Full Length Research Paper

Divergences between the BR GAAP and US GAAP

Thiago Luiz, Fernando Coelho and Alessandra V. Lima

Department of Accounting and Finance, Faculty of Business Administration, Universidade Norte do Paraná, Londrina, Brazil.

Accepted 19 January, 2015

The objective of this paper is to analyze impacts of the divergences between Brazilian accounting standards (BR GAAP) and 'generally accepted accounting principles' in the United States (US GAAP) in accounting recognition, measurement and disclosure. Seventeen Brazilian companies listed on the São Paulo stock exchange (BOVESPA) that negotiated American depositary receipts (ADRs) on the New York stock exchange (NYSE) were selected, using as a reference financial statements. Results demonstrate that the principal groups of accounts affected by divergences were long term realizable assets (assets and equity realizable over a long term), long term exigible liability (long term debts) and operational profit. The principle divergences observed in explanatory notes were those relative to 'goodwill' and structure of the balance.

Key words: Divergences, BR GAAP, US GAAP, financial statements, disclosure, Brazilian companies.

INTRODUCTION

One of the challenges faced by regulatory accounting agencies worldwide is how to reduce or even eliminate the asymmetry of information evidenced in reports produced according to the standards of different countries. Various international agencies like the International Accounting Standards Board (IASB), the International Federation of Accountants (IFAC), the United Nations Conference on Trade and Development (UNCTAD) and the International Organization of Securities Commission (IOSCO) have made an effort to develop high quality international accounting standards. In doing so, they seek to promote the convergence of various local standards into an international harmonization on accounting. The 'international financial reporting standards' (IFRS) are rapidly gaining worldwide acceptance. In January 2005, approximately 7,000 companies listed with the European Union converted their statements to the IFRS requirements (Cummings; Brannen, 2005). Approximately, 113 countries around the world currently require or permit IFRS reporting for domestic listed companies (International Accounting Standard Board – IASB, 2009).

*Corresponding Author. Email: dr.thiagoLuiz44@yahoo.co.uk

In the United States, the 'securities and exchange commission' was voted in August 27th, 2008 to publish for public comment a proposed 'roadmap' that could lead to the use of IFRS by U.S. issuers beginning in 2014. The 'commission' would make a decision in 2011 on whether adoption of IFRS is in the public interest and would benefit investors (U.S. Securities and Exchange Commission - SEC). In November 14th, 2008, the 'commission' proposed a 'roadmap' for the potential use of financial statements prepared in accordance with IFRS as issued by the IASB by U.S. issuers (U.S. Securities and Exchange Commission - SEC).

In Brazil, the efforts of the 'committee on accounting pronouncement' (CPC), has contributed to the convergence process of Brazilian accounting standards with the international accounting standards of the IASB. The CPC is made up of representatives from the 'Brazilian association of publicly owned companies' (ABRASCA), the 'association of analysts and professionals from the capital investments market' (APIMEC), the São Paulo stock exchange (BOVESPA), the 'federal accounting council' (CFC), the 'foundation institute of accounting, actuarial and financial research' (FIPECAFI) and the 'institute of independent auditors of Brazil' (IBRACON).

The Brazilian government has also given signals that it supports this process. Proof of which was in the

promulgation of Law n. 11.638, of 28 December 2007, which alters various dispositives factors related to the accounting section of Law n. 6.404/76 (Law on Shareholder Organizations) and n. 6.385/76, introducing significant advances to accounting in Brazil and allowing adoption of international accounting standards starting in 2008. The major objective of these efforts is to reduce asymmetry of information among various users of financial statements, thereby increasing the trust that investors place in Brazilian companies and mainly among foreign investors.

Asymmetry in information provided to users, provoked by differences in accounting standardization between countries, can prejudice the decisions of investors and other decision makers. In a globalized economy, accounting information from companies is analyzed by different users from all over the world. In particular, minimizing or eliminating these differences can help investors in the analysis of this information, in any market where the company's shares are traded. Despite all the efforts made towards international harmonization of accounting standards, it is possible that a company, for example, presents favorable performance indicators according to local accounting standards, but does not present the same performance when the indicators are calculated based on financial statements prepared according to the standards of another country. Thus, the objective of this article is to analyze the impacts of the divergences between Brazilian accounting standards (BR GAAP) and the 'generally accepted accounting principles' in the United States (US GAAP) in accounting recognition, measurement and disclosure. It seeks to identify the variations provoked in the account groups of the balance sheet and in operational profit and liquid profit in statement of fiscal period.

It is assumed that not found significant differences in accounting recognition, measurement and disclosure on the account groups of the financial statements prepared according to the Brazilian and American accounting standards due to historical events that influenced the Brazilian accounting process. In Brazil, there was a strong influence of the Anglo-American audit firms in the past, which came to the country bringing a strong tradition of audit procedures and manuals, and the habit of giving training courses in companies on accounting standards and procedures (ludícibus, 2004). These aspects gave to the accounting procedures adopted in Brazil, certain similarities to the ones established in the US GAAP.

The goal of this study is to reinforce the importance of professionals in the accounting area and its regulatory agencies to promote the convergence of local standards to the IFRS. The United States (whose economy is among the largest ones in the world) and Brazil (whose emerging economy has potential signs for growth) realized, rather than many other countries, that market globalization requires the convergence of local accounting standards to IFRS. Even though researches (Cia et al., 2008; Lemes and Carvalho, 2009) are questioning the effects and implications of the divergence of local standards to US GAAP, the results indicated that there are differences in profits, which were reported by Brazilian companies in BR GAAP and US GAAP and the researches suggested additional studies to identify specific differences. Thus, this research analyzes the impact of the adoption of different accounting standards (Brazil versus United States) in the groups of accounts of the 'balance sheet', operating profit and net profit of Brazilian companies with ADRs on the NYSE. These companies were selected because they are required to submit financial statements to BOVESPA in Brazil GAAP and to NYSE in the U.S.

ACCOUNTING DISCLOSURE

Lopes and Martins (2005) state that the accounting process is characterized by three phases: recognition, measurement and disclosure. The accounting process and its stages are the result of the social, economic and political environment that surrounds them. In this context, the different accounting standards adopted by various countries can affect one or all of the stages of this process, resulting in asymmetry of information among the various users of accounting information.

The disclosure consists of demonstrating the process of recognition and measurement realized to outside users of the organization. There have been various studies and discussions about what should be disclosed by organizations. Radebaugh and Gray (1977) understand that disclosure of information does not necessarily need to be legal or enforced; it can be voluntary or informal. What is important is that it should be the same for everybody, thus avoiding the potential problem of inside information. Choi and Mueller (1992) point out that accounting disclosure is influenced by four main factors:

(a) The environment in which the company is inserted (the stage of economic development of the home country, colonial history, etc.

(b) The market for capital (competition for resources of less cost).

(c) Non-financial influences (like unions).

(d) The corporate demand for greater transparency.

Therefore, the level of disclosure will be more or less elevated in accordance with these characteristics. Companies from countries with a more developed economy and capital markets would tend to realize more transparent disclosure than companies from countries with less developed economies and more closed markets. An example of this environmental and market influence on the level of disclosure is presented by Hendriksen and Van Breda (1992), who note that in the United States, it is common for reports to be prepared by shareholders, creditors and other investors. In Europe, the vision is a bit wider, since the interests of employees and the state is placed on the same level of shareholders' interests.

Whatever the forms or methods of disclosure used, the information produced by accounting must be disclosed in accordance with the interests and possibilities of understanding each user, with the goal of helping them in the decision making process. Hendriksen and Van Breda (1992) note that those companies that end up having a greater dependence on foreign capital tend to provide disclosure that is more appropriate to the markets where they intend to capture resources. However, whether the greater quality of disclosure is due to the competition for funds or to the desire to look for resources in the American and British markets, which possess rigorous regulations for disclosure, is not known.

The strongest argument for voluntary disclosure on the part of companies is the strengthening of their image in the stock exchange markets. This contributes to a greater financial evaluation of a company, resulting in less cost of capturing resources, greater return and less fluctuation in the price of its shares on the market (Malacrida and Yamamoto, 2006). A study made by Price Waterhouse Coopers with institutional investors and analysts points out five benefits of greater disclosure: increased credibility of managers, more long-term investors, greater monitoring on the part of analysts, better access to new capital and better evaluation of the share price (Eccles et al., 2001).

According to Hendriksen and Van Breda (1992), there also exist companies that resist increasing the degree of accounting disclosure unless there is pressure from the accounting community or from public agencies. They allege that greater disclosure will help competitors to the detriment of shareholders and will give unions an advantage in negotiating wages. Investors do not understand accounting policies and procedures and as a result, this will confuse them. They also alleged that there exist other sources of available information at a much lower cost and finally, that the needs of investors are not known.

Wong and Ho (2003) understand that compulsory disclosure and spontaneous disclosure complement each other, thereby enhancing the total functioning of the market. Despite the increase in voluntary disclosure, Carvalho et al. (2004: 265) point out that as a result of the recent scandals involving large companies, the relationship between investors and companies has become less solid and has given way to mistrust: "Consequently, there is an elevated demand for more relevant information, which further increases the importance of transparency in financial statements". To meet this demand, regulatory agencies have made efforts to determine the information that must be disclosed by publicly owned companies. Obligatory disclosure has become more and more detailed by regulating agencies. This is done in order to return credibility to financial statements for the sake of investors. However, this credibility still

cannot be achieved in relation to the global market due to the divergences among international accounting standards, which can cause asymmetry of information about what is disclosed in different markets.

DIVERGENCES IN WORLD ACCOUNTING STANDARDS

Differences in accounting standards between countries require different practices of recognition, measurement, accounting and disclosure in business, which is reflected in the financial statements available to the public. Tarca (2004) points out that two types of non-domestic use of non-national patterns in the consolidated accounts presented to the public may be considered: adoption of international standards in replacing national standards are used in conjunction with national standards. These two methods have been considered by countries in the convergence to 'international financial reporting standard' (IFRS).

The accounting systems and information to be shown will be heavily impacted in the convergence of local rules of each country with the international accounting standards. However, Soderstrom and Sun (2007) believe that differences in the quality of accounting disclosure between countries can be maintained by the adoption of 'international financial reporting standard' (IFRS) because they understand that quality is an overall institutional positioning of the company, including the legal and political systems of the country where the company is. Studies on the causes of divergences in accounting standards between countries almost point in the same direction, citing the characteristics of the legal system of each country involved. Castro Neto (1998), commenting on the probable causes of the different accounting practices of member nations of the European Union, lists the following reasons: the historical formation of the country, cultural influence, level of governmental control, structure of property and raising of capital and peculiarity of accounting principles.

According to Weffort (2005), the causes of different accounting practices can be classified into: characteristics and necessities of users and preparers of information, the manner in which the society is organized, cultural aspects and other external factors. Table 1 shows the association of these causes and some of the more frequent reasons as they appear in the literature according to Weffort.

To Weffort (2005: 42), "the reasons often complete, overlap and even confuse things among themselves and are clearly interdependent". In regard to this point, Niyama (2005: 21) comments; "considering that each country has its own set of laws, rules, philosophies, procedures and objectives (they look to protect their own national interests), it is reasonable to suppose that the

Generic reasons	Examples of specific reasons
Characteristics and needs of users of financial statements	Level of education and sophistication of users (especially in terms of business management and the financial community) Type of capital investment system Characteristics of the company: size, complexity, multi-nationality, debts, etc.
Characteristics of preparers of financial statements (accountants)	Professional education system of accountants Status, age and size of the accounting profession
Way in which the society is organized and the accounting method that develops from this organization	Political system Economic system and level of development Juridical system Fiscal system
Cultural aspects	Cultural values Religion Language
Other external factors	Historical events (principal invasions and colonial heritage) Geographical factors Political and economic ties

Table 1. Summary of the principle reasons for difference in accounting standards and practices.

Source: Adapted from Weffort (2005, p. 42).

accounting systems of each country have been impacted by such measures". Therefore, divergences among accounting standards between countries do not originate in one factor only, but in a set of factors that range from cultural aspects to technical differences in recognition, measuring and disclosure. The principle divergences in accounting recognition and measurement observed by Niyama (2005) and PriceWaterHouseCoopers (2006) in relation to Brazilian and North American accounting standards are presented in Table 2. The divergences shown in Table 2 referent to the recognition and measurement of accounting elements can impact the constant values in financial statements. Therefore, the same company can present different compositions of assets and liabilities, beyond divergent results, in disclosing financial statements prepared from these different starting points. Consequently, asymmetry of information can occur if the statements were sent to different countries or stock markets.

RESEARCH METHODS AND PROCEDURES

The present research is characterized as a descriptive one and it used a quantitative approach. Gil (2002) notes that the objective of a descriptive research is to describe the characteristics of a determined population or phenomenon, or to establish relationships between variables. In this sense, this research seeks to describe the principle divergences observed between Brazilian and American accounting standards and the respective variation in balance account groups and the results of companies involved in the study. In regard to a quantitative approach in descriptive research, Boudon (1973: 24) affirms; "quantitative research can be defined as that which allows collection, within a set of elements, of information comparable between one element and another". Therefore, the existence of a set of more or less comparable elements is indispensable to the adoption of the quantitative approach.

In regard to the procedure used in data collection, this research prioritized document analysis, using as a reference financial statements from 2004 and 2005 sent by companies to BOVESPA (www.bovespa.com.br) and the NYSE (www.nyse.com), and their explanatory notes were included in the Form 20-F submitted by companies to NYSE. Document research is characterized by Gil (2002) as that which is based on material that has yet to receive any analytical treatment or that which can be re-elaborated in terms of research objectives.

The study is transversal or sectional cut, as the focus of analysis covers financial statements referent to 2004 and 2005. With these financial statements as references, the principal adjustments made by companies to the 'balance sheet' and to the 'statement of result of the fiscal period' and which were disclosed in the explanatory notes of financial statements were analyzed. In selecting Brazilian companies, the option was made to work with companies listed according to the 'corporate governance' of BOVESPA, by considering that these companies had greater commitment to transparency and responsibility for the information submitted. Thus, there was greater ease in access to data and greater reliability in using them. The population thus consisted of 81 Brazilian companies listed in levels 1 and 2 of the 'new market' of corporate

Divergences	Recognition and measurement
Research and development expenses	BR GAAP – must be capitalized as an asset and amortized during the expected period of future economic benefits, no longer than ten years.
	US GAAP – all research and development expenses must be taken to a result immediately, without exceptions (SFAS 2).
Re-evaluation of assets	BR GAAP – permits re-evaluation, including negative. The proposal to modify the corporate law foresees re-evaluation only in cases of corporate re-organization.
	US GAAP – prohibits any type of re-evaluation.
Accounting of financial leasing	BR GAAP – are accounted for as rent, in compliance with fiscal legislation, both for the lessee and the leaser.
	US GAAP – the essence must prevail over the form. The asset must be registered by the leaser as a fixed asset in correspondent with a liability obligation. In this case, the contract must have at least one of these requirements: transference of the property of the asset to the leaser, a bargain buying price, the contractual period must be greater than 75% of the useful economic life of the asset or the present value of the minimum leasing payments must be greater than 90% of the marker value of the asset leased on the date when the operation began (SFAS 13).
Accounting of 'goodwill'	BR GAAP - treated as a premium, must be declared an asset and amortized according to its useful life, not longer than ten years. Fiscal legislation permits the inclusion of goodwill as an asset that must be amortized in up to five years.
	US GAAP – must be capitalized as an asset and subjected annually to the impairment test, taking it as the result of the difference between the determined value of the goodwill and what is effectively capitalized (SFAS 142).
Actualization of stock via the LIFO method	BR GAAP – the LIFO is not admitted fiscally, hence leading companies use the average or the FIFO (first in first out).
	US GAAP – allows adoption of the LIFO (last in first out) for fiscal and corporate purposes.
Deferred taxes	BR GAAP – legislation requires accounting for the effects of temporary differences, such as tax credit, the asset and provisions for deferred income tax.
	FASB – determine the recognition of deferred taxes for corporate effects, accounted for in the same accounting period in which the expenses and receipts were recognized (SFAS 109).
Responsibilities for employee retirement	BR GAAP – essentially observes IAS 19, starting in 2001, but only for public companies authorized by the SEC (Deliberation 371/00). Others adapt a cash basis.
benefit plans	UG GAAP – accounts through competence regime, with recognition of a passive actuarial and a financial asset evaluated by a fair value, similar to the IAS 19 (SFAS 87 e SFAS 88).
Financial instruments	BR GAAP – only financial institutions are subordinate to the control and inspection of the Central Bank's adopted international accounting rules. Public companies are subjected only to disclosure by explicative notes of market values, that is, for options, futures, terms and swaps. Other anonymously owned companies, subordinate to Law n. 6.404/76, are not obligated for any kind of disclosure of these instruments.
	US GAAP – are norms identical to the IASB (SFAS 133). Derivatives must be registered as resources items in the balance sheet, as assets and liabilities by fair value. Usually, adjustments to fair value must be recognized in that they occur as a result, except those derivatives classified as hedges (IAS 39).

Table 2. Principal differences between the BR GAAP and US GAAP in the recognition and measurement of accounting elements.

Source: Adapted from Niyama (2005, pp. 55-83) and Price Water House Coopers (2006, pp. 12-25).

governance of BOVESPA. The listings considered are from October 2006. The sample is of the intentional type, with the selection criterion being companies that negotiated American depositary receipts (ADRs) on New York stock exchange (NYSE) in January 2007. Based on this criterion, 19 Brazilian companies were selected, with two being discarded because of a lack of information sent to the NYSE in the period researched, leaving a total sample

of 17 companies.

In the data analysis, the differences between BR GAAP and US GAAP have been identified from the reconciliation of net income and the PL, based on the notes on the Form 20-F submitted by companies to NYSE. Then, the differences were found in the 'balance sheet' groups, as well as in the operating profit and net profit of the 'statement of results' of the year of each company. The

Indicator	СА	LTRA	PA	CL	LTEL	NW	OP	NP
BR GAAP	329.191	100.096	69.017	277.666	147.633	73.004	19.305	12.419
US GAAP	350.398	46.466	77.558	166.123	231.112	77.184	36.975	14.891
Difference	6%	-54%	12%	-40%	57%	6%	92%	20%
ANOVA (standard error)	1717839138	7308831	1581204	74356242	40830170	1836244	810261,4	120636,8
ANOVA(t statistics)	9.4963 ^{e-06}	-0.00056	0.000416	-0.00012	0.000157	0.000175	0.001678	0.001576

Table 3. Sum total of account groups in the year 2004 in BR GAAP and US GAAP from Brazilian companies.

Table 4. Sum total of account groups in the year 2005 in BR GAAP and US GAAP from Brazilian companies.

Indicator	CA	LTRA	PA	CL	LTEL	NW	OP	NP
BR GAAP	374.844	119.431	69.433	290.359	191.618	81.734	25.161	18.286
US GAAP	419.613	49.153	80.269	186.509	275.418	87.203	43.603	19.335
Difference	12%	-59%	16%	-36%	44%	7%	73%	6%
ANOVA (standard error)	234511357	10127801	1552162	82912735	63393409	2576871	1420494	284230,4
ANOVA(t statistics)	1.4685 ^{e-05}	-0.00053	0.000537	-9.6 ^{e-05}	0.000102	0.000163	0.000999	0.000284

differences between BR GAAP and US GAAP were calculated using the sum of the respective groups of all accounting firms. Having established the differences in each group of accounts, ANOVA was performed to verify whether the percentage differences found are statistically significant.

DESCRIPTION AND ANALYSIS OF DATA

Presented in the description and analysis of data are the adjustments to accounts from the 'balance sheet' to the operational profit and net profit, based on the financial statements from 2004 to 2005 sent by these companies to the São Paulo stock exchange (BOVESPA) and the New York stock exchange (NYSE), because of divergences between the BR GAAP and the US GAAP.

Analysis of the variations in relation to account groups of financial statements

To begin this analysis, it can be stated that there exist variations in the groups of the 'balance sheet' as well as in

the operational profit and net profit of the 'statement of results' for the fiscal period'. The differences between the BR GAAP and US GAAP, beginning with the sum total of the respective account groups of all the companies, are presented in Table 3. These are considered, in a global way, to be the values of the groups: Current Asset - CA (assets and short term equity), Long Term Realizable Asset - LTRA (assets and equity realizable over a long term), Permanent Asset - PA (assets and equity of permanent character in the company), Current Liability - CL (short term debts), Long Term Exigible Liability -LTEL (long term debts) and Net Worth - NW (capital invested by shareholders and bond investors). In other words, they comprised the whole items from the 'balance sheet' and two items from the results statement, operational profit (OP) and net profit (NP). Besides the percentage differences between the groups of accounts, ANOVA was performed to verify whether they are statistically significant (Table 3) . ANOVA is a resource used to determine the like-lihood of having differences in averages of different groups occurring only due to sampling error. To conduct the test, the significance level of 0.05 was chosen. To determine the

 t_{crit} , the distribution t 13 - 1 degree of freedom (k - 1) and = 0.05 was applied, having t_{crit} , = 1.782. Table 3 reveals

that the percentage difference in operational profit between the implementation of BR GAAP and US GAAP is 92% in the companies analyzed for the year 2004, considering the sum of the net income values in BR and US accounting standards of all companies. Other groups that presented high variations were 'long term realizable assets' (-54%), 'current liability' (-40%) and 'long term exigible liability' (57%).

The ANOVA test shows that the percentage differences found in comparing the sum of the values of accounts' groups based on BR GAAP and US GAAP for all companies surveyed, are mostly in groups; 'long term realizable assets' (LTRA), 'current liability' (PL), 'long term exigible liability' (LTEL) and 'operational profit' (OP), although none of the groups had t_{crit} , = 1,782. Therefore, for this analysis, it cannot be said that the differences found between the implementation of BR GAAP and US GAAP are statistically significant. The other groups in the financial statements did not present relevant differences, varving from 6 - 20% points. Similar procedures were adopted to analyze the figures of the year 2005, whose results are shown in Table 4. Analyzing Table 4, the set of 17 companies, shows that the principal variations in relation to BR GAAP versus US GAAP are found in 'long term

realizable assets' (-59%), 'active liability' (-36%) and 'long term exigible liability' (44%). Besides these variations, there was also a variation of 73% in 'operational profit' in comparing the values found in BR GAAP and US GAAP. In the other groups of financial statements, the differences observed can be considered minimal, varying from six to sixteen percentage points.

The ANOVA test shows, as in the previous year, that although the percentage differences were found in comparing the sum of the values of accounts' groups based on BR GAAP and US GAAP for

all companies surveyed, none of the groups had t_{crit} , = 1,782. Therefore, it can not be said that the differences found are

statistically significant. It can not be stated that the differences between BR GAAP and US GAAP have statistically affected the values of accounts' groups of the 2004 and 2005 financial statements of these companies in a significant manner. However, the explanations for the variations are found in the fact that some companies were more heavily impacted accounting groups by differences in accounting standards, particularly in the case of transactions that affected the value of 'long term realizable assets' (LTRA), 'current liability' (CL), 'long term exigible liability' (LTEL) and 'operational profit' (OP) of the analyzed companies. Differences observed in groups of accounts as a result of the implementation of the BR GAAP and US GAAP indicates that users of accounting information may come to different conclusions of the assets and economic-financial evaluation of a company's situation. Depending on the accounting standard that is being considered (BR GAAP or US GAAP) in the financial statements published, one can apply different evaluations to the same company. Doing so could negatively interfere in these organizations' decisions about investments, thereby losing potential investors. It could also harm investors that expected to derive profit from the values invested and felt punished by the information asymmetry caused by the differences in the accounting standards applied. After the classification of variations in the principal accounts of the 'balance sheet' and the 'statement of result of the fiscal period', analysis was made of the principal adjustments disclosed in the explanatory notes of financial statements sent to the NYSE.

Analysis of variations by account group, based on explanatory notes

The variations in the groups of accounts of the 'balance sheet' and 'statement of results' above resulted from the adjustments made in the following accounts: Research and development expenses, reevaluation of assets, financial leasing of accounting, accounting of goodwill, stock update via LIFO method, deferred taxes, responsibilities for employee retirement benefit plans and financial instruments. The adjustments observed in the explanatory notes, with the corresponding asset item or the result affected, are displayed in Table 5. Table 5 shows that of the divergences between Brazilian and American accounting practices, the ones most observed in the financial statements of the Brazilian companies investigated were related to 'goodwill' (stated in 14 of the 17 companies analyzed) and those related to the structure of the balance sheet (present in nine of the 17 companies analyzed). Other explanatory notes, which will be addressed in the specific chart, were found in the reports of all analyzed companies.

On the other hand, the divergences least observed in the explanatory notes of Brazilian companies were those related to reevaluation of assets and expenses in research and development, observed in only three companies. When confronting the findings of this research to the main differences between BR GAAP and US GAAP in the recognition and measurement of accounting elements, identified by Niyama (2005) and PricewaterhouseCoopers (2006), as discussed in the theoretical basis of this study, there are some aspects that deserve to be highlighted. Although, the structure of the balance sheet is not an item indicated by these authors as having differences between BR GAAP and US GAAP, nine companies mentioned something about the notes. Moreover, stock update via the LIFO method and differed taxes were pointed out by the authors as evidence of differences, but differences in the notes of the companies surveyed were not indicated.

During the analysis of the notes, some items appeared in a more dispersed way among the companies and were not discussed in the references. So, this set of differences was named "others". Besides these divergences that are constant with the reference table, others were also seen in analysis of the explanatory notes. Those found are listed in Table 6. In Table 6, 'other' divergences can be seen between Brazilian and American accounting standards observed in the explanatory notes that are not part of the reference table. These are highlighted because they affected a greater number of account groups, that is, those oriented towards adjustments relative to the conversion of local currency (reais) to dollars, deferred taxes and the appraisal of fair value for assets and liabilities. The number of companies affected by the divergence in "others", highlighted as shown in Table 6, is presented in Figure 1. Figure 1 shows that 14 of the 17 Brazilian companies investigated suffered alterations in their financial statements when converted to US GAAP because of adjustments related to deferred taxes. This adjustment is derived from other adjustments such as goodwill, impairment, patrimonial equivalence and recognition of receipts, among others. Every adjustment that alters the value of the result ends up impacting the calculation of tax on this same result, being deferred in the conversion. Besides deferred taxes, other adjustments can be highlighted, such as patrimonial equivalence and the impairment test, observed in seven companies, as well as monetary actualization and the recognition of receipts, which appeared in six companies.

Other adjustments pointed out in Table 6 appeared in a maximum of five companies, in which divergences were observed in just one of the 17 companies investigated. The survey results confirm what Soderstrom and Sun (2007) believe can happen even adopting IFRS rather than local standards. Their belief was that the differences in the quality of accounting disclosure between countries can be maintained because they understand that the quality depends on the overall institutional positioning of the company. Within, the companies surveyed were found in the explanatory notes about the differences between BR GAAP and US GAAP not covered in the literature and the reverse was also found, that is, items addressed in the literature and not found in the explanatory notes of the companies, although they have affected their financial statements.

Conclusions

The objective of this paper is to analyze impacts of the divergences between Brazilian accounting standards (BR GAAP) and the generally accepted accounting principles in the United States (US GAAP), in the recognition, measurement and disclosure of financial statements. Seventeen Brazilian companies listed on BOVESPA, that negotiated American depositary receipts (ADRs) on the New York stock exchange (NYSE) in January 2007, were selected, in order to analyze the impacts in financial statements from 2004 and 2005 sent by companies to BOVESPA and the NYSE. Based on analysis of the values in the 'balance sheet' and the 'statement of results for the fiscal period' from the years 2004 and 2005, it can be stated that the groups most affected were the 'long term realizable asset', the 'current liability' and 'the long term exigible liability', along with the operational profit of these organizations. It can be inferred from what was

Table 5. Variations, in relation to account groups, in financial statements.

Companies					G	irou	ps o	f acco	unts	affe	cted	by di	verge	ence	s fro	m th	e ta	ble c	ot ref	ere	nce				
companies	CA and CL					LTRA and LTEL				. PA					PL						OP and NP				
	3	5	6	7	3	5	6	7	1	2	3	4	8	1	2 3	34	5	6	8	1	2	3	4	56	8
Aracruz Celulose S/A										х		х	х		х	х			х		х		х		х
Banco Bradesco S/A	х	х		х	х	х		х			х	х	х		2	к х	х		х			х	х	х	х
Banco Itaú Holding Financeira S/A				х				х				х	х			х			х				х		х
Brasil Telecom Participações S/A	х	х	х		х	х	х				х	х	х		2	к х	х	x	х			х	х	хх	х
Braskem S/A		х				х						х	х			х	х		х				х	х	х
Cia. Brasileira de Distribuição	х		х		х		х				х	х	х		3	к х		х	х			х	х	х	х
Cia. Energética de Minas Gerais – CEMIG				х				х					х						х						х
Cia. Saneamento Básico do Estado de São Paulo - SABESP		х				х			х				х	х			х		х	х				х	х
Cia. Vale do Rio Doce				х				х				х	х			х			х				х		х
CPFL Energia S/A	х	х	х		х	х	х			х	х	х	х		x	к х	х	x	х		х	х	х	хх	х
Gerdau S/A		х	х			х	х					х	х			х	х	x	х				х	хх	х
Gol Linhas Aéreas Inteligentes S/A				х				х					х						х						х
Perdigão S/A			х	х			х	х	х			х	х	х	х	х		х	х	х			х	х	х
Sadia S/A		х	х	х		х	х	х				х	х			х	х	x	х				х	хх	х
Ultrapar Participações S/A			х				х		х	х		х	х	х	х	х		х	х	х	х		х	х	х
Unibanco Holdings S/A			х	х			х	х				х	х			х		х	х				х	х	х
Votorantim Celulose e Papel S/A		х		х		х		х				х	х			х	х		х				х	х	х
N°. of observations	4	8	8	9	4	8	8	9	3	3	4	14	17	3	4 4	4 1	48	8	17	3	3	4	14	88	17
Legend:	Re	-evalu	latio	n of	asse	ets								Employee benefit plans											
-	Re	searc	h ar	nd de	velo	pme	nt ex	pendit	ures					Fir	anci	al as	sets	-							
		asing				•								Ba	lance	e she	et s	tructu	ıre						
		odwill			,										hers	5 5110									

was discussed that these differences can lead to asymmetry of accounting information and can prejudice the analysis of a company's performance indicators (mainly those indicators involving profitability and debt). This in turn can prejudice investor decisions or the decisions of other users of this accounting information in relation to these companies. However, despite the differences found in the comparative percentage of the sum of the groups' values of accounts based on BR GAAP and US GAAP in all com-panies surveyed, the ANOVA test indicates that none of the groups had t_{Crit} , = 1.782, so it cannot be stated that the differences are statistically significant.

In regard to analysis of explanatory notes, it was observed that the divergences most found were related to 'goodwill' and to the structure of the balance sheet. These divergences mainly affected the groups of 'permanent assets' (goodwill), 'current assets', 'long term realizable assets', 'active liability' and 'long term exigible liability'. One consequence of this is that they also ended up affecting the 'net worth' and 'net profit' of the companies analyzed. This fact was pointed out in

Table 6. Account groups affected by other divergences.

Divergences		Account groups affected by other divergences not found in the reference table												
	CA	LTRA	PA	PL	LTEL	NW	OP	NP						
Conversion	х	х	х	х	х	х	х	х						
Monetary actualization			х			х		х						
Deferred taxes	х	х		х	х	х		х						
Treatment of financial expenses as operational or non-operational							х							
Interest on own capital				х		х		х						
Adjustments from patrimonial equivalence			х			х		х						
Adjustments by gains/losses in the sale of available assets	х					х		х						
Classification of receipts and expenses into operational and non-operational							х	х						
Provision for corporate res-structuring				х		х		х						
Different criteria of capitalization and amortization of loans and financial expenses (SFAS 34)				х	х	х	х	х						
Classification of dividends and interest on the NW				х	х	х								
Classification of certain fiscal incentives directly on the NW or on the result from the period						х		х						
Classification of the participation of employees in profits as an operational expense or as an appropriation of profit at the end of the period						х	х	х						
Valorization of long term assets (impairment test)			х			х		х						
Recognition of receipts				х	х	х	х	х						
Classification of pre-operational costs			х			х	х	х						
Accounting of obligations regarding environmental assets (SFAS 143)				х	х	х		х						
Capitalization of operational costs			х			х	х	х						
Depreciation			х			х	х	х						
Capitalization of financial costs in constructions underway			х			х	х	х						
Effects in the acquisition of businesses (evaluation of fair value versus cost value)			х			х		х						
Allocation of employee participation in profits of stock	х					х		х						
Evaluation of fair value for assets and liabilities	х	х	х	х	х	х	х	х						
Treatment of expenses with public stock offerings						х	х	х						
Classification of export notes as a reducer of asset or as liability	х	х		х	х									
Minority participation					х	х		х						
Anticipated expenses	х					х		х						

the prior analysis, when the values of respective account groups from the 'balance sheet' and from the 'statement of results for the fiscal period' were compared and prepared based on the BR GAAP and US GAAP. Therefore, the assumption that significant differences would not be found in the account groups of the financial statements prepared according to the Brazilian and American accounting standards has not been confirmed._In conclusion, generally speaking, it can be stated that the divergences between BR GAAP and US GAAP can cause asymmetry of accounting information between what is published for different users that are spread throughout the world. Depending on the statement that is



Figure 1. Number of companies affected by 'other' divergences observed in explanatory notes of financial statements of Brazilian companies.

being analyzed, based on BR GAAP or US GAAP, these users can make different decisions on the same company. The consequences could be investors mistrusting and weakening of the capital market.

Although, it is necessary to look carefully to the results of this paper, it can be considered that an exploratory study will work as the base for future studies on the subject. The results also reinforce the importance of the international organizations' efforts such as IASB in creating global accounting standards and the discussion on the convergence of accounting standards in each country for the global accounting standards. It is emphasized that the United States and Brazil, and most of other countries in the world, are already promoting the convergence of local standards to IFRS, which will minimize differences like the ones presented in this study. As a matter of fact, the number of countries making the decision of adopting the IFRS has a long way to go in achieving the desired convergence. As already warned by Tarca (2004), the adoption of international standards in replacing national standards is possible, but there is also the option of using it as a supplement or making changes in local rules by using IFRS as a parameter. Each of these strategies will have implications on the quality of the accounting information and its comparability in different countries. Another relevant aspect is the time required for regulatory agencies to define the form and content of agreements and for companies to adjust to the new accounting standards. In 2008, the U.S. Securities and Exchange Commission decided to implement IFRS in 2014, but the discussion about form and content is still in an embryonic stage. In Brazil, the 'Accounting Announcements' Committee' (CPC) was formed in 2005 to make the convergence of local standards to IFRS, making it mandatory for companies in 2010.

Choi and Mueller (1992) have already warned that the accounting disclosure is influenced by the environment, the capital market and the corporate response. However, another factor that was found in this study is the impact of

applied accounting standards. The requirement of a single accounting language to strengthen and expand international relations has become more widely discussed from the globalization of markets and the consolidation of economic blocks. Even though there is a strong trend of adopting IFRS to having a universal accounting language, refinement studies will be needed to address specific issues that affect the accounts of each accounting group. Considering the limitations of the present study, it is recommended that future research should investigate other companies in order to determine the differences in account groups of the 'balance sheet' and the 'statement of result of the fiscal periods' in the conversion of their statements from BR GAAP and US GAAP to IFRS. Analysis of an historical series of financial statements can also lead to different results. It is also recommended that other differences in the identification and measurement of events, resulting from the diversity in accounting standards among countries, should be investigated and consequently, other affected account groups should be considered as well.

REFERENCES

- Bolsa de Valores de São Paulo (BOVESPA). Listed companies. Available as of January 05th, 2007, at http: <http://www.bovespa.com.br>.
- Boudon R (1973). Les méthodes em sociologie. Paris: P.U.F.
- Carvalho LNG, Trapp ACG, Chan BL (2005). 'Disclosure e risco operacional: uma abordagem comparativa em instituições financeiras que atuam no Brasil, na Europa e nos Estados Unidos', Revista de Administração da USP, v. 39, n. 3, p. 264-273, jul./set.
- Castro NJL (1998). Contribuição ao estudo da prática harmonizada da contabilidade da União Européia, Tese de doutorado não publicada, Faculdade de Economia, Administração e Contabilidade da Universidade de São Paulo, São Paulo, Brasil.
- Cia JNS, Santos ES, Cia JC (2008). US GAAP x normas contábeis dos países da américa latina: há diferenças significativas no valor do lucro reportado pelas empresas com ADRs na NYSE? In: Congresso USP de Controladoria e Contabilidade, 8., 2008, São Paulo. Anais ... São Paulo: FEA/USP. CD ROM.
- Choi FDS, Mueller GD (1992). Int. accoun. 2. ed. Prentice Hall.

- Eccles RG et al. (2001). The value reporting revolution: moving beyond the earnings game. PriceWaterhouseCoopers. New York: John Wiley & Sons, Inc.
- Cummings J, Brannen L (2005). 'Waking up to global gaap', Bus. Finance. J.
- Financial Accounting Standards Board (FASB). SFAS 2 Accounting for Research and Development Costs, Available as of April 20th, 2008, at http://www.fasb.org/st/summary/stsum2.shtml.
- Financial Accounting Standards Board (FASB), SFAS 13 Accounting for
- Leases, Available as of April 20th, 2008, at http://www.fasb.org/st/summary/stsum13.shtml.
- Financial Accounting Standards Board (FASB), SFAS 39 Offsetting of Amounts Related to Certain Contracts - an interpretation of APB Opinion No. 10 and FASB Statement No. 105, Available as of April 20th, 2008, at http://www.fasb.org/st/summary/finsum39.shtml.
- Financial Accounting Standards Board (FASB), SFAS 87 Employers' Accounting for Pensions, Available as of April 20th, 2008, at http://www.fasb.org/st/summary/stsum87.shtml.
- Financial Accounting Standards Board (FASB), SFAS 88 Employers' Accounting for Settlements and Curtailments of Defined Benefit Pension Plans and for Termination Benefits, Available as of April 20th, 2008, at http://www.fasb.org/st/summary/stsum88.shtml.
- Financial Accounting Standards Board (FASB), SFAS 109 Accounting for Income Taxes, Available as of April 20th, 2008, at http://www.fasb.org/st/summary/stsum109.shtml.
- Financial Accounting Standards Board (FASB), SFAS 133 Accounting for Derivative Instruments and Hedging Activities, June 1998, Available as of April 20th, 2008, at http://www.fasb.org/pdf/fas133.pdf. Financial Accounting Standards Board (FASB), SFAS 142 Goodwill and
- Financial Accounting Standards Board (FASB), SFAS 142 Goodwill and Other Intangible Assets, Available as of April 20th, 2008, at http://www.fasb.org/st/summary/stsum142.shtml.
- Gil AC (2002). Como elaborar projetos de pesquisa. 4. ed. São Paulo: Atlas.
- International Accounting Standard Board (IASB), IAS 19 Employee benefits, Available as of April 20th, 2008, at http://www.iasplus.com/standard/ias19.htm.
- Iudícibus, S. (2004) Teoria da contabilidade. 7. ed. São Paulo: Atlas. Hendriksen ES, Van BMF (1992). Accounting theory. 5 ed. Hemewood, Illinois: Rchard D. Irwin.

- International Accounting Standard Board (IASB), Use of IRFS by jurisdiction, Available as of January 20th, 2009, at http://www.iasplus.com/country/useias.htm.
- Lemes S, Carvalho LNG (2009). Comparabilidade entre o resultado em BR GAAP e US GAAP: evidências das companhias brasileiras listadas nas bolsas norte-americanas. Revista Contabilida & Finanças, n. 50, maio/ago.
- Malacrida MJC, Yamamoto MM (2006). 'Governança corporativa: nível de evidenciação das informações e sua relação com a volatilidade das ações do Ibovespa', Caderno de Estudos, FIPECAFI, Edição Comemorativa, set.
- New York Stok Exchange (NYSE). Information for listed companies. Available as of January 05th, 2007, at http: <http://www.nyse.com/audience/listedcompanies.html>.
- Niyama JK (2005). Contabilidade internacional. São Paulo: Atlas.
- PriceWaterhouseCoopers (PWC). Semelhanças e diferenças IFRS x US GAAP x práticas contábeis adotadas no Brasil. Available as of November 21th, 2006, at em http://www.pwc.com.br.
- November 21th, 2006, at em http://www.pwc.com.br. Radebaugh LH, Gray SJ (1997). International accounting and multinational enterprises. 4. ed. Boston: Wiley & Sons.
- Soderstrom NS, Sun KJ (2007). IFRS adoption and accounting quality: a review. Eur. Account. Revi. 16(4): 675-702, Dec.
- Tarca A (2004). International convergence of accounting practices: choosing between IAS and US GAAP. J. Int. Financ. Manage. Account. 5(1): 60-91.
- U. S. Securities and Exchange Commission (SEC). SEC proposes roadmap toward global accounting standards to help investors compare financial information more easily. Available as of January 12th, 2009, at http://www.sec.gov/news/press/2008/2008-184.htm.
- Weffort EFJ (2005). O Brasil e a harmonização contábil internacional: influências dos sistemas jurídico e educacional, da cultura e do mercado. São Paulo: Atlas.
- Wong KS, Ho SSM (2003). 'Preparer's perceptions of corporate reporting and disclosures', Int. J. Disclosure. Governance. 1(1).