RESUMO

Neste trabalho são apresentadas evidências da relevância dos números contábeis dentro da estrutura de Ohlson. Meus resultados sugerem que os valores de patrimônio são superiores aos do lucro em termos de relevância. Também são demonstrados que o resultado contábil não incorpora o resultado econômico de forma conservadora (assimetricamente). Esses resultados são consistentes com a hipótese de que em uma estrutura de mercado de capitais na qual a concentração da propriedade é alta os lucros são menos eficientes como redutores da assimetria informacional do que os valores de patrimônio que permanecem relevantes devido a implicações legais.

PALAVRAS-CHAVE

Mercados emergentes; Assimetria informacional; Valor relevância; Reconhecimento assimétrico.

ABSTRACT

I present evidence of the value relevance of Brazilian accounting numbers under the Ohlson framework. My results suggest that book values are superior to earnings in terms of value relevance. I also show that accounting income does not incorporate economic income in a conservative way (asymmetrically). These results are consistent with the hypothesis that under the very concentrated ownership capital markets system in Brazil accounting earnings are less useful as information asymmetry reducers while book values remain relevant due to legal implications of Brazilian corporate law.

KEY WORDS

Emerging markets; Information asymmetry; Value relevance; Asymmetric recognition.

SUMMARY

CONSERVATISM AND ASYMMETRIC RECOGNITION: SOME EVIDENCES FROM BRAZIL

Alexsandro Broedel Lopes

I. INTRODUCTION

How relevant is accounting information in emerging markets? Does the information and structural problems so common in these markets increase or decrease the relevance of accounting information? In such as inimical circumstances, as these markets are normally involved, the value relevance is concentrated in earnings or book values? Questions like these remain basically unanswered due to a lack of theoretical background for establishing the relevance of accounting information in emerging (inefficient?) markets. This paper try to help in this debate by providing some evidence on the value relevance of accounting information for the São Paulo Stock Exchange using Brazil as a proxy for an emerging market.

This work is of interest for two basic reasons. First, it provides empirical evidence about Brazil which remains relatively unknown to accounting literature despite its economic relevance. Brazil is of interest not just by curiosity. Several aspects of the Brazilian economy and its accounting system are unorthodox, at least, being its system for inflation adjustment in financial statements just one example. This aspect will become clearer in the section III below. Second, this work relates directly to the information economics literature in the sense that this framework explains most of the findings reported. Earnings are seemed, as reducers of information asymmetry and of little use for investors in a country like Brazil where concentrated ownership is the rule not the exception. It also relates to the recent work of Ball et all (2001) that relates conservatism to the general common vs. code law debate.

My findings show that accounting numbers are reasonably informative in Brazil. I use the Ohlson (1995) model, as a framework to test relevance is a cross-sectional analysis. However, contrary to prior research, this relevance is concentrated in book values instead of earnings. Earnings are quite useful, because of the information content of accruals Barth et all (2001), as reducers of information asymmetry. This function is useless in Brazil because managers and owners are, normally, the same group or, at least, have the same access to privileged information compared to ordinary investors. As expected those earnings fail to incorporate economic income in a result consistent with the findings of Ball et all (2001).

The remaining of the paper is organised as follows: section II is designed to put this work in the context of prior research; section III provides a description of the Brazilian corporate financial reporting system; section IV describes the models used as well as the hypothesis to be tested; section V presents the data and the results and section VI concludes the paper.

II. RELATION TO PRIOR RESEARCH

The value relevance of accounting information in an international context recently has been the focus of some interest in the financial accounting literature. The reasons for this interest are quite diverse but are generally related to a wish to improve the understanding of the impact of institutional factors on the relevance of accounting. This topic has some importance for accounting theory because some countries, specially the emerging ones, provide a laboratory to test existing theories under environments that are intrinsically different from the realities of the US and some Western European countries which have been more investigated. Additionally, new theories may emerge as a consequence of the understanding of these weird realities. The empirical literature in this area has presented two major venues: comparisons of the relevance of domestic vs. US-GAAP adjusted information and purely domestic studies which, sometimes, compare results across markets, but always using the domestic securities' market as the major benchmark. Chan and Seow (1996) and Davis-Friday and Rivera (2000) are good examples of the first stream. Harris et all (1994) and Ball et all (2001) are examples of the second venue. This work contributes to second stream by comparing results obtained using purely domestic information with those obtained in other studies performed in more developed markets.

Accounting theory has been relatively silent on the role of accounting in (possibly) inefficient and emerging markets. One could expect accounting to be less relevant in those markets because price fails to reflect information due to a variety of market problems. However, information sources are less available in those markets (possibly) making accounting information relatively more important than other sources are in more developed markets. These two effects seem to have diverse effects and only empirical evidence could contribute to solve this apparent puzzle.

Ali and Hwang (2000) found strong relationships between the value relevance of accounting and some country-specific factors. Initially, they found that value relevance is lower for countries with bank-oriented (as opposed to market oriented) financial systems. In those countries there is a lower demand for accounting information because banks and other stakeholders have direct access to information. In those countries accounting information has no role as a reducer of information asymmetry.

Second, they found that value relevance is lower for countries where private-sector bodies are not involved in the standard setting process. This is the result of government bodies, which establish rules, whose primary purpose is to satisfy regulatory needs instead of investor’s demands.

Third, they found that value relevance is lower for countries that adopt a Continental model than for British-American model countries. This fact is, basically, motivated by the fact that in Continental model countries investors are not seen as the primary users of accounting information; or at least they are not seen as such by the regulatory bodies.

Fourth, they found that value relevance is lower in countries where tax rules significantly influence financial accounting rules. This finding derives from the fact that tax rules reflect a broader scenario of political and cultural influences.

Fifth, they found that value relevance is higher when more is spent in external auditing. In such a structure the amount paid to external auditors reflects the importance of external investors.

This work also contributes to the debate initiated by Ball and Shivakumar (2001). They argue that earnings quality is a function of demand and not of accounting rules. They based this conclusion on results showing that earnings quality is lower in private UK companies than in public ones due to different economic functions of financial reporting in the two groups. According to them “Private companies are more likely to resolve information asymmetry by an insider access model. They are less likely to use financial statements in contracting with lenders, managers and other parties, and for equity valuation. Their financial reporting practices are correspondingly more likely to be influenced by taxation and dividend policies. These differences imply a demand for financial statements of lower quality, where we define quality in abstract terms as the usefulness of the financial statements for contracting, monitoring, valuation and other decision making by investors, creditors, mangers and all other parties contracting with the firm”. In Ball and Shivakumar (2001) paper two effects are studied together. Their sample is composed of private firms with a great concentration of ownership, a situation very common. In that sense it is not possible to define, a priori, why accounting is less informative. It may be because of absence of trading or concentration. In this paper I show that concentration is the major point. Using a sample of Brazilian firms which are traded but have few shareholders I show that trading alone is not enough for demanding high quality accounting earnings.

I contribute to a growing literature on international accounting which includes Jacobson and Aaker (1993), Alford et all (1993), Amir et all (1993), Bandyopadhyay et all (1994), Harris et all (1994), Joos and Lang (1994), Barth and Clinch (1996), Pope and Walker (1999), Ball et all (2001) and Chan and Seow (1996).

III. AN OVERVIEW OF THE BRAZILIAN ACCOUNTING SYSTEM AND CAPITAL MARKETS

1. BRAZILIAN CORPORATE FINANCIAL REPORTING SYSTEM

Modern Brazilian Corporate Financial Reporting System can traced back to 1976 with the issuance of the Company Law (*Lei das Sociedades por Ações*). At that time the military government issued a relatively sophisticated company's law to trying to foster the development of a emerging capital market. In the same year the government created the Brazilian Securities and Exchange Comission (CVM) to regulate capital markets in Brazil. This function was previously with the Central Bank of Brazil. With the new structure the Law established the major accounting guidelines and the CVM was in charge of specific guidance on more technical aspects. In addition to compliance with the Law and CVM specific requirements Brazilian companies have to hire external auditors to verify the compliance of their accounts to Brazilian GAAP. Financial institutions continued to be regulated by the Central Bank which issued a Plan of Accounts (COSIF) to orient their accounting policies. Those financial institutions are held in a dual regulatory scheme that frequently results in conflicts. In addition, the Brazilian Institute of Accountants (IBRACON) also issues statements that are generally considered to be GAAP. The major aspects approached by the Brazilian Company Law can be summarised as follows:

- Inventory: lower of acquisition cost or market value. Finished goods and work in progress are stated at the lower of production cost or market value. Agricultural and minerals are carried at market values when reliable values are available. Obsolete items should be carried by their realizable value. Cost refers to all applicable expenditures and charges directly or indirectly incurred to in bringing an item to its existing condition and location. Cost can be determined based on a FIFO, LIFO or average cost method. However, LIFO is not accepted for tax purposes and consequently is not often used.

- Depreciation: no specific depreciation method is recommended but any method chosen must be applied consistently. The useful lives of the assets should be revised and so the depreciation rates. However, usually enterprises adopt fiscal rates that are deductible for tax purposes.

- Statement of Cash Flow: the statement of changes in financial position is required and the statement of cash flows must be disclosed as supplementary information. Cash equivalents include all types of accounts which posses the same liquidity characteristics as cash. Those cash equivalents are highly liquid short term investments. The classification is the usual one separating cash equivalents in operating, investing and financing activities.

- Extraordinary items, prior period adjustments, changes in accounting policy and accounting estimates: those items (net of income tax) must be segregated from income from ordinary operations and must be reported as a separate line item in the income statement. Those events must unusual in nature and not be expected to occur frequently as well as being material. Adjustments to the opening balance of retained earnings are permitted for corrections of errors in prior periods and changes in accounting policies. The effects of changes in the accounting practices are classified as prior year adjustments. The financial statements are not restated. Depreciation method changes is not treated as a change in accounting policy.

- Research and Development Expenses: may be capitalised as a deferred asset. Those costs must be valued at cost less accumulated amortisation. Tax legislation requires a minimum amortization period of 5 years, while accounting legislation allows for a maximum amortization period of 10 years. This amount must be written off immediately if there doubts with respect to recoverability of the amount.

- Contingencies: must be accrued when the likelihood of its occurrence is considered probable and when its value can be reasonably estimated. Gains contingencies should not be accrued in the financial statements but disclosure is recommended.

- Post period events: should be disclosed if significant. No adjustments to financial statements are required.

- Income Taxes: the liability method should be used and a deferred tax liability should be recognised in relation to all taxable temporary differences.

- Construction contracts: three methods can be used. Percentage of completion, completed contract and instalment method can be used to contracts with an expected completion period greater than 12 months. If the contract income cannot bee reliably measured, revenue is recognised to the extent of costs incurred, that are recoverable.

- Property, plant and equipment: should be recorded at historical costs including those financing costs directly attributable to the contract. Revaluation above historical cost is allowed and revaluation reserve is credited as equity. There are no specific requirements for real estate investments. A provision for devaluation may be required if the carrying amounts are higher than its realization amounts.

- Segment reporting: information by segment is not required.

- Leases: all leases are considered to be operating leases. Sales revenue in a sale and leaseback transaction is recorded at nominal value, regardless of the circumstances. Certain disclosures are required in explanatory notes.

- Revenue recognition: is recognized when the process of revenue realization is complete or virtually complete and a transaction has occurred. Software revenue is not addressed in Brazilian GAAP.

- Retirement benefits: the method used is the projected unit credit method. The total cost is the entire periodic change in the plan liabilities less assets, aside from certain changes not fully recognized.

- Government incentives: are recorded when received or granted and are not associated with the life of the project or sale. All incentives are recorded as a capital reserve in equity.

- Foreign exchange: are recorded in domestic currency at the exchange rate on the transaction date. Monetary items should be adjusted to reflect the exchange rate. Those items are to be presented in the income statement. However, recently the Brazilian Securities and Exchange Commission (CVM) allowed losses from foreign currency liabilities to be deferred.

- Business combinations: there is no clear definition of the date to be adopted and the acquisition date is normally used. The basis is cost and differences between costs and carrying amounts are recorded as goodwill. The positive and negative goodwill should be recorded along with an indication of the economic justification.

- Investment in associates: an associate is an investee in which a company retains 10% share in capital. The equity accounting is used for valuation of the relevant investment in each associate and or its equivalent when the investor has influence in the management or its retains directly or indirectly more than 20% share of participation.

- Consolidation: consolidation is required for publicly held companies including joint ventures and holding companies which retain investments in publicly held companies.

- Joint ventures: the assets and liabilities, revenues and expenses are recognised proportionally to the equity interest of each investor and consolidated in their respective financial statements.

- Financial Instruments and Derivatives: there are specific requirements for accounting for financial instruments. Only disclosures as to the market value of certain financial instruments are required. Exception is derivatives held by financial institutions which have to follow the COSIF.

- Intangible assets: can be classified as deferred assets.

- Pre-operating stage: all costs are capitalised as deferred assets. The amortization period cab be extended over a minimum of 5 years (tax law) and a maximum of 10 years (Corporate Law).

Despite this rigid structure sometimes the Law is simply not considered. Recently, in two opportunities, the CVM issued statements allowing deferment of exchange related expenses over a period of several years. The previous regulation clearly expressed that such items should be accounted for in the same period of the devaluation and not deferred for years to come. The justification of this action was that the devaluation of the Brazilian currency the Real would cause unrealistic losses for companies.

The Real Plan, which was implemented in 1994, was an (successful) attempt to control inflation in Brazil. Inflation levels dropped from more than one thousand percent in 1993 to very lower levels in 1994 and 1995. After 1995 the Ministry of Finance stop allowing the use of the Brazilian Method for Inflation Adjustment (BMIA) which. Clearly the profession was not consulted regarding this aspect.

Another important feature of Brazilian accounting is the influence of tax legislation. In almost all important matters, as can be seen from the above description, tax rules have direct influence in the numbers reported. Representants of the profession in Brazil clearly recognize this reality. Da Costa (1993:13) commenting on the financial statements produced in Brazil: "*are used with little effectiveness by corporations that usually comly merely with their legal obligations*".

Given this structure the Brazilian Corporate Financial Reporting System can be analysed under the findings of Ali and Hwang (2000). First, Brazil has a bank-oriented system where domestic capital markets have an insignificant role in providing funds for companies. The recent flow of Brazilian companies to US markets through American Depositary Receipts is just a sign of that phenomenon. Second, private sector bodies are irrelevant in setting accounting rules in Brazil. Ultimate power remains in the government and the major accounting orientation is still a Corporate Law, which requires Congressional approval. Third, Brazil has clearly a Continental model accounting system despite the strong US influence in business in Latin America. Fourth, tax rules are dominant in Brazil. Companies typically present their financial statements according to tax regulations despite the arbitrary motivations of some of those regulations. The fifth aspect cannot be determined in this study since I do not have reliable evidence on how much money is spent on external auditing. Additionally, some aspects of capital markets in Brazil add to this inimical scenario. The section below discusses these last features.

2. BRAZILIAN CAPITAL MARKETS

This work does not intend to provide an exhaustive coverage of Brazilian financial markets. Only aspects considered to be relevant to the determination of the relevance of accounting information were considered. The general conditions of functioning and corporate governance in Brazil have a direct impact on the demand for accounting information. The most important aspects are described below:

Shareholder's Control and Institutional Factors: the structure of shareholder control is a central point for understanding of the accounting role in capital markets. Two aspects are especially relevant: (i) concentration of voting capital and (ii) minority treatment. The firs aspect is relevant because one of the most important roles of accounting in capital markets is to reduce information asymmetry. The bigger the concentrations of voting capital lower the demand for accounting information. In Brazil the capital is extremely concentrated and managers and owners are normally the same persons or institutions. Clearly those shareholders do not demand accounting information. The minority treatment is relevant because minority shareholders typically demand accounting information and for those accounting is more likely to be the primary source of information. Minority shareholders are typically less sophisticated investors. The literature already recognizes conflicts of interest between controlling shareholders and minority shareholders. According to Gomes (2000:615-616): *"this problem arise in some countries for two reasons: (1) the corporate governance structure of public companies insulates large shareholders- that is, those with a majority of votes and often with an involvement on the firm's management- from takeover threats or monitoring; and (2) the legal system does not protect minority shareholders because of either poor laws or poor enforcement of laws. Despite the lack of protection for minority interests, the average ratio of stock market capitalization held by minorities to gross national product is greater than 40 percent for a sample of 49 countries. This raises the question of why people are willing to be minority shareholders when they know that neither corporate governance mechanisms, such* *as takeovers and monitoring, nor laws protect them from expropriation by large shareholders…the answer to the puzzle about people's willingness to be minority shareholders is: firms can sell shares to minority shareholders even without an explicit mechanism of governance because managers are able to commit implicitly no to expropriate shareholders. In other words, managers can develop a reputation for treating minorities shareholders well".* In Brazil the concentration is enormous. According to Economatica (in Gazeta Mercantil, 2000) in most companies which only posses voting shares, 70% of the shares are in the hands of just one shareholder. According to Mackinsey (2000) 95% of all companies traded in the São Paulo Stock Exchange (BOVESPA) have 3 or less shareholders with 50% or more of the voting rights. Brazilian capital markets have been gradually losing room as a source of funds for companies. In 2000 seven public companies turned to be private: Agrale, White Martins, Arno, Durex Industrial, Abril, Ceval and Lojas Brasileiras. According to LUZ (2000) majority shareholders are have been expropriating minority shareholders in several ways including the sale of assets below market values to companies which are owned by director's of the parent's company, employment of unqualified personnel, implementation of projects to benefit company's executives and the classical problem of high salaries. Nowadays there is a project in Brazilian Congress to modify the Corporations Law to allow for better treatment for minorities. Primitiveness in Brazilian institutions is well observed by the literature as Anderson (1999) comments: "Brazil's institutions are far from primitive, but they appear insufficiently developed to substantially assist parties to financial contracts. First, Brazil has a civil-law legal tradition, characterized … as an impediment to external financing in general. The Brazilian legal system, in particular, does not imply the principle of stare decisis and the judiciary is regarded as inefficient and sometimes even corrupt. Second, the quality of disclosure by Brazilian firms is perceived to be low. South American accounting practices are dominated by the legal and administrative systems inherited from the Iberian colonizers and the 'higly political environment that result from such systems'. Third, ancillary institutions are weak. Fourth, thin trading and volatile pricing characterize Brazilian financial markets. Finally, Brazilian regulators do not provide the same guarantee of financial system soundness as that enjoyed in developed countries. Reflecting Brazil's weak institutional environment, Transparency International's Inaugural Corruption Perception Index ranked Brazil 37th out of 41 rated countries".

Sources of Funds: the sources of funds to firms are fundamental to the understanding of the role of accounting. Despite the fact that both providers of debt and equity use accounting information they differ significantly. In Brazil the scenario is dominated by credit policies as Studard (2000: 15) comments "since the 1950's, the financing of economic development in Brazil has relied significantly of selective credit policies, inflationary financing and external saving. We claim that in the 1990's and for the first time in its post-war history, due to the developments both in the international and in the domestic financial markets, there existed opportunities to develop non-inflationary private sources of long term finance and to reduce its dependency on foreign savings. These opportunities have been so far spared due to the lack of policies towards enhancing the some of the positive aspects of recent developments in Brazil's financial systems, and avoiding excessive volatility and instability of financial markets".

State Participation in the Economy: the atrophy of the private sector in providing funds for firms in Brazil is also a function of the participation of the Brazilian government in the economy, which is quite high. According to Anderson (1999:54) "…the government frequently responds to high inflation, volatile growth and capital flight with sweeping heterodox policies characterized by reliance on wage and price controls. These economic plans (Cruzado Plan, 1986; Bresser Plan, 1987; Summer Plan 1989; Collor I, 1990; Collor II, 1991; Real Plan, 1994) substantially revise the fundamental rules of the game for transactions among private parties. In particular, these plans often unilaterally amend contract terms, particularly inflation indexation. These plans affect a financial contract directly when its terms are altered by government fiat and indirectly when other contracts are manipulated.

This overview of the Brazilian accounting system and capital markets clearly indicates that accounting information is expected to be of low quality due to both the conditions in the profession and the capital markets structure.

IV. MODELS AND HYPOTHESIS

Given the level of development of capital markets in Brazil and the current state of the profession in the county I raise the hypothesis that accounting information will not be value relevant. I raise the hypothesis that the level of information asymmetry in the country is extremely low causing earnings to be of low relevance to investors.

Initially I test the relevance of earnings and book values in the structure provided by Ohlson (1995) and used by Collins et all (1997) and Harris et all (1994). Using the cross sectional and pooled time-series and cross section regression below.

(1) $\boldsymbol{P_{jt} = w_{0t} + w_{1t}BV_{jt} + w_{2t}EARN_{jt} + \varepsilon_{jt}}$

Additionally, I decompose the above regression to test the relevance of book values and earnings isolated as suggested by Collins et all (1997).

(1.1) $P_{jt} = w_{0t} + w_{1t}BV_{jt} + \varepsilon_{jt}$

(1.2) $P_{jt} = w_{0t} + w_{2t}EARN_{jt} + \varepsilon_{jt}$

This second specification is designed to investigate the role of earnings to explain securities' behaviour in Brazil.

Additionally I use the specification used by Harris et all (1994) to evaluate the role of accounting earnings to explain returns. Initially, in terms of earnings:

(3) $(P_{jt} - d_{jt} + P_{jt-1})/P_{jt-1} = \alpha_{0t} + \alpha_{1t}(Earn_{jt} - Earn_{jt-1})/P_{jt-1} + \alpha_{2t}(Earn_{jt})/P_{jt-1} + \varepsilon_{jt}$

My results demonstrated that most of the relevance present in accounting numbers is due to book values instead of earnings. To investigate how effectively accounting income incorporates economic income, I use the structure developed by Basu (1997) and used in an international context by Ball et all (2000). This specification is designed to confirm the irrelevance of earnings to incorporate economic income.

(4) $NI = \beta_{0t} + \beta_{1t}D + \beta_{2t}R + \beta_{3t}DR + \varepsilon_{jt}$

This last test was designed to provide additional evidence of the ineffectiveness of economic income incorporation by accounting income. In our hypothesis this inability to incorporate economic income causes accounting earnings to be irrelevant.

V. DATA AND EMPIRICAL RESULTS

1. DATA AND DESCRIPTIVE STATISTICS

The sample was selected from the Economática database from the period of 1995-1999. In 1993 the Plano Real was implemented and reduced inflation to levels of 5 to 7% a year. So, this period was the first, in Brazilian post-war history, that inflation declined to acceptable levels and economic stabilization was fully implemented. The sample show a high standard deviation, which confirms the variability of firm's size and industry classification traded in the São Paulo Stock Exchange (BOVESPA).

Table 1

Descriptive Statistics

Variables	Mean	Stand. Dev.	Median	Max	Min
Prices	3.31	20.66	0.05	137.54	0,00
BV	3.19	125.76	0.11	286.71	-162.11
Earnings	-0.78	11.71	0.00	65.80	-3,639.52
Economic Income	18.33	106.40	-11.27	904.50	-92.89

2. RESULTS

The results presented in table 2 show that accounting numbers are significantly relevant to explain prices. This relevance, however, declines quite substantially during the period analysed. Those results indicate that accounting information remains fully relevant despite the characteristics of the corporate governance structure and capital markets in Brazil. The steady reduction in R^2 is not explained in this paper.

Table 2

Tests of Relations between Prices and Accounting Variables

$$P_{jt} = w_{0t} + w_{1t}BV_{jt} + w_{2t}EARN_{jt} + \varepsilon_{jt}$$

	w_{ot}	W_{1t}	w_{2t}	R^2
1995	-O.35 (-1.70)***	0.42 (39.14)*	7.27 (28.51)*	0.98
1996	0.61 (1.69)***	0.41 (18.62)*	0.34 (4.30)*	0.67
1997	1.04 (2.09)**	0.47 (13.31)*	-0.06 (-1.11)	0.51
1998	1.18 (3.11)*	0.25 (12.57)*	-0.25 (-10.76)*	0.46
1999	5.46 (5.10)*	0.43 (6.31)*	-0.60 (-1.87)***	0.16
Pooled	2.00 (6.25)*	0.34 (22.13)*	-0.30 (-11.04)*	0.36

Table 2 (continued)

Tests of Relations between Prices and Accounting Variables

$$P_{jt} = w_{0t} + w_{1t}BV_{jt} + \varepsilon_{jt}$$

	w_{ot}	w_{1t}	R^2
1995	-0.09 (-0.13)	0.56 (16.07)*	0.79
1996	0.64 (1.69)***	0.35 (19.45)*	0.65
1997	1.04 (2.09)**	0.48 (14.52)*	0.51
1998	1.09 (3.99)*	0.10 (5.62)*	0.13
1999	5.57 (5.18)*	0.45 (6.58)*	0.15
Pooled	2.24 (6.67)*	0.33 (20.57)*	0.29

Table 2 (continued)

Tests of Relations between Prices and Accounting Variables

$$P_{jt} = w_{0t} + w_{1t}EARN_{jt} + \varepsilon_{jt}$$

	w_{ot}	w_{1t}	R^2
1995	0.99 (0.99)	11.82 (10.60)*	0.62
1996	1.62 (2.77)*	-0.56 (-5.52)*	0.13
1997	2.24 (3.34)*	-0.31 (-4.33)*	0.08
1998	2.05 (4.05)*	-0.04 (-2.13)**	0.02
1999	6.50 (5.70)*	-0.86 (-2.52)**	0.02
Pooled	3.09 (8.07)*	-0.28 (-8.43)*	0.06

The results of the two remaining specifications in table 2 two show that most of the relevance of accounting numbers is due to book values and not earnings. This result is fully expected given the Brazilian corporate governance structure and capital markets. These results confirm earnings low relevance when compared to book values in Brazil. This specification emphasizes the tradeoff, in the value relevance framework, between earnings and book values. In this work this tradeoff is explained in terms of information asymmetry and transmission.

The results presented in table 3 confirm that earnings, as expected, do not explain returns. These results demonstrate clearly the low quality of earnings in Brazil that confirms the idea that earnings are not used as an efficient mechanism to reduce information asymmetry. Table 3 shows that this is true for earnings and earnings changes as well. The coefficients are significant, in the pooled regression, but the R^2s are insignificant.

Table 3

Tests of Relations between Returns and Reported Earnings

$$(P_{jt} + d_{jt} - P_{jt-1})/P_{jt-1} = \alpha_{0t} + \alpha_{1t}(Earn_{jt} - Earn_{jt-1})/P_{jt-1} + \alpha_{2t}(Earn_{jt})/P_{jt-1} + \varepsilon_{jt}$$

	α_{0t}	α_{1t}	α_{2t}	R^2
1996	6.74 (23.72)*	-0.06 (-0.71)	0.16 (1.15)	0.01
1997	5.90 (17.00)*	0.58 (3.40)*	-0.15 (-1.88)***	0.09
1998	4.91 (10.10)*	0.37 (1.38)	-0.89 (-2.52)**	0.12
1999	7.24 (26.07)*	0.15 (2.20)**	-0.15 (-2.41)**	0.03
Pooled	6.72 (40.61)*	0.11 (2.28)**	-0.10 (-2.37)**	0.02

In table 4 the asymmetric recognition of earnings and book values is evidenced. The results show that, as expected, accounting income does not incorporate economic income in a meaningful way. This feature confirms the low quality of earnings and those numbers are not conservative, as expected. Several additional specifications were tried to observe if this low quality was sector dependent or corporate governance dependent (was suggested in the initial project). The empirical evidence is not favorable to this hypothesis showing that earnings are not conservative.

Table 4

Contemporaneous Association between Earnings and Returns

$$NI = \beta_{0t} + \beta_{1t}D + \beta_{2t}R + \beta_{3t}DR + \varepsilon_{jt}$$

	β_{0t}	β_{1t}	β_{2t}	β_{3t}	R^2
1996	-0.08 (-0.09)	1.40 (1.04)	0.00 (0.88)	0.08 (2.73)*	0.05
1997	-0.56 (-0.46)	-0.33 (-0.15)	0.01 (0.63)	-0.00 (-0.08)	0.00
1998	0.23 (0.05)	0.43 (0.07)	0.00 (0.01)	0.06 (0.53)	0.01
1999	-0.28 (-0.87)	-1.03 (-1.14)	0.00 (1.05)	-0.01 (-0.57)	0.01
Pooled	-0.17 (-0.24)	1.11 (0.93)	0.00 (0.37)	0.06 (2.62)*	0.01

VI. SUMMARY AND CONCLUSIONS

This paper evaluates the value relevance of accounting information in Brazil. Using a sample of firms traded at the São Paulo Stock Exchange (BOVESPA) this paper shows that earnings are not relevant to explain returns and that accounting income does not incorporate significantly economic income. These results confirm the hypothesis that earnings in Brazil are of a low quality not being used to reduce information asymmetry. This confirmation contributes to the idea that quality of earnings is a function of the demand for accounting information. This demand is clearly low in Brazil given its corporate governance structure and capital markets. Companies in Brazil are publicly traded and despite this fact earnings continue to be irrelevant. This irrelevance of earnings contrasts with the importance of book values to explain prices as showed. The major point in this conclusion is that trading itself is not enough to make accounting relevant. Concentrated ownership seems to dominate trading in the determination of accounting quality. This is the paper's major contribution to the literature.

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