

## PROPERTY DEVELOPMENT FIRM IPOs IN BRAZIL: WAS THERE OVERPRICING OR NOT?

### *Abstract*

Between September 2005 and October 2007, representative companies of the Brazilian residential real estate market adopted a strategy intended to increase their investment capacity by initial public offer (IPO). The setting at that time was favorable for constructing residential real estate designed for the middle class, in view of two main factors: first, in 2005 a restructuring of the Brazilian finance system had relaxed requirements needed to receive financing for the purchase of residential property and, second, there was substantial demand in the middle class market because most developers had been focusing on the upper class market in order to guarantee the sales resources in the production phase. Thus, to attend the middle-class demand it was necessary to enhance the investment capacity of the real estate companies. These two factors, associated with a favorable outlook for the Brazilian, and as well, the global economy, encouraged those representative companies to rapidly increase their investment capacity by IPO, in a short time. The focus of this article is to analyze the quality of the investments in the stock of these Real Estate companies (21 offers were taken into account in the analysis). In order to identify what these companies' expectations were and how that supported their decisions to enter Bovespa with their designated prices and amounts, correlating offers against the BOVESPA Index (market index) were also analyzed. The results allow concluding that these offers were not supported by validated procedures of pricing, but rather, were just speculative offers, even though we do take into account the investment grade granted to the Brazilian economy within the period concerned in our analysis.

**Keywords:** Initial Public Offerings (IPOs), under-pricing, property investment companies, property development companies.

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## **Introduction**

When the two agencies, Fitch and S&P, conceded the rating of BBB for the Brazilian national debt that elevated the quality of basic investments in reals to the category of *investment grade*. This low level of risk allows international funds destined for otherwise conservative investments in the Brazilian market to have an eye out for better alternatives.

As the two ratings converged in May 2008, the initial reaction from the Brazilian real estate market was one of elation, inflamed by the trade media and on-the-spot financial experts. After all, these now accessible conservative investments represent the bulk of financial resources available for long-term investments. Keeping in mind the main objective of such investments is the preservation of wealth, this means the resources are destined for basic undertakings in the real estate market such as rental properties or residential ventures in the form of mortgage financing for the acquisition of real estate. At the time of this study, there is natural restraint resulting from the current economic insecurity caused by the *sub-prime* mortgage market in the United States.

The migration of such resources is nowhere near immediate, much less these, which are the lowest level of *investment grade*, withstanding the appearance of a new business oasis.

Basic real estate investments are valid for long-term financial return cycles. Although, in Brazil the observed rates of financial attractiveness are considerably higher than those of major markets, freezing resources into concrete and steel for the generation of sustained long-term income is contingent on placing confidence in prolonged cycles of a stable economy and/or demand. On the other hand, the fragility of the documents of analysis attesting to the quality of the real estate opportunities produced by Brazilian businesses is easily recognizable and certainly, is of no stimulus for the conservative money looking for financial safeguards, to anchor itself in Brazil.

Investments in products derived from financing the residential market are dependent on two factors: i. the existence of proven instruments for the securitization of credit portfolios with a performance background and protection from credit risks and ii. the assurance of a strong secondary market where the security bonds can easily be sold/liquefied. Real estate credit in Brazil is in the hands of the banking system and the amount of CRI's, Debentures or shares of FIDC's in circulation does not represent enough volume to warrant confidence in an established market for this segment.

In confronting the evidence that the Brazilian real estate sector warranted an *investment grade* rating, the first strong reaction noted was an increase in stock values of the real estate companies listed in BOVESPA, which is the subject of this paper.

## **IPO's Literature**

Although similar to the objective of this article but with a different focus of analysis, there are articles by some researchers who have evaluated indexes related to the IPO's of real estate businesses outside Brazil. These publications are related to the stocks of REIT's IPO, while the present article considers the indexes of the stock of Brazilian residential real estate businesses.

GERBICH, LEVIS and VENMORE-ROWLAND (1999) assessed the performance of investments in the stock of companies and businesses that invest in the real estate market of the United Kingdom. The indexes of these two business types<sup>1</sup> were compared together with an evaluation of the correlations between their stock indexes with other market indexes, one of which were the indexes of direct investment in real estate (the majority of indexes for direct investment in real estate were taken from investments made by institutional investors of the United Kingdom).

The performance of the IPO's of real estate development companies was also investigated by CHAN, S. H. et al. (2001). In his research, CHAN, S. H et al. (2001), 399 IPO's launched on the Hong Kong stock market between 1986 and 1997 were evaluated in relation to their performance the first day on the market by comparing the IPO's of real estate development companies and the IPO's of businesses unrelated to the real estate market. The conclusion was that their performances are quite similar. Along the same lines, the research of BROUNEN, D and EICHHOLTZ, P (2002) evaluated the response of 54 French, British and Swedish real estate company IPO's the first day on the market and during periods of 12 months between 1986 and 1999 concluding that, although the first day's returns were higher than expected, the accumulated results were negative for periods of 12 months.

DIMOVSKI, W. e BROOKS (2006) evaluated 37 REIT's IPO's in Australia during the period between 1994 to 1999 determining which of those were under-evaluated and which were over-evaluated. Of the 37 IPO's analyzed, 15 were considered to be over-evaluated. Surprisingly, the research concluded that the value of the stock did not present significant variations in relation to its initial price. The authors believe that the main reason for this circumstance appears to be the lack of any capital gains tax if 100% of the profit is distributed as a dividend. This condition facilitates the process of valuation, therefore leading to heightened interest in the stock on the part of institutional investors. Together, these factors reduce uncertainties and consequently the likelihood of speculation, possibly resulting in less oscillation of the stock's price.

### **Evidence**

Since May 2006, the NRE has been calculating and releasing the sector index of real estate (IRE), which reflects the average price of the stock of real estate companies listed in BOVESPA. The index is composed of the price of the stock of real estate companies operating in the residential segment and the companies that invest in real estate projects for the purpose of generating income. The stock of those companies that commercialize real estate is not calculated into the index.

The IRE<sup>2</sup> is made up of three different market segment indexes: i. – IRE R50+, which reflects the performance of the stock prices of residential real estate companies and

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<sup>1</sup> The authors show that real estate development companies (which develop real estate for commercialization) and companies that invest in real estate (for the long-term generation of income) present different risks, and for this, present different performances during the period analyzed (accumulated return and price of stock variations).

<sup>2</sup> Available at [www.realestate.br](http://www.realestate.br)

represents more than 50% of the total volume traded in that sector of BOVESPA. The three oldest real estate companies listed in that sector of BOVESPA (CYRE3, GFSA3 and RSID3) are responsible for that volume, and are also listed in IBOVESPA; ii. – IRE R50 – is associated to the performance of the stock of the remaining 18 residential real estate companies traded on BOVESPA and; iii. – IRE BI, which represents the fluctuations of the stock prices of the 6 companies that invest in real estate development portfolios for the purpose of generating income.

Graphic 1 illustrates the performance of the three indexes separately, of the IRE itself and of IBOVESPA, covering an initial period from July 2007 when investors began perceiving higher risks looming for the international market with the worsening of the United States mortgage crisis, and following the concession of *investment grade* status by Fitch Ratings and Standard & Poor's (May 2008).

In all the graphs presented in this article, the index numbers use a base of 100 in the first month's presentation of data to better illustrate the effects of *investment grade* on the price of stocks.

Graph 2 shows the sector indexes detached from IBOVESPA. Presenting the indexes detached means quantifying the movements isolated from the sector, discounting the macro-economic effects caused by crisis and /or market euphoria reflected in the index variation of IBOVESPA. When the detached index has a negative gradient or presents a standard below 100, it reveals fragility of the sector. In this hypothesis, the sector is not taking full advantage of a bull market or it falls more than the stocks themselves are falling. With a positive gradient or maintaining a standard above 100, the sector proves to be more resistant to the market fluctuations, falling less or rising higher.

chart 1

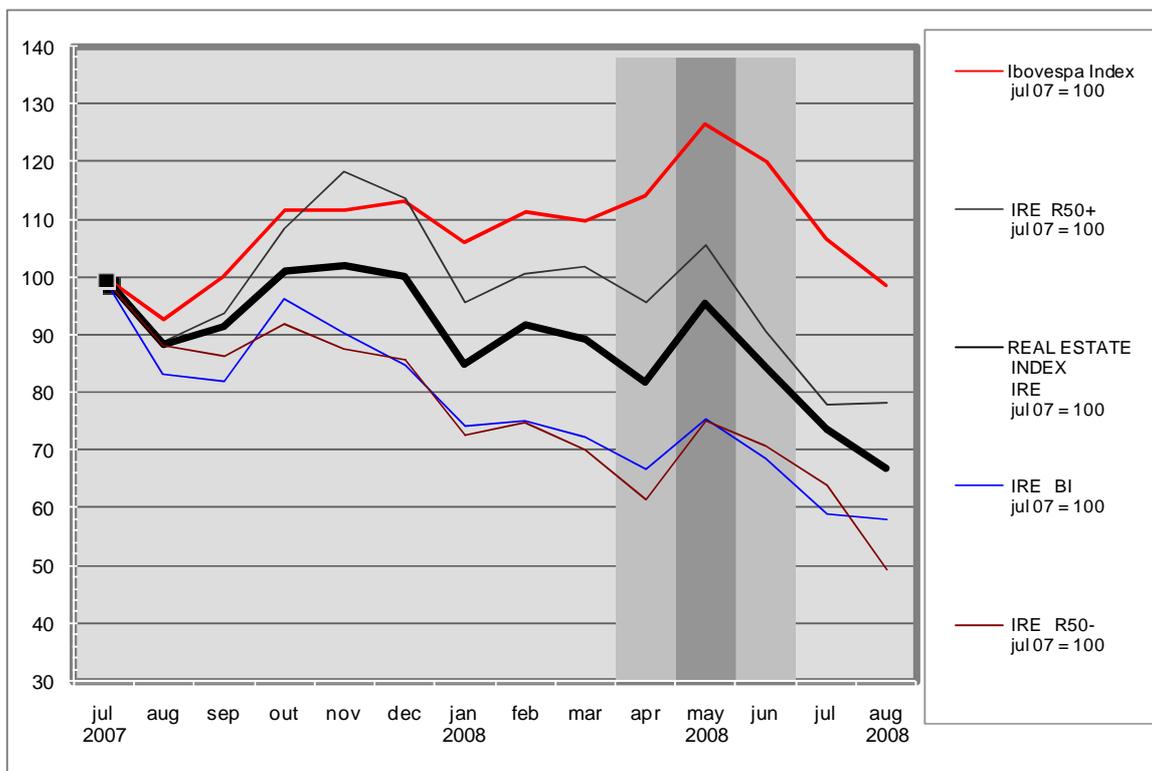
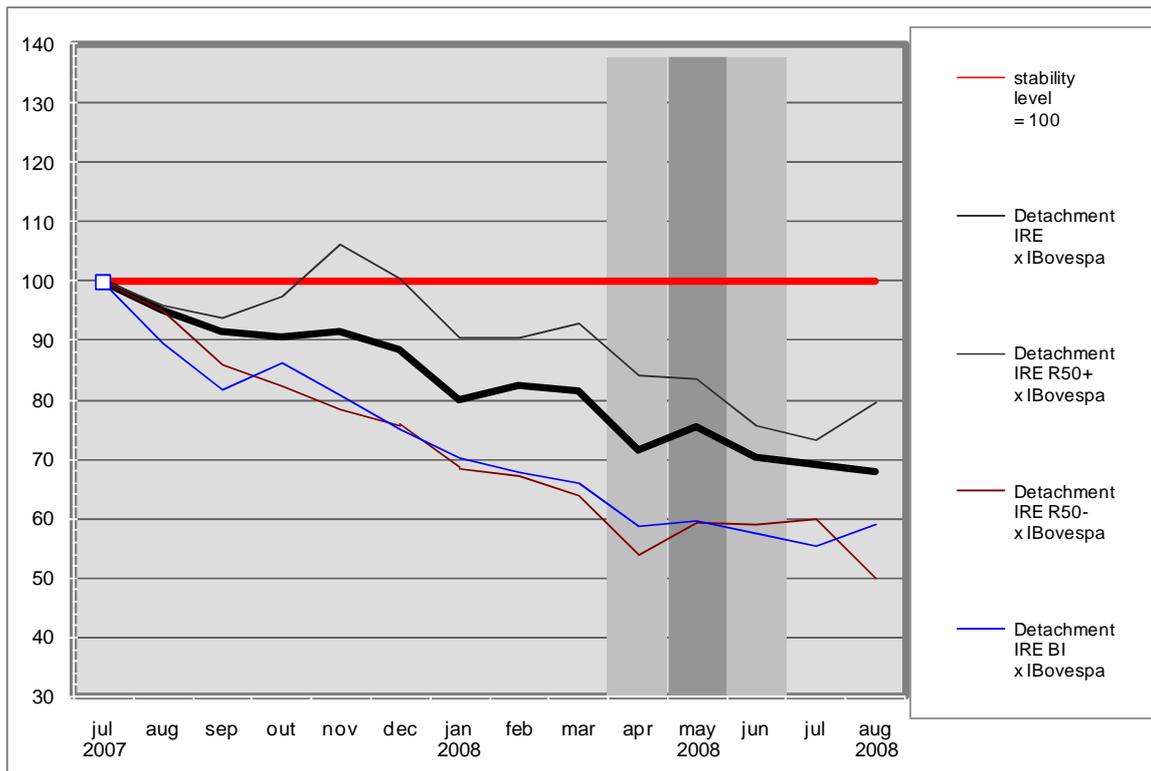


chart 2



The analysis of these movements indicates:

- all indexes, including those of IBOVESPA, were affected negatively in August 2007, in the market's view the most critical month for the failure of financial institutions holding *sub-prime* bonds (graph1);
- IBOVESPA, IRE and IRE R50+ show a certain recovery until the end of 2007 with the sector's indexes falling until April 2008. The sector indexes and IBOVESPA present a sharp rise in May 2008, most surely in reason of the *investment grade* rating;
- all indexes fall sharply from May until August 2008;
- the indexes of graph2 show the sector's rally was short-lived with stock prices falling sharply, much more than the decline of IBOVESPA. This reflects market skepticism concerning the price of real estate company stock listed in IBOVESPA. It is always good to note that the selling price of any stock transaction, excluding speculation, reflects the prevailing market value.
- isolation of the most representative fluctuations of stock prices for the residential sector (IRE R50+) reveals the greatest decline in stock value to have been among smaller companies and those of real estate. In the cycle between July 2007 and August 2008 IBOVESPA fell 1.4%, the market value of large companies fell 21.6%, while small companies and real estate base companies fell a whopping 50.7% and 42.0%, respectively.
- the perceived value of real estate based companies is much more linked to the exaggerated pricing occurring during the IPO's than it is to the devaluation of

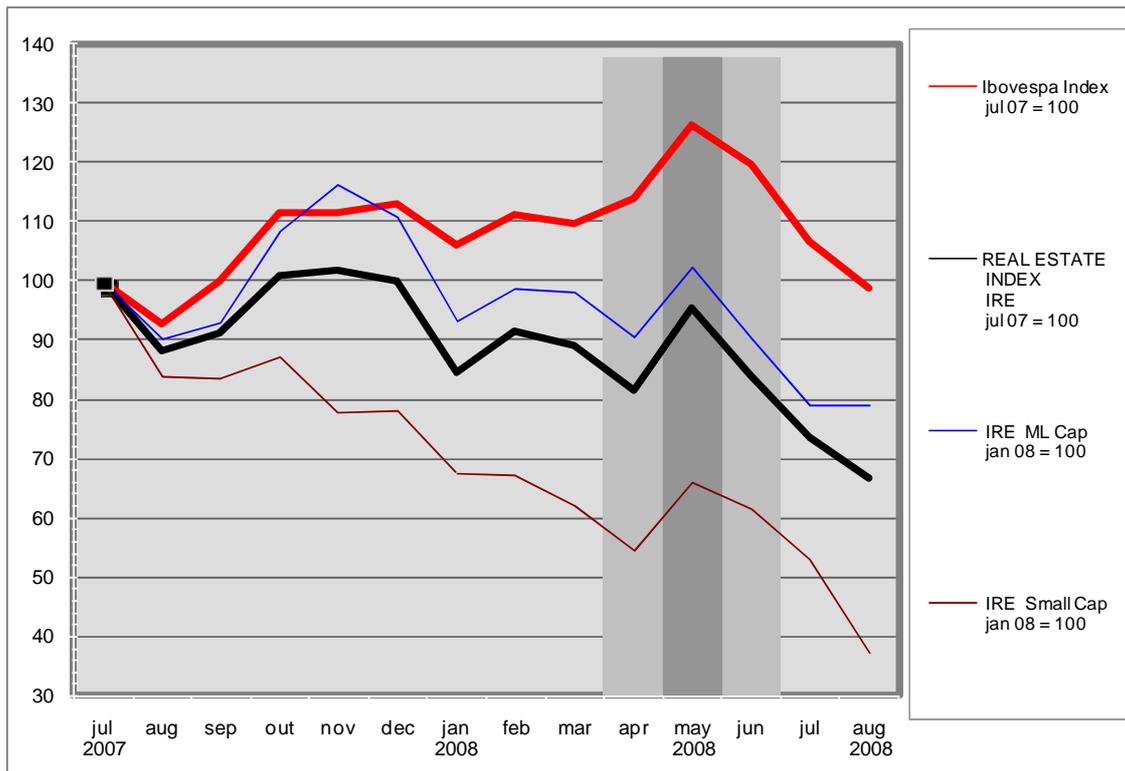
portfolios which, for the most part, increased in value during the cycle. This occurred because the rental price of office space and the performance of shopping centers are producing high revenues, resulting in profits for the stockholders of *property companies*.

Analysis of price behavioral patterns by means of the indexes does not give real insight into the basic essentials of each real estate development company. However, it does support evidence that the monthly economic trading volume of each stock in this sector is the determining variable in this phase of analysis for holding the stock's price up. This is true even when the prices are far below those of the IPO's, analysis of the adopted strategies is favorable or unfavorable, and publication of the companies' financial balance occurs within this period.

This tendency becomes even more evident when the performance of IRE B1 is compared with the history of stocks from similar companies, in a variety of international markets. This is most notably true with the Real Estate Investment Trusts (REIT) of the United States, Europe, Southeast Asia and Australia. The behavioral patterns of these REIT's present solid values for short periods of trading and are most susceptible to macroeconomic factors, especially the referential interest rates.

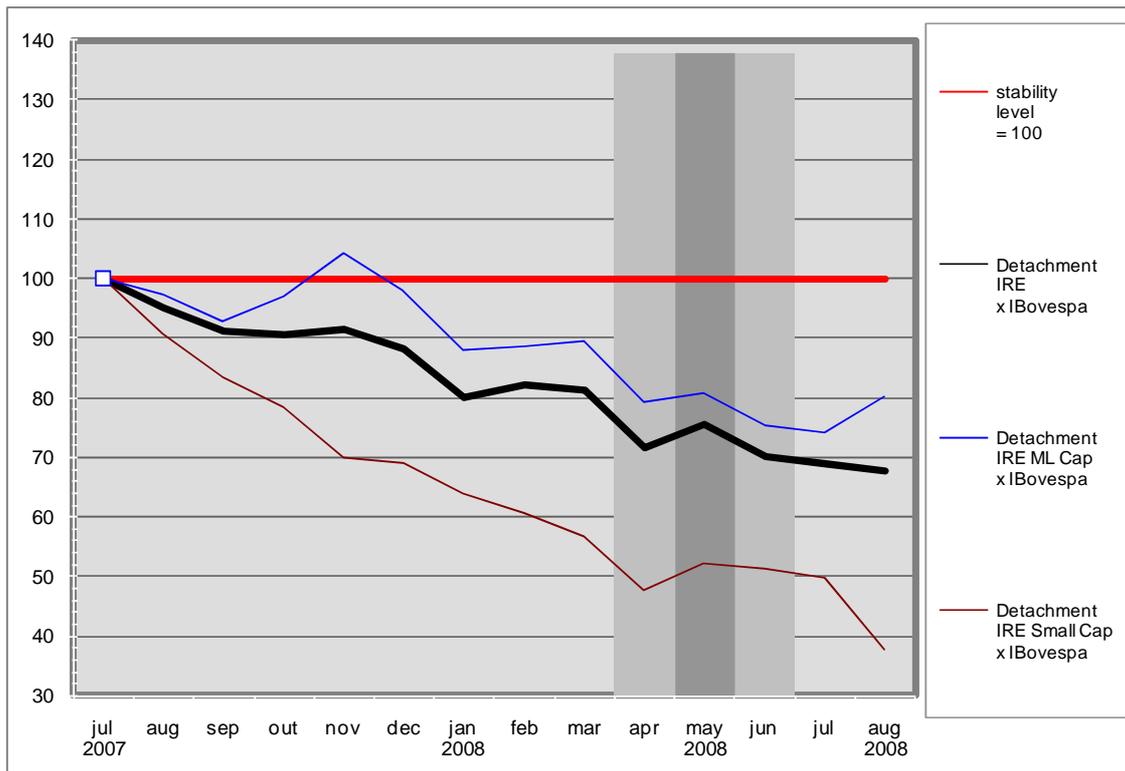
An alternative method of reading (analyzing) the market is to follow the stratification of BOVESPA, classifying the companies as Mid Large Cap and Small Cap, a criteria which separates the large capitalizations (85% of the market of BOVESPA) from the smaller ones (the remaining 15%). In this paper, the companies are similarly classified as ML Cap, the most expressive real estate stock but which also has liquidity on BOVESPA. They are, CYRE3, GFSA3, RSID3, BRML3, PDGR3, AGIN3 and MRV3. The others are classified as Small Cap, with the real estate agencies always excluded. Graphs 1A and 2A, with the same format as Graphs 1 and 2, show real estate stock to be the most vulnerable to market volatility, and Small Cap companies the most severely penalized.

chart 1A



Graph 1A continues to show that the market believes the *investment grade* status will not lead the real estate sector to any higher plateaus, or that, pricing of the stock is already sufficiently aggressive to the point that the value of the companies will not surpass what has already been established. This perception was so strong that in May 2008, with the market operating in a state of euphoria, the stocks did not even reach the prices of July 2007 and, further, between June and August 2008, they fell, just like BOVESPA. Graph 2 reveals the IRE fell even more than IBOVESPA during these three months, the market reacting negatively against pricing inflated by the *investment grade* rating. The stock of Small Cap falls with the strong decline of August and ML Cap withstands the onslaught better, but there is no evidence the expected valuation occurred.

chart 2A



As for questioning whether or not the entire real estate segment presents a sharp decline in prices is debatable, because real estate companies, in particular the Small Cap, are incapable of defending adequate prices for themselves. Two factors stand out: i. – the optimistic scenarios presented for valuation during IPO's begin to fade in the face of the market's reality; ii – the recent manner in which the quality of real estate company performance has been analyzed (read) has led to evaluations that attribute perennial behavior to the companies. However, the evaluations do not take into consideration that the periods submitted for analysis by the companies are quite inferior to the actual cycles of business themselves, and therefore cannot be considered systematic. It can be said of some of the companies, that they were born after IPO because with their investment capacity multiplied up to ten fold, they are still in the process of structuring to be able to plan, decide and operate at the new level. This means that the results are still bearing the costs of expansion. More so, the systems are certainly not fully operational to justify considering a six-month behavioral cycle, a short period of time for business dealings and in the life of the company, as a valid indicator for projecting future performance. The severe punishment taken by prices, as seen in the index of Small Cap of [Graph 2A](#), can be the result of a very conservative evaluation (leitura) as to the capacity of the companies to begin producing adequate results for the stockholders, in face of the promises projected at IPO.

Price behavior and the misguided upward movement spurred by *investment grade* status is clearly illustrated by verifying the variation of prices between January and August 2008.

[Graphs 3](#) and [4](#), with formats similar to those preceding, show the indexes: i.-

IBOVESPA; ii. – the indexes of the largest real estate company within the sector at BOVESPA (Major ML Cap), iii. – the indexes of the company with the best performance in price since the launching of its IPO (Best ML Cap), although, for the most part, the prices of its stock are below the IPO's; iv. – the indexes of the company with the worst performance in price since its IPO, a Small Cap (Worst Small Cap).

- The largest company, perhaps in reason of being listed in IBOVESPA, oscillated yearlong in proximity with the market. Conversely, the favorable effect of *investment grade* was short-lived (the first week of May) and was followed by a plunge greater than that of the market (Graph 4), recovering only in August.
- Likewise, the company with the most stable price fluctuates in symphony with the market's oscillations, reaping a smaller valuation from the effect of *investment grade*, which dissolves quickly in the wake of the market's decline.
- The company with the worst performance takes momentary advantage of *investment grade* for two weeks, but falls sharply after July 2008.

In other words, even with an analysis (readings) isolating the extremes, it is evident there is no enduring effect resulting from *investment grade*. This is an indication that the prices are not sustainable at the levels proposed at the launching of the IPO's or, there are no investors willing to put faith in the reduction of Brazil's national risk conceded by the upgrade to *investment-grade* credit rating.

The real estate market is passively affected by the demands of the economy. Therefore, with a sustained economic growth after absorbing the effects of the global pinch, the real estate market could possibly witness a positive reaction, although moderately, due to its extended business cycles. This effect could favor the price of *property company* stock, with the *investment grade* contributing to the acquisition of long-term capital. The real estate development business may still have a long way to go before the companies adjust to this new business domain by learning to adequately plan the offer of its products, manage decisions and processes on a scale equivalent to its size (not presently occurring) and unpacking the real estate kept in land banks where it produces nothing. There are still many unanswered questions as to how developers will redesign offers to include the increasing costs of production, costs, which are greater than the incomes of the target public.

chart 3

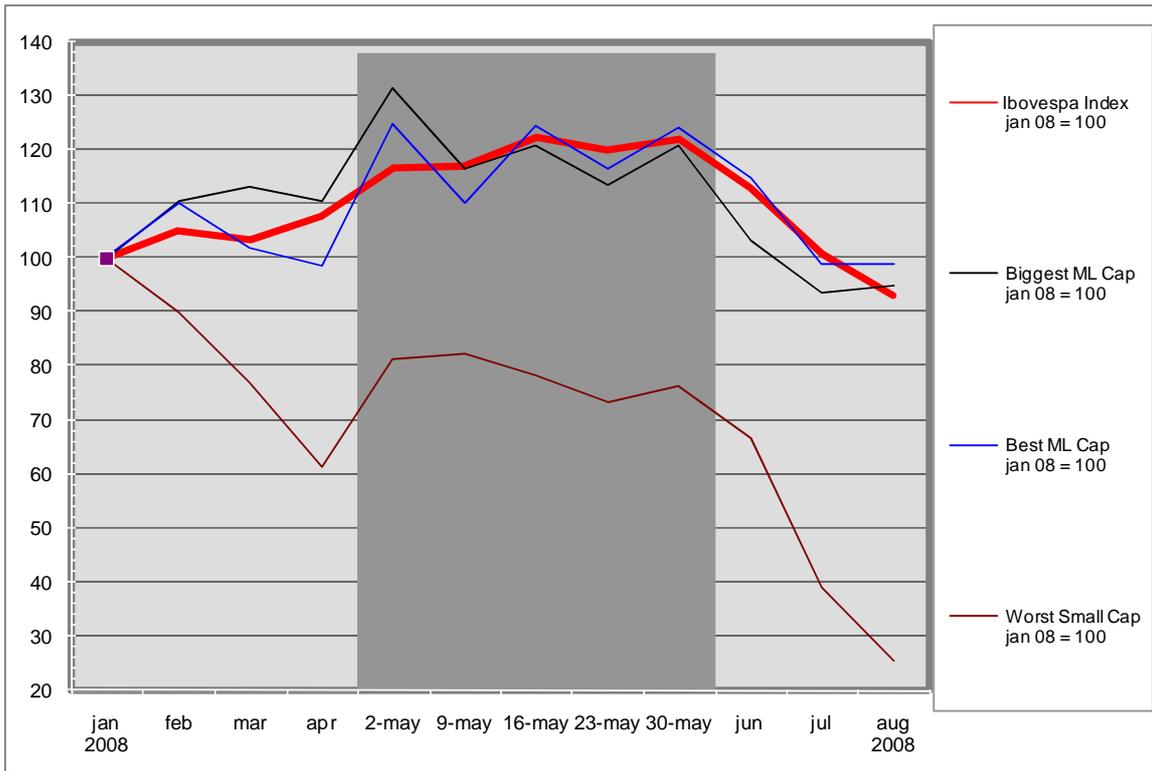
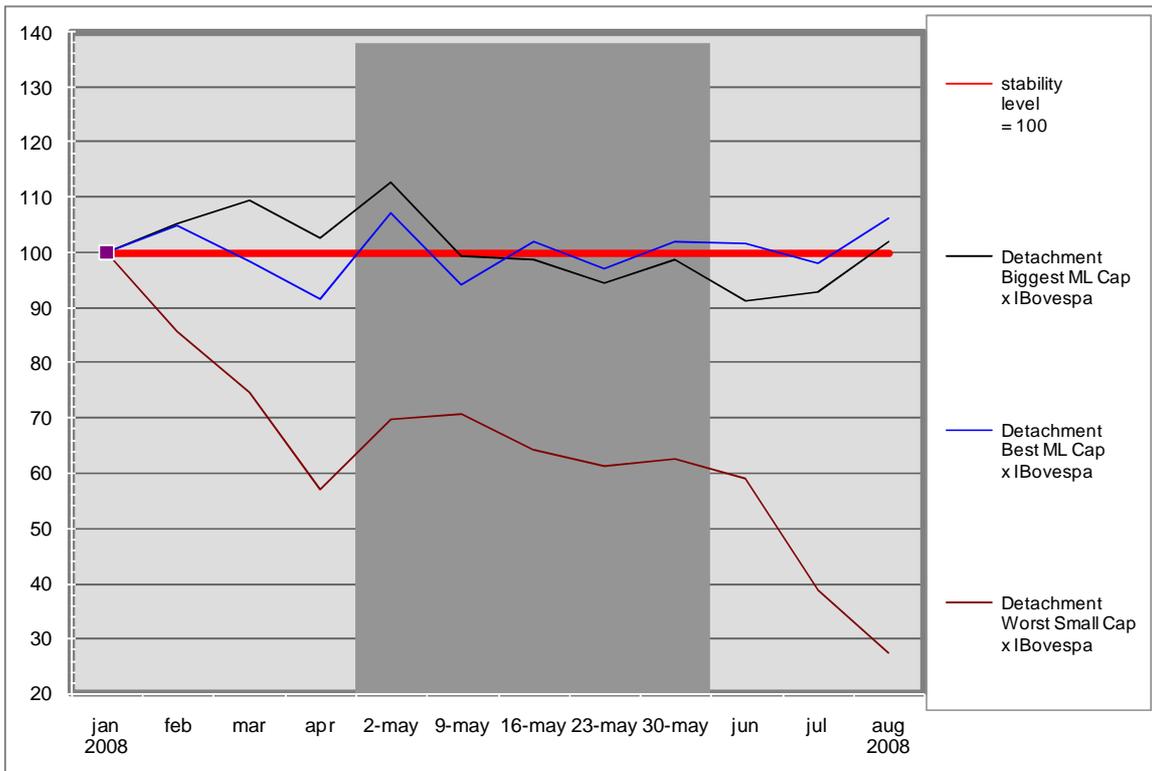


chart 4



## Final Remarks

The diverse information that can be taken from this assortment of stock offers in OPA's of **RD** in Brazil between September 2005 and April 2007 permit concluding there is no evidence indicating that the offers were submitted to any type of formal pricing.

Let us consider the principles that should be followed for the valuation of shares/stock:

- i. – design behavioral scenarios founded in observed strategic planning, or, in its absence, standards of performance and behavior rigorously supported by historic examples of the company's performance, which is undergoing pricing, using average sector standards for benchmarking;
- ii – establish a certain rate of attractiveness prevalent on the market for the investment offered;
- iii. – formulate a price range taking into consideration scenarios stressed against the referential, assuming positions that are more aggressive and more conservative.

In the opinion of the authors, those responsible for structuring the OAP's did not use the most recognized technique for valuation but relied on the multiples of Ebitda or RDA to set a price for the companies' stock, which represents a technical error. This method of pricing homogenizes behavior without giving any value to the intrinsic quality of each organization, their strategic plans of attack in a competitive market, their management capabilities or the results.

From the models studied, which comprises all the OPA's in this cycle, no evidence was found indicating the use of any method for determining the price of the offers, not even the second hypothesis, which does not constitute a sustained method but is merely a simplifying procedure. The data put forth in this article permits concluding that the market has relied exclusively on speculation motivated by the liquidity present in the global economy, an international image of stability and sustained economic growth for Brazil to produce the OPA's of the **RD**, the majority in IPO. Moreover, with the companies listed at BOVESPA not presenting any evidence they are capable of producing sufficient results to sustain interest in the stock at the established prices, investors will become frustrated. Therefore indicating that placement of the IPO's was just an isolated action, which will not permit the companies to take advantage, in the future, of the capital market as an instrument for accessing the resources necessary for their development.

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