# ENTERPRISE VALUE AND DISCLOSURE LEVEL: EVIDENCES IN THE BRAZILIAN MARKET

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#### **Abstract**

There is a strong tendency in global markets towards an enhanced level of corporate transparency regarding the activities of companies and, as a result, information on their performance. The Purpose of this study is to analyze the relationship between greater disclosure levels and shareholder value creation. Increasing levels of disclosure are required from companies' management before shareholders and the society in general. Obscure practices that fail to take into consideration the best interests of shareholders increase risks and cause shares to lose liquidity. The São Paulo Stock Exchange's "Novo Mercado" ("New Market") emerged from the intent to improve the Brazilian stock market by adopting best practices in corporate governance, adding transparency to disclosed information, and heightening the respect for the interests of shareholders, whether they may be minority or not. The "Novo Mercado" intends to foster a differentiated environment in which companies committed to corporate governance are recognized and can benefit from better stock prices, resulting in lower placement costs and increased liquidity. Our research will assume that companies with American Depositary Receipts -ADRs are committed to a higher level of disclosure as a result of the requirements of the Security Exchange Commission - SEC, and the Financial Accounting Standards Board - FASB; an empiric study about these firms will be performed. We will determine, through a Study Event concerned with cases where ADR have been issued, which consequences of the commitment to higher levels of disclosure as regards shareholder are responsible for value creation, and what are the reflections on the stock price quoted in the Brazilian market.

**Keywords:** American Depositary Receipt (ADR); Differentiated Levels of Corporate Governance; Disclosure; Financial Accounting Standards Board (FASB); Internacional Accounting Standards Board (IASB); New Market; Security Exchange Commission (SEC)

#### I. Introduction

Informational asymmetry in the stock market has a marked impact on enterprise valuations and investor interest. Investors wish to reduce the insecurity and uncertainty that affect their decisions by being aware of risks and mitigating or eliminating them where possible. It is therefore very important for companies to increase the transparency of their financial statements.

One of the great challenges in the field of Accounting is establishing the quality and quantity of information that meets the needs of the users of financial statements. Footnotes are information that supplement financial statements and may be descriptive or provide analytical charts.

A key issue here is which information companies should offer to supplement financial statements. In the Brazilian case, the Corporations Law (Law No. 6.404/76) provides general guidance and the notes that

must be included with financial statements. The *Comissão de Valores Mobiliários* (CVM - the Braziliian equivalent of the SEC), in turn, makes recommendations concerning the disclosure of matters it considers relevant for the purpose of better understanding the financial statements.

In Brazil, there is a sense that the information provided to the market are insufficient or low-quality, as compared to other countries such as the United States. We admit that our regulation is inadequate. Which is precisely why the São Paulo Stock Exchange is attempting to implement the "Novo Mercado" and the "Niveis Diferenciados de Governança Corporativa" ("Differentiated Corporate Governance Levels"), and why Congress has been trying to establish a new Corporations Law for several years.

Brazilian companies seem to resist adopting higher disclosure levels. Intending to shed light on this discussion, this paper will attempt to investigate value



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creation at companies that have adopted a more transparent stance.

International accounting standards also address the disclosure of accounting and financial information In the United States, the types of information companies must disclose in addition to financial statements are established by the accounting principles set by the Financial Accounting Standards Board (FASB) and the Securities Exchange Commission (SEC).

Another positive factor is the voluntary disclosure of additional information, a practice encouraged by the Financial Accounting Standards Board (FASB). This entity is going forward with a broad, important project known as "Business Reporting Research Project", whose main purpose is to assist companies in improving their reports and financial statement. The basic assumption underlying the project is that increased disclosure makes capital allocation more efficient and reduces the average cost of capital.

The reasoning of the FASB is that a company's cost of capital is strongly influenced by the transparency level of its accounting and financial information. The cost of capital faced by companies is made up, in part, of a premium to investors that have to do with the potential informational asymmetry between the company and the market.

Therefore, adopting the same perspective as LEUZ & VERRECCHIA (2000), we will analyze Brazilian American Depositary Receipts (ADRs) Issuers. This is due to the fact that these companies sport rather high transparency levels as a result of the Securities and Exchange Commission's requirements to authorize the issuance of ADR for Brazilian companies in the American market.

#### II. Benefits and Costs of Voluntary Disclosure

The main potential benefits relate to the fact that investors benefit from reduced uncertainty, while companies (and their owners) benefit from lower average cost of capital, increased credibility, a better relationship with investors, greater access to liquid markets with stock price fluctuations, and lower risk of lawsuits claiming inadequate disclosure.

The benefits for the economy in general are more effective capital allocation, the effects of the lower cost of capital on investments, and more liquid markets. The potential costs of a wider disclosure policy lie in competitive disadvantages for companies, inasmuch as competitors would have more access to information, and disadvantages in negotiations with suppliers, customers and employees.

# III. Studies on the Benefits of Voluntary Disclosure

Earlier studies on this topic generally reinforce the notion that increased transparency in accounting and financial statements and the consequent reduction in informational asymmetry lead to a lower cost of equity capital by increasing market liquidity and/or reducing uncertainty, thereby enabling companies to create value. Botosan (1997)attempts to relate cost of capital and voluntary disclosure by introducing an index that includes items regarded as helpful to decision-making by investors and analysts. Adopting the index enabled the author to generate a score for each of the 122 sampled industrial companies by assigning marks to each one of the items presented at the footnotes in the 1990 annual report.

The results suggest that, for companies to which the market paid less attention, the cost of capital decreased as disclosure levels rose, after adjustment for risk (measured by the market beta) and company size. The results indicate that companies of this description that provided maximum disclosure, equity capital cost dropped by 9% as compared to others that provided little information. On the other hand, for companies that are traditionally in the market's focus, increased transparency levels did not bring about lower cost of capital.

An article by Sengupta published in 1998 discusses the negative relationship between companies' general disclosure policy and the interest rates they must pay when collecting funds from the market. Companies that investors regard as averse to higher levels of disclosure are assigned a greater risk, which ensures higher risk-premium embedded in interest rates.

The author measured companies' disclosure policy based upon the metrics available at the "Report of the Financial Analysts Federation Corporate Information Committee", with scores ranging from zero to 100 points. He associated the disclosure measure with two corporate indebtedness metrics: "yield to maturity" in new debt security issues (such as debentures, for example), and the effective interest rate on new debt. Based on a sample of 102 companies, his results show that the two cost metrics maintained a negative relationship with the disclosure measure, after adjustments to interest rate determinants such as company-specific risk, loan features, and market conditions.

In another interesting study, Healy, Hutton & Palepu (1999) examined factors relating to improved voluntary disclosure using a 97-company sample in the 1980-1990 period. The results showed that increased disclosure transparency is related to improved stock performance and liquidity, as well as to institutional equity growth.

Leuz & Verrecchia (2000) presented a study of the relationship involving informational asymmetry, market liquidity, and cost of capital by means of analyzing the regulations of the German stock market. German accounting standards are characterized by high measurement and low disclosure levels. The authors argue that, as a result, a significant number of German companies traded in global stock markets have adopted strategies under which their accounting statements are prepared based on the International Accounting



Standards (IAS) or on the U. S. Generally Accepted Accounting Principles (US GAAP). Therefore, the authors believe that adopting such principles enhances a company's commitment to increased disclosure levels.

In Brazil, there is a study by Rodrigues (1999) on the effects of the listing of the stock of Brazilian companies in the American market via ADRs, dealing with three hypotheses, as follows:

- □ The visibility, or "investor recognition" hypothesis prepared by Merton (1987) states that increased visibility reduced total asset risk. The evidence in favor of the hypothesis includes increased market value before the event (listing), with reduced returns, increased stock base, reduced volatility and increased trade volume after the event.
- ☐ The liquidity hypothesis dealt with by Amihud & Mendelson(1988) and stipulating that listing in major markets enhances asset liquidity and, among other results, increased disclosure volume; therefore, returns after the event are lower and the pre-event market values is higher.
- □ Segmentation hypothesis proposed by Alexander, Eun & Janakiranaman (1987) and dealing with asset-pricing models in the context of segmented stock markets, that are subsequently integrated by means of double-listing. It is expected that a double-listed stock's expected return should drop, as long as covariance with the local market portfolio is greater than that with the market where the new listing takes places.

Rodrigues concludes that the investor recognition and the return hypotheses are supported by the results collected by the author. ON the other hand, no empirical evidence was found to support the hypothesis of market segmentation/integration.

## IV. Subject

The main purpose of this study is to determine whether companies with greater accounting and financial information disclosure levels perform better than the market.

Our study assumes that companies that issue ADRs - as with any other means to raise funds - intend to exploit their investment alternatives with an aim to maximizing shareholder value. However, issuing a security abroad may have an additional meaning as - by meeting American legal requirements and making the stock acceptable to international investors by adopting enhanced disclosure levels - companies may be sending a signal to the market that future prospects are good. Therefore, issuing ADRs is expected to create shareholder value represented by increased stock prices in the Brazilian market after adjustment to the market effect.

We will use as proxy the analysis of ADR-issuing companies' excess return as compared to market indexes. Our focus will be on the issue of greater information requirements posed by international accounting standards regulating bodies, particularly at

the time of the placement of stocks in markets other than the original one.

Our hypothesis for the study:

Brazilian companies that have ADRs ib the United States do not perform better than their reference market and, therefore, do not create shareholder value.

In this sense our specific objective includes:

• Establishing a connection among the "*Novo Mercado*", the "Differentiated Corporate Governance Levels", and international standards as regards disclosure of information.

# V. Investigative Methodology

■ The value of ADR-issuing companies will be ascertained by means of an Event Study as per the methodology proposed by CAMPELL, LO & MACKINLAY (1997).

#### Returns measurement and analysis

Data on the daily returns of issuing companies were the basic material for the study. The data were operated as neperian logarithm:

$$R_{i\tau} = Ln \left( \frac{P_{i\tau}}{P_{i\tau-1}} \right)$$

Where:

 $R_{i\tau} \rightarrow \text{Return of asset } i \text{ on day } \tau$ 

 $P_{t}$  Closing price of the share on date  $\tau$ 

Daily market returns, represented by IBOVESPA, in turn - and similarly to stock returns - are operated in logarithmic form. Therefore:

$$R_{m\tau} = Ln \left( \frac{P_{m\tau}}{P_{m\tau-1}} \right)$$

Where

 $R_{m\tau} \rightarrow \text{Return of market } m \text{ on day } \tau$ 

 $P_{\it mt}$  ightharpoonup Closing price of the market (IBOVESPA) on day au

Stock and market returns are used to obtain abnormal (excess) returns,  $AR_{it}$ , relative to expected figures and according to two models: Market Adjusted Returns Model (MARM), and Market and Risk Adjusted Returns Model (MRARM):

MARM 
$$\rightarrow AR_{it} = R_{it} - R_{mt}$$

MRARM  $\rightarrow AR_{it} = R_{it} - (\alpha_i + \beta_i R_{mt})$ 

Concerning model MRARM, parameters  $\hat{\alpha}_i$  and  $\hat{\beta}_i$  are calculated as square minimum over the data for  $R_{it}$  and  $R_{mt}$  for the period between days 386 and 44,



from day 0 of the shareholders' meeting that dealt with the subscription.  $R_{\it mt}$  is the market return on day  $\tau$  .

#### **Observation Periods**

The tests conducted in this study rely crucially on the definition of time "windows" both to estimate models and to measure performance. These windows are described below. One must bear in mind that they are referenced to day "0", that is, the date of the shareholders' or board meeting that deliberated for subscribing new shares:

- ✓ MRARM parameters estimation window for the period between 386 and 44 days of excess returns observation:
- ✓ As regards abnormal returns, we elected periods from 521 to +521 observation days. More specifically, this period is segmented into sub-periods: a) -521 to -261; b) -261 to -20; c) -20 to 0 d); 0 to +20; e) +20 to +261:
- $\checkmark$  As regards the observation of effects in the post-subscription event period, we surveyed abnormal returns in the period +261 to +521.

We will, therefore, test the evolution the ADR-issuing companies' stock prices from the moment they started issuing ADRs to present. Based on the empirical data obtained and the theoretical framework developed, we will perform our analysis of value creation and draw conclusions.

#### Data Treatment

We initially surveyed all companies that filed Depositary Receipts with the CVM. At a second stage, we collected daily series of closing prices with Economática (Equity analisys tool). We then eliminated from the sample all companies that did not have a continuous prices series within the observation window (-521 to +521 trade days). This left us with 51 observations for analysis (listed in table 1).

Subsequently, we performed the excess return calculations (considering the MARM and MRARM models) compared to daily temporal series for IBOVESPA (São Paulo Stock Exchange Index), IBA (Brazilian Stock Index), MSCI-World and one index (Ind+10).

Ind+10 was assembled from the ten most-liquid stocks on the date of the event (of each ADR-issuing stock in the sample). The liquidity was that provided by the Economática service.

## VI. Results

To analyze our hypothesis we built a table with the compounded excess return index (CAR), whose initial value us 1.00 on day 521, evolving by continuous capitalization for each trade day comprised in the observation window.

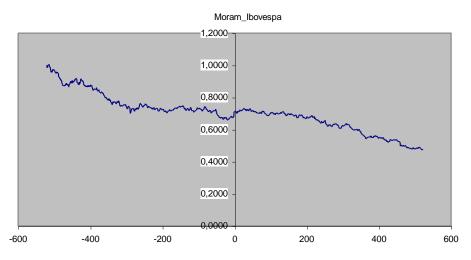
$$\Box \quad Ind \ Car_{(\Box)} = 1.0 \ e^{(\sum \overline{AT_{\tau}})}$$

T-student tests were implemented to verify the hypothesis of null average excess returns, against alternate hypotheses  $\overline{AR}_{\tau} \neq 0$  (double-tail test) and  $\overline{AR}_{\tau} < 0$  (single tail test). The statistics for these tests were calculated based on the parameters for  $\overline{AR}_{\tau}$  distribution estimated for the period [-386; -44].

The tables (omitted) for both models (MARM and MRARM) do not display significantly negative abnormal returns at significance levels of 2.5% or 5.0%. In addition, significantly positive excess returns took place in no trade days.

Our observations lead us to the same conclusions as Furtado (1997) and Garcia (2002) on the market efficiency aspect: no statistically significant evidences were found leading to the rejection of the hypothesis of random distribution around the zero-average of excess returns after the shareholders' meeting.

The graphs (omitted here) plotting the evolution of the CAR (Compounded Excess Return) index for both models and the several observation windows.



Graph A. CAR Index Evolution (base MARM/IBOVESPA) for observation window [-521;+521]





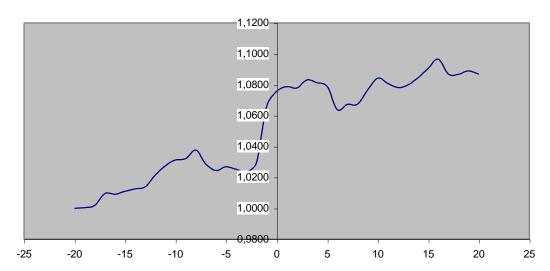


Gráfico B. CAR Index Evolution (base MARM/IBOVESPA) for observation window [-20;+20]

## Momer\_lbov

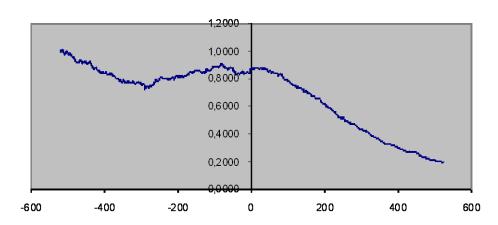


Gráfico C. CAR Index Evolution (base MRARM/IBOVESPA) for observation window [-521;+521]



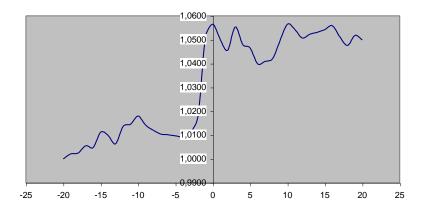


Gráfico D. CAR Index Evolution (base MRARM/IBOVESPA) for observation window [-20;+20]



We were able to determine, by observing the charts that the period in the vicinity of the event sports marked evolution of abnormal returns, indicating that there is a positive effect at the time of the placement of ADRs, but that this effect doesn't persist in the long run

We also observed, as did Euchério (1999), that after the ADR placement event, average excess return drops, which is consistent with his observations.

Statistical tests performed based on the two models (MARM and MRARM) - see the descriptive statistics, attached – showed that average abnormal returns ex-post (based on the different benchmarks) are more acutely negative, confirming the new observations performed above.

#### VII. Conclusions

We observed that longer observation periods for compounded excess returns do not allow rejecting the hypothesis that Brazilian companies with American Depositary Receipts - ADRs in the U.S. market perform no better than their reference market.

However, considering compounded excess returns in the period close to the event of ADR placement - when the market become aware of the company's new status, therefore - there is a positive movement of the stock's return.

We have found evidence that confirms the studies by Euchério (1999), according to which, after the placement of ADRs, average excess return drops, which is consistent with the liquidity hypothesis of Amihud & Mendelson (1988) and the visibility hypothesis formulated by Merton (1987)

Finally, empirical evidence indicates that the performance of the stocks of the set of ADR-issuing companies is better than BOVESPA's corporate governance index and than IBOVESPA, indicating that increased information disclosure leads to shareholder value creation.

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