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Analysis of the impact of adopting the IFRS by the companies listed on BVB

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Abstract

Starting with the financial year 2012, the companies in Romania whose securities are admitted to trading on a regulated market are required to apply International Financial Reporting Standards (IFRS) on individual annual financial statements. The purpose of the present paper is to elaborate an objective opinion regarding the impact on the companies listed on Bucharest Stock Exchange (BVB) when applying IFRS. In order to achieve this, we made a comparison between the indicators from the financial statements reported according to the national regulations and the indicators reported according IFRS by taking into consideration the results from the financial year 2011. The analysis was conducted on a sample of 39 companies listed on BVB that are part of the manufacturing sector. The data was analyzed by using the statistical software SPSS.

1. Introduction

The adoption of the IFRS in the European Union instead of the other internationally recognised system, US GAAP, was conducted based on economical as well as political reasons. IFRS was elaborated in order for it to be applied at the international level, while the US GAAP regulations were conceived by taking into account the U.S.

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economy exclusively without any influence from Europe (Tabără et al., 2010). Moreover, by adopting IFRS, the European Union wanted to counterattack the United States hegemony in setting the accounting standards (Dewing et al., 2010).

The International Financial Reporting Standards (IFRS) represent a set of global accounting standards "based on principles" because they establish some general rules, but they also set some particular accounting treatments. Many of the standards that are part of the IFRS are known as the International Accounting Standards (IAS).

IAS were elaborated between the years 1973 and 2001 by the International Accounting Standards Committee (IASC). Their purpose was to reduce or to even eliminate the differences between the national accounting regulations and to ensure the comparability of the financial statements from corporations from different countries (Camfferman and Zeff, 2008). As soon as the informational asymmetry has been eliminated, the investors from any part of the world would be able to analyse and compare the financial information from the traded companies on different markets in order for them to be able to make the best decisions (Beuren et al., 2008). IASC became in 2001 the IASB, the International Accounting Standards Board, an independent organisational that is based in London.

Nowadays, the IASB is the most influential organisation when it comes to accounting normalising and harmonization.

In April 2001, IASB adopted all the IAS standards and later on continued to develop them. Although there are no more IAS standards elaborated nowadays, the already existing ones are still valid until their replacement or modification by establishing new standards called IFRS.

2. Adopting IFRS in Romania

Although it is organised after the French accounting model, Romanian accounting encountered in the last few years Anglo-Saxon influences which resulted in the existence of a combination of accounting rules between these two systems (Berheci and Chersan, 2011).

In the last few years, the International Financial Reporting Standards were adopted in over 110 countries, out of which the majority are from Europe (Beuselinck, et al., 2010). For the first time in Romania, through the OMFP no. 907/2005, the adoption of IFRS at a national level has been approved. According to this order, in the financial year 2006, the credit institutions are obligated to also make a set of financial statements in accordance to the International Financial Reporting Standards, for their own needs to inform the users, other than the state institutions.

The next step through which the gradual implementation of the IFRS has taken place in Romania was OMFP no. 1121/2006. In this order, the companies whose securities are admitted for trade on a regulated market and that make consolidated financial statements are obligated to apply the IFRS starting with the financial year 2007.

Afterwards, according to the BNR Order no. 9/2010 and 27/2010, it was established that starting from 1st January 2012, the IFRS would become the only basis for reporting financial statements for the credit institutions. Banks were obligated to also make financial statements in accordance with the IFRS even in the 2009-2011 period, apart from the ones made according to the Romanian accounting regulations specific to the financial institutions.

According to the order C.N.V.M. no. 116 from 21 December 2011, the Insurance Supervisory Commission (CSA) asked that a number of entities from the ones they are monitoring to make an additional set of annual financial statements according to the IFRS with an informative purpose depending on the value of gross written premiums from the year 2011 and on the membership to an international group. These statements are obtained by re-treating the information from the annual financial statements made in accordance with the national regulations. Moreover, these companies would have to make individual financial statements based on the accounting regulations in accordance with the European Directives. However the ordinance mentions that the IFRS financial statements are exclusively meant to be used by the respective entities, their shareholders or by the CNVM and they cannot be invoked as a basis for the investment decision.

Starting with the financial year 2012, in Romania, it was decided according to OMFP no. 881/2012 (completed by the order 1286/2012) that the companies whose securities are admitted on a regulated market are obligated to apply IFRS when making the annual individual financial statements. For the financial year 2012, the annual individual financial statements based on the IFRS are made by re-treating the accounting information based on the Fourth Directive of the European Economic Community approved by the OMFP no. 3055/2009.

Starting with the financial year 2013, the companies whose securities are admitted for trade on a regulated market organise accounting based on the IFRS.

3. The main differences between the accounting politics based on OMFP 3055/2009 and IFRS

In Romania, the Ministry of Economics and Finance (MEF) has the legal responsibility to issue Romanian Accounting Standards. MEF established an accounting and financial reporting committee that should advise MEF regarding the development the Romanian Accounting Standards. The body of Licensed Accountants and Expert Accountants in Romania (CECCAR) is a member of this committee. Among other members of the council there are representatives of government agencies and of ministries, other professional organisations and academics. CECCAR is also responsible for translating IFRS and IFRS for the SMEs in Romanian (IFRS Foundation, 2013).

According to IAS "Presentation of Financial Statements", a complete set of financial statements contains the following: Statement of financial position (similar to the balance sheet from national accounting regulations), Statement of comprehensive income (similar to the Profit and Loss Statement from the national accounting regulations), statement of changes in equity, statement of cash flows and accounting policies and other explanatory information.

Nowadays a series of orders of the international standards were already adopted by the national accounting regulations, a fact that facilitates somehow the re-treating process. However, a large number of differences remain between the two sets of regulations which make the work of practising accountants more difficult.

The main differences between the accounting politics from OMFP and IFRS will be summarised in the following table.

Table 1. Differences between the accounting politics from OMFP and IFRS.

Indicator	IAS/IFRS	Romanian Accounting Standards (RAS)
Tangible assets	Regulated by IAS 16; The depreciable value (the cost out of which the residual value is deducted) is depreciated; The depreciation does not stop when the asset is not used.	The set of of tangible assets is more entended in OMFP 3055/2009 because it also contains assets that are contained in the activity set of other regulations such as IFRS 5 „Non-current Assets Held for Sale and Discontinued Operations" or IAS 40 „Investment Property"; The whole cost of the assets is depreciated.
Intangible assets	Regulated by IAS 38; The formation expenses affect the Profit and Loss Statement at the moment of their execution and they cannot capitalised; An intangible asset with an established utilization period is the subject of depreciation while an intangible asset without an established utilization period will have to be annually re-evaluated.	The formation expenses can be capitilised and are depreciated over a five years period; Does not permit the re-evaluation of intangible assets.
Investment property	Regulated by IAS 40; An investment property is a property owned in order to obtain revenues from rents and/or for increasing the value of capital.	Are treated identically with the tangible assets.
Non-current assets held for sale	Regulated by IFRS 5; Those assets whose accounting value will be more probably recuperated through selling rather than through usage; In the accounting plan from IFRS the 311"Non-current assets held for sale" account was introduced; They are evaluated at their lowest value between the accounting value and the fair value minus the selling costs; Those assets cannot be depreciated because they are held for	Regulates only the classification of tangible assets at inventories, in the case in which they are about to be improved in order to be sold.

	sale.	
Inventories	Regulated by IAS 2; There is no distinction between different types of price discounts because they all diminish the acquisition price; The method LIFO is forbidden.	The accounting treatment of price discounts is different depending on their nature (commercial, financial) and depending on their registration in the initial invoice or in a later one; The method LIFO is allowed.
Derivative financial instruments	Regulated by IAS 39; Are recognised at their fair value at their reporting date.	Are recognised only in the moment of settlement.
Income tax	Regulated by IAS 12; Is recognised as a deferred tax for temporary differences which are taxable or deductible; The current tax and the deferred one is taken as an income or as an expense except for the case in which it appears from a combination of enterprises or from a transaction which is directly recognised in the shareholders equity.	The current tax is recognised based on an expense; The notion of deferred tax is not regulated; The provision for the tax respects the general rules regarding provisions.
Share capital	Regulated by IAS 29; By applying retrospectively the IAS 29, adjustments to the elements of non-monetary assets are necessary for the ones constituted before 1st January 2004; The share capital constituted before 2004 must be adjusted with the inflation index which is made applicable from the formation date until 31 December 2003.	The IAS 29 regulations have been applied until 31 December 2003 because before this date, Romania had a hyperinflationary economy.

Source: Own processing based on information from CECCAR and KPMG

4. Empirical study

In the present paper we want to analyse the main adjustments that have been made as a consequence of re-treating information from the financial statements on 31 December 2011 reported according OMPF 3055/2009 for determining the initial balances according to the IFRS. The target population of this study is represented by the Romanian companies listed on BVB. Financial statements that refer to 2011, both in accordance with OMFP 3055/2009 as well as the ones with IFRS have been compared.

In order to be able to undergo an objective analysis, we considered in our study only companies that are part of the manufacturing sector. Out of the 42 companies which were initially considered in our study, we have eliminated 3 companies because of suspicions regarding errors in reporting or because of missing data. Obtaining the variables considered was done by analysing the data taken from annual reported financial statements from the companies selected in our sample, from the BVB website. The year 2011 is the only year for which we had financial data reported as well from the OMFP perspective as well as from the IFRS one.

The descriptive statistics which were used to analyse the impact of the conversion to IFRS on the consolidated statements of financial position, on the financial performance of the group and on the consolidated cash-flow statement were summarised in the following table.

Table 2. Adjustments in relative measures of the main indicators from financial statements.

	N	Minimum	Maximum	Mean	Std. Deviation
Non Current Assets	39	-69,89	67,86	-3,1115	19,82191
Tangible assets	39	-70,02	21,60	-3,7851	14,67540
Inventories	39	-52,03	736,93	17,0533	122,10729
Current Assets	39	-61,94	331,04	14,8503	65,34800
Deferred income	39	-100,00	74,02	-2,6300	26,81945
Equity - Total	39	-108,14	1246,22	27,5233	202,11560

Receivables	39	-14,08	517,91	28,4413	91,45299
Net turnover	39	-7,13	,66	-,4208	1,35179
Operating income	39	-15,14	5,57	-,4526	2,98629
Operating expenses	39	-13,25	21,43	,7497	5,42903
Operating result	39	-841,02	179,74	-19,1659	140,73710
Financial income	39	-54,34	12,94	-1,5826	9,39569
Financial expenses	39	-11,16	3,73	-,7354	2,58243
Financial profit	39	-27,39	64,54	,6549	13,88653
Total income	39	-15,01	4,40	-,5121	2,87014
Total expenses	39	-13,10	17,73	,3851	4,54386
Gross result	39	-170,44	130,95	3,7044	41,11827
Net result	39	-201,55	203,12	2,9503	50,61645

Source: Own processing in SPSS based on data from companies financial statements available at www.bvb.ro

As a result of the analysis on the conversion to IFRS, we observed that for the year 2011 there have been significant reductions in the indicators for the tangible assets and total assets as well as significant increments regarding the balance of the current assets (inventories and receivables) at the level of the considered companies. If we refer to the indicators from Profit and Loss Statement or, in the case of financial statements in accordance to IFRS, to the indicators from the consolidated statements of the global result, we can observe an average decrease of 19,16% at the level of the whole sample of companies on the operating result (profit or loss). The net turnover in accounting in accordance with IFRS has met a negative adjustment compared with the reports based on accounting principles applied previously. A positive average adjustment can be observed in the case of the financial result as well as in the case of the global result.

Apart from this, as a result of our analysis, we can observe significant standard deviations of the financial statements reported based on the IFRS compared with the ones reported based on accounting principles applied previously. The greatest standard deviation can be observed at the inventories levels, shareholders equity, as well as at the operating results level.

By applying the principal components analysis (PCA) we can obtain the correlation matrix that contains the values of the correlation coefficients between every pair of variables. The variables considered are the relative differences obtained as a result of adjusting the net turnover, the inventories, the tangible assets and the operating income and the form of the matrix is the following.

Table 3. The correlation matrix.

		Tangible assets	Inventories	Net turnover	Operating income
Correlation	Tangible assets	1,000	-,768	-,075	-,018
	Inventories	-,768	1,000	,076	,010
	Net turnover	-,075	,076	1,000	,303
	Operating income	-,018	,010	,303	1,000
Sig. (1-tailed)	Tangible assets		,000	,340	,460
	Inventories	,000		,336	,478
	Net turnover	,340	,336		,043
	Operating income	,460	,478	,043	

a. Determinant =,371

Source: Own processing in SPSS based on data from companies financial statements available at www.bvb.ro

Between the variables "average difference for the inventories adjustments" and the "average difference for the Tangible Assets" there exists a strong inverse relation, the correlation coefficient being -0.768 . The small values of

the other coefficients show that between the other statistical variables taken into account in our analysis there is no correlation and as a result, the principal component analysis whose purpose is identifying this correlation, cannot be applied. In the Cartesian system of axis, the points that represent the variables will be in different quadrants.

In order to test the independence hypothesis for the researched variables, we use the X^2 - statistic.

For this, we formulate the following statistical hypotheses:

H0: between the analysed variables there is no statistical correlation (the independence hypothesis)

H1: there is at least one pair of correlated variables (the dependence hypothesis)

The X^2 – statistic calculated based on the data from the initial table is presented in table 4.

Table 4. The calculated test statistic value.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,504
Bartlett's Test of Sphericity	Approx. Chi-Square	29,612
	Df	6
	Sig.	,000

Source: Own processing in SPSS based on data from www.bvb.ro

The calculated test statistic for the considered example is X^2 = 29,612.

The significance level for this test is sig = 0,000 < 0,05 so we reject the H0 hypothesis and as a consequence there are correlation relations between the considered variables. It is guaranteed with a 95% probability that there are significant correlation relations between the statistical variables.

In this situation, the factorial analysis can be applied on the considered data.

In the output presented previously, the value of the KMO statistic is mentioned. For the given example, a value of 0,504 is obtained which shows that there are correlations between the variables.

Table 5. The Eigenvalues and the variance explained (Total Variance Explained)

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1,788	44,690	44,690	1,788	44,690	44,690
2	1,287	32,163	76,853	1,287	32,163	76,853
3	,693	17,337	94,191			
4	,232	5,809	100,000			

Extraction Method: Principal Component Analysis

Source: Own processing in SPSS based on data from www.bvb.ro

The eigenvalues of the correlation matrix correspond to the insertion explained by the factorial axes. Their sum represent the total insertion of the scatter plot is equal with the number of statistical variables from the initial table of data.

In=1,788+1,287+0,693+0,232 = 4

The first factorial axis explains 1,788/4 = 44,69% of the total variance of the scatter plot.

The explained variance of the second factorial axis is 32,16%.

The first two factorial axes explain together about 76,85% of the total variance.

According to the Kaiser criterion, the number of factorial axes that are about to be interpreted is the one is calculated based on whether or not the corresponding eigenvalue is greater than 1. If the eigenvalue is greater than 1, we consider that factorial axis.

The Benzecri criterion assumes the selection of a number of axes which explains over 70% of the total variance of the scatter plot.

In conclusion, according to these two criteria, we can select the first and the second axes because $\lambda 1=1,788>1$ and $\lambda 2=1,287>1$ (Kaiser criterion) and the first two factorial axes explain the greatest differences between the statistical units considered. More exactly, it explains 76,85% of the total variance (Benzecri criterion).

The graphical representation of the variables' position in the system of the first two factorial axes is obtained as a result of analysing the data with SPSS and is pictured in the following figure:
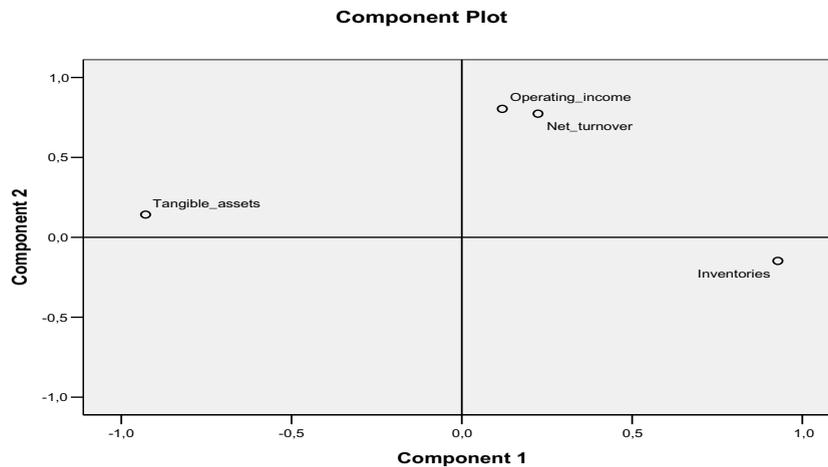
Component Plot

Fig. 1. The representation of points of the variables on the first two factorial axes.

The position of the variables on the first factorial axis represented in the previous figure shows that between the variables "the adjustment of the operating income" and "the adjustment of the net turnover" there is a strong correlation. Between the two variables and "the adjustment of inventories" there is a direct relation.

The variables "the adjustment of inventories" and "the adjustment of tangible assets" are strongly correlated with the first factorial axis which shows that there are significant differences between the statistical units from the point of view of recorded values for these variables. As a consequence, the companies that record the high values for the inventories adjustment as a result of the transition to the IFRS, register reduced values for the adjustment in the case of tangible assets.

The differences between the accounting politics from OMFP 3055/2009 and the ones from IFRS need visible adjustments regarding the position of assets and the inventories position and the accounting standards IAS 16 "Tangible Assets", IAS 36 "Impairment of Assets", IAS 40 "Investment Property", IFRS 5 "Non-current Assets Held for Sale and Discontinued Operations" and IAS 2 "Inventories".
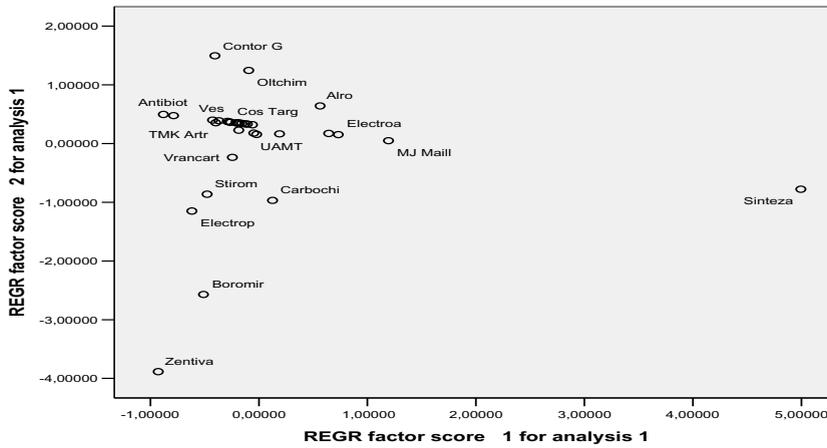
Fig. 2. The representation of the companies listen on BVB in the system of the first two factorial axes.

The impact of adopting the IFRS on the financial position of the companies differs a lot depending on the industry sector that it is part of. The above presented diagram shows that companies such as Antibiotice SA or Armatura SA have negative coordinates on the first factorial axis while the company Sinteza has a positive coordinate on this axis. This occurrence can be explained by the fact that while both SC Antibiotice SA and SC Armatura SA had an increase of the tangible assets, SC Sinteza had a decrease after the transition from the national accounting regulations to the IFRS.

By analysing the difference that appears between the profit tax rate of 16% established in Romania and the level of the effective tax rate for the reports based on the national regulations, as well as based on the IFRS regulation, we can observe the following aspects: (a) in both cased, the effective rate is greater than the legal one with approximately 6% and (b) the differences between the two effective rates are under 1% (see figure 3).

As we can observe in the following table, the average effective rate extracted from the financial statements according to IFRS are 3,7 % greater than the one calculated based on the national regulations (see table 2).
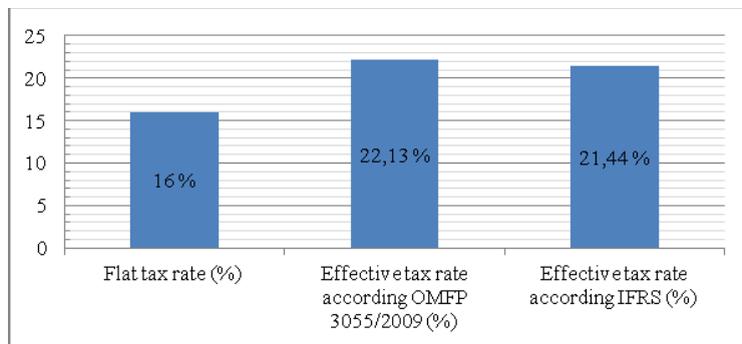

Fig. 3. The differences between the tax rates according to OMFP 3055 and IFRS and the romanian tax rate.

The small variation between the two effective rates can be cause by the fact that the companies in the considered sample are part of the category of the big tax payers and they are part of the same domain (the manufacturing sector).

In order to be able to make a valid comparison, we have to mention that we have eliminated all the companies that had gross negative result from the sample of 39 companies and we were left with 23 companies.

5. Conclusions

The literature review shows the fact that adopting the IFRS in Romania by the companies listed on a regulated market (BVB) is a useful step towards the alignment with the international accounting practice and constitutes the basis of the accounting harmonization by insuring the comparability of the financial accounting information reported by the listed companies in our country with that reported by similar trade companies on capital markets of other countries.

The results of the empirical analysis confirm that introducing the IFRS influences the results of the listed companies. The effectuated analysis emphasizes the fact that adopting the IFRS in Romania had a significant effect over the majority of the companies that made the transition from the accounting principles previously applied to the individual financial statements elaborated in accordance with the IFRS. However, the analysis showed that the adjustments that the IFRS determined over the Profit and Loss Statement, more exactly, on the net result, do not depend on the company's assets.

On another note, the impact generated by adopting the IFRS on the listed companies differs very much depending on the industry sector that the company is part of (the food sector, the energy one, telecommunications, etc.). An idea for future research in this direction could focus on extending the analysis on all the companies listed on the BVB and on effectuating a detailed empirical study in order to see what standards (IAS/ IFRS) impose greater adjustments on the financial statements and which is the immediate impact of applying IFRS for the first time.

Another research idea about the transition to IFRS, apart from studying the impact on the financial statements exclusively from an accounting point of view (the main aspect followed by most studies), would be the analysis of the effect of the transition to IFRS on the direct taxes as well as on managerial decisions.

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