***	***0.2***	***0.05***
II. Measurement						
Cost – general principle	1					
Cost of purchase – details	0.5	0.25				0.25
Cost of production – general principles	1					
Joint products and by-products		1				
Cost of work in process			1			
Borrowing costs	0.5					0.5
Costs excluded	1					
Costs of inventories of a service provider	1					
Techniques for measuring cost	0.5				0.5	
Inventory systems					1	
Total	**5.5**	**1.25**	**1**		**1.5**	**0.75**
Total recalculated	***0.55***	***0.125***	***0.1***	***0***	***0.15***	***0.075***
III. Cost formulas						
Cost formulas	0.67					0.33
Total recalculated	***0.67***					***0.33***
IV. Impairment						
Measurement (general principle)	1					
Impairment details	0.5	0.5				
Total	**1.5**	**0.5**				
Total recalculated	***0.75***	***0.25***				
V. Derecognition						
Derecognition	0.5	0.5				
Total recalculated	***0.5***	***0.5***				
VI. Disclosure						
Disclosure		0.5			0.5	
Total recalculated		***0.5***			***0.5***	
Total of the recalculated totals	**2.77**	**1.575**	**0.3**	**0.05**	**0.85**	**0.455**
Index	**0.46**	**0.26**	**0.05**	**0.01**	**0.14**	**0.08**

As Table 2 shows, the **convergence index** for inventories is 0.51 (types I and II.2), while the **divergence index** is 0.35. Some of the provisions of the national regulations (type II.4, value 0.14) do not influence the convergence or divergence with the IFRS for SMEs (what we call the **guidance index**). Some might argue that the implementation of the IFRSs should follow the standard as issued by the IASB.

However, previous studies indicated the need for details in accounting standards and regulations in the context of emerging economies, which is measured by the guidance index. The case of China as a successful long-term convergence might be a model for countries in developing SMEs national standards or regulations converging with the IFRS for SMEs. Consequently, we argue for the necessity of using additional guidance in these countries and the inclusion in future research of an index for measuring the role of prescribing, detailing items.

5. Conclusion

The differences between the national regulations and the IFRS for SMEs are important to be evaluated before the implementation of the latter. Also, the evaluation of the similarities or dissimilarities is necessary to inform the decision regarding the implementing strategy (adoption or convergence). These differences provide a general overview of the changes in accounting practices, of the needs in terms of training and about the way in which national practices may influence the application of the IFRS for SMEs.

Our analysis is focused on the measurement of convergence between the IFRS for SMEs and Romanian regulations for inventories. The study advances the methodology used in international studies to measure the convergence by advocating the need for in-depth studies (for specific topics) and by proposing a new index, relevant especially in the context of emerging economies (i.e., the guidance index).

While previous studies argue that for inventories there are not significant differences between the national regulations and the IFRS for SMEs, we bring evidence that the convergence index has only a value of 0.51, while the divergence index has a value of 0.35. Therefore, there are some significant differences between the two sets of principles/rules. On the other hand, we have identified elements included in the national regulations much more relevant to the management of inventories and the organization of accounting than to measurement. We consider that these additional details are necessary and useful in the context of emerging economies, characterized by an under-developed accounting profession. There is a concern that the IFRS for SMEs is not as detailed as the national regulations, which may lead accountants to use previous regulations or fiscal ones.

This study is limited by the use of a single country (Romania) and of a single topic (inventories). However, this in-depth analysis revealed aspects difficult to be identified in large and complex studies. Future research is needed in order to provide different perspectives (normative, critical and empirical) on the convergence and divergence issues of the national regulations with the IFRS for SMEs. In this way research might have a significant contribution in the debate on regulatory issues (Singleton-Green, 2010).

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