A Theory Documenting the Feasibility of a Global Capital Market from an Accounting Perspective

CARMEN GIORGIANA BONACI

Department of Accounting Babes-Bolyai University Cluj Napoca 58-60 Teodor Mihali Street, 400591 Cluj Napoca ROMANIA

carmen.bonaci@econ.ubbcluj.ro

JIŘÍ STROUHAL

University of Economics Prague 130 67 Prague 3, W. Churchill Square 4 CZECH REPUBLIC strouhal@vse.cz

RAZVAN V. MUSTATA

Department of Accounting Babes-Bolyai University Cluj Napoca 58-60 Teodor Mihali Street, 400591 Cluj Napoca ROMANIA

razvan.mustata@econ.ubbcluj.ro

DUMITRU MATIS

Department of Accounting Babes-Bolyai University Cluj Napoca 58-60 Teodor Mihali Street, 400591 Cluj Napoca ROMANIA

dumitru.matis@econ.ubbcluj.ro

Abstract: - Paper proposes a theory for testing the feasibility of a global capital market from an accounting perspective. The theory connects the area of accounting regulations and the place where the result of their application is put into use, namely the capital market. Quantifying this connection is done indirectly, by using two direct connections. Firstly there is quantified the similitude degree of the considered accounting regulations based on a detailed content analysis. Secondly there is quantified to what extent the foresights of the considered accounting regulations are actually used in practice by companies being listed on the capital market. Once determined the two correlations there is derived the link between a certain capital market and a set of accounting regulations that is different from the one officially being applied by companies listed in the considered market. The proposed theory is tested by considering accounting regulations issued by the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) and companies being listed on the London Stock Exchange (LSE) and the New York Stock Exchange (NYSE), focusing on financial assets' measurement. Paper concludes by validating the proposed theory based on the fact that we have dimensioned a conceptual and methodological algorithm that was applied and generated results allowing the interpretation of the feasibility of a global capital market between financial reporting theory and practice.

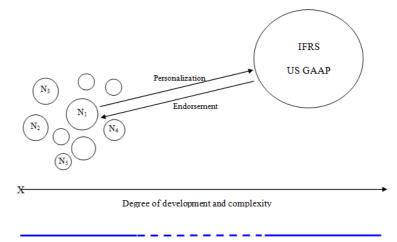
Key-Words: - feasibility, capital market, theory, accounting regulations, accounting practices

1 Introduction

The main objective of this paper is to develop and test a feasibility theory that focuses on capital markets and corresponding accounting elements. The first tendency of national jurisdictions when it comes to the dilemma of regulating accounting for financial instruments is to try and keep it under control. If we are to consider the significant number of financial scandals involving the use of financial instruments, the main problem with this approach would be that it doesn't seem to produce the expected results. Therefore, realities surrounding financial instruments have led to their corresponding financial reporting standards to be extremely controversial, long debated and amended over time. On the other hand there shall be also considered the predispositions being transferred through the financial sector whose development and nature favored and continues to favor the increased complexity of nowadays financial instruments. Under such circumstances, applying inadequate regulations can easily lead to negative effects, further stopping or slowing innovation and the market's condition.

Therefore we have to face the dilemma of two principles which may prove to be contrasting. A first principle refers to national jurisdictions opting for accounting regulations that are personalized in accordance to their environment. This represents a kind of harmonization that is tailored in accordance to national particularities. It is also our belief that such an approach could lead to slowing processes that might otherwise help accelerate the rhythm of development in less developed countries, further making it more difficult to keep pace with more developed countries. On the other hand there is always the option of endorsing accounting regulations which were developed based on the experiences of more developed economies. While the advantage consists in offering the chance to actually relate to the current stage of development in terms of financial reporting standards, this might in some cases be translated as moving away from context of the particular considered environment. These two approaches are graphically illustrated within the following figure that positions national regulations in relation to international financial reporting standards. Based on their experience in terms of development and degree of elaboration, the international financial reporting standards obviously present competitive advantage if we are to only consider their due process involving the contribution of a significant diversified group of constituents.

Figure 1. Perceptions of the Accounting Regulation Process Considering a National Level



National accounting regulations

International accounting regulations

Source: authors' projection

The particular case of reporting for financial instruments makes this reflection even clearer. An approach being based on personalizing national accounting regulations based on the degree of development would for sure generate a large variety of results. Simply analyzing trading activity taking place on different stock exchanges is a first sign of this diversity. The option of endorsing accounting regulations that were tailored based on the experiences of countries in which capital markets allowed for significant development of financial engineering could also generate negative effects. Among these we must think about national regulations including foresights that are much too sophisticated when compared to the ability to manage the considered capital market. And still, the development of a global capital market represents the rational desideratum of investors all over the world, encouraging such an approach based on the advantage of uniformity and comparability of accounting information.

Beyond these general aspects that are based on the above presented reasoning, when it comes to giving shape to a national accounting system there are a series of other determinant factors that are quite difficult to quantify both individually and within real accounting systems that assume the existence of a number of inter and intra relations. These factors make reference to elements related to the degree of economic integration, financing resources, legal and political system, fiscal system, culture, accounting language and other external influences [1, 9, 12].

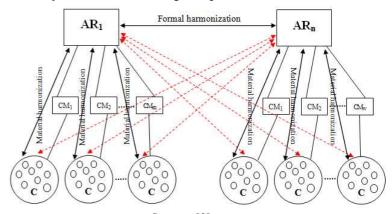
We can therefore rather catch the reflection of such an assembly at a one moment in time than

know the details of the individual evolution for all the involved factors and that of the assembly which obviously differs from the sum of the components. There has to be made a reference to morphologic theories having as main methodological grounding the idea of holistic approaches together with the principle of the shape's independence in relation to the content. Therefore shapes are seen as being global, meaning whole parts that cannot be reduced to the sum of the parts in their composition. In accordance to these theories, shape's behavior is not deduced based on the behavior of separate parts in their composition. We find these theories to be applicable in the area of financial reporting since the result cannot be deduced based on separate analysis of the components in an accounting Their manifestation is analyzed in system. different moments in time and tries to extract the informational content of the obtained image.

2 Theoretical Background

Based on these beliefs, we aim at using the advantage of the approached area, namely the development and dynamic of capital markets, in order to elaborate a theory referring to the feasibility of a global capital market (Global Capital Market Feasibility Theory - GCMF Theory) from an accounting perspective. This theory aims at linking the space of accounting regulations in the area of financial instruments and the space where the results of their application is put into use, namely capital markets. We aim at quantifying this link in an indirect manner, by deriving two direct connections. On one hand there could be quantified the degree of similarities between accounting regulations based on a detailed analysis of their foresights. On the other hand, the extent to which these foresights are actually put into practice within the capital market can also be quantified based on analyzing financial statements belonging to entities listed on the selected capital markets. Once determined these two relations we argue that we can also derive a relation between a certain capital market and a set of accounting regulations, other than the one officially being applied by entities being listed within that particular market, as reflected within the following figure:

Figure 2. The Global Capital Market Feasibility Theory from an Accounting Perspective



Source: [3] Note: AR (accounting referential), CM (capital market), C (companies)

The reason why we have chosen to formulate this hypothesis in the shape of a theory for the feasibility of a global capital market is based on the results such an analysis can generate. Although the analysis is focused on accounting issues, quantifying all the above mentioned connections assumes reflecting the manifestation of all involved factors at one moment in time. Such a theory actually helps reflect the manifestation of the involved factors at a particular moment in time that is being considered. There could be obtained several such reflections in accordance to the moment being considered for the theory's application. Following the manner in which results evolve can also represent the input for developing forecasts.

We consider that testing our theory has the ability to provide useful information regarding capital markets and accounting regulations being applied. The obtained results would specially benefit accounting standard setting bodies when considering the development of joint projects and their feasibility.

The proposed theory can be further developed and applied for different areas of accounting besides accounting for financial instruments, therefore offering similar information regarding projects being developed in the considered area. Such an analysis can also be developed by considering an entire accounting referential which would require a quite complex approach in order to cover all the necessary elements. Furthermore, accounting standard setting bodies usually develop projects dealing with more narrow topics, raising different levels of interest, but still converging through the conceptual framework.

We therefore start by testing the proposed theory on a narrow topic in financial reporting. The particular field of financial instruments enjoys the advantage given through capital markets offering the possibility to group entities exactly through the place where the components whose accounting implications are being tested enter the trading process.

Accounting research literature comprises studies approaching the issue of accounting regulations' impact on capital markets documenting significant results being relevant and in agreement with the main idea of the proposed theory. E.g. [13] test the hypothesis in accordance to which companies at national level have the tendency to become listed on stock exchanges that involve a financial reporting system that is similar to their national Generally Accepted Accounting Principles (GAAP). They start their analysis based on the idea that both contracts being signed in the US by American entities as well as US GAAPs are grounded through the national culture and institutional climate, therefore making reporting based on US GAAPs more authentic when compared to applying some foreign accounting regulations. [2] were also emphasizing the fact that contract signing in American markets is based on numbers that are obtained through application of US GAAPs, while listing on international capital markets creates the context to evaluate the informational relevance of these contracts, being grounded on national regulations, from the perspective of foreign regulations. consequence, foreign investors' assessment of these contracts through the lens of the regulations corresponding to the market within which they act, or in other words in the rational context of some other regulations, might generate effects that are not in fact informational relevant, but rather represent effect of some differences in mental programming that characterizes a certain capital market. Furthermore, the potential reached level of this impact actually depends on the existent differences between national accounting regulations considering the listed entity and those regulations characterizing the market where listing takes place.

A result of acknowledging the impact of the above mentioned differences is the inversely proportional relation with the probability of listing within a foreign capital market. In other words, the higher the differences between the accounting regulations of the country to which the entity belongs and those of the capital market where it aims to list, the lower is the probability of that listing becoming reality.

A study which has a similar objective with that of the proposed theory was developed by [7], examining the association between the level of financial information being presented within capital markets and the development of the considered markets. The starting point of their study is still different; [7] taking into consideration the systems that are used by stock exchanges in presenting information rather than information actually being presented by companies. They therefore analyze the connection between stock exchanges' policies and information regarding the market's development level (such as liquidity, trading activity and dimensions of the capital markets through the gross domestic product). [7] document that the level of the stock exchange's reporting system (involving regulations regarding the information being provided and measures being taken for its application and supervision) is positively associated with the development level of the capital market when some explanatory variables (such as legal system, investors' protection, market's dimensions) are being controlled for.

The particularities of the European setting, where different accounting regulations continued to exist in parallel with the development of a gradual harmonization process of the fundamental legal framework and where the adoption of the international referential by some entities anticipated its necessity, is approached by [5]. Their study documents that the integration of financial markets would have already contributed to the intermediating the economic consequences of accounting diversity and that implicitly the adoption of the international accounting referential would have a short time effect on capital markets.

[10] analyzes another interesting aspect, namely the reasons why the informational content of earnings being reported by foreign entities listed in the US varies with the segmentation of the capital market in their country of origin. It is documented that indirect barriers in developing investments (such as accounting regulations and liquidity differences) are rather responsible for the reduction of investment volumes than direct ones (such as investment restrictions). We consider the results of this study to represent an argument for the role being played by information presented through financial reporting when considering the process of global capital markets' integration, but also for the proposed theory.

The proposed theory referring to the feasibility of a global capital market from an accounting perspective aims at developing a link between accounting regulations in the area of financial instruments and the space where the outcome of their application is put into use, namely capital markets. There will be further tested the above

described and proposed theory in order to complete its grounding. In doing so, there need to be constructed a certain setting which will be further described while establishing the methodological details. The proposed theory will be tested by considering the accounting regulations being issued by the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB). Considering the complexity of accounting for financial instruments, we found it opportune to first test the theory by looking at financial assets' measurement in analyzing the changes of a global capital market from the perspective of entities applying the two considered sets of accounting standards.

Developing content analysis of the two considered sets of accounting standards indicated a series of aspects that require particular attention when dealing with financial assets' measurement for reporting purposes. In accordance to the foresights of the two sets of accounting regulations, we can only speak about using a certain measurement base for financial assets after previously classifying them within one of the possible categories. Despite the fact that the international accounting referential is considered to be principle based we must underline the fact that when it comes to accounting for financial instruments we observe a higher rigor in describing certain aspects when compared to the American one. This is also due to the numerous amendments that were necessary for the standards in the approached area that is an extremely dynamic

Therefore, while the international accounting referential defines the category of financial assets at fair value through profit and loss clearly delimitating those held for trading from those taken in that category through the fair value option, the American accounting referential only mentions financial assets held for trading. The foresights of the American accounting referential are also to a certain extant unclear when it comes to transaction costs, SFAS 133 and SFAS 115 not approaching this aspect, but only the provided guidance mentioning that:

... in the case of investments in debt securities that are classified as held to maturity or available for sale, the costs being paid directly to the seller and other paid commission, excluding collected commissions, should be included in the initial value of the investment in the debt security.

These foresights can lead to different interpretation when it comes to their practical application. The international accounting referential clearly states the principle in accordance to which

transaction cost must be included in the fair value being used for all financial instruments on initial recognition, with the exemption of instruments in the category at fair value through profit and loss, but further complicates the situation through the guidance being provided recommending the use of bid and ask prices.

There has to be also mentioned the fact that the international accounting referential defines a category that does not exist within the American accounting referential, namely loans and receivables. Some slight differences are also found with regard to the use of fair value in cases when its measurement is problematic [4, 15], the American regulations recommending the use of models for their valuation, while the IASB for example accepting cost as measurement base for financial assets in the available for sale category that do not have an active market.

After quantifying the similitude degree between the two considered sets of accounting regulations there were analyzed the manner in which each of them are being applied by entities within the two considered capital markets declaring to fill their financial statements in accordance to these regulations, all from the perspective of financial assets measurement. The remainder of this paper is therefore organized as follows: the first part discusses research methodology aspects, the second develops the analysis aimed to test the proposed theory and the final one presents the obtained results that are used in arguing for the validity of the theory.

3 Research Methodology

The possibility for a global capital market to exist depends on a series of factors with distinct and different influence and interaction. Such a factor which we consider determinant is the accounting regulation and financial reporting process, and implicitly the result of this process, accounting regulations.

Testing the proposed theory from the perspective of accounting regulations acting on the capital market assumes two distinctive dimensions of the developed analysis. The first one refers to the compatibility degree between accounting regulations, more precisely between two sets of accounting regulations considered at one moment in time. The second dimension follows the first one by focusing on accounting practices. In other words, testing the theory basically imposes on one hand the analysis of accounting regulations and on the other the analysis of accounting practices.

With reference to the two aimed dimensions of our analysis we are actually trying to quantify the compatibility degree of accounting practices while considering a certain degree of similitude between the two sets of considered accounting regulations. In other words the major objective of our theory is to determine the feasibility of a global capital market while considering two or more stock exchanges. The following graphical representation illustrates the applied reasoning by considering some hypothetical values:

Illustration 1. Graphical Representation for the Reasoning behind the Feasibility of a Global Capital Market

The reasoning being further developed considers two accounting referential, namely the Statements of Financial Accounting Standards (or US GAAPs) and the International Financial Reporting Standards. When saying SFAS PRACTICES we refer to practices of those companies that officially apply SFAS. Correspondingly, IFRS PRACTICES means practices of those companies officially applying IFRS.

STEP 1:

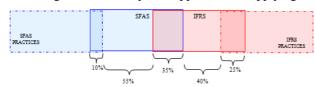
We first consider the similarities between the two accounting referential. In other words, formal harmonization between SFAS and IFRS must be determined.



Note: We will assume for representation purposes that formal harmonization between the two accounting referential is of 35%.

STEP 2 – case 1:

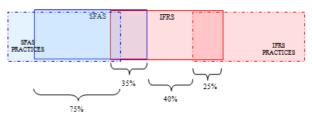
Material harmonization must further be determined. We therefore analyze the compatibility degree between companies' accounting practices and the foresights of the accounting referential they are supposed to be applying.



Note: We will assume a 10% material harmonization for accounting practices of companies applying SFAS and a 25% material harmonization for accounting practices of companies applying IFRS. In this case the feasibility of IFRS implementation process by companies currently applying SFAS is null because the 10% compatibility of

accounting practices with SFAS might very well refer to those 65% foresights of SFAS that differ from IFRS foresights. The feasibility of SFAS implementation process by companies currently applying IFRS might be similarly judged and still be null.

STEP 2 – case 2:



Note: If we assume a higher material harmonization or compatibility between accounting practices of companies applying SFAS and SFAS' foresights the situation changes. A 75% material harmonization means that 75% of SFAS foresights are found within the practices of companies officially applying SFAS. Since SFAS' foresights only differ from those of IFRS at a 65% level (in accordance to formal harmonization analysis) it implicitly means that companies officially applying SFAS are also applying at least 10% of the IFRS foresights (also found within SFAS).

Source: authors' projection based on [3]

Based on the above presented reasoning we propose a manner of quantifying the feasibility degree of a global capital market ($\gamma \phi$ Index) when considering two analyzed capital markets. The computation formula is as follows:

$$\gamma \phi = \text{max} \left[\text{AccP}_{\text{R1}} - \left(1 - \text{AccS}_{\text{R1/R2}} \right); \text{AccP}_{\text{R2}} - \left(1 - \text{AccS}_{\text{R1/R2}} \right) \right]$$

where:

 $\begin{array}{ll} \gamma\phi & \text{represents the feasibility of a global capital market} \\ \text{AccP}_{R1} & \text{represents the compatibility degree between} \\ & \text{accounting practices and the first set of considered} \\ & \text{accounting regulations} \end{array}$

AccP_{R2} represents the compatibility degree between accounting practices and the second set of considered accounting regulations

 $AccS_{R1/R2}$ the level of similitude between the two sets of considered accounting regulations

The essence of this indicator is based on the fact that the minimum certitude or the feasibility is given by the maximum of the values being recorder for the two considered situations. When interpreting the proposed indicator by considering similarities and dissimilarities involved within a comparison process, we may say that the feasibility of a global capital market is given by the difference between the harmony of accounting practices and diversity of accounting regulations. In accordance to this approach, the proposed computation formula can also be expressed as following:

$$\gamma\phi = \text{max}\big[\big(\text{AccP}_{\text{R1}} + \text{AccS}_{\text{R1/R2}}\big) - 1; \big(\text{AccP}_{\text{R2}} + \text{AccS}_{\text{R1/R2}}\big) - 1\big]$$

Regardless of the computation formula being used for the $\gamma\phi$ Index, based on the further proposed approach the potential values to be obtained will be either negative or positive. A positive recorded value documents the feasibility of a global capital market, while a negative recorded value documents the lack of feasibility.

In relation to the above formulated approach, there must be mentioned the fact that both the compatibility degree of accounting practices (AccPR1, AccPR2) and the similarity degree of accounting regulations (AccSR1/R2) particular methodological aspects in order to be dimensioned. The object of the measurement is in first case accounting practice (material accounting harmonization) and in the second accounting regulation (formal accounting harmonization). Furthermore, γφ Index's computation imposes the use of the same measurement instrument for both accounting practices and accounting regulations in order to ensure uniformity.

When it comes to measuring formal and/or material accounting harmonization, accounting research literature uses a series of instruments or indexes such as the H index, C index and I index, Spearman's coefficient, Jaccard's coefficients, the Euclidian Distance, Roger & Tanimoto's coefficient etc. Our choice when searching for the suitable instrument to measure the needed dimensions of our computation formula was therefore based on finding that instrument that both applies in terms of accounting practice and accounting regulations. After carefully looking at the methodology being employed by other studies in accounting research literature we concluded that only one of the above mentioned measurement instruments has been previously used in measuring both material and accounting harmonization. coefficients have been previously used in measuring the level of similarities between two sets of accounting regulations in studies such as [6, 8, 14], but also in quantifying the compatibility degree between accounting regulations and accounting practices in studies such as [11]. We have chosen to use Jaccard's coefficients in dimensioning the two components of the proposed yo Index.

The most often used form of Jaccard's coefficients of similitude and dissimilitude between two sets of considered elements was proven through accounting research literature to be as follows:

$$S_{ij} = \frac{a}{a+b+c}$$

and

$$D = \frac{b+c}{a+b+c}$$

where:

S_{ij} represents the similarity or similitude degree between the two sets of analyzed accounting regulations

D_{ij} represents the degree of dissimilarities or dissimilitude (diversity) between the two sets of analyzed accounting regulations

a represents the number of elements which record the value 1 for both sets of regulations

b represents the number of elements which record the value 1 within the j set of regulations and the value 0 for the i set of regulations

c represents the number of elements which record the value 1 within the i set of regulations and the value 0 for the j set of regulations

The above presented formula details the elements being considered when measuring formal accounting harmonization. The same formula can also be applied when measuring material accounting harmonization by codifying elements based on whether they are being applied in practice by each of the considered company. Generally speaking, the value of the above presented coefficients will be placed within a minimum of "0" and a maximum of "1", while their sum naturally equals 1. For example when considering the similar coefficient (S_{ii}) , the closer its value is to "1" the higher is the compatibility degree between the two sets of considered accounting regulations or the higher is the harmonization of the considered entities' accounting practices with the analyzed accounting regulations. The possible values to be obtained for Jaccard's coefficients also represented an argument in their favor for the purpose of our study. For example, Spearman's coefficient can take values on a scale from -1 to +1, which correlated with potential values of the Jaccard's coefficients within the proposed computation formula for the γφ Index would in fact lead to irrelevant values of the index. The developed research methodology will be further applied by considering the accounting regulations being issued by the FASB and the IASB and listed companies officially applying them.

4 Developing the Analysis

As previously mentioned, the main purpose of this study is to test the proposed theory referring to the feasibility of a global capital market. There will be therefore used the above presented theoretical and methodological grounding by considering two

capital markets that can are representative at a global level while also involving financial reporting practices in accordance to two different sets of accounting regulations. More precisely there will be considered companies being listed on the London Stock Exchange (LSE) and the New York Stock Exchange (NYSE).

From a historical point of view, the common element of these two stock exchanges was actually a coffee house¹. The London Stock Exchange is the most international capital market in the world, allowing for trading approximately 3,000 companies from around 70 countries. Starting with that 17th century London coffee house, The Exchange how the British call their market has become one of the oldest in the world, having a life of over 300 years. After nine decades, on the other side of the Atlantic Ocean, a new capital market arises as a result of the Buttonwood Agreement. We nowadays know it as the New York Stock Exchange, having a long and diversified history and representing an important element in the development of a significant number of companies. The later is considered to be part of the largest and most liquid group of capital markets in the world.

Considering the fact that the main objective of the study is to test the functionality of the proposed theory, a sample selection was applied by analyzing a number of 50 companies belonging to the two markets. Therefore a number of 25 companies were necessary to be considered for each of the two markets. The used selection criteria required entities to be listed on the main market, to be included in the main stock index (i.e. FTSE 250 and NYSE US 100) and to only consider groups of entities.

A number of seven distinct elements were considered and analyzed for each of the 50 selected companies. These elements represented financial reporting issues related to financial assets' measurement referring to their initial (i) measurement, and (ii) subsequent measurement. The elements were established based on the foresights of the accounting regulations being issued by the FASB and the IASB, while the diversity of practices depends on the sample companies accounting practices. The following table synthesizes this approach:

Table 1. Elements Considered for Analysis

	nents	I	F	С
1.	Financial assets at fair value through pr	ofit a	nd los:	<u> </u>
1.1	Initial measurement			
	1.1.1. Fair value plus transaction costs	0	0	1 or 0
	1.1.2. Fair value	1	1	1 or 0
1.2	Subsequent measurement			
	1.2.1. Cost	0	0	1 or 0
	1.2.2. Amortized cost	0	0	1 or 0
	1.2.3. Fair value through profit and loss	1	1	1 or 0
	1.2.4. Fair value in equity	0	0	1 or 0
	1.2.5. Impairment	0	0	1 or 0
2.	Held to maturity investments			
2.1	Initial measurement			
	2.1.1. Fair value plus transaction costs	1	1	1 or 0
	2.1.2. Fair value	0	0	1 or 0
2.2	Subsequent measurement			
	2.2.1. Cost	0	0	1 or 0
	2.2.2. Amortized cost	1	1	1 or 0
	2.2.3. Fair value through profit and loss	0	0	1 or 0
	2.2.4. Fair value in equity	0	0	1 or 0
	2.2.5. Impairment	1	1	1 or 0
<i>3</i> .	Loans and receivables			
3.1	Initial measurement			
	3.1.1. Fair value plus transaction costs	1	0	1 or 0
	3.1.2. Fair value	0	0	1 or 0
3.2	Subsequent measurement			
	3.2.1. Cost	0	0	1 or 0
	3.2.2. Amortized cost	1	0	1 or 0
	3.2.3. Fair value through profit and loss	0	0	1 or 0
	3.2.4. Fair value in equity	0	0	1 or 0
	3.2.5. Impairment	1	0	1 or 0
4.	Available for sale financial assets			ı
4.1	Initial measurement			
	4.1.1. Fair value plus transaction costs	1	1	1 or 0
	4.1.2. Fair value	0	0	1 or 0
4.2	Subsequent measurement			
	4.2.1. Cost	1	0	1 or 0
	4.2.2. Amortized cost	0	0	1 or 0
	4.2.3. Fair value through profit and loss	0	0	1 or 0
	4.2.4. Fair value in equity	1	1	1 or 0
	4.2.5. Impairment	1	1	1 or 0

Source: own analysis Note: I (IASB), F (FASB), C (companies)

The following part of this study will briefly present and interpret the obtained results. Correlating the obtained results with the validity of the proposed theory will also be discussed.

5 Discussing the Obtained Results and the Validity of the Theory

Implementing the above presented research methodology led to a series of results whose interpretation is quite interesting. There shall be once more mentioned the fact that quantifying the compatibility degree between accounting practices and the corresponding accounting regulations was done by considering a number of 50 selected companies belonging to the NYSE and LSE.

128

¹ They both started their activity in a coffee house. The London Stock Exchange started to act through John Castaing's office located in *Jonathan's Coffee-house*, while the New York Stock Exchange first started trading in the street, brokers sometimes moving inside the *Tontine Coffee House*.

Furthermore the entire analysis considered the above presented aspects related to financial assets measurement as prescribed by the accounting regulations being issued by the FASB and the IASB. The necessary data related to the considered accounting regulations was obtained based on content analysis. The information on sample companies' accounting practices was collected by analyzing the corresponding financial statements for the 2008 reporting period. The matrix comprising the considered variables is presented in *Appendix*.

Based on the information obtained by analyzing the foresights of the considered accounting regulations and the financial statements of sample companies there were calculated Jaccard's coefficients and the $\gamma\phi$ Index. A synthesis of the obtained results in presented in the following table:

Table 2. Synthetic Results of Testing the Theory

Analysis elements	Obtained values
Jaccard's Coefficients (compatibility level)	
 IFRS versus US GAAP (SFAS) 	0.6670
 IFRS versus accounting practices LSE 	0.3927
 US GAAP versus accounting practices NYSE 	0.5979
Global Capital Market Feasibility Theory (γφ index)	0.2649
Number of observations	1,400
Sets of accounting regulations	2
Sample entities	50

Source: own analysis

Applying the proposed computation formula in determining the feasibility of a global capital market led to a final value of 0.2649 for the proposed $\gamma\phi$ Index. This was based on the following obtained results of the study:

$$\gamma \varphi = \max[0.3927 - (1 - 0.6670); 0.5979 - (1 - 0.6670)]$$
$$\gamma \varphi = \max[0.0597; 0.2649]$$
$$\gamma \varphi = 0.2649$$

Interpreting the obtained results there might be said that the documented feasibility of a global capital market in the considered setting is of 26.49%. In other words, the feasibility of a global capital market, when considering the London Stock Exchange and the New York Stock Exchange as components, is of 26.49%. Furthermore, an even more important conclusion is that being able to formulate the previous findings based on the developed conceptual and methodological algorithm documents the sustainability of the proposed theory, namely the Global Capital Market Feasibility Theory.

There could be said that in case companies being listed on the LSE would be asked to start applying US GAAPs, there was documented that in terms of

financial assets' measurement their accounting practices already correspond with the American referential foresights for 5.97%. From the other point of view, there was noticed that companies being listed on the NYSE already have accounting practices that correspond with the foresights of the IFRS for 26.49% when looking at financial assets' measurement.

We therefore conclude by underlining the validity of the proposed theory based on the fact that we have dimensioned a conceptual and methodological algorithm that was applied and generated results that allowed the interpretation of the feasibility of a global capital market between financial reporting theory and practice.

Acknowledgements

This work was supported by CNCSIS-UEFISCSU, project number PNII – IDEI 2571/2009, entitled "Developing a Conceptual Integrated and Self Sustainable Model Regarding Financial Reporting within Romanian Private Sector Entities" and by project P403/11/0002 "Current Issues of Valuation for the Purposes of Company Management: Owner's and Manager's Approach" registered at Czech Science Foundation (GA ČR).

References:

- [1] J. Andreu, and S. Torra, Market Index Biases and Minimum Risk Indices, WSEAS Transactions on Business and Economics, Vol. 7, No. 1, 2010, pp. 33-58.
- [2] R. Ball, S.P. Kothari, and A. Robin, The Effect of International Institutional Factors on Properties of Accounting Earnings, *Journal of Accounting and Economics*, Vol. 29, 2000, pp. 1–52.
- [3] C.G. Bonaci, D. Matis, and R.V. Mustata, Framework for Documenting National Accounting Practices' Orientation Towards IAS/IFRS, *Journal of International Management Studies*, Vol. 10, No. 3, 2010, pp. 125-132.
- [4] C.G. Bonaci, D. Matis, and J. Strouhal, Crisis of Fair Value Measurement? Some Defense of the Best of All Bad Measurement Bases, WSEAS Transactions on Business and Economics, Vol. 7, No. 2, 2010, pp. 114-125.
- [5] C. Dargenidou, S. McLeay, and I. Raonic, I., Expected Earnings Growth and the Cost of Capital: An Analysis of Accounting Regime Change in the European Financial Market, *Abacus*, Vol. 42, No. 3-4, 2006, pp. 388–414.

- [6] A. Fontes, L. Rodrigues, and R. Craig, Measuring Convergence of National Accounting Standards with International Financial Reporting Standards, *Accounting Forum*, Vol. 29, 2005, pp. 415–236.
- [7] C.A. Frost, E.A. Gordon, and A.F. Hayes, Stock Exchange Disclosure and Market Development: An Analysis of 50 International Exchanges, *Journal of Accounting Research*, Vol. 44, No. 3, 2006, pp. 437-483.
- Garrido, A. Leon, and [8] P. A. Zorio, of **Formal** Harmonization Measurement **IASC** Experience, **Progress:** The International Journal of Accounting, Vol. 37, 2002, pp. 1–26.
- [9] S.A. Ionescu, C.S. Murgoci, C.M. Gheorghe, and E. Ionescu, Towards Profitability on the Financial Markets: A Discriminant Analysis Approach, WSEAS Transactions on Business and Economics, Vol. 6, No. 3, 2009, pp. 99-111.
- [10] T. Kang, Global Market Segmentation and Patterns in Stock Market Reaction to US Earnings Announcements: Further Evidence, *Journal of International Financial Management and Accounting*, Vol. 16, No. 2, 2005, pp. 123-141.
- [11] A. Morais, and A. Fialho, Do Harmonized Accounting Standards Lead to Harmonized Accounting Practices? An Empirical Study of IAS 39 Measurement Requirements in Some European Union Countries, *Australian Accounting Review*, Vol. 18, No. 3, 2008, pp. 224-236.

- [12] R.V. Mustata, C.G. Bonaci, D. Matis, and J. Strouhal, Using Econometric Tools for Accounting Harmonization Measurement, *International Journal of Mathematical Models and Methods in Applied Sciences*, Vol. 5, No. 2, 2011, pp. 316-323.
- [13] G.A. Ndubizu, and R.S.O. Wallace, Contracts Valuation Assessment Noise and Cross-Border Listing of Equities on U.S. and U.K. Stock Markets, *The International Journal of Accounting*, Vol. 38, 2003, pp. 397–420.
- [14] J. Strouhal (Ed.), International Harmonization of SMEs Financial Reporting in Emerging CEE Countries, Stevens Point: WSEAS Press, 2011.
- [15] J. Strouhal, C.G. Bonaci, N. Pasca, and J. Boksova, Fair Value Accounting: Political Obstacles?, *International Journal of Mathematical Models and Methods in Applied Sciences*, Vol. 5, No. 5, 2011, pp. 1019-1026.

Appendix - The Matrix of Variables Being Analyzed in Testing the Feasibility of a Global Capital Market

Аррениіх -	THE IVI	auix oi	l Valla	ibles b	emg A	naryze	umi	esung	me rea	isidility	y or a c	Jiobai	Сарпа	.i iviai k
Code	1.1.1	1.1.2	1.2.1	1.2.2	1.2.3	1.2.4	1.2.5	2.1.1	2.1.2	2.2.1	2.2.2	2.2.3	2.2.4	2.2.5
IFRS	0	1	0	0	1	0	0	1	0	0	1	0	0	1
US GAAP	0	1	0	0	1	0	0	1	0	0	1	0	0	1
LSE 1	0	1	0	0	1	0	0	0	0	0	0	0	0	0
LSE 2	0	1	0	0	1	0	0	0	0	0	0	0	0	0
LSE 3	0	1	0	0	1	0	0	0	0	0	0	0	0	0
LSE 4	1	0	0	0	1	0	0	0	0	0	0	0	0	0
LSE 5	1	1	0	0	1	0	0	1	0	0	1	0	0	1
LSE 6	1	1	0	0	0	0	0	0	0	0	0	0	0	0
LSE 7	0	1	0	0	1	0	0	0	0	0	0	0	0	0
LSE 8	0	1	0	0	1	0	0	0	0	0	0	0	0	0
LSE 9	0	1	0	0	1	0	0	0	0	0	0	0	0	0
LSE 10	1	1	0	0	1	0	0	0	0	0	0	0	0	0
LSE 11	0	1	0	0	1	0	0	1	0	0	1	0	0	0
LSE 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LSE 13	0	1	0	0		0	0	0	0	0	0	0	0	0
LSE 14	0	1	0	0	1 1	0	0	1	0	0	1	0	0	1
LSE 15	0	0	0	0	1	0	0	0	0	0	0	0	0	0
LSE 16	0	1	0	0	1	0	0	0	0	0	0	0	0	0
LSE 17	0	1	0	0	1	0	0	0	0	0	0	0	0	0
LSE 18	0	1	0	0	1	0	0	0	0	0	0	0	0	0
LSE 19	0	1	0	0	1	0	0	0	0	0	0	0	0	0
LSE 20	0	1	0	0	1	0	0	0	0	0	0	0	0	0
LSE 21	0	1	0	0	1	0	0	0	0	0	0	0	0	0
LSE 22	0	1	0	0	1	0	0	0	0	0	0	0	0	0
LSE 23	0	ā	0	0	8	0	0	0	0	0	0	0	0	0
LSE 24	0	0 0	0	0	1 0	0	0	0	0	0	0	0	0	0
LSE 25	0	1	0	0	1	0	0	0	0	0	0	0	0	0
NYSE 1	0	1	0	0	1	0	0	0	0	0	0	0	0	0
NYSE 2	0	0	0	0	1	0	0	0	0	0	1	0	0	1
NYSE 3	0	0	0	0	0	0	0	0	0	0	1	0	0	0
NYSE 4		1 1	0	0	1	0	0	1		0	1	0	0	1
NYSE 5	0	1	0	0	1	0	0	1	0	0	1	0	0	1 1
NYSE 6	0	1	0	0	1	0	0	0	1	0	1	0	0	1
NYSE 7	0	0	0	0	0	0	0	1	0	0	1	0	0	1
NYSE 8	0	1	0	0	1	0	0	1	0	0	1	0	0	1
NYSE 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NYSE 10	0	1	0	0	1	0	0	0	0	0	0	0	0	0
NYSE 11	0	1	0	0	1	0	0	0	0	0	0	0	0	0
NYSE 12	0	1	0	0	1	0	0	0	0	0	0	0	0	0
NYSE 13	0	1	0	0	1	0	0	0	0	0	0	0	0	0
NYSE 14	0	1	0	0	1	0	0	1	0	0	1	0	0	1
NYSE 15	0	1	0	0	1	0	0	0	0	0	0	0	0	0
NYSE 16	0	1	0	0	1	0	0	1	0	0	1	0	0	1
NYSE 17	0	1	0	0	1	0	0	0	0	0	1	0	0	1
NYSE 18	Ö	1	0	0	1	0	Ŏ	0	0	0	1	Ŏ	0	1
NYSE 19	0	1	0	0	1	0	0	1	0	0	1	0	0	1
NYSE 20	Ŏ	1 1	0	Ŏ	1	0	0	0	0	Ŏ	0	Ö	l ŏ	0
NYSE 21	0	0	0	0	0	0	0	0	0	0	1	0	0	1
NYSE 22	Ŏ	1	0	0	1	0	0	Ö	0	Ŏ	0	0	0	0
NYSE 23	0	1	0	0	1	0	0	0	0	0	1	0	0	1
NYSE 24	0	1	0	0	1	0	0	0	0	0	1	0	0	1
NYSE 25	0	0	0	0	0	0	0	0	0	0	1	0	0	1
- 1 - D - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2														

cont.:

Code	3.1.1	3.1.2	3.2.1	3.2.2	3.2.3	3.2.4	3.2.5	4.1.1	4.1.2	4.2.1	4.2.2	4.2.3	4.2.4	4.2.5
IFRS	1	0	0	1	0	0	1	1	0	1	0	0	1	1
US GAAP	0	0	0	0	0	0	0	1	0	0	0	0	1	1
LSE 1	0	1	0	1	0	0	1	0	0	0	0	0	0	0
LSE 2	1	1 0	0	1	0	0	0	1	0	0	0	0	1	0
LSE 3	1	0	0	1	0	0	1	0	0	0	0	0	1	1
LSE 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LSE 5	1	0	0	1	0	0	1	1	0	0	0	0	1	0
LSE 6	1	0	0	1	0	0	1	1	0	0	0	0	1	1
LSE 7	1	0	0	1	0	0	1	0	1	0	0	0	1	1
LSE 8	0	1	0	0	0	0	1	1	0	1	0	0	1	0
LSE 9	0	1	0	1	0	0	0	1	0	0	0	0	1	1
LSE 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LSE 11	1	0	0	1	0	0	0	1	0	0	0	0	1	1
LSE 12	0	0	0	1	0	0	1	0	0 0	0	0	0	1	0 1
LSE 13	1	0	0	1	0	0	1	1		0	0	0	1	1
LSE 14	1	0	0	1	0	0	1	1	0	0	0	0	1	1
LSE 15	0	0	0	1	0	0	1	0	0	1	0	0	1	1
LSE 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LSE 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LSE 18	0	0	0	0	0	0	0	0	1	0	0	0	1	1
LSE 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LSE 20	1	0	0	0	1	0	0	0	0	0	0	0	0	0
LSE 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LSE 22	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0
LSE 23	0	0	0	1	Ü	0	1	0		0	0	0	0	0
LSE 24	0	0	0	0	0	0	0	0	0	0	0	0	1	1
LSE 25	1	0	0	1	0	0	1	0	1	0	0	0	1	1
NYSE 1	0	0	0	0	0	0	0	0	1	0	0	0	1	1
NYSE 2	0	0	0	0	0	0	0	0	1 0	1	0	0	1	1 0
NYSE 3	0	0	0	0	0	0	0	0	0	0	0	0	1	0
NYSE 4	1	0	0	1	0	0	1	1	0	0	0	0	1	1
NYSE 5	0	0	0	0	0	0	0	0	1	0	0	0	1	1
NYSE 6	0	0	0	1	0	0	1	1	0	0	0	0	1	1
NYSE 7	0	0	0	0	0	0	0	0	1	0	0	0	1	1
NYSE 8	0	0	0	0	0	0	0	1 1	0	1	0	0	1	1 1
NYSE 9	0	0	0	0	0	0	0		0	0	0	0	1	
NYSE 10	0	0	0	0	0	0	0	1	0	0	0	0	1	1
NYSE 11	0	0	0	0	0	0	0	0	1	0	0	0	1	1
NYSE 12	0	0	0	0	0	0	0	0	1	0	0	0	1	1
NYSE 13	0	0	0	0	0	0	0	1	0	0	0	0	1	1
NYSE 14	0	0	0	0	0	0	0	1	0	0	0	0	1	1
NYSE 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NYSE 16	0	0	0	0	0	0	0	1	0	0	0	1	0	0
NYSE 17	0	0	0	0	0	0	0	1	0	0	0	0	1	1
NYSE 18	0	0	0	0	0	0	0	0	0	0	0	0	1	1
NYSE 19	0	0	0	0	0	0	0	0	0	0	0	0	1	1 1
NYSE 20	0	0	0	0	0	0	0	0	0	0	0	0	1	1
NYSE 21	0	0	0	0	0	0	0	0	0	0	0	0	1	1
NYSE 22	0	0	0	0	0	0	0	0	1	0	0	0	1	1
NYSE 23	0	0	0	0	0	0	0	0	0	0	0	0	1	1
NYSE 24	0	0	0	1	0	0	1	0	1	0	0	0	1	1
NYSE 25	0	0	0	0	0	0	0	0	0	0	0	0	1	1

Source: authors' analysis