CHAPTER 8: CONCLUSION

In this chapter, we discuss the main findings of the dissertation and some important avenues for future research.

8.1 Main Findings

The study addresses an important question, “Are public equity issuances motivated by market timing by managers or market conditions or genuine investment needs of the firms?” In other words, our study attempts to find out whether equity issuance decision of the firms is driven by firm-specific overvaluation/market-wide overvaluation or firms issue equity when there is increase in demand of capital in the overall economy or firms issue equity when they really need capital to finance their investments. We investigate these questions by examining all IPOs and SEOs which were issued in India during 1991-2009. We carry out our analysis in three stages. First, in our direct tests we evaluate the impact of market timing and market conditions (pseudo market timing) on the number of equity issues by using various proxies which reflect aggregate market timing, firm-specific market timing and market conditions. Second, we examine long-run performance of IPOs and SEOs by using calendar-time approach in order to test market timing against pseudo market timing. This serves as indirect test of market timing and pseudo market timing. We not only examine the data as a whole but we also examine all IPOs and SEOs in three regulatory regimes, different types of ownership and industries. Third, in order to explore the investment motives of firms, we decompose market-to-book ratio into two components – mispricing and growth opportunities. This decomposition is essential to construct clean test of market timing because market-to-book ratio is considered as a proxy of misvaluation as well as of growth options. We examine the independent effects of market timing
(misvaluation) and growth opportunities on the actual use of proceeds of equity issuance in the post-issue period. This is done to find out whether firms issue equity due to market timing or due to the genuine need of capital to finance its investments.

The main findings of our study are as follows:

- At aggregate level, we find strong evidence of firm-specific market timing, aggregate market timing and pseudo market timing for all IPOs issued during 1991-2009. Thus, we can conclude that in India, firms issue equity not only to time the market but due to market conditions.

- Long-run underperformance of IPOs at aggregate level supports the evidence of market timing.

- We find strong evidence of market timing and pseudo market timing in both business group affiliated IPOs as well as standalone IPOs. However, other IPOs which are mainly government IPOs do not show any evidence of market timing and pseudo market timing. Our long-run performance of IPOs in different types of ownership show similar results.

- Our industry-wise analysis of IPOs show that there is strong evidence of market timing and pseudo market timing in manufacturing industry and financial institutions & insurance industry and we do not find any evidence of market timing as well as pseudo market timing in construction industry. It is important to note that construction industry mainly contains government IPOs and our ownership-wise analysis show that government IPOs do not show any evidence of market timing and pseudo market timing.

- When we carry out regime-wise analysis of IPOs, we find that there is strong evidence of market timing and pseudo market timing in regime I (1991-1996). The possible reason for strong evidence of pseudo market timing in regime I is that this is the initial phase of
liberalization and economic reforms when economy was opening up and the demand for capital led to heavy equity issuance through IPOs. The reason for strong evidence of market timing in this era is that there were very few regulations during this period and many entrepreneurs took this as an advantage and eroded wealth of investors. Due to regulations imposed by SEBI on IPO pricing and other constraints on promoters’ holding in regime II, we do not find evidence of market timing and evidence of pseudo market timing is weak in this regime. This also led to very few IPOs during regime II (1997-2002). To encourage equity participation after observing the slump in IPO market in regime II, SEBI introduced norms for public equity offerings in 1999 and 2000 such as norms related to allotment, norms related to financial reporting, transparent book-building process, etc. We expect that the effect of these norms will be seen only after 1-2 years. That is why, we find moderate evidence of market timing and pseudo market timing in regime III (2003-2009). Our regime-wise long-run performance analysis of IPOs support these results.

- For SEOs, we find strong evidence of pseudo market timing and moderate and weak evidence of firm-specific and aggregate market timing respectively for all the SEOs issued during 1991-2009. In secondary equity offerings also, firms issue equity not only to time the market but due to market conditions.

- Negative long-run performance of all SEOs also supports the evidence of market timing.

- We do not find evidence of market timing and pseudo market timing in SEOs other than business group and standalone SEOs but we find strong evidence of market timing and pseudo market timing in standalone SEOs and weak evidence of market timing and strong evidence of pseudo market timing in case of business group SEOs. Our long-run performance of SEOs in different types of ownership show similar results.
Our industry-wise results of SEOs indicate that SEOs belonging to manufacturing industry show strong evidence of market timing and pseudo market timing and we do not find any evidence of market timing and pseudo market timing in construction SEOs. SEOs belonging to other industries examined show weak evidence of market timing and pseudo market timing.

Regime-wise analysis of SEOs show that in regime A (1991-1996), we do not find any evidence of market timing but we find weak evidence of pseudo market timing whereas in regime B (1997-2009), we find weak evidence of market timing and pseudo market timing. Our results of long-run performance of IPOs and SEOs for complete time period and in different regimes support above results. We find negative long-run performance of SEOs in both the regimes.

Long-run underperformance is higher in hot IPO/SEO market as compared to cold IPO/SEO market. In other words, evidence of market timing in hot issue market is stronger than that of cold issue market.

Long-run underperformance is higher for IPOs compared to SEOs. In other words, evidence of market timing in IPOs is stronger than that in SEOs.

We use Rhodes-Kropf, Robinson and Viswanathan (2005) to decompose market-to-book (M/B) ratio into two components of mispricing (M/V) and growth opportunities (V/B) where M, V and B are market value, fair value and book value of equity respectively. We find that IPO and SEO firms have high level of mispricing and greater growth opportunities. This suggests that firms issue equity to take advantage of equity overvaluation and finance investment needs which is consistent with both behavioral and rational explanations of high M/B in pre-issue period.
• We find that issuing firms (IPOs and SEOs) with high mispricing component increase their cash holdings in the post-issue period and issuing firms with greater growth opportunities invest the equity proceeds in total assets and capital expenditures in post-issue period. We find similar results for both IPO and SEO firms and results are stronger for IPO firms as compared to SEO firms.

• We find long-run underperformance for both high and low overvalued IPOs but underperformance is more for high overvalued IPOs as compared to low overvalued IPOs. Similarly, we find evidence of long-run underperformance for IPOs which have greater growth opportunities as well for IPOs which have less growth opportunities. However, underperformance of IPOs which have greater growth opportunities is higher than that of IPOs which have less growth opportunities. Our results of post-issue stock returns for IPOs are consistent with the behavioral explanation and rational explanation of long-run underperformance of firms issuing equity. In the context of SEOs, we find that long-run underperformance for high overvalued SEOs but we do not find any evidence of long-run underperformance for less overvalued SEOs. Also, we find long-run underperformance for issuing firms having less growth opportunities and no underperformance for issuing firms having greater growth opportunities. This suggests that our SEO post-issue stock returns results do not support rational explanation of post-issue low stock returns.

8.2 Avenues for future research

• In our study, we examine IPO and SEOs at aggregate level and in different regulatory regimes on one hand and also business group IPOs/SEO, standalone IPOs/SEO and other IPOs/SEO as a whole on the other hand. Also, we examine industry-wise IPOs and SEOs in aggregate. This work can be further extended and one can examine different types of
ownership of IPOs and SEOs in each regime and different industries in each regime. This would enable us to understand which type of ownership and industry dominates in each regime.

- Market timing versus pseudo market timing can be examined in a scenario which is opposite of equity issuance and that is equity repurchases in India. In equity repurchases, managers can exhibit market timing behavior by buying back equity when it is undervalued. In such environment, we can test pseudo market timing which is an alternative hypothesis and states that one can find the appearance of market timing even if the markets are efficient.

- Both the hypotheses can also be tested in the context of mergers and acquisitions where the mode of payment is stock because acquiring companies tend to use their overvalued equity to buy the target. Fair valuation of cash mergers and stock mergers can be compared.

- Venture capitalist can exit the company via IPO or an acquisition in which he sells the company to another company. Market timing versus pseudo market timing hypothesis can be examined in these two contexts to find out in which conditions a venture capitalist goes for an IPO or an acquisition.