Return of Equity Issues in the Spanish Stock Market from the Investor's Perspective, during the 1997-2012 Period

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Abstract Is it profitable for an investor, from a risk-return perspective, to acquire a stake in a quoted company when a capital increase is announced? This paper analyses the return obtained from the investment in equity issues with cash contribution and pre-emptive rights, aimed at funding corporate activities: acquisitions, investments in new facilities and/or strengthening the balance sheet of the companies undertaking the equity issue. During the 16 years covered by the study, the results show a negative average excess risk-adjusted return of almost 5%, from the moment that the equity offer is announced until the completion of the preferential subscription period. To obtain this excess return, the difference between the nominal Internal Rate of Return (IRR) and the expected return, using the CAPM, is computed for each equity issue. The intention behind this method is to eliminate the effects of time and any other possible effect on the stock price during the period of the analysis. The results from this article are consistent with the Pecking Order theory for the Spanish Stock Market also six months after the preferential subscription period. However, there is a positive return after three months.

Keywords: Equity Issues Returns Pecking Order

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1 Capital Structure and the Pecking Order Theory

The theory of capital structure has been widely studied by researchers and professionals, since it corresponds to one of the key financial decisions from the point of view of both academics and practitioners. The modern starting point of this theory was Modigliani and Miller's 1958 paper which stated that, in perfect markets, financing decisions with either external or internal resources are irrelevant to the market value of companies. From this starting point, additional hypotheses to make the model more realistic (influence of taxes, market behaviour, etc.) have been included, resulting in more complete and explanatory theories to explain the financial preferences of companies.

The Pecking Order theory of financing choices was originated some 25 years ago by Myers (1977), Myers (1984) and Myers & Majluf (1984), who stated that companies' funding preferences are as follows: (i) firms prefer internal financing, (ii) they adjust their dividend policies to their investment opportunities; (iii) when external finance is required, they start with debt, followed by convertible securities and, as a last resort, using equity issues.

The rationale for the Pecking Order goes as follows: (a) the investor knows that the management of the company's information is superior to her/his; (b) the investor also knows that the management can time the equity issue so that it does not take place when the stock price, according to the management's superior information, is undervalued; (c) therefore, the investor knows that when the management proposes the equity issue, the price of the stock must be either right or overvalued; and (d) a rational investor should then sell her/his shares at the issue price, the consequence being a drop in the price of the shares when the issue is announced.

2 Financing Companies in the Spanish Stock Market through Equity Issues with Cash Contribution and Pre-emptive Rights

This study provides new evidence of the Pecking Order theory within the Spanish market. Numerous previous works have shown the hierarchy of financing resources through different methodologies like, without claiming to be exhaustive: Fernández, de Rojas and Zuliani (2004), Pastor-Llorca, M.J. and Poveda, F. (2004), Sánchez-Vidal and Martín Ugedo (2004) and Aybar, Casino and López Gracia (2001).

As explained by Sánchez-Vidal and Martín-Ugedo (2004), Myers and Majluf (1984) analyses the North American stock market, where quoted companies mainly make equity issues on a firm basis, so they usually restrict pre-emptive rights for existing shareholders. In the Spanish stock market, equity issues with monetary contributions in which companies restrict pre-emptive rights are made when an investor or an organized block of investors want to acquire a stake in the company, but this doesn't mean that the company is seeking funding for expansion. The only type of equity issues whose aim is always funding corporate growth using the Spanish stock market are those with cash contribution and pre-emptive subscription.

As a consequence, it seems reasonable to analyse for the Spanish market the return obtained by investors in this type of equity issue as a method of confirming the potential negative impact of this corporate funding criteria, guided by all the papers mentioned before and also in the paper published by Asquith and Mullins (1986), which investigated the effect on stock prices of equity offerings on the NY Stock Exchange.

To summarize, there are several major practical reasons for the analysis of this type of equity issues: (i) the objective corporate purpose of the equity issue, (ii) The ability of the entire investor community to subscribe the equity issue (both institutional and domestic investors), (iii) greater systematic follow-up by the stock exchange commission (CNMV), (iv) longer periods to subscribe the equity issue, and therefore to analyse it and (v) the possibility of avoiding shareholder dilution.

3 Methodology

The universe of equity issues analysed meet the following criteria:

1. All companies are quoted in the Madrid Stock Exchange Market when the equity issue is made. Initial Public Offerings (IPOs) have not been considered.
2. The period of analysis is 16 years starting from the beginning of 1997. This period involves two cycles of expansion and contraction of the Spanish economy.
3. There is a monetary contribution in every equity issue considered.
4. The Board of the Company recognises the pre-emptive rights of the existing shareholders.
5. The capital increases are registered in the Spanish Stock Market Commission (CNMV).

The methodology used to obtain the investors' return follows three steps:

- Internal Rate of Return of the equity issue 'n' (IRRn) is the IRR obtained by that investor who, once they know of the intention of the company to proceed with an equity issue, finally decides to invest in it. The stock price information has been obtained from Bloomberg. In this sense, it is important to mention that theoretical value of rights has been adjusted by Bloomberg in the stock price history once the pre-emptive subscription period is completed. IRR has been calculated for three different short term periods: (i) once the pre-emptive subscription period is finished, (ii) three months, and (iii) six months after the forementioned period has finished.

The main issue in calculating the IRR is the date of the first day the investor decides to acquire shares. The day when enough information about the equity issue is published in CNMV has been designated t=0. Usually, most of the information has been given when the Board of the Company announces the total amount of the equity issue (nominal + premium issue). The next step would be to schedule a General Meeting of the Shareholders in order to approve the equity issue and to delegate to the Board the faculty to carry out the issue.

During the analysis of the return obtained by the investor, all dividends earned by the shareholder have also been considered as dividend cash flow.

$$0 = O_0 + \sum_{j=1}^{i} \frac{Dj}{(1+IRR)^{\frac{(tj-t_0)}{365}}} + \frac{Si}{(1+IRR)^{\frac{(ti-t_0)}{365}}} \quad (1.1)$$

Where:

O_0: Outflow. Disbursement for the investor (t=0)

Dj: Dividend received by the investor on the day j

Si: Inflow. Sale of the investment on the day i

- Expected return of the equity issue ‘n’ (ERn) that the investor should have obtained in each equity issue. It is calculated during the same period of time as the calculated IRRn.

  The expected return has been calculated with the “Capital Asset Pricing Model” CAPM method (Campbell and Viceira, 2002).

  The risk-free rates of return considered are three months and six months interest rates of the Spanish public debt, depending on the period analysed. The market premium has been calculated considering the difference between the real rate of return of IBEX with dividends Index (Bloomberg ticker: IBEX35TR) and the risk-free rate of return.
- Excess risk-return of the equity issue ‘n’ (ERRn): it is obtained as the difference between the IRR and the expected return.

$$ERRn = IRRn - ERn \quad (1.2)$$

By extracting the expected return from the IRR, the effect of time or any other possible effect on the stock price during the period is eliminated.

The universe of stocks combined for this study implies 132 out of 137 (96%) of the total equity issues with cash contribution and pre-emptive right made by 68 companies. According to the sector breakdown provided by the Spanish Stock Exchange (Bolsas y Mercados Españoles, S.A.), 27% of the equity issues analyzed comes from companies within the financial services and real estate sector, 24%

basic materials, industry and construction, 21% consumer goods, 14% technology and telecommunications, 8% oil and energy and 8% consumer services.

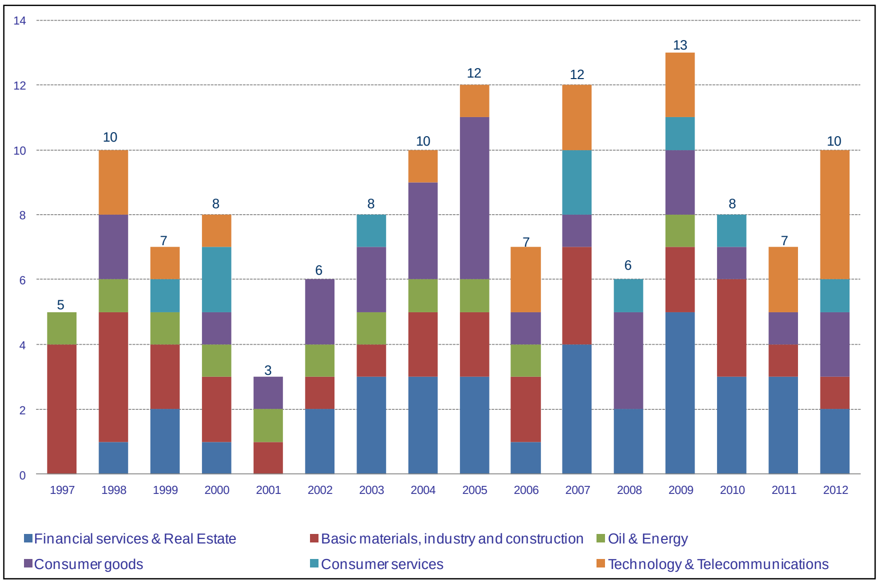

Fig. 1 Equity issues per year considered by the analysis by sector

An average of 8 equity issues per year have been fully subscribed; 2001 was the year with the fewest equity issues (3) and in 2009 13 companies issued new shares.

In terms of nominal and total value, equity issues fully subscribed during 2010 represented 25% and 20% respectively of the total universe analyzed. On the other side, 2001 was the least active year, representing less than 1% of the total analysis.

The most active years in terms of corporate financing through these types of equity issues correspond with the most restrictive period on financing held by financial institutions (2008-2012).

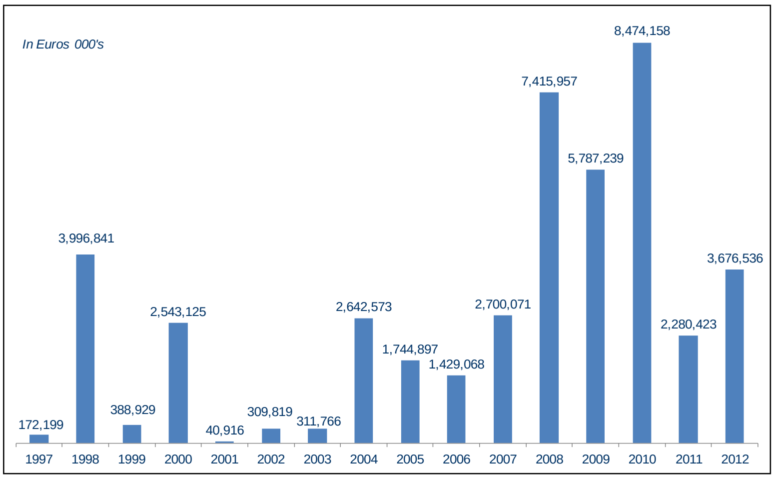

Fig. 2 Total value (nominal + premium) of the equity issues analysed

4 Results Obtained

Those investors who have decided to buy shares in a company at the time that it makes public its intention to issue equity in the market have obtained, on average, a negative excess return, both at the end of the preferential subscription period and six months after in terms of the mean and the median. However, the mean after three months shows a positive return. When calculating the median value of the excess returns, one can observe a negative figure for all periods.

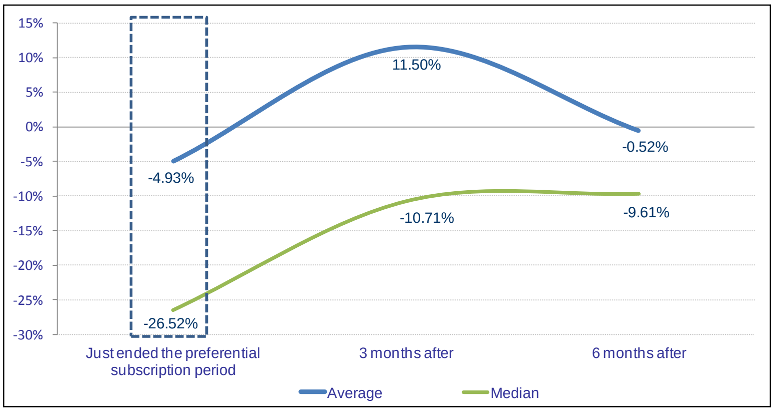

Fig. 3 Average and median excess returns (ERRn) of the equity issues analysed (for those equity issues made during the second semester of 2012, only the first period has been taken into account)

If made a grouping of stocks according to their betas, the following average excess returns shown in fig.4 are obtained:

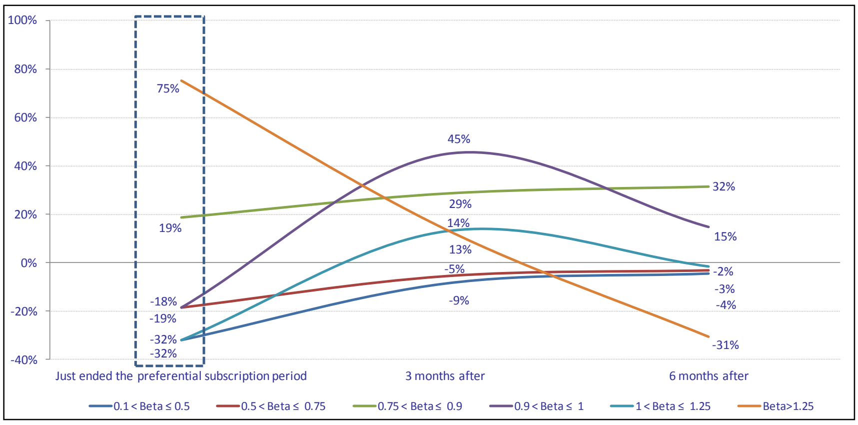

Fig. 4 Average excess returns (ERRn) according to different groups of betas

Those companies whose betas are between 0.75 and 0.9 higher than 1.25 obtain an average positive excess return.

If a grouping of stocks according to the total amount funded in the stock exchange market (nominal + premium) is made, the following results shown below are obtained.

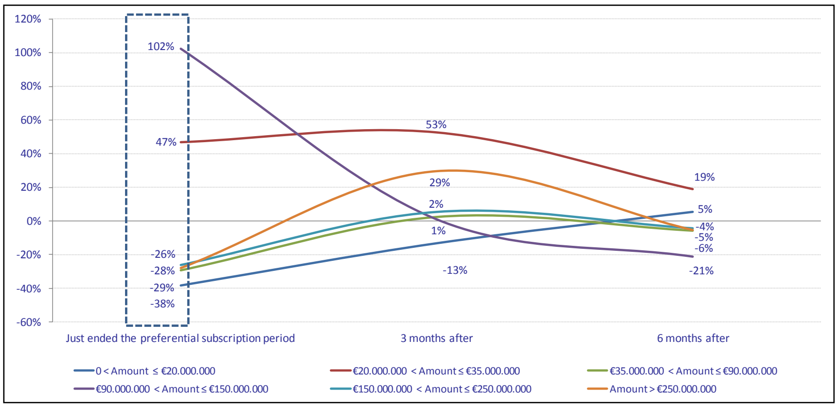

Fig. 5 Average excess returns (ERRn) according to the amount funded in the equity issues

Neither the total amount of the equity issue nor beta affect the excess return obtained. There is no proven correlation between these two parameters and the excess returns obtained.

4.1 Industry Split

As shown in figure 6, one can observe the main differences between industry weights in terms of average excess returns during the study period: Basic materials, manufacturing and construction is the only sector that has a positive average excess return from the moment that the equity issue is announced until its completion.

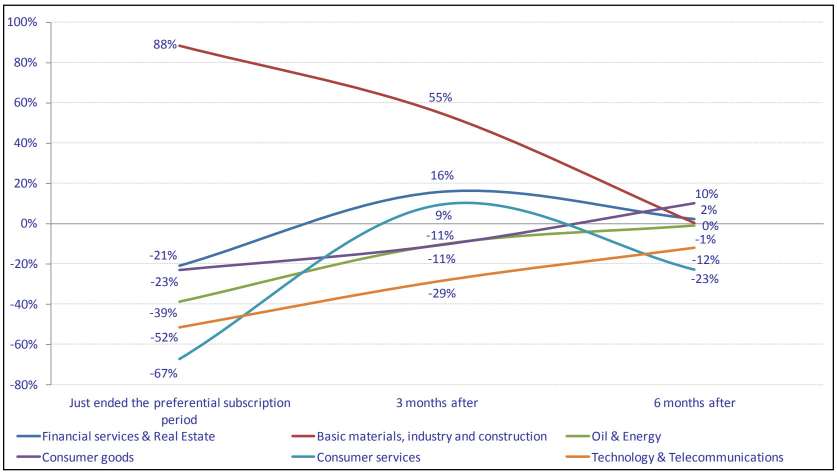

Fig. 6 Average excess returns (ERRn) according to sector

5 Conclusions

The results of this study demonstrate that the announcement of equity issues in the Spanish stock exchange market destined for corporate growth provides a negative excess return for those investors who decide to subscribe them from the moment they are announced. The average excess return obtained by these investors is -5% and is statistically significant.

Other significant results from this study include: (i) There is no relationship between betas and size of the equity issue and the return obtained for each offering; (ii) according to the sector breakdown made by the Spanish stock market, the consumer services sector is the most unprofitable sector for investors and the basic materials, industry and construction sector is the only profitable sector.

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