

The Characteristics of Hot Market Seasoned Equity Issuers

Halil D. Kaya, PhD

Associate Professor of Finance
Northeastern State University
Broken Arrow, OK 74012, United States

Abstract

In this study, I examine the characteristics of U.S. firms that come to the Seasoned Equity Offering (i.e. SEO) market in HOT versus COLD equity markets. HOT markets are defined as the top twenty percent of the months in terms of the de-trended number of equity offerings. I find that the HOT market SEO firms generally have higher market-to-book ratios compared to the COLD market firms. Also, in HOT markets, the issuers tend to be smaller firms with fewer tangible assets. With regard to profitability and pre-issue leverage, my results show that there is no significant difference between HOT and COLD market firms.

Keywords: Market Timing · Hot market · Equity Market · Seasoned Equity Offerings

JEL Classification G30 · G32

1. Introduction

Equity market timing and debt market timing are tested by several studies including Taggart (1977), Marsh (1982), Jalilvand and Harris (1984), Asquith and Mullins (1986), Rajan and Zingales (1995), Pagano, Panetta, and Zingales (1998), Hovakimian, Opler, and Titman (2001), Korajczyk, Lucas, and McDonald (1992), Choe, Masulis, and Nanda (1993), and Bayless and Chaplinsky (1996). Although these studies examine the timing behavior of firms in the equity and debt markets, they do not look at the impact of timing on firms' capital structure.

Baker and Wurgler (2002) study is the first one that establishes a link between market timing and capital structure. In their influential study, they show that low leverage firms are those that raised funds when their market valuations were high, as measured by the market-to-book ratio, while high leverage firms are those that raised funds when their market valuations were low.

More recent studies like Korajczyk and Levy (2003), Alti (2006), Flannery and Rangan (2005), Hovakimian (2006), Kayhan and Titman (2007), Huang and Ritter (2009), Elliott, Koeter-Kant, and Warr (2008), and O'Brien, Klein, and Hilliard (2007) only partially support Baker and Wurgler (2002) findings. Although they confirm the existence of timing, most of them refute the capital structure implications of timing. The general argument in these papers is the existence of only a short-term impact (i.e. within a period of two or three years, the effect of market timing on the issuing firm's capital structure disappears).

Most of these studies use a market timing measure that is based on market-to-book ratio. Alti (2006) has tried a different measure. He first classifies each calendar month as "Hot", "Neutral", or "Cold" depending on the number of IPOs in each month. Then, he eliminates the IPOs in "Neutral" months from his sample. Finally, he compares the leverages of the "Hot" market and "Cold" market issuers. His results indicate that "Hot" market firms tend to issue more equity compared to "Cold" market firms. Although he argues that firms tend to issue more equity in "Hot" months (i.e. there is timing in the IPO market), he refutes the existence of a permanent impact on leverage (i.e. his results show that the "Hot" market effect on leverage disappears after two years).

In this study, my objective is to determine the characteristics of the SEO firms in "Hot" markets. In other words, I want to see how "Hot" market and "Cold" market firms are different. What kind of firms go to the SEO market when the market is "Hot"? What kind of firms go to the SEO market when the market is "Cold"?

If certain months are more advantageous to the firms, why are some firms flocking to the SEO market while others are not?

First, I follow Alti (2006) methodology and create the “Hot” market variable for the SEO market. Alti (2006) eliminates the “Neutral” months, but Kaya (2013) shows that, for IPOs, eliminating the “Neutral” months versus including them within the “Cold” month group does not make any significant difference in results. In fact, not eliminating any observations is the preferred method since we have more power with a bigger sample. Therefore, in this study, I include the “Neutral” months within the “Cold” month group. I classify the most active twenty percent of the months in my sample period as “Hot” and all other months as “Cold”. Then, I compare the two groups’ (i.e. the “Hot” and the “Cold” month groups’) size, tangibility, profitability, market-to-book ratio, and pre-issue leverage using nonparametric tests. I also compare the issue size across “Hot” and “Cold” markets.

The paper proceeds as follows: Section 2 presents the hypotheses. Section 3 explains the data and the methodology. Section 4 reports the empirical results. Section 5 concludes.

2. Hypotheses

In HOT equity markets (i.e. active months), I expect to see better market valuations and higher profitability values. In fact, the equity market is active due to firms’ success and the resulting higher valuations that come with that success. In addition, during these more favorable periods, I expect to see smaller firms with fewer tangible assets coming to the market (i.e. who cannot come to the markets during other times). I also expect to see highly levered firms coming to the market in “Hot” months (i.e. again, for highly levered firms, “Hot” markets present good opportunities). Therefore, my hypotheses regarding the SEO firms’ characteristics in HOT markets are:

Hypothesis 1: The firms that come to the SEO market in “Hot” months have higher market valuations compared to the firms coming to the market in “Cold” months.

Hypothesis 2: The firms that come to the SEO market in “Hot” months have higher profitability values compared to the firms coming to the market in “Cold” months.

Hypothesis 3: The firms that come to the SEO market in “Hot” months are smaller compared to the firms coming to the market in “Cold” months.

Hypothesis 4: The firms that come to the SEO market in “Hot” months have fewer tangible assets compared to the firms coming to the market in “Cold” months.

Hypothesis 5: The firms that come to the SEO market in “Hot” months have more leverage compared to the firms coming to the market in “Cold” months.

3. Data and Methodology

First, the data on SEOs are downloaded from Thomson Financial’s SDC Database. Then, I matched them with the corresponding accounting data from the Compustat quarterly files. My sample period is from year 1984 through year 2004. After excluding the financial firms, small firms (i.e. firms with book values of assets below \$10 million in 2004 dollars), the subsidiary firms, the unit offers, and the possible outliers (i.e. market-to-book ratio greater than 10, leverage ratio greater than 1, earnings before interest, taxes, and depreciation scaled by assets greater than 1), I have 2,510 SEOs in my final sample. Out of these, 1,006 SEOs are completed during HOT equity markets (i.e. the months when the equity market is among the top 20% of the months in terms of market activity).

Table 1: SEO Characteristics for the Whole Sample

| Variable | Median | Mean | St.d. |
|------------------------------|--------|------|-------|
| <i>Size</i> | 3.55 | 3.60 | 1.96 |
| <i>Tangibility</i> | 0.28 | 0.36 | 0.27 |
| <i>Profitability</i> | 0.26 | 0.29 | 0.21 |
| <i>M/B</i> | 1.61 | 2.37 | 2.10 |
| <i>Leverage</i> | 0.27 | 0.28 | 0.22 |
| <i>Proc./A_{t-1}</i> | 0.30 | 0.47 | 0.54 |
| N | | 2507 | |
| % of total | | 100% | |

Table 1 shows the summary statistics for my HOT market SEO sample. Size is the natural logarithm of sales. Tangibility is measured as net property, plant, and equipment scaled by total assets. Profitability is EBITDA scaled by total assets. The market-to-book ratio is the (total assets – book value of equity + market value of equity)/total assets. Leverage is (long-term debt + short-term debt)/total assets. $Proc./A_{t-1}$ is the total proceeds from the transaction scaled by end-of-previous quarter total assets. All variables are measured at the end of the previous quarter.

As we can see from the table, for my whole sample, the mean of issue proceeds scaled by assets is 47%, while the median is 30%. There are 2,507 SEOs in the whole sample.

4. Empirical Results

Table 2: Comparison of HOT and COLD Market SEOs

| Variable | All SEOs | | | SEOs in HOT Markets | | | SEOs in COLD Markets | | |
|------------------------------|----------|------|-------|---------------------|---------|-------|----------------------|---------|-------|
| | Med. | Mean | St.d. | Med. | Mean | St.d. | Med. | Mean | St.d. |
| <i>Size</i> | 3.55 | 3.60 | 1.96 | 3.41 | ***3.41 | 1.87 | 3.63 | ***3.73 | 2.01 |
| <i>Tangibility</i> | 0.28 | 0.36 | 0.27 | 0.26 | ***0.34 | 0.27 | 0.30 | ***0.37 | 0.27 |
| <i>Profitability</i> | 0.26 | 0.29 | 0.21 | 0.26 | 0.29 | 0.21 | 0.26 | 0.29 | 0.20 |
| <i>M/B</i> | 1.61 | 2.37 | 2.10 | 2.06 | ***2.74 | 2.26 | 1.44 | ***2.12 | 1.94 |
| <i>Leverage</i> | 0.27 | 0.28 | 0.22 | 0.26 | 0.27 | 0.23 | 0.28 | 0.28 | 0.21 |
| <i>Proc./A_{t-1}</i> | 0.30 | 0.47 | 0.54 | 0.37 | ***0.58 | 0.63 | 0.25 | ***0.40 | 0.47 |
| N | 2507 | | | 1006 | | | 1501 | | |
| % of total | 100% | | | 40.13% | | | 59.87% | | |

Table 2 compares the characteristics of the “Hot” market SEO firms and the “Cold” market SEO firms. It also compares the issue sizes (i.e. the proceeds scaled by assets) across HOT and COLD markets. When we compare the means, we are seeing that the HOT market issuers are smaller firms with fewer tangible assets compared to the COLD market issuers. The natural logarithm of sales is 3.41 for the HOT market issuers while it is 3.73 for the COLD market issuers (the difference is significant at 1% level). Similarly, the tangibility is 0.34 for the HOT market issuers while it is 0.37 for the COLD market issuers (again, the difference is significant at 1% level).

On the other hand, the average M/B is 2.74 for the HOT market issuers versus 2.12 for the COLD market issuers (the difference is significant at 1% level). So, we can conclude that, on average, smaller firms with high market values tend to do their SEO when the equity market is HOT. The table shows that there is no significant difference between the two groups’ profitability and leverage measures.

When we compare the proceeds, we are seeing that the HOT market SEOs tend to be larger than the COLD market issues. The average “proceeds scaled by assets” is 58% for the HOT market firms versus 40% for the other group. This finding confirms the earlier studies that show evidence of timing in the SEO market (i.e. the HOT market issues are larger).

When we look at the number of SEOs in HOT and COLD markets, we see that 40.13% of all issues are completed in HOT markets (versus 59.87% completed in COLD markets). In other words, during the top 20% of the months in terms of market activity, we have 40.13% of the SEOs.

5. Conclusion

In this study, I examine the characteristics of U.S. Seasoned Equity Issuers in HOT versus COLD equity markets. In HOT equity months, there are “windows of opportunities” for the firms in the equity market. In other words, during these periods, firms are able to sell their shares at a higher price (i.e. the M/B for the SEO firms are higher in HOT months compared to COLD months as shown in Table 2).

Similar to Alti (2006), I define HOT markets as the top twenty percent of the months in terms of the de-trended number of equity offerings. When I compare the characteristics of the HOT market and the COLD market issuers, I find interesting results. First of all, I find that the HOT market firms tend to have higher market-to-book ratios compared to the COLD market firms in these markets.

Also, in HOT markets, the issuers tend to be smaller firms with fewer tangible assets. With regard to profitability and pre-issue leverage, my results show that there is no significant difference between HOT and COLD market firms.

When I look at the size of the transactions, I find that the mean proceeds scaled by assets is 58% for “Hot” market issuers and only 40% for “Cold” market issuers. So, in “Hot” (or active) months when more firms are coming to the market, the issue size tends to be much larger. When I examine the market activity in terms of the number of firms coming to the market (i.e. the percentage of transactions in HOT versus COLD markets), I find that 40.13% of SEOs are offered in HOT months and 59.87% of SEOs are offered in COLD months. So, the top 20% of the months in terms of activity covers 40.13% of SEOs.

References

- Alti A. (2006). How persistent is the impact of market timing on capital structure? *Journal of Finance*, 61, 1681-1710.
- Asquith, P., & Mullins D. W. (1986). Equity issues and offering dilution. *Journal of Financial Economics*, 15, 61-89.
- Baker, M., & Wurgler J. (2002). Market timing and capital structure. *Journal of Finance*, 57, 1-32.
- Bayless, M., & Chaplinsky S. (1996). Is there a window of opportunity for seasoned equity issuance? *Journal of Finance*, 51, 253-278.
- Choe, H., Masulis, R. W., & Nanda V. (1993). Common stock offerings across the business cycle: Theory and evidence. *Journal of Empirical Finance*, 1, 3-31.
- Elliott, W. B., Koeter-Kant, J., & Warr R. (2008). Market timing and the debt-equity choice. *Journal of Financial Intermediation*, 17(2), 175-197.
- Flannery, M. J., & Rangan K. P. (2005). Partial adjustment and target capital structures. *Journal of Financial Economics*, 79, 469-506.
- Hovakimian A. (2006). Are observed capital structures determined by equity market timing? *Journal of Financial and Quantitative Analysis*, 41(1), 221-243.
- Hovakimian, A., Opler, T., & Titman S. (2001). The Debt-equity choice. *Journal of Financial and Quantitative Analysis*, 36, 1-24.
- Huang, R., & Ritter J. R. (2009). Testing theories of capital structure and estimating the speed of adjustment. *Journal of Financial and Quantitative Analysis*, 44, 237-271.
- Jalilvand, A., & Harris R. S. (1984). Corporate behavior in adjusting to capital structure and dividend targets: An econometric study. *Journal of Finance*, 39, 127-145.
- Kaya H. D. (2013). The Long Run Impact of IPO Market Timing on Capital Structure. *Investment Management and Financial Innovations*, Issue #1 (cont.).
- Kayhan, A., & Titman S. (2007). Firms' histories and their capital structure. *Journal of Financial Economics*, 83(1), 1-32.
- Korajczyk, R. A., & Levy A. (2003). Capital structure choice: Macroeconomic conditions and financial constraints. *Journal of Financial Economics*, 68, 75-109.
- Korajczyk, R. A., Lucas, D. J., & McDonald R. L. (1992). Equity issues with time-varying asymmetric information. *Journal of Financial and Quantitative Analysis*, 27, 397-417.
- Marsh P. (1982). The choice between equity and debt: An empirical study. *Journal of Finance*, 37, 121-144.
- O'Brien, T. J., Klein, L. S., & Hilliard J. I. (2007). Capital structure swaps and shareholder wealth, *European Financial Management*, 13(5), 979-997.
- Pagano, M., Panetta, F., & Zingales L. (1998). Why do companies go public? An empirical analysis. *Journal of Finance*, 53, 27-64.
- Rajan, R. G., & Zingales L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance*, 50, 1421-1460.
- Taggart R. A. (1977). A model of corporate financing decisions. *Journal of Finance*, 32, 1467-1484.