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The analysis of the principal components of the financial reporting in the case of Romanian listed companies

Ioan Bogdan Robu [a]*, Costel Istrate[a]

[a]*Alexandru Ioan Cuza University of Iasi, B-dul Carol 1 nr.22, Iasi 700505, Romania*

Abstract

Reported financial statements of listed companies aim to base decisions for all stakeholders. Most times, especially in emerging economies like that in Romania, the issue of harmonization of national reporting standards with international financial reporting to be ensured homogeneity and comparability of information reported is mandatory. When reporting in line with European Directives, the question of identifying the principal components of the financial statements reported by Romanian companies listed is a research problem. The purpose of this study is to identify the principal components of financial statements, in the case Romanian listed companies. Using a sample of Romanian listed companies, the study aims to identify the principal components of financial statements, for the period 2006-2011.

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Keywords: financial reporting, principal components, listed firms, Bucharest Stock Exchange

1. Introduction

The dimensions of the Romanian financial market are reduced compared to other financial markets in the area – the share of the market capitalization in the GDP is amongst the lowest in the region: a World Bank Report (2013) offers the following data: 18.5% in 2009, 19.7% in 2010, 11.2% in 2011 and 8.3% in 2012 (after Poland, Hungary or the Czech Republic). Though, the functioning of the Romanian stock exchange and the financial regulation,

* Corresponding author. Tel.: +4-075-4458-273.
E-mail address: bogdan.robu @feaa.uaic.ro

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reporting, auditing and analysis environments they develop are extremely important to the description of the Romanian business environment.

The information that stock exchange companies are obliged to allow the access to and the data regarding the share prices, the number of operations, the number and the evolution of the listed companies represent features that set Romania on the map of researches carried up upon the financial market, financial reporting, the impact of the accounting norms, the relevancy of the accounting information compared to the market data etc.

Within this context, our purpose is to identify principal financial reporting components of the Romanian listed firms on the Bucharest Stock Exchange (BSE), regarding the indicators that best feature their financial profile. In order to reach our purpose, we use a series of financial analysis specific techniques, as well as advanced statistical data processing methods. We will start from a series of indicators used in financial analysis, indicators that are to be grouped according to their importance for the identification of the principal components of financial reporting. In order to avoid the collinearity and the cyclicity, our analysis aims to eliminate the factors that have no significant impact, reaching several components that can be used in establishing some scores that describe the principal components of the financial reports.

In order to surpass the criticism of using just accounting information in company analysis, we have also withheld market capitalization at the closing time of the considered exercises. We will see that the indicators including market capitalization as well are significant and their usage contributes to the shaping of the company's financial profile. At the same time, we express our hope that, by developing a score that is to measure the financial components of the reports of the listed companies, some of the limits of the comparative analysis of various companies would be surpassed, with various activities, considering high global informative strength indicators.

The data we analyzed in this study for the BSE listed companies come from financial exercises prior to the mandatory implementation of the IFRS, including 2011. Starting from 2012, the data series has had a moment of interruption, considering the major estimated differences of the Romanian and international financial reporting standards.

The statistical analyses of the data that correspond to listed companies have generated numerous researches, many of which are situated in the positivist research trend, or in accounting/analysis/audit, or in enterprise financing, or in financial economy.

Hereinafter, our study will include: a litterature review and the objectives of the research (section 2), the research methodology and the data analyzed (3), research results and discutions (4) and conclusions.

2. Literature review and hypothesis development

The analisys ot the utility and quality of the financial informations by using economic and financial indicators represent the study subject of an extremely vaste literature. It is shown that financial indicaors are influenced by the rules applied in financial reporting. Garcia Jara et al. (2011) aim to identify this type of influence by grouping the influence factors such as to evaluate the quality of the accounting information and ease the financial analysis process carried out by various users. Lannto and Sahlström (2009) also limit themselves at a whole indicators series when analyzing the impact of the evolution of the Finnish norms to IFRS.

Triandafil et al. (2010) analyzes the macroeconomic impact on the Romanian listed companies' profitability, using data between 1997-2007; in order to evaluate the profitability, the indicators taken and used from the financial statements are the company liquidity, solvability and firm's dimension (together with macroeconomic variables). Triandafil et al. (2010) discover a significant influence of liquidity, solvability and dimension of the firm on profitability.

The principal component analysis is also used by Tudor (2009) that starts by using 16 variables which he groups in three new variables that explain 96,72% of the initial variability: analyzed data also comes from the Romanian listed companies, but the analysis is limited to a part of the financial exercise. The three new variables Tudor (2009) attains are a general efficiency indicator, an indicator correlated to companies' historical debts and a development indicator (given by the long term debts and the deferred incomes).

An analysis model proposal based on modern performance indicators is also given by Savin (2013), who limits himself to promoting the global result, also considering aspects regarding the social and environment performance.

The advantages of using principal component analysis are emphasized by Armeanu and Neagu (2011), who think that the main advantage of using this method is that it reduces the initial causal space to an equivalent space of less considerable dimensions. Armeanu and Negru (2011) analyze a sample of Romanian foreign companies (for the 2010 exercise) and get, from seven classical financial analysis indicators (total assets, turnover, operating result, operating cash flow, net result, total liabilities and market capitalization), to just two, which explain 94% of the initial space variability. The two authors (Armeanu and Negru, 2011) rank the analyzed companies according to the registered scores of the principal two components – we also aim at such an analysis, to the extent that we will reach specific variables.

The statistical instrument we intent to use in this study (principal component analysis – PCA) is, next to factor analysis, amongst the most frequently used multivariate techniques (Hair et al., 2006, quoted in Garcia Jara et al., 2011). In fact, these last authors provide a review of the PCA indicators grouping literature. For example, Stevens (1972) reduces 20 indicators to just six indicators (leverage, profitability, liquidity, activity, dividend policy, price and earnings). In turn, Garcia Jara et al. (2011) group the variable into six factors.

The implementation of the principal component analysis is also found at Robu and Istrate (2013) who use the same indicators and the same grouping method, though aiming at emphasizing the impact of the financial crisis started in 2008 on the data reported by the Romanian listed companies.

2.1. The presentation of financial statements of the Romanian listed companies

The accounting rules applied by the Romanian BSE listed companies in the determined period of the analysis are the Romanian ones. Even though changes of the rules in power have not appeared, rules that aim at regulating the accounting and financial reporting of the Romanian listed companies, we consider that the numbers corresponding to the 7 exercises we have analyzed are comparable. In fact, starting from 2006 (including that year), the listed companies report according to the European accounting directives, from the Order of the Public Finances Minister (OMFP) 1752/2005 to OMFP 3055/2009. Only in the 2005 exercise, the applied norms have been harmonized both according to the European directives and the international accounting standards. We though consider that the Romanian companies' options regarding accounting policies are highly constant in time, and if we assume that the implementation of the IAS/IFRS between 2001 and 2005 had been approximately carried out, we then are able to use the 2005 numbers for the analysis.

2.2. Research objectives

The research problem: financial statements have a series of common elements, but there are also problems regarding the reported results' homogeneity and comparability.

***O_1**: Identifying the principal components of the financial statements of the Romanian listed companies.*

***O_2:** Estimating the influence of the determining financial factors on the principal identified components of the financial reporting.*

3. Research methodology

In order to reach the research objectives, the study has been structured in two stages. During the first stage, the principal components of financial reporting have been identified based on several financial-economic indicators. During the second stage, the parameters of the associated score functions of each principal identified component have been estimated, according to the financial determining factors.

3.1. Target population and analyzed sample

The target population on which the study was carried upon is represented by the Romanian stock exchange listed companies. The main regulated stock exchange in Romania is represented by the Bucharest Stock Exchange (BSE). It comprises three main parts: BSE as a regulated *spot market*, RASDAQ (*Romanian Association of Securities*

Dealers Automated Quotation) as a regulated term market and *ATS (Alternative Transaction System)* as an alternative trading system.

Comparing to the listed companies in the last two sections, the companies comprised in the BVB section must meet a series of specific trading conditions on the Romanian stock exchange (Filip and Raffournier, 2010, p. 83) and makes the subject of statuary audit, according to the OMFP 3055/2009, with subsequent changes. Because of the fact that the criteria regarding the financial reporting listing and transparency are much more stringent for the BSE listed companies comparing to the ones listed on RASDAQ and ATS, the study only considers the companies listed on the first section (BSE).

At the end of 2011, there were 79 BSE listed companies (I, II and IIIrd categories). The companies listed on the first section, BSE, are grouped in two important companies' categories. The first category (I) includes the listed companies that meet a series of criteria regarding the minimum size of the share capital, the minimum period of operating, the financial performance and liquidity, and the second category (II) includes the rest of the companies that must meet only the minimum dimension of the share capital condition (Filip and Raffournier, 2010, p. 83).

Depending on the membership in one of the two BSE categories, the evolution in time of the companies' number has been the following *(source: www.bvb.ro)*:

Category I: 24 (2005), 26 (2006), 26 (2007), 26 (2008), 26 (2009), 26 (2010), 26 (2011);
Category II: 53 (2005), 53 (2006), 54 (2007), 54 (2008), 54 (2009), 54 (2010), 53 (2011);
Total: 77 (2005), 79 (2006), 80 (2007), 80 (2008), 80 (2009), 80 (2010), 79 (2011).

The study has been carried upon the 2005-2011 financial exercises, considering a number of 6 exercises. The final sample, which made the subject of the analysis, comprises a number of 555 observations, as follows: 77 observations in the 2005 exercise, 79 observations regarding the 2006 exercise, 80 observations for the 2007, 2008, 2009 and 2010 exercises, and 79 observations for the 2011 financial exercise.

3.2. Variables and data source

The reported financial statemnts can meet the informational requirements of the *shareholders* and ease the financial information transmission, with a significant impact on the activity planning and coordination within the company (Palttala and Vos, 2012).

Starting from the indicators with informational features reffered to in the literature regarding the position and the company performance, the reporting and result manangement operations transparency (Goncharov and Zimmermann, 2007; Penman, 2007), *Table 1* includes a series of variables that are proposed for the analysis (also see Robu and Istrate, 2013).

Table 1. Variables used in the analysis

Symbol	Computing formula	Source code: *Datastream*
Kp/At	Equity ownership/Total assets	(WC03501)/ (WC02999)
(Cb-Kp)/Kp	(Market capitalization – Equity ownership)/ Equity ownership	((WC08001)-(WC03501))/ (WC03501)
Cb/Kp	Market capitalization/ Equity ownership	(WC08001)/ (WC03501)
CA/At	Turnover/ Total assets	(WC01001)/ (WC02999)
Rexp/At	Operating result/ Total assets	(WC01250)/ (WC02999)
Rexp/CA	Operating result/ Turnover	(WC01250)/ (WC01001)
ChSal/CA	Salaries expense/ Turnover	(WC01084)/ (WC01001)
Rnet/Kp	Net result/ Equity ownership	(WC08301)
Rnet/Cb	Net result/ Market capitalization	(WC01706)/ (WC08001)
Rnet/At	Net result/ Total assets	(WC01706)/ (WC02999)
Rnet/CA	Net result/ Turnover	(WC01706)/ (WC01001)
Rnet/Vt	Net result/ Total incomes	(WC01706)/ (WC02999)
Fexp/Rexp	Operating treasury cash flows/ Operating result	(WC04860)/ (WC01250)
Ftot/CA	Total treasury cash flows/ Turnover	(WC08311)
Ftot/Rb	Total treasury cash flows/ Gross result	(WC08311)/(WC01100)
Ftot/At	Total treasury cash flows/ Total assets	(WC05501)· (WC05301)/ (WC02999)
Imob/At	Permanent assets/ Total assets	((WC02999)- (WC02201))/ (WC02999)
Ac/At	Current assets/ Total assets	(WC02201)/ (WC02999)
Trez/ At	Treasury assets/ Total assets	(WC02005)/ (WC02999)
Dtl/At	Long term debts/ Total assets	(WC03251)/ (WC02999)
Proviz/At	Provisions/Total assets	(WC01302)/ (WC02999)

PER	Share list/ Share net result	(PE)
Cb/CA	Market capitalization/ Turnover	(WC08001)/ ((WC01001)
Cb/Ft	Market capitalization/ Total cash flows	(WC08001)/ ((WC05501)· (WC05301))

In order to calculate the proposed indicators' values in *Table 2*, data has been collected, for each company in the sample, from the financial statements reported by each of these companies to the Bucharest Stock Exchange and the National Securities Commission. In order to eliminate the errors that might emerge during the collecting process, data has been collected using *Datastream Advanced 4.0,* by accessing the *Thomson Financial* database.

3.3. Data analysis methods

For the identification of the principal components of financial reporting, as well as for the estimation of the determining factors' influence on them, this study proposes the use of the *principal components analysis* (Jaba and Robu, 2011).

By using this method, one starts from the initial variables set X_i ($i = 1,...,n;\ n = 24$), presented in *Table 1*, existing collinearities are eliminated and a series of new variables is determined, variables that are called components. The *m* ones, the new components, C_j, replace the initial variables associated to the financial reporting and are as follows:

$$C_j = \beta_{j1}X_1 + \beta_{j2}X_2 + ... + \beta_{ji}X_i + ... + \beta_{jn}X_n \quad (1)$$

and $m \leq n$.

Based on the equation (1), one can notice that the new components (C_j) correspond to the *m* components of financial reporting and are determined as a linear combination pf $X_i$variables. The C_j components meet the independency hypothesis that can be validated by using the χ^2statistical test or the *KMO* (Kaiser-Meyer-Olkin) statistics, which also determines the intensity of *Xi*variables' relations (Jaba and Robu, 2011).

The *KMO* statistics has values between [0;1], where 0 shows the absence of a relation between initial variables, and 1 signals the existence of a significant relation (Lebar*et al,* 2006). In PCA, model parameters (β_{ji}) are being estimated based on which C_j components are calculated. B_{ji} parameters represent the correlation coefficients of the initial variables and the main determined components (Jaba and Robu, 2011).

In order to reach the research objectives, data processing and analysis have been carried out by using the SPSS 20.0 statistical software.

4. Research results and discussions

Based on the 24 variables in *Table 1* which have been introduced into the analysis process, C_j components have been obtained through PCA, which significantly (79,075%) explain the variation of the observations in the study, which are specific to financial-accounting information. This phenomenon is also supported by a high value of the *KMO* statistical test (0,614), which emphasizes a significant connection between the analyzed variables (see results in *Table 2*).

Table 2. *Identification criteria of the principal financial reporting components for the BSE listed companies between 2005 and 2011*

KMO = 0.614		**Eigenvalue**	
Sig. = 0.000		**Total**	**% from Variance**
	1	2.851	25.918
	2	2.376	21.604
Components	3	1.933	17.576
	4	1.538	13.977
	5…11	<1.000	20.926

(*Source: Robu and Istrate, 2013*)

In order to establish the financial reporting's number of components, Benzecri's criterion has been considered, which mentions the fact that the value of the sole vector associated to each component should be higher than 1 (Jaba and Robu, 2011).

Based on this criterion, 4 main components characteristic to financial reporting have been identified for the BSE listed companies (see *Table 3*). The main 4 C_j components meet the independence hypothesis, fact that is emphasized as a result of eliminating the 24 initial X_i variables that were presenting collinearity features. The remained final variables of the analysis, which are used in order to determine the financial reporting components, are shown in *Table 3*, alongside with a series of descriptive statistics.

Table 3. Descriptive statistics for the variables retained in the PCA

Variables	Mean	Std. Dev.
Kp/At	0.6291	0.8235
(Cb-Kp)/Kp	0.1121	2.0651
Cb/Kp	0.9984	2.0955
Rexp/CA	0.0142	0.3247
Rnet/Kp	0.0231	1.0167
Rnet/Vt	0.0481	0.3384
Proviz/At	0.0247	0.1314
Rnet/CA	-0.0053	0.5409
Ftot/CA	0.0042	0.4030
Ftot/At	0.0065	0.0940
Rnet/Cb	-0.2153	2.5082

(Source: Robu and Istrate, 2013)

The associations of the X_i variables included in the APC, as well as the correlations between these ones and the main C_j identified components, are represented in the *Figure 1* chart.

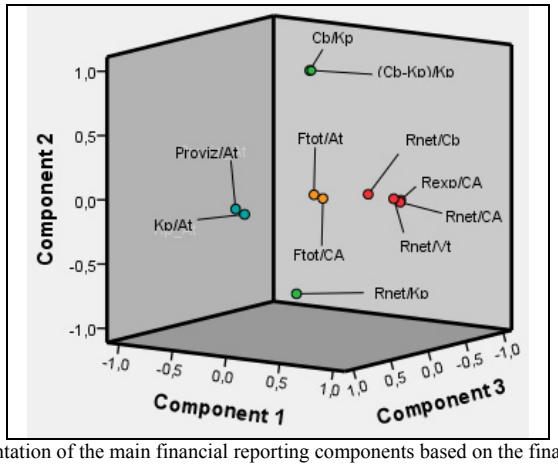

Fig. 1. Graphical representation of the main financial reporting components based on the financial determining factors (*Source: Robu and Istrate, 2013*)

Within the coordinates system of the first three components, powerfully correlated variables are presented and the nature of each financial reporting component is determined.

Component 1 is highly correlated to the ***Rnet/Cb***, ***Rexp/CA***, ***Rnet/CA***, ***Rnet/Vt*** indicators and describes the efficiency of the operating assets result. These variables describe the company's performance from the point of view of the gained results compared to the market value of the company, the assets used in the operating activity and the registered incomes of one financial exercise. The 4 identified capitalization variables are highly correlated to *Component 1* and have a significant influence on the variation of each listed company's calculated score. Depending on the nature of dominant variables, this component exhibits the *Result Component* related to financial reporting. Armeanu and Negru (2011), based on a much more different size and time sample, formulate such a component that considers the turnover, operating result, net result, the treasury and cash flow management and market capitalization. The differences between Armeanu and Neagu's (2011) and our study are explained, as we have already mentioned, through the disparity of the two authors' sample, through their low observations number, and also through the fact that we have used relative and not absolute indicators.

Component 2 is strongly correlated to ***(Cb-Kp)/Kp***, ***Cb/Kp***, ***Rnet/Kp*** and it describes the relation between the company's market value and its net book value as well as the own capitals' capitalization used by the company during its operating activity. The market value and net book value report describes the answer of the market to the announcing of accounting data, and high values of this rate signal the presence of truthful, viable financial information, which can support investors' strategic decisions. The financial capitalization ratio describes the extent to which the company can remunerate the capitals of the shareholders. High values of the ***Rnet/Kp*** fires a signal for investors and can emphasize a high attractiveness degree, which leads to the growth of demand for the shares of the respective company, with impact on the growth of the stock exchange and market capitalization. Depending on the nature of the three identified variables *Component* 2 is strongly correlated to and which have a significant influence on the calculated scores, *Value Component* related to financial reporting can be defined.

Component 3 is highly correlated to the ***Kp/At***, ***Proviz/Atb***. These variables describe the company's financial autonomy and the prudence of financial statements and they are indicators of company stability. The two identified variables define the *Financial Autonomy Component* related to the financial reporting.

Component 4 is strongly related to the ***Ftot/CA***, ***Ftot/At*** indicators and describes the cash flows volume of the company reported to the registered turnover or the total used assets of the company for its operations. Depending on the two prevailing variables, with a strongly correlated *Component 4*, and with a significant influence on calculated scores, the financial reporting related *Cash Flow* can be defined.

Influenţa variabilelor X_i rămase în analiză asupra fiecărei din cele 4 componente ale raportării financiare este evidenţiată cu ajutorul rezultatelor privind matricea de structură din *Tabelul 4*.

Table 4. Descriptive statistics for the variables retained in the PCA

Variables	Principal Components of Financial Statements			
	Result	*Value*	*Financial Autonomy*	*Cash Flow*
Kp/At	0.076	-0.014	**0.972**	-0.025
(Cb-Kp)/Kp	0.036	**0.966**	0.021	0.001
Cb/Kp	0.023	**0.964**	0.027	-0.010
Rexp/CA	**0.832**	0.029	-0.033	-0.014
Rnet/Kp	-0.097	**-0.784**	0.033	0.030
Rnet/Vt	**0.881**	0.068	0.132	0.132
Proviz/At	-0.004	0.020	**0.976**	-0.013
Rnet/CA	**0.842**	0.017	-0.010	0.240
Ftot/CA	0.138	-0.022	0.015	**0.922**
Ftot/At	0.008	-0.016	-0.051	**0.912**
Rnet/Cb	**0.559**	0.053	0.012	-0.074

(Source: own processing in SPSS 20.0)

Based on the data in *Table 5*, one can notice that the variation of the *Result Component* is significantly influenced, in a positive manner, by 83.20% of the ***Rexp/Cab*** indicator variation, by 88.10% of the ***Rnet/Vt***, by 84.20% of the ***Rnet/CA*** variation and 55.90% of the ***Rnet/Cb*** variation. The *Value Component* variation is positively influenced by 96.60% of the ***(Cb-Kp)/Kp*** variation and by 96.40% of the variation of ***Cb/Kp*** and in a negative manner by 78.40% of the ***Rnet/Kp*** variation. The variation of the *Financial Autonomy Component* is significantly influenced, in a positive manner, by 97.20% of the ***Kp/At*** variation and by 97.60% of the ***Proviz/At*** variation. The *Cash Flow Component* is positively influenced by 92.20% of the ***Ftot/CA*** variation and 91.20% of the ***Ftot/At*** variation.

In order to estimate each company's scores, related to each financial reporting component, *Table 5* displays the parameters' estimations of the 4 C_j components' associated functions.

Table 5. The estimations of the score function parameters associated to the principal financial reporting components

Variables	Principal Components of Financial Reporting			
	Result	*Value*	*Financial Autonomy*	*Cash Flow*
Kp/At	0.000	-0.013	0.506	0.001
(Cb-Kp)/Kp	-0.029	0.329	0.007	0.20

Cb/Kp	-0.033	0.391	0.010	0.015
Rexp/CA	0.349	-0.026	-0.048	-0.088
Rnet/Kp	-0.009	-0.314	-0.024	0.009
Rnet/Vt	0.347	-0.009	0.040	-0.002
Proviz/At	-0.036	0.005	0.511	0.016
Rnet/CA	0.328	-0.025	-0.030	0.061
Ftot/CA	-0.031	0.006	0.025	0.531
Ftot/At	-0.082	0.015	-0.005	0.536
Rnet/Cb	0.238	-0.005	-0.016	-0.096

(Source: own processing in SPSS 20.0)

Based on the data in *Table 5*, the score functions related to the 4 principal financial reporting components of BSE listed companies are as follows (also see *Robu and Istrate, 2013):*

*Result Component = -0.029**(Cb-Kp)/Kp** -0.033**Cb/Kp** + 0.349**Rexp/CA** -0.009**Rnet/Kp** +0.347**Rnet/Vt** - 0.036**Proviz/At** + 0.328**Rnet/CA** -0.031**Ftot/CA** -0.082**Ftot/At** +0.238**Rnet/Cb*** (2)

*Value Component = -0.013**Kp/At** + 0.392**(Cb-Kp)/Kp** + 0.391**Cb/Kp** -0.026**Rexp/CA** -0.314**Rnet/Kp** - 0.009**Rnet/Vt** + 0.005**Proviz/At** -0.025**Rnet/CA** + 0.006**Ftot/CA** -0.005**Ftot/At** -0.016**Rnet/Cb*** (3)

*Financial Autonomy = 0.506**Kp/At** +0.007**(Cb-Kp)/Kp** +0.010**Cb/Kp** -0.048**Rexp/CA** +0.024**Rnet/Kp** +0.040**Rnet/Vt** + 0.511**Proviz/At** -0.030**Rnet/CA** +0.025**Ftot/CA** -0.005**Ftot/At** -0.016**Rnet/Cb*** (4)

*Cash Flow Component = 0.001**Kp/At** + 0.020**(Cb-Kp)/Kp** + 0.015**Cb/Kp** -0.088**Rexp/CA** + 0.009**Rnet/Kp** - 0.002**Rnet/Vt** + 0.016**Proviz/At** + 0.061**Rnet/CA** +0.531**Ftot/CA** +0.536**Ftot/At** -0.096**Rnet/Cb*** (5)

Using the equations (2), (3), (4) and (5) associated to the score functions related to each financial reporting component, reporting scores are obtained for each company in the sample. Descriptive statistics regarding calculated scores for each dimension are used in *Table 6.*

Table 6. Descriptive statistics for the estimated scores of the principal components of financial reporting

Components	Mean	St. Dev.	Min	Max
Rezult	0.0000	1.0000	-10.7999	2.7324
Value	0.0000	1.0000	-10.5479	11.9571
Financial Autonomy	0.0000	1.0000	-0.6612	21.9591
Cash Flows	0.0000	1.0000	-10.5140	7.6963

(Source: Robu and Istrate, 2013)

Estimated scores for the four components display a 0.0000 mean and a standard deviation of 1.0000.

For the *Result Component*, a higher than 0 value of the calculated score of a company signals the existence of capitalization and profitability, and negative values show the absence of capitalization and profitability.

For the *Value Component*, a value higher than 0 of the calculated score of a company show a stability state of the company from the funding method point of view and investors' attractiveness, and negative values are registered contrariwise.

For the *Financial Autonomy Component,* a positive value of the calculated score of a company shows the use of company's own resources but also of some provisions in order to ensure the activities' continuity. Values under 0 signal a series of impairments within the company in meeting the principle of going concern.

For the *Cash Flow Component,* a value higher than 0 of the calculated score of a company show the company's insurance of sufficient treasury cash flows reported to the registered incomes but also to the used assets for the operating activities, and negative values indicate a paucity of treasury cash flows as a result of not collecting claims or the result of a faster payment of debts, with impact on company's liquidity.

5. Conclusions

The research development can be also carried out on data that meet the IFRS (starting with 2012), and it is interesting to analyze the extent to which our results can be confirmed/denied, based on the specific numbers of these new accounting standards. For example, in the case of Turkey, Ağca and Aktaş (2007) have found differences for certain analysis indicators only. Within the same context, Lantto and Sahlström (2009) discovered, in the case of

Finland, a significant influence of the IFRS transition of several financial indicators (by considerably increasing the profitability ratios and gearing ratio moderately, and considerably decreasing the PE ratio and equity and quick ratios slightly).

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