

## A RESEARCH ON THE FINANCIAL DISCLOSURE CHOICES WITHIN LISTED COMPANIES

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### Abstract:

*Romanian listed companies must prepare and present their financial statements according to IAS/IFRS standards. These standards are characterized by a certain convergence trend demonstrated by the acceptance of a small number of choices for the same accounting issue. However, companies are able to choose among several accounting treatments. Our research aims to demonstrate that there are correlations between certain particularities of the group (e.g. industry type, reporting basis) and the accounting policies it chooses. In this regard, we want to research the accounting policies published in 2007 financial statements by companies included in Fortune Global 500 top, to establish through statistical methods correlations among dependent and independent variables and to explain the option for a certain accounting treatment. In this research we included the options concerning the disclosure formats of the financial statements.*

**Key Words:** Financial statements, IAS/IFRS, Accounting Issue, Accounting Treatments, Accounting Policies, Statistical Methods

**JELClassification:** M40, D53

## INTRODUCTION

In this research(1) we started from the idea that there is a correlation between the country, the standards it uses or the industry in which a company operates and the accounting policies it chooses. In order to prove it, we selected a sample of listed companies that are included in FORTUNE'S GLOBAL 500 top (2).

FORTUNE'S GLOBAL 500 top is published annually by Fortune Magazine and it is prepared by its editors and reporters from all over the world. It was first dated in 1955 and since then more than 1,800 companies have appeared on the Fortune 500.

The accounting policies are the specific principles, bases, conventions, rules and practices applied by an entity for the preparation and disclosure of the Financial Statements. In this category we include the depreciation of the fixed assets (method and depreciation period choice), the revaluation of the fixed assets or the use of the historical cost, the capitalization of the borrowing costs or its recognition as an expense, the choice of the method for the inventories valuation etc.

The management of each entity has to establish accounting policies for the transactions performed. These policies have to be chosen after taking into account the specific of the activity by economic and technique specialists that know the industry and the strategy adopted by the entity.

For this paper we analyzed only a part of the accounting policies of the companies, namely the format of disclosure of the Balance Sheet, of the Income Statement and of the Cash Flow Statement. The study is important for more reasons. First, it provides information about the process of convergence and company preferences for particular policies acceptable under US GAAP,

IAS/IFRS, Japanese GAAP and others. Next, we selected companies from different industries. These groups are used to investigate how the industry (that we consider that define the firm's attributes) impacts on companies' accounting policy choices. We also tried to prove that the selection of accounting policies is influenced by the national rules. For this, we defined a few hypotheses concerning the accounting policies and the origin country.

## 1. LITERATURE REVIEW, RESEARCH OBJECTIVES AND HYPOTHESES

This correlation research aims to measure some variables and look for relationships between a set of variables, defined in the following Table:

**Table no. 1**

Variables	Semnification	Type	
Var 1	Balance Sheet Format	Nominal	Independent variable
Var 2	Income Statement Format	Nominal	Independent variable
Var 3	Cash Flow Statement Format	Nominal	Independent variable
Var 6	Reporting Basis	Nominal	Dependent variable
Var 7	Countries	Nominal	Dependent variable

We present as follows the literature review performed by the authors on the set of variables defined above. The influence of the format of the financial statements on the decision -making process was tested on more categories of users throughout the time.

### 1.2. LITERATURE REVIEW

Klammer & Reed (1990) investigated the impact of operating cash flow format on the decision making process. The results of their study show that there was less variability in the size of the loans that would be granted when analysts received the direct method, as opposed to the indirect method of the statement of cash flows. According to the authors, "These findings suggest that the direct method of presenting cash flow information may be preferable to the more commonly used indirect format".

Hard & Vanecek (1991) investigated the association between presentation format and task when subjects used financial statements. In their experiment each participant completed one of four tasks (varying from low task levels to high task levels) and used one of two presentation formats (either tabular or graphical) when they responded to questions about financial statements. The experiment examined decision performance as measured by efficiency and accuracy. The results of this experiment suggested that presentation format, with respect to the task being performed, does have a relationship to the decision-making process of financial decision makers.

Lungu (2005) has performed an empirical research based on a questionnaire sent to 238 companies. Unfortunately, only 10 answers were received. The conclusions were:

- most of the companies use the account format for the Balance Sheet (80%);
- most of the companies use the list format for the Profit and Loss Account (86%);
- most of the companies present information about the Cash Flow Statement using the direct method (84%).

Calu et al. (2007) searched the tendencies that exist at the level of the forms of presentation for the balance sheet, profit or loss account, cash flow statement of the companies included in the Fortune Global 500 top, using a sample of 285 companies. On the same sample they also tested the preference of the companies to use certain accounting policies for the evaluation of inventories and for certain depreciation methods. The conclusions were:

- there is a dependency relationship between the reporting standard and the Balance Sheet and Income Statement chosen;

- even if there is no statistical prove of the dependency between industry and inventories valuation, for instance, they notice a use of the weighted average cost for most of the companies applying IFRS while for the companies applying US GAAP they has the same percentage for the weighted average cost and LIFO.

The financial statements represent the interface between the "internal" and "external" sides of the company. Both the components and structure can be different according to some variables being identified one tendency or another. At the world's level there are more bodies issuing accounting standards, and their norms are different. The common element is the process of the accounting convergence that has as a purpose to establish the same direction for some structures or accounting systems.

**IAS1** *Presentation of Financial Statements* assures the basis for the presentation of the general financial statements, in order to assure the comparability of an entity through time to identify trends and of different entities to evaluate relative financial position. According to IAS 1 (2004, par. 8), a complete set of financial statements includes the following components: Balance Sheet; Income Statement; Statement of Stockholders Equity; Cash -Flow Statement; Accounting policies and explanatory notes.

According to **US GAAP** the Financial Statements prepared by the American companies are: Balance Sheet, Income Statement, Cash -flow statement, Statement of Stockholders Equity and Notes to financial statements. Besides these documents and with the same importance is presented the Statement of the Global Result (economical) that can be reported separately or within the Statement of Stockholders Equity – Ristea et al. (2006). None of these documents has a standard format and even the name of the statement can vary from one company to another (for instance the Balance Sheet can also be named Statement of Financial Position or Statement of Financial Condition).

Our study was reduced to the format of three of these financial statements: Balance Sheet, Income Statement and Cash Flow Statement.

### **The Balance Sheet**

In the last variant, **IAS 1** gives up on the model current/non-current for the account form of disclosure and uses the list form, computing the Net Assets. This indicator appears in the Balance Sheet between the long term liabilities and the stockholders equity. The persons involved in financial reporting reached the conclusion that the account form is not useful for the users of accounting information which transferred this emphasis on aspects like ownership and equity. In this format the liabilities are classified into long term/short term and the net assets are calculated. This is why IAS 1 recommends the list form (Lungu, 2005).

The **American** standards present the Balance Sheet starting from the equation Total Assets (which show the structure of the company's resources) = Liabilities + Owners' Equity (which present the financing sources of the company). The elements that have to be presented in the Balance Sheet are similar to those required by IAS 1. So, the format used by the companies that apply the US GAAP is the account type.

### **The Income Statement**

**IAS 1** asks the companies to present the expenses in the Income Statement according to their nature or according to their function and it suggests that one should analyze within the Income Statement the classification chosen. It is important to keep in mind that IAS 1 does not claim one classification or another but if the company chooses the function form it will have to present additional information about the nature of the operating expenses in Notes.

According to the **American** standards the Income Statement should be presented either:

- in a short form in which the elements are classified into two groups: revenues and expenses. All the expenses are classified according to their function and are deducted from the total income, generating the profit before tax. The detailed information is presented into the Notes; or

- in a longer form, in which appear intermediary groups and subtotals that present separately the elements from the ordinary activity and the other items. The Sales Cost is deducted from the Sales and the Gross Margin is obtained. After this indicator other revenues and expenses are presented before the Profit before tax is obtained.

A reason for choosing an option concerning the profit and loss account is given by M. Ristea (M. Ristea, 2001). The author starts from the indicators that the two forms focus on (the turnover and the production of the year for the nature form and the turnover and the cost of goods sold for the function form) and notices that the form by nature assures information useful to the financial analysts and to the persons that contribute to the value creation and distribution, in general (investors, creditors, employees etc.) (the financial perspective of the performance), while the function model is more useful for management by reporting the costs of different functions to the production sold and obtaining information about the efficiency of the production, administrative or selling areas (the economical perspective of performance).

### The Cash Flow Statement

Both the international and the American standards ask for the disclosure of the Cash Flow Statement a detail of the inflows and outflows of cash on each kind of activity (Operating, Financing and Investing activities). Both standards allow a presentation according to the direct and indirect methods.

In the direct method the information is presented for each type of inflow or outflow of cash, usually extracted from the accounting entries. The rulers encourage the choice of the direct method because it observes the reason of the preparation of this statement that is to report in parallel the inflows and outflows of cash. The same requests are encountered in both standards.

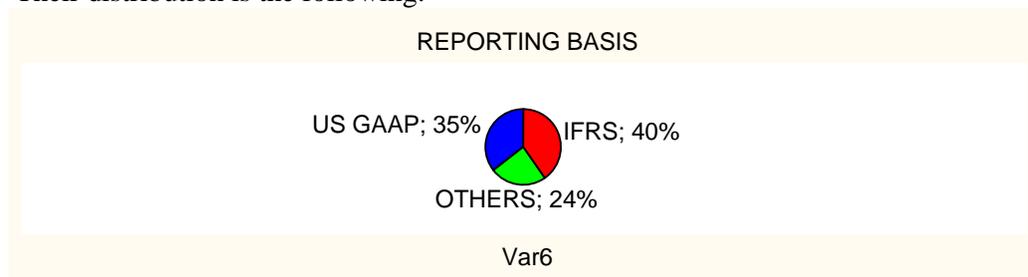
The indirect method reports the same amounts of cash flows as the direct method, but in different form: it starts from the result and it adjusts it with the differences in assets and liabilities and with the elements that do not involve cash.

The direct method is preferred by the investors because it allows them to establish the value of the company by forecasting the cash flows, while the indirect method is preferred by the accountants (because it is easy to compute) and by the managers as it hides the real image of the company's liquidity and solvency to the external users.

## 1.2. ANALYSIS OF THE CHOICE IN THE PRESENTATION OF THE FINANCIAL STATEMENTS

Knowing that the analysis of the information collected pointed out the fact that from the total of 285 companies investigated, 115 companies use the IFRS standards and 101 companies use the US GAAP, the other reporting standards (e.g. Japanese GAAP, Canadian GAAP, India GAAP etc.) were regrouped in the category Others.

Their distribution is the following:



**Figure no. 1 Reporting basis**

We also used an analysis of the companies according to their industry. The industries taken into account within the chosen sample are represented in the chart below:

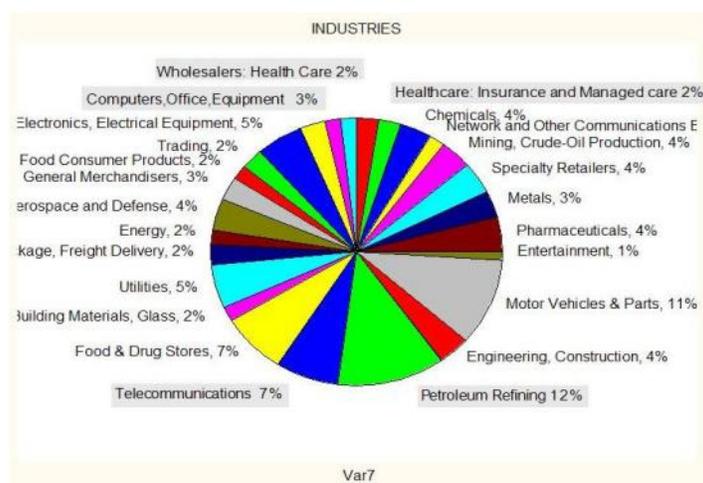


Figure no. 2 Industries

Starting from these ideas we had in mind the following:

- ✓ The form for the Balance Sheet's disclosure:
  - List, using the relationship:  $\text{Assets} - \text{Liabilities} = \text{Shareholder's Equity}$  or
  - Account, based on relation:  $\text{Assets} = \text{Liabilities} + \text{Shareholder's Equity}$ ;
- ✓ The form for the Income Statement's disclosure:
  - Using a classification of the expenses by nature (e.g. raw materials expenses, wages expenses, depreciation expenses) or
  - Using a classification of the expenses by function (e.g. cost of goods sold, administrative expenses, distribution expenses);
- ✓ The form for the Cash Flow Statement's disclosure:
  - Using the direct method ( $\text{Inflows} - \text{Outflows}$ ) or
  - Using the indirect method (starting from the result).

The hypotheses used for this matter were:

- H1<sub>0</sub>**: Balance Sheet format and reporting basis are independent
- H1<sub>1</sub>**: The two criteria of classification are not independent
- H2<sub>0</sub>**: Balance Sheet format and industry are independent
- H2<sub>1</sub>**: The two criteria of classification are not independent
- H3<sub>0</sub>**: Income Statement format and reporting basis are independent
- H3<sub>1</sub>**: The two criteria of classification are not independent
- H4<sub>0</sub>**: Income Statement format and industry are independent
- H4<sub>1</sub>**: The two criteria of classification are not independent
- H5<sub>0</sub>**: Cash Flow Statement format and reporting basis are independent
- H5<sub>1</sub>**: The two criteria of classification are not independent
- H6<sub>0</sub>**: Cash Flow Statement format and industry are independent
- H6<sub>1</sub>**: The two criteria of classification are not independent

## 2. RESEARCH METHODOLOGY

### Sample description

The research methodology is based on **empirical analysis**. We chose to survey a series of accounting policies presented in 2007 Financial Statements from listed companies enclosed in FORTUNE'S GLOBAL 500 top. We started in our research from classifying the companies according to the industry in which they operate. The sample searched was chosen as follows. From the existent industries we have eliminated banks and insurance companies because they use specific reporting standards. We have also eliminated the industries that included less than five companies

in order to prevent a dispersion of the information. Another part wasn't included in our sample because the companies did not have information in English or French. After this selection we had 285 companies left.

### **Results and analysis**

In order to see if there is any correlation between the independent and dependent variables we chose **Chi-square test** ( $\chi^2$ ). It tests a **null hypothesis** that two criteria of classification are *independent*. If two criteria of classification are not independent, there is an association between them. In our research, we computed  $\chi^2$  using *Statistica* soft.

### **Analyzing the way are chosen the forms of the financial statements**

For testing the independency of the Balance Sheet form we considered earlier we tested the following null hypothesis:

**H1<sub>0</sub>**: Balance Sheet format and reporting basis are independent

After applying the statistical test  $\chi^2$  the following information was obtained:

**Table no. 2**

	Chi-square	df	p
<b>Pearson Chi-square</b>	13.97294	df=2	p=.00092
<b>M-L Chi-square</b>	16.26902	df=2	p=.00029

After calculating  $\chi^2$  we notice that the probability at which  $\chi^2$  is computed is smaller than the critical.  $\chi^2$  is 0.00092 (for Pearson Chi-square) and 0.00029 (for M-L Chi-square), both values being smaller than 0.05 (maximum accepted amount). As a consequence we conclude that the null hypothesis (**H1<sub>0</sub>**) is rejected and there is a relationship of dependency between choosing the Balance Sheet form and the reporting basis, meaning that the accounting standards used determine the preference for one form of Balance Sheet or another.

Even though both the international rules IFRS and the US GAAP offer the option of choosing one or another balance sheet forms, the preference for one option or another is strictly connected to the reporting basis chosen. Following the distribution of the reporting form we notice that in the countries where a US GAAP reporting is preferred a greater polarization appears; many of the companies consider using the account form for the balance sheet. This polarization of the preferences can be explained by the fact that the companies applying the US GAAP are from USA, while the companies applying IFRS or other standards (OTHERS) are from many countries, their preference for one form or another being probably given by the reporting model used especially at the national level.

The conclusions are convergent with the ones of a previous study (Calu et al., 2007), based on the reports of the companies included in the Fortune Global 500 top, for the year 2006.

**H2<sub>0</sub>**: Balance Sheet format and industry are independent

The existences of the frequencies that equal zero indicate the fact that the results obtained concerning the rejection or the acceptance of the null hypothesis are not conclusive. As a consequence we choose a graphical presentation of the registered frequencies.

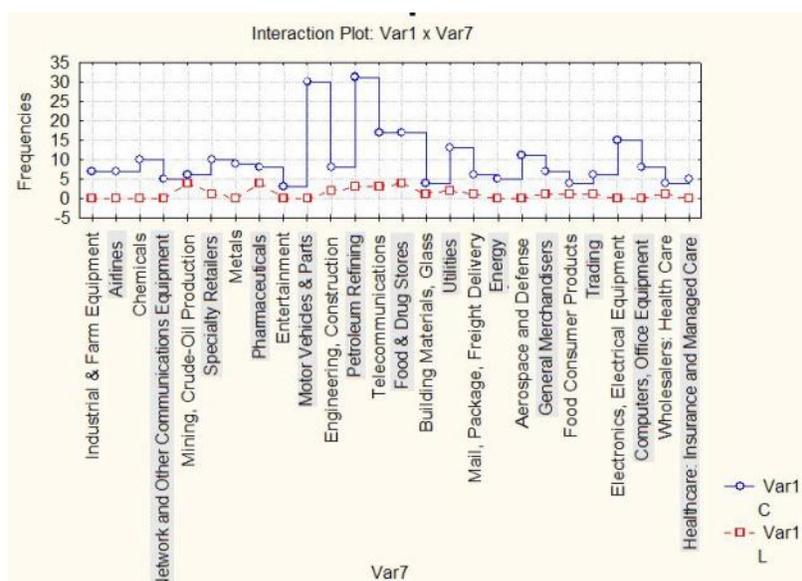


Figure no.3

We notice an emphasized preference for the account form of the Balance Sheet on the extent of the list form in the case of the Petroleum Refining industry and Motor Vehicles & Parts. In the other industries (except for Mining, Crude-Oil Production) we observe as well a tendency for the account form but this is not so obvious. For Mining and Crude -Oil Production we couldn't identify any tendency.

These conclusions are convergent with the ones of the previous study of Calu et al . (2007).

**H3<sub>0</sub>:** Income Statement format and reporting basis are independent

After computing  $\chi^2$ , we obtained the following information:

Table no. 3

	Chi-square	df	p
<b>Pearson Chi-square</b>	9.379445	df=2	p=.00919
<b>M-L Chi-square</b>	9.282248	df=2	p=.00965

In this case we also notice that the probability at which  $\chi^2$  is computed is smaller than the critical  $\chi^2$ . It is  $p=0.00919$  (for Pearson Chi-square) and  $p=0.00965$  (for M-L Chi-square), both values being smaller than 0.05. We conclude that the null hypothesis (**H3<sub>0</sub>**) is rejected. In conclusion, applying a certain set of accounting standards is correlated to the choice of a form for the Balance Sheet.

Considering the distribution of the reporting form we notice that in the countries where a US GAAP reporting is preferred a greater polarization appears; many of the companies consider using the destination classification for the expenses for the income statement. Just as in the case of the balance sheet, this polarization of the preferences can be explained by the fact that the companies applying the US GAAP are from USA, while the companies applying IFRS or other standards (OTHERS) are from many countries, their preference for one form or another being probably given by the reporting model used especially at the national level.

These conclusions are also convergent with the ones of the previous study of Calu et al. (2007), based on the reports of the companies from Fortune Global 500 top for the year 2006.

**H4<sub>0</sub>:** Income Statement format and industry are independent

The existences of the frequencies that equal zero indicate the fact that the results obtained concerning the rejection or the acceptance of the null hypothesis are not conclusive. As a

consequence we choose a graphical presentation of the registered frequencies. The analysis of the frequencies registered indicates a high preference for the form in which the expenses are grouped by function in Petroleum Refining and Electronics, Electrical Equipment industries. In the case of the other industries we couldn't notice a clear tendency for one model or another.

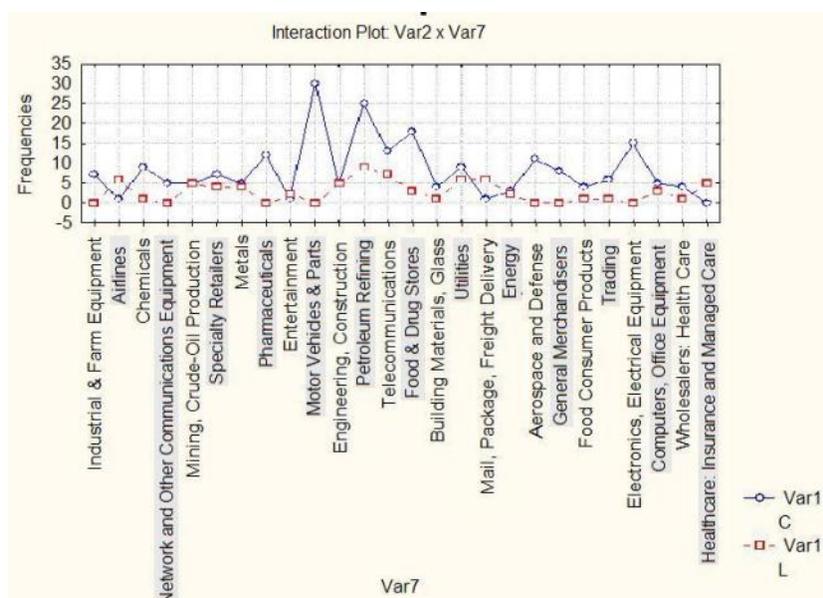


Figure no. 4

These conclusions are also convergent with the ones of the previous study of Calu et al. (2007), based on the reports of the companies from Fortune Global 500 top for the year 2006.

**H5<sub>0</sub>:** Cash Flow Statement format and reporting basis are independent  
After computing  $\chi^2$ , we obtained the following information:

Table no. 4

	Chi-square	df	p
<b>Pearson Chi-square</b>	.2586139	df=2	p=.87870
<b>M-L Chi-square</b>	.2716847	df=2	p=.87298

In this case we notice that the value at which  $\chi^2$  is computed is bigger than the critical  $\chi^2$ . We have p=0.87870 (for Pearson Chi-square) and p=0.87298 (for M-L Chi-square), both values being bigger than 0.05. We conclude that the null hypothesis (**H5<sub>0</sub>**) is accepted. As a consequence there is no connection between the Cash Flow Statement method (direct or indirect) and the accounting standards used. On the other hand, the small number of companies that use the direct method for the preparation of the Cash Flow Statement (11 companies out of 285) indicate an obvious preference towards the indirect method, without connection to the accounting standards used.

These conclusions are also convergent with the ones of a previous study (Calu et al., 2007), based on the reports of the companies from Fortune Global 500 top for the year 2006.

**H6<sub>0</sub>:** Cash Flow Statement format and industry are independent

The existences of the frequencies that equal zero indicate the fact that the results obtained concerning the rejection or the acceptance of the null hypothesis are not conclusive. As a consequence we choose a graphical presentation of the registered frequencies. For these two methods we notice an obvious preference for the indirect method, no matter the industry.

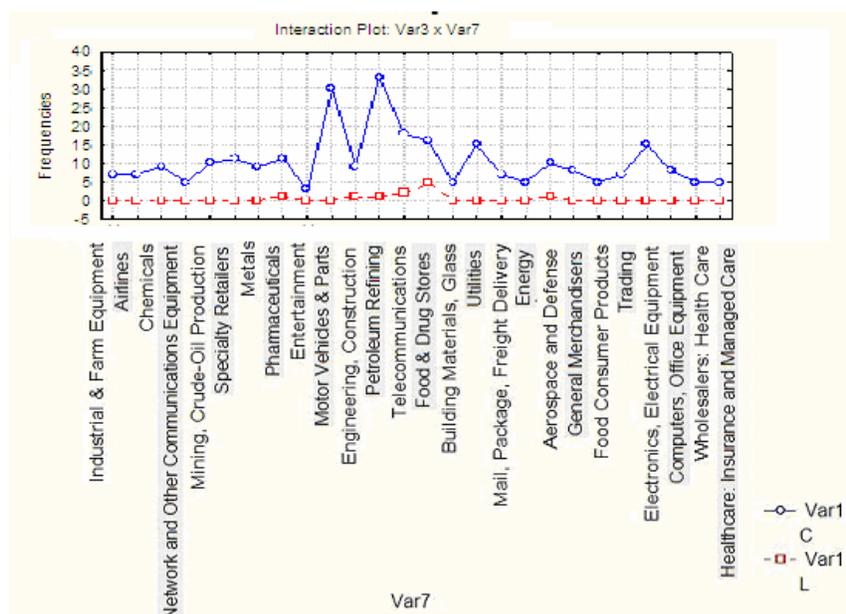


Figure no. 5

These conclusions are also convergent with the ones of the previous study of Calu et al. (2007), based on the reports of the companies from Fortune Global 500 top for the year 2006.

## CONCLUSIONS

Based on the statistical correlations we have noticed that two null hypothesis were rejected (**H1<sub>0</sub>**: Balance Sheet format and reporting basis are independent and **H3<sub>0</sub>**: Income Statement format and reporting basis are independent). The rejection of these hypotheses signifies that there is a dependency relationship between the reporting standard and the Balance Sheet and Income Statement chosen.

In this study we have also tested some other correlations (e.g. disclosure forms – industry) but because of the dispersion of the information the  $\chi^2$  test applied is not relevant.

The limits of the present research consist in the fact that we didn't pursue an evolution along the time, on a series of at least three years for the companies included in this top. Another limit is that we didn't analyze separately the companies presented in the first sample (one year ago, in the article of Calu et al. 2007) and the newly entered companies in order to obtain comparative results.

## NOTES

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