

AN ANALYSIS OF TRADITIONAL VERSUS IFRS FINANCIAL STATEMENTS OF BRAZILIAN PUBLIC COMPANIES FOR THE YEARS 2009 AND 2010

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Abstract

The aim of this paper is to analyze the effect of adopting International Accounting Standards on the accounting statements of Brazilian public companies that are quoted in the São Paulo Stock Exchange Index (IBOVESPA). We analyze financial statements that were disclosed in 2009 and retransmitted in 2010 for 57 public companies. Difference of mean tests were carried out for the following indicators in the statements: third party participation (debt) debt composition, immobilization of non-current resources, net liquidity, general liquidity, and return on net worth. Results show that there was significant decrease in the debt composition index upon change to the new accounting practice. The difference has been confirmed though the "test t" for dependant samples with both indicators which presented a normal distribution. As for the debt indicators, immobilization of non-current resources, net liquidity, general liquidity, and return on net worth, there was no significant difference in values. However, it's noticeable in the financial statements in general, the increase in the comparability of the information among companies and the transparency of the financial statements, and also improvement of both quality and quantity of the information exposed to stakeholders and responsible authorities.

Keywords: Economic and financial indicators, IFRS, CPC, Convergence with international accounting standards

Introduction

In recent years there is a drive to harmonize international accounting standards. In Brazil the CPC - Comitê de Pronunciamentos Contábeis (Accounting Pronouncements

Committee) of 2005. Was created to issue Brazilian standards based on the *International Financial Reporting Standards* (IFRS). Its aim is to prepare and issue Technical Pronouncements about Accounting Procedures.

Due to the innumerable changes brought by the creation of the CPC, the importance of the analysis of financial statements becomes evident from the fact that analyses such as this can help companies with the adoption of such changes, helping to minimize difficulties, using instruments of analysis of financial performance of companies, both for internal and external users.

Faced with such importance, this paper analyzes the changes to the financial indicators of Brazilian public companies as reported in their financial statements disclosed in 2009 and retransmitted in 2010. The public companies of interest are those quoted in the Brazilian Stock Exchange, IBOVESPA.

The paper is motivated by the recent changes on in the regulations of Brazilian financial accounting as Stipulated in Law 11.638/07. The law came into effect in 2008 and brought considerable changes to Brazilian accounting practices. It introduced new provisions to the Law of Corporations (6.404/76). In 2010 companies started to publish their financial reports in accordance with the International Standards.

This paper tries to answer the question: Did the adoption of the IFRS/CPC cause significant changes in financial indicators of the Brazilian companies in IBOVESPA that were published in 2009 and retransmitted in 2010? To answer this question, we analyzed six financial economic indicators calculated from the financial statements presented in 57 companies in our sample.

Also as a support to solve the problem that research, analyzed the effect of the adoption of the International Accounting Standards on the financial statements of the public companies in IBOVESPA published in 2009 and retransmitted in 2010.

The article is divided into four sections. While the first is the introduction, the second section presents the theoretical framework in approaching the adoption of the IFRS and CPC in Brazil. The third section contains the methodology and the fourth presents data results and analysis. The final section contains the conclusion in which we give our final thoughts on the change to the international standard of accounting.

Theoretical framework in approaching the adoption of the IFRS and CPC in Brazil

According to Deloitte (2008), the world is clearly moving towards accounting convergence. Brazil, like other countries, is going through a change process in its accounting standards and practices. Over 100 countries have already adopted the IFRS accounting

standards that tend to be globally accepted for financial reporting. Also, according to the same author, the standards relative to this model are published by the *International Accounting Standards Board* (IASB) and imply a financial report preparation environment that requires better judgment and fewer detailed-rule standards.

The convergence movement to the International Standards as an accounting practice is generally and globally accepted in full speed. Some highlights of recent events of adoption IFRS in Brazil is: Law 11.638/07, which came to accelerate the convergence process from Brazilian accounting practices to the IFRS, the CVM - Comissão de Valores Mobiliários, through Instruction 457/07, the BC - Banco Central do Brasil ; and the creation of corporate governance regulations by the São Paulo Stock Exchange (Bovespa).

In a study carried out by Callao, et al., (2007) which aimed at searching for significant changes between accounting data and financial indexes under the Spanish accounting standards and those of the IFRS, comparability is clearly adversely affected when few countries choose to adopt the IFRS and others choose to adopt local accounting standards.

In Brazil it can be noticed that companies that choose the international standards show improvements in the results. This improvement has been confirmed by a study carried out by Ernst & Young, when the net worth increased by R\$ 33 billion and accrued profits increased by R\$ 9 million in 2010 for a 50-companies sample (Bautzer, 2011).

Expectations regarding the adoption of the IFRS are great because it results in fundamental changes to the business environment, especially because it reduces the variety of accounting norms that companies must follow in each country it operates in. As there is a considerable variation in accounting quality and efficiency among countries, a common international language will allow for better comparability in the economical and financial analysis of companies in different countries or regions (Calixto, 2010).

Reduced complexity and higher transparency, comparability, and efficiency are just some of the benefits of the adoption of the IFRS. For Callao, et al., (2007) reforms to make local standards remain in line with international standards are urgent. Due to this need for international convergence of accounting standards (cost reduction of financial reporting, risk and cost reduction in analyses and decisions, reduction of capital costs;) centralizing the issuance of such standards, and the representation and democratic process in the production of information, the Accounting Pronouncements Committee was created (CPC, 2011).

The CPC was created in 2005 upon an agreement with the Resolution of the Federal Accounting Council (CFC) 1055/2005, and the efforts of various Accounting entities in Brazil, such as the Brazilian Association of Public Companies (Abrasca) the Analyst and

Capital Market Association (APIMEC), the São Paulo Stock Exchange (Bovespa) the CFC, the Institute of Actuarial and Financial Accounting Foundation (FIPECAFI) and the Institute of Independent Auditors of Brazil (Ibracon). It aims at preparing and issuing Pronouncements about Accounting Procedures (CPC, 2011).

Within the context of Brazil, the CPC has brought very positive results, aiming its efforts at the centralization and standardization of the production process standards by the regulatory authority by taking into account the convergence of Brazilian accounting to the international standards.

To date of this paper, the Accounting Pronouncements Committee has deliberated 43 Pronouncements, as well as the Basic Conceptual Standard (R1) and the CPC PME, specifically for small and medium businesses, all of which have their respective approvals by the CVM.

According to Iudícibus, et al., (2009) the most relevant changes arising from the internationalization of accounting standards are as follows: the primacy of substance over form, accounting standards guided by principles and the need of better judgment from accounting professionals. According to the authors, these points are not explicit in the laws that promote change in the regulatory framework of Brazilian accounting, but when considering the nature of the standards being adopted, this change in philosophy should permeate the whole convergence process of accounting standards.

The adopting of accounting standards was triggered by the need to compare the numbers generated by the accounts. This comparison refers both to results from the same company over the years, and with other national and international companies. It is inferred by importance that the topic has grown in recent years in the national and international scene, as well as by the need to assess the level of comparison achieved with the adoption of the IFRS, that studies about the impact of changes in rules and practices in the national accounting setting have become quite relevant.

Presentation of Financial Statements

According to Presentation of Financial Statements - IAS 1, the aim of accounting statements is to provide information about the financial position, performance, and cash flows of the entity that is useful to a large number of users in their assessments and economic decision-making. Financial statements also aim to present results of the administrative performance faced with their duties and responsibilities in diligently managing the resources entrusted to them (CPC, 2011).

According to Santos (2008) the financial statements presented and disclosed according to the International Standards, meet the requirements of all current technical standards and interpretations, which are developed backed by concepts, definitions and criteria described in the conceptual framework.

It is important to recognize the users in the preparation process of financial statements. For Santos (2008), the International Standards aim at entering to those users who may have the most varied interests in the information, and be anywhere in the planet. As a result, according to the author, the firm commitment to the requirements of international standards is the relevant benchmark for the need every user has to know that the financial information available is useful and reliable for the decision-making process.

Financial Statements only a are part of the financial information disclosed by an entity. The complete set of financial statements is comprised of the balance sheet, the income statement for the period, the comprehensive income statement, the changes in equity statement, the cash flow statement, as well as the notes and the value added statement (CPC-026, 2011).

Information about the financial position is primarily provided by the Balance Sheet. According to the International Standards, the Balance Sheet is the statement that gives external users information inherent to the financial position of an entity (Santos, 2008).

According to Gelbcke et al., (2010), the Income Statement is the summarized presentation of transactions undertaken by the company during the fiscal year, demonstrated in order to highlight the earnings of the period, including revenue and expenses.

The Comprehensive Income Statement includes changes in equity that do not represent income and expenses. Gelbcke et al., (2010) report that the DRA is derived from the sum of the net profit in the Income Statement and other comprehensive income, as determined by the Pronouncements, Interpretations, and Guidelines governing the accounting activity. Thus, the Total Comprehensive Income is the total change in net worth that is not resulted by capital transactions between the company and its shareholders.

For Santos (2008), the Changes in Equity Statement, in a way, go beyond the capital invested by the shareholders showing the performance evidenced by the operations statement and the changes in financial position arising from changes to levels of net economic benefits embedded in assets and liabilities.

The Cash Flow Statement must disclose the cash flow during the period classified by operational, investment, and financial activities. According to Ernst & Young (2010) the IAS 7 was created to facilitate the understanding of the DFC after the IFRS, and aims at

demanding the disclosure of information about historical changes in cash flow and its equivalents for an enterprise.

According to the Presentation of Financial Statements - IAS 1 (2011) the notes should present information about the basis for the specific design used, disclose the information required by the Accounting Standards, the Interpretations and Guidelines of the CPC that have not been presented in the financial statements, and provide additional relevant information not presented in the financial statements.

The Value Added Statement as from the adoption of Law 11.638/07, became mandatory for public companies. The DVA aims at demonstrating the value of the wealth generated by company activities as a result of collective effort, and its distribution among the elements that contributed to its creation (Gelbcke et al. 2010). It is noteworthy that the DVA is not obligatory according to the International Standards, and should be part of the social and environmental additional information section in financial reports.

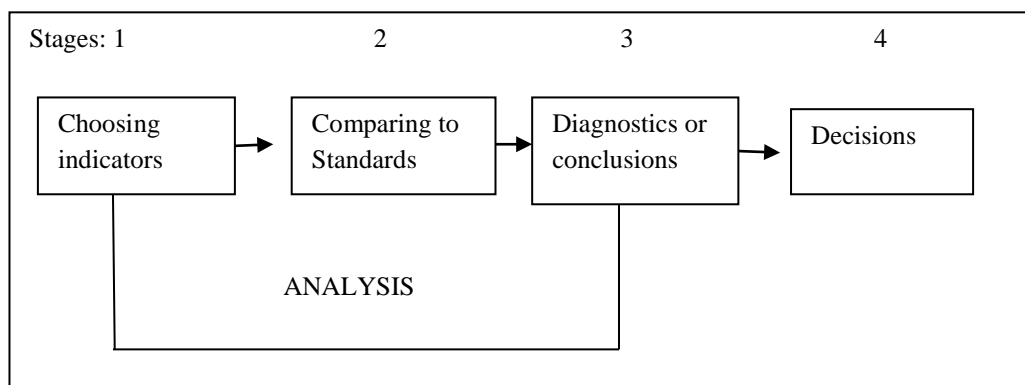
Financial Analysis of Financial Statements

The analysis of financial statements emerged and developed within the banking system, with origins in the late nineteenth century, when American bankers began to require balance sheets from borrowing companies. The need to analyze financial statements may then be considered older than the very origin of the statements (Pereira et al., 2008).

According to Franco (1992), to analyze a demonstrative is to break it down into its forming pieces for better interpretation of its components. Also, according to the author, as the main financial statements are exposures of equity components and their variations, we resort to them when we want to know the different aspects of equity and its variations. Synthetic statements do not provide detailed information about the patrimonial status and its variations, hence the need to apply financial statement analysis (also known as balance sheet analysis) as an accounting technique.

The balance sheet analysis must be understood within its possibilities and limitations. On one hand, it mostly points to problems in need of investigation, rather than indicating solutions. On the other hand, as long as it is conveniently used, it can become a powerful "dashboard" for administration (Iudícibus, 2008).

Matarazzo (2010) argues that the balance sheet analysis is based on scientific reasoning. In most sciences, the decision-making process generally follows the sequence described in Picture 1:



Picture 1: Decision-making process
 Fonte: Matarazzo (2010, p. 7).

According to Assaf Neto (2010), the two main traits of a company are the comparison of values from period to period, and the relationship between these values with like values. Thus, one can say that the basic criterion that guides balance sheet analysis is comparison. This is done by means of economic and financial analysis of accounting and financial statements, which generally uses a series of indexes calculated from relationships between accounts or groups of accounts in financial statements to this end.

Considering the aim of the IASB to achieve comparability of accounting-generated numbers by the various companies, the balance sheet analysis can be a tool to gauge this goal.

Matarazzo (2010) defines Index as the relation between accounts or groups of accounts in Financial Statements, which aims at highlighting certain aspects of the economic or financial situation of a company. Padovese and Benedicto (2007) add that the analysis begins with the separation of data to combine, so as to facilitate the interpretation according to the purpose of the analysis, with the translation from financial statements to financial indicators.

Matarazzo (2010) subdivides the analysis of financial accounting statements into financial indices that show the financial condition (structure and liquidity) and indexes that show the economic situation (profitability). Assaf Neto (2010) adds a few groups of important indicators such as: a) coverage of liabilities and interest; b) analysis of actions; and c) asset performance indicators.

Many studies like this have analyzed the impact of economic indicators on financial companies located in various countries. It may be mentioned that the study by Costa and Lopes (2010) investigated the impact of the transition into the International Accounting Standards / International Financial Reporting Standards (IAS / IFRS), verifying that within the headings investment properties, deferred tax assets, cash, net income, minority interests, provisions, non-current debt, non-current financing, deferred tax liabilities, total non-current

liabilities, current financing, and total liabilities, there are significant differences in values, as well as with all items in financial statements.

Papers by Daske et al., (2008) and Callao (2009) had similar goals, at first the main objective was to analyze the economic consequences of mandatory adoption of the IFRS around the world: We found that, by comparing mandatory and voluntary adoption of International Standards, the effects of the capital market is more pronounced for companies that have adopted such standards voluntarily, both in the years when companies were not required to adopt the IFRS, and later, when they were required to. The authors also concluded that many countries have made simultaneous efforts to improve the implementation and adoption of the IFRS, so that comparisons between the statements of companies are held more reliably.

Studies on the perception of professionals working in the accounting department about the difficulties faced by them from the adoption of IFRS were also written. We can cite as example Silva et al. (2010), who analyzed based on the perception of accounting professionals, what difficulties there are in the adoption of the IFRS, and their likely impact on assets and income for Brazilian sanitation companies. After the application of questionnaires to professionals responsible for accounting information in Brazilian sanitation companies the authors concluded that the adoption of the IFRS impacts the balance sheet and the results of companies in this sector.

It is observed after reading these studies actually being written several papers on the impact of the adoption of International Standards, especially in public enterprises, which can be explained by the fact of being considered a change to the new accounting and its impacts, be they positive or negative, should be reflected reliable and comparable the most professionals working in the area.

The present research is credit for being carried out after the IFRS adoption by the listed companies as regulated by the Brazilian CVM in 2010 evaluating, according to analysts' view, the reflection of the new set of rules on those companies' performance. Considering the *sui generis* type of convergence of Brazil, which impacted both on the consolidated balance sheet and on the individual ones (these due to the IFRS translation and approval, through CPC), identifying the impacts generated by the financial statements allows to evaluate, more broadly, the success of the IASB work in Brazil. In addition to that, the choice of a rate with companies from distinct sectors allowed the identification of migration impacts for the IFRS in the Brazilian companies more broadly.

Methodology

The methodological approach must be appropriate for the analysis of the impact of the differences in accounting procedures provided before and after Law 11.638/07 on the financial and economic indicators for 2010, calculated based on the financial statements published in 2009, and retransmitted in 2010 for IBOVESPA open companies. In this sense, this research is characterized as descriptive and quantitative.

The sample was comprised of IBOVESPA companies, which is an index of non-financial listed companies with most liquid shares in the São Paulo Stock Exchange, who presented their statements in 2009 and retransmitted them in 2010 with the accounting changes established by Law 11.638/07, 449/08, and the CPC, for comparative purposes. The choice of years is justified by the fact that in 2009 the financial statements were published in accordance with general auditing standards, and in 2010, according with the IFRS / CPC, noting that the adoption of the International Standards became mandatory in 2010.

Banks and insurance companies were left out of the sample because they did not present their statements in full IFRS form, as authorized by their respective regulators. From this crop, the analysis was performed considering 57 companies listed on the Bovespa.

The indicators chosen for this study were selected based on literature review about financial statement analysis, and according to the forecast of the impact of the changes in accounting practices adopted in Brazil. Such indicators were chosen mainly so we could observe the economic and financial situation of the companies selected in 2009 and retransmitted in 2010.

Using literature to justify the selection of the indicators studied, for Matarazzo (2010), the important thing is not the calculation of a large number of indexes, but of a set of indexes that ascertain the situation of the company according to the degree of depth of the analysis. The author states further that for industrial and commercial companies the analysis through traditional indexes must have from 4 to 11 indexes, and recommends the use of 6 indexes. Assaf Neto (2010) adds that there are many indexes that can be used to measure a company's performance, that, comparatively, such indexes are important for drawing the best conclusions and that the number of indicators varies according to depth of each study.

Due to the aim of this study, the indexes selected were those that had the balance sheet in their formulas, since the focus of this study was to examine the effect of the adoption of the IFRS / CPC mainly in the balance sheet submitted in 2009 and retransmitted in 2010. The indicators used were calculated the same way for both the financial statements for the 2009 fiscal year, and for the statements retransmitted in 2010. For the 2009 fiscal year, containing

the changes provided by Law 11.638/07, 449/08, and the CPC. This methodological uniformity allowed for the comparison of indicators.

Considering the purpose of this study and the depth to be given to the analysis process, the economic and financial indicators chosen were:

INDEX	FORMULA	INTERPRETATION
Capital Structure		
Third Party Participation (Debt)	$(\text{Third party capital}) / (\text{Net Worth})$	The participation of third party capital in relation to the company's own capital shows the subjection of the company to external resources. The lower, the better.
Debt Composition	$(\text{Current Liabilities}) / (\text{Third Party Capital})$	Represents the composition of the Total Debt, or which Debt installment is due Short Term. The lower, the better.
Immobilization of Net Worth	$(\text{Fixed Assets}) / (\text{Net Worth})$	Indicates the percentual of the net worth applied in the fixed assets. The lower this index, the better the financial standing of the company.
Liquidity		
General Liquidity	$(\text{Current} + \text{Real Assets Long-Term}) / (\text{Current Liabilities} + \text{Long-Term Demands})$	Detects the long-term financial health of the enterprise. When this indicator is greater than 1, it means the company is able to pay its debts with its rights achievable.
Current Liquidity	$(\text{Current Assets}) / (\text{Current Liabilities})$	Relates the amount of cash the company has immediately available and convertible into cash, to its short-term debt. The higher, the better.
Profitability (or Results)		
Net Worth Profitability	$(\text{Net Profit}) / (\text{Average Equity})^1$	The amount of return the company's entrepreneurs are getting towards their funds invested in the venture. The higher, the better.

Chart 1: Indicators of structure, liquidity, and profitability.
Source: Adapted from Matarazzo (2010) and Iudícibus (2008).
¹ Average Equity: $(\text{Net Worth Above} + \text{Current Net Worth}) / 2$ (Adapted from Matarazzo, 2010 and Iudícibus, 2008).

Based on the problem raised, and seeking to verify whether there is evidence of significant differences between the indices calculated for the financial statements of 2009, before and after the changes envisaged by Law 11.638/07, some statistical hypotheses were defined. To that end, we tested whether the average index calculated for statements published

in 2009, is the same average index calculated for "restated" 2009 statements after Law 11.638/07, thus preparing the following hypothesis: H_0 : no significant differences between indicators.

To test the differences in the indices of "original" financial statements in 2009 and "restated" 2009 statements, a difference in means test was used for two paired samples.

The choice of test for paired samples depends on the evaluation of the basic assumption that the variables (indicators) have a normal distribution. To test the above assumption the "Kolmogorov-Smirnov" test was used, based on a 0.05 significance level. Preliminary analysis of the data indicates that, of the indexes selected for the study, only "debt composition" and "immobilization of non-current resources" had normal distribution. Due to this analysis of most not normally distributed indexes, we used a more suitable nonparametric test for the case of two parallel samples, the "Wilcoxon."

The "Wilcoxon" nonparametric test, as described Neto and Stein (2008), is applied when two related groups are compared, and the variable must have ordinal measurements.

The difference in the means test was also performed in this study. Anderson, Sweeney and Williams (2007, p.354) define this statistical method as two samples, taken apart and independently, called independent simple random samples. To make an inference about this difference, we selected a random sample of n_1 units of population 1 and a random sample of n_2 units of population 2. We refer to this situation as the case where α_1 and α_2 are known.

The tests used in this study, the Wilcoxon nonparametric test and difference in means test, were also applied to the selected sample and the respective years under study.

Results and Analysis

Table 1 below presents descriptive statistics of economic and financial indicators calculated based on the financial statements for the year 2009 originally published in 2009, and the financial statements for the year 2009 restated for comparative purposes in 2010, of the 57 companies in our sample.

Table 1 – Descriptive statistics of "original" and "retransmitted" selected indicators

Variables	Mean		Standard deviation		Minimum		Maximum	
	2009 (orig.)	2009 (retrans.)	2009 (orig.)	2009 (retrans.)	2009 (orig.)	2009 (retrans.)	2009 (orig.)	2009 (retrans.)
Debt	1, 004	0, 957	1, 409	1, 398	-3, 022	-2, 954	7, 700	8, 277
Net Worth Profitability	0, 242	0, 264	0, 455	0, 452	-0, 338	-0, 141	3, 009	3, 009
Debt Composition	0, 446	0, 422	0, 248	0, 247	0, 060	0, 060	1, 000	1, 000

Immobilization of non-current resources	0, 772	0, 757	0, 225	0, 239	0, 314	0, 059	1, 288	1, 295
General liquidity	8, 923	9, 401	31, 744	31, 818	0, 669	0, 661	233, 329	233, 329
Current liquidity	2, 920	3, 328	4, 235	5, 134	0, 216	0, 217	22, 461	25, 254

It can be seen from the data in Table 1, that there are apparently no significant changes in the statistical measurements of indicators: (i) net worth profitability; (ii) debt composition indebtedness; and (iii) immobilization of non-current resources. Debt, general liquidity, and current liquidity showed distinct variations in relation to the other indicators in terms of mean. It is noteworthy that this comparative analysis is partial and can only be confirmed with specific statistical testing for difference in means.

Table 2 below presents the results of the nonparametric difference in mean test for paired samples for each of the statistical indicators showing Z , the p -value, and the decision based on 0.05 a significance level for each indicator.

Table 2 – Mean difference - Calculation performed for the six indicators using the significance level 0.05

Variables	Z	p -value	Decision
Debt	-0.8012	0.4230	Not reject H_0
Net worth profitability	-0.8100	0.4179	Not reject H_0
Debt composition	-3.3545	0.0008	Reject H_0
Immobilization of non-current resources	-1.4766	0.1398	Not reject H_0
General Liquidity	-1.0031	0.3158	Not reject H_0
Current liquidity	-0.5737	0.5661	Not reject H_0

The "test t", which was subsequently done, for dependent samples with normal distribution indicators, produced the same results as verified by the non-parametric mean difference test for pair samplings for all indicators. And so a significant difference was confirmed for the composition debt between the indicator before and after adoption of IFRS in Brazil thereby rejecting H_0 . However, the immobilization of non-current resources index of the sample companies does not reject H_0 pointing to the absence of significant, difference between the indicator before and after the adoption of IFRS.

Table3: "Teste t" for indicators which produced normal distribution

Variables	t	df	Significance
Debt composition	-2,027	56	,047
Immobilization of non-current resources	-0,809	56	,422

The application of the test was performed for the entire sample of companies on a consolidated basis, with the analysis being done for each individual financial-economic index.

The Wilcoxon nonparametric test was used, as earlier stated. The choice of this test is due to its being a free distribution test, which can be applied to normal distribution as well. The decision to "Reject H_0 " may be interpreted as indicating the existence of a significant difference between the index calculated for the original 2009 financial statements and the 2009 financial statements restated for comparison purposes. That is, the difference between the before indicator and the after indicator for the selected sample is significant. When the decision was "not reject H_0 ", it points to no significant differences in the indicators calculated for the original 2009 financial statements and restated 2009 financial statements.

The paired test result for 'debt composition' shows that the p-value is lower than the significance level established, with the null hypothesis rejected. Based on that, one can say that at a significance level of 0.05, the average rates of debt composition from the "original" 2009 financial statements is significantly different from the average rates of debt composition from the 2009 financial statements of these companies "restated" for comparative purposes.

The applied test pointed to the fact that a significantly greater number of companies decreased the rate of debt composition (37 out of 49 cases had a decrease in debt composition) compared to those that had this index increased (12 out of 49 cases). This effect can be derived from changes that affected liability, especially long-term liabilities, with greater effects on increasing this component, with no compensatory effect, or with a decrease in current liabilities.

Overall, the effects on the debt composition index may have occurred due to changes in the following items: a) the increase of the long-term liabilities (35 out of 45 cases had an increase in debt composition); b) the decrease in current liabilities (24 out of 45 cases); and c) both, simultaneously (14 out of 45 cases). However, one can see an indication that the effects on long-term liabilities were more important as the cause of the significant difference on the debt composition index of the two groups "original 2009 statements" and restated 2009 statements."

For the other indicators examined, test results show that the paired p-value is greater than the significance level, when the null hypothesis is not rejected. Based on that, one can say that at the significance level of 0.05, the average debt ratio, the net worth profitability, the immobilization of non-current resources, the general liquidity, and the cash flow, for

"original" 2009 financial statements are not significantly different from the average of those ratios derived from the "restated" 2009 financial statements of these same companies.

The test also showed variations applied in the other indexes studied. Same value cases were found, as well as increase and decrease, for the selected sample of 57 companies, before and after the adoption of the International Accounting Standards. However, these changes did not achieve a significant enough magnitude to change the average between the two groups (before and after). The data is shown in Table 4.

Table 4 – Variation of other indicators studied

Indicators	Increase	Decrease	Same Value
Debt	25	27	5
Immobilization of non-current resources	20	34	3
Return on net worth	28	24	5
General liquidity	24	25	8
Current liquidity	22	26	9

Conclusion

This study aimed at examining, through financial indicators, the effect of the adoption of the International Accounting Standards in the financial statements of Brazilian companies in IBOVESPA, published in 2009 and retransmitted in 2010, with the aim of ascertaining whether there were significant changes in these indicators. To achieve this goal, we developed a descriptive empirical-analytic study.

The empirical evidence suggests that the average debt composition indicator calculated from the "original" 2009 financial statements is significantly different from the average of the same indicator calculated from the 2009 financial statements "restated" for comparison purposes. This result has been confirmed by the "test t" for dependent samples which has been applied to two sample indicators that presented normal distribution. It is emphasized that this index showed a downtrend for the restated 2009 financial statements, with indications that the main cause for this decrease was the significant increase in long-term liabilities and the decrease in current liabilities. These changes can be derived from the changes in corporate law.

As for the average debt indicators, immobilization of non-current resources, net worth profitability, general liquidity, and current liquidity, calculated based on the "original" 2009 statements there was no evidence of significant difference compared with the average of those same indicators calculated based on the "restated" 2009 statements.

In response to the research question, it is inferred that the adoption of the IFRS caused a significant decrease in the debt composition index of IBOVESPA companies in 2009; however, this difference was not seen in the other indexes analyzed. With this result, we determine that major changes in the transition balance (2009) were due to liabilities accounts (short and long term), which were captured by the debt composition ratio. These conclusions are limited to the sample and period analyzed, in view of the methodology employed in the construction of the empirical research.

It is worth noting that the 2009 financial reports, restated due to the adoption of the IFRS and necessary to allow for comparison with 2010, were determined in a *sui generis* situation, where numbers were determined after much of the estimated transactions were or were not confirmed, and in the light of a different economic scenario. So this comparison of the indicators must be viewed with caution, which does not nullify the results, considering that all the sample companies have developed their accounting reports under the aegis of the same situation.

It's important to mention that two years after the adoption of the IFRS in Brazil, both in the consolidated financial statements and in the individual ones, an accounting system change which used to prepare reports eminently used for tax purposes for a sample, in which the main user is the stakeholder, has already provoked substantial alterations. The general perception, mainly among the companies of the sample, is that there was a considerable increase of transparency, quality and quantity of disclosure. Proof of that was the considerable increase of courses aiming at updating the accounting professional, as well as the review of almost all the Brazilian accounting sciences graduation courses. Finally, similar to the convergence process in other countries, the migration of a system from "shape to essence" to an "essence to shape" one won't happen in a complete and adequate way in such a short time. In general perception, the Brazilian companies' financial statements, in their first adoption, are more comparable among them, than among their worldwide competitors and new efforts and accompaniments needed to be done in order to attend this comparability perspective (among worldwide companies).

As a suggestion for future research, similar studies may be done with the scope directed to companies other than those used in this work, as well as through the years after IFRS adoption. We also recommend the use of other indicators, which can be selected for aiming their applicability in the various statements that were impacted by the adoption of the International Accounting Standards, thereby differentiating it from the focus of this work on balance sheet analysis.

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Table 4 - Calculation of the six indicators for each company in the sample by 2009.

57 public companies	Third Party Participation (Debt)	Debt Composition	Immobilization of Net Worth	Current Liquidity	General Liquidity	Net Worth Profitability
ALL AMER LAT	0,43409	0,05995	0,68199	12,80826	3,30368	0,00959
AMBEV	0,77106	0,55409	0,95966	0,82160	2,29692	0,32638
BROOKFIELD	0,15006	0,16944	0,79298	4,40759	7,66397	0,10269
BRF FOODS	0,43601	0,51036	0,86457	1,44716	3,29349	0,01112
BRASKEM	3,53348	0,40332	1,03729	0,91867	1,28301	0,21720
BR MALLS PAR	0,16655	0,09233	0,88027	9,96504	6,04525	0,25606
BRASIL TELECOM	0,89146	0,42600	0,59268	0,90617	2,12176	-0,13183
B2W VAREJO	7,70048	0,41856	0,40775	1,91509	1,12986	0,10474
BMFBOVESPA	0,06549	0,75845	0,88716	2,79354	16,27046	0,04518
CCR AS	0,46057	0,13990	0,46301	12,27880	3,17122	0,28478
CESP	0,91433	0,20666	0,96040	0,52911	2,09369	0,09286

CIELO	1,89501	0,94378	0,31425	1,24747	1,52770	3,00894
CIA HERING	1,69077	0,35349	0,59026	2,27067	1,59145	0,40971
CEMIG	0,15450	0,68156	0,91030	1,89373	7,47258	0,18968
CPFL ENERGIA	0,22551	0,60647	0,85831	1,77049	5,33444	0,25471
COPEL	0,14935	0,16766	0,77505	6,22306	7,69553	0,12159
CYRELA REALT	0,61036	0,36558	0,84229	1,27407	2,63838	0,24418
DASA	1,46189	0,45544	0,81376	1,15420	1,68405	0,16465
DURATEX	0,71355	0,48333	0,94276	1,05581	2,40144	0,06768
ELETRORAS	0,41823	0,24811	0,44099	2,83748	3,39104	0,00211
ELETROPAULO	2,61304	0,42901	0,82041	0,99007	1,38270	0,32315
EMBRAER	1,74095	0,43892	0,46016	1,79728	1,57440	0,16025
FIBRIA	1,51421	0,26585	0,89608	1,21763	1,66041	0,07263
GAFISA	1,44038	0,36409	0,47844	2,09167	1,69426	0,10845
GERDAU	0,17942	0,21823	0,95171	2,18355	6,57357	0,06498
GERDAU MET	0,18962	0,08926	0,98207	1,60471	6,27364	0,06006
GOL	0,44181	0,38392	0,95542	0,68024	3,26341	0,41126
HYPERMARCAS	0,79882	0,44608	0,83505	1,41473	2,25185	0,11706
JBS	0,98866	0,37216	0,93444	1,18286	2,01147	0,01320
KLABIN S/A	2,33421	0,26704	0,64657	2,22589	1,42841	0,14368
LOCALIZA	2,20149	0,57169	1,26761	0,56744	1,45424	0,17847
LOJAS AMERIC	1,02046	0,47638	0,65008	1,39636	1,09800	0,45076
LIGHT S/A	0,15257	1,00000	0,99039	1,06265	7,54736	0,21257
LLX LOG	0,01504	1,00000	0,46115	18,38838	67,51036	-0,06781
LOJAS RENNER	1,38614	0,92458	0,47830	1,40934	1,72143	0,25463
MMX MINER	-3,02188	0,34612	1,28832	0,21646	0,66908	1,24160
MARFRIG	1,25912	0,28060	0,37885	3,21674	1,79420	0,19643
MRV	0,54892	0,60428	0,36311	2,26361	2,82175	0,17615
NATURA	0,99898	0,92011	0,86327	0,87008	2,00102	0,63505
OGX PETROLEO	0,00430	1,00000	0,90763	22,46060	233,32903	0,00118
P.ACUCAR-CBD	1,02955	0,46752	0,72793	1,47188	1,97130	0,09887
PDG REALT	0,30455	0,27041	0,48315	5,12261	4,28357	0,15310
PETROBRAS	0,92413	0,53577	0,80333	0,71607	2,08210	0,19039
ROSSI RESID	0,66275	0,29562	0,44344	3,29000	2,50887	0,12386
SABESP	1,04842	0,28174	0,92064	0,81295	1,95382	0,13687
SID NACIONAL	4,83226	0,18999	0,78860	1,51770	1,20694	0,41721
SOUZA CRUZ	1,33611	0,51529	0,66978	1,54604	1,74844	0,64467
TAM S/A	0,46559	0,56267	0,85465	1,59701	3,14781	1,23635
TIM PART S/A	0,03223	0,86711	0,99834	0,97653	32,02689	0,02667
TELEMAR	0,16768	0,30053	0,86446	1,76401	6,96366	-0,05452
TELEMAR N L	3,42195	0,30536	0,96149	0,84800	1,30943	-0,06128
TELEF BRASIL	1,00121	0,73012	0,93210	0,87543	1,99880	0,21618
TRAN PAULIST	0,47616	0,57982	0,92249	0,57498	3,10015	0,19980
ULTRAPAR	0,28165	0,12798	0,86194	1,23838	4,55050	0,09817
USIMINAS	0,62891	0,28696	0,73227	2,66957	2,59004	0,08581
V-AGRO	0,30827	0,39491	0,47320	4,76701	4,24396	-0,33768
VALE	0,66871	0,25761	0,97156	0,90086	2,49542	0,10675

Table 4 - Calculation of the six indicators for each company in the sample by "retransmitted" 2009.

57 public companies	Third Party Participation (Debt)	Debt Composition	Immobilization of Net Worth	Current Liquidity	General Liquidity	Net Worth Profitability
ALL AMER LAT	0,46309	0,05992	0,66737	12,69199	3,15942	0,01192
AMBEV	0,59016	0,59775	1,00472	0,91156	2,69445	0,29016
BROOKFIELD	0,15006	0,16944	0,79298	4,36559	7,66397	0,10269
BRF FOODS	0,45497	0,50915	0,85137	1,38423	3,19796	0,01454
BRASKEM	3,57322	0,40212	0,87707	0,88178	1,27986	0,08418
BR MALLS PAR	0,15166	0,10140	0,87867	9,96504	7,59374	0,25606
BRASIL TELEC	1,29826	0,39743	0,56085	0,85763	1,77026	-0,06325

B2W VAREJO	8,27692	0,42771	0,95116	1,75701	1,12082	0,11530
BMFBOVESPA	0,06781	0,73170	0,83677	3,57122	15,74654	0,04563
CCR AS	0,36306	0,06856	0,57466	25,25370	3,75439	0,28449
CESP	0,86056	0,15774	0,94442	0,59098	2,16203	0,05166
CIELO	2,39857	0,74564	0,26532	1,21477	1,41692	3,00894
CIA HERING	0,83491	0,57574	0,42165	2,33652	2,19774	0,44932
CEMIG	0,15089	0,64224	0,80324	1,88677	7,62744	0,20798
CPFL ENERGIA	0,09127	0,07017	0,89072	12,63683	11,95701	0,29364
COPEL	0,13267	0,15709	0,84898	3,87750	8,53753	0,08630
CYRELA REALT	0,61036	0,34725	0,84146	1,31283	2,63838	0,24418
DASA	1,46942	0,44948	0,82657	0,99049	1,68054	0,19026
DURATEX	0,59148	0,44087	0,94022	0,98648	1,19596	0,09801
ELETRORAS	0,51836	0,14864	0,43002	3,55776	2,92916	0,01177
ELETROPAULO	2,00354	0,36437	0,69832	1,10009	1,49912	0,32947
EMBRAER	1,77866	0,45040	0,47972	1,73116	1,56222	0,16727
FIBRIA	1,03531	0,27542	0,90466	1,15814	1,96590	0,20089
GAFISA	1,45790	0,35971	0,47410	2,09167	1,68592	0,05167
GERDAU	0,16397	0,21422	0,95232	2,18355	7,09870	0,06153
GERDAU MET	0,23522	0,06736	0,98286	1,60471	5,25127	0,04418
GOL	0,48082	0,38392	0,95239	0,68024	3,07979	0,45170
HYPERMARCAS	0,75241	0,47934	0,86511	1,37675	2,32907	0,10952
JBS	0,94424	0,35548	0,92809	1,23887	2,05905	0,01867
KLABIN S/A	1,29482	0,23704	0,75838	2,31456	1,77231	0,04886
LOCALIZA	1,96162	0,55243	1,21855	0,56991	1,50978	0,17535
LOJAS AMERIC	1,62493	0,47762	0,62231	1,38580	1,06154	0,56027
LIGHT S/A	0,04272	1,00000	0,98880	1,26121	24,41071	0,18524
LLX LOG	0,01503	1,00000	0,46116	18,03776	67,51196	-0,07630
LOJAS RENNER	1,14160	0,91781	0,43349	1,49295	1,87596	0,24030
MMX MINER	-2,95410	0,34612	1,29512	0,21659	0,66149	1,05379
MARFRIG	1,47794	0,30114	0,45522	2,44679	0,93979	0,16439
MRV	0,54458	0,54417	0,35309	2,52659	2,83629	0,17579
NATURA	0,99898	0,82750	0,79514	0,96747	2,00102	0,63505
OGX						
PETROLEO	0,00430	1,00000	0,90763	22,46057	233,32901	-0,01097
P.ACUCAR-CBD	1,04817	0,48839	0,75545	1,38478	1,95404	0,10130
PDG REALT	0,30741	0,26630	0,47869	5,20176	4,25300	0,15405
PETROBRAS	0,93308	0,51354	0,79797	0,68387	2,07172	0,19386
ROSSI RESID	0,68075	0,37119	0,45987	2,57739	2,46896	0,11662
SABESP	1,39885	0,26100	0,99697	0,73662	1,71487	0,16765
SID NACIONAL	4,23481	0,14961	0,71169	1,78883	1,13770	0,39516
SOUZA CRUZ	1,62207	0,48807	0,66978	1,52754	1,61650	0,76936
TAM S/A	0,58962	0,56267	0,82387	1,58857	2,69600	1,36412
TIM PART S/A	0,03123	0,86691	1,01374	0,40714	33,02431	0,04192
TELEMAR	0,12186	0,30453	0,89915	1,11783	8,86576	0,40552
TELEMAR N L	2,52508	0,30520	0,94768	0,82367	1,39603	0,44893
TELEF BRASIL	0,79677	0,67368	0,86036	0,95850	2,25506	0,20651
TRAN PAULIST	0,32936	0,49874	0,05885	2,26917	4,03621	0,19666
ULTRAPAR	0,27152	0,09007	0,85181	1,83539	4,68302	0,09142
USIMINAS	0,59823	0,27222	0,66428	2,86523	2,67160	0,08278
V-AGRO	0,32478	0,37996	0,45444	5,22856	4,07901	-0,14145
VALE	0,68225	0,25320	0,96422	0,82451	2,46574	0,10766