Research article

Explaining Short Run Performance of Initial Public Offerings in an Emerging Frontier Market: Case of Sri Lanka

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Abstract

The study documents the performance of initial public offerings in Sri Lanka, an emerging frontier market. The Sri Lankan economy had underperformed during a long drawn out internal civil conflict which was finally overcome in 2009. The pickup in the economy has boosted the equity market which grew more than five hundred percent for the next 3 years, but has tapered off since then. This is despite the Government of Sri Lanka providing incentives for companies to obtain a listing on the stock exchange in order to fund growth and to develop the still fledgling stock market. The study focuses on all IPOs listed in the period 1996 to 2000 which had a mix of private initial public offerings and some entities that were privatized by the state. High issue underpricing similar to the returns seen in developing countries was documented with privatized IPOs offering superior excess returns than private offerings. These positive excess returns were apparent even after six months while holding period returns were significant even at the second year. Returns at the end of the third year show no excessive market returns. Market volatility, ex ante stock price uncertainty, ex ante market uncertainty and privatization had an impact on the magnitude of the excess initial returns for the privatized offerings while only the demand multiple was significant for the private offerings. **Copyright © IJEBF, all rights reserved.**

Keywords: IPO, underpricing, privatization, excess returns, emerging market

1. Introduction

The issue of under pricing in Initial Public Offerings (IPO) has been well documented, especially in the developed markets. Even in the emerging markets, research over the last decade has clearly pointed to the prevalence of this phenomenon. Investment in emerging markets has grown over the last decade due to tepid economic growth in countries like USA and Japan and most of Europe. China, India and other emerging frontier economies, however have recorded double digit growth. For diversification, portfolio managers have recognized the importance of emerging markets by including this asset class in their portfolio of assets. This study evaluates IPO performance of a small emerging frontier market of Sri Lanka and attempts to identify the reasons for contributing to such performance. The mix of privatized offerings during the period of study offered the opportunity to assess any differences in the drivers of performance in these sub categories.

The total number of firms that raised equity through an IPO in Sri Lanka for the period 1990 to 2013 is one hundred and fifty. As seen in Figure 1, the market has exhibited growth spurts during the periods 1990 to 1993, 2001 to 2006 and 2008 to 2010. As expected, the number of issues that had been listed during this "hot" period is correspondingly high compared to the "dull" period in the market. In order to control for the effect of listing in these hot periods, and sentiment distorting the overall findings, the period between 1996 and 2000 where the market was relatively stagnant and IPO market relatively active was chosen. The IPOs during this period were also a mix of privatization offerings and private offerings which provided the opportunity to study the factors affecting the performance on these different types of IPO issues.



Figure 1: Number of IPOs and the All Share Price Index Source: CSE Annual reports, various issues

The study examines initial public offerings on the Colombo Stock Exchange (CSE) during the period 1996 to 2000, numbering a total of 30 issues. This time period was specifically chosen since the overall market was relatively lax and thus not be influenced by a hyperactive equity market and investor sentiment unduly distorting the market. Sri Lanka which came out of a long protracted internal conflict has seen its economy grow at around 7.5% over the last four years. The Government has encouraged private investment and provided incentives for companies to raise equity in the capital markets. The market recorded a growth of over three hundred percent in the initial two year post conflict period but has retracted around ten percent from the market peak subsequently, due to concerns and uncertainties in the local and global environment. The influx of listing that was expected to flow in to the market did not materialize. Recently the Government announced a range of

incentives including concessionary tax rates for companies listing on the stock exchange. The Government has also stepped up its plan to list some of the bigger public companies. Given this backdrop, the period under study which mirrors the emerging current period would provide investors and the Government useful information in planning this next phase of growth of the CSE.

A 57% initial excess return for all IPOs was documented with privatized companies providing excess returns as high as 98% (Peter, 2007). However, this excess returns dissipates at the end of the first year and the returns are indistinguishable from the rest of the market. The excess returns peak during at six month period. Statistically significant support was found to indicate that market volatility, ex ante stock price uncertainty, ex ante market uncertainty and privatization were driving the excess initial returns. These factors explained sixty eight percent of the excess returns for privatized IPOs. However, the impact of these factors on non privatized IPOs was not significant.

2. Literature Review

Asymmetry of information has formed the basis for a number of theories put forward to explain the phenomenon of under pricing of IPOs. The winners curse where the issuer is assumed to have superior information and thus uninformed investors end up subscribing to overvalued stocks, signaling hypothesis where the issuer deliberately underprice his stock to build credibility among the investing community and the legislative hypothesis where the issuer underprice stock to safeguard against any possible court action by subscribers to the issue are some examples.

The investment sentiment theory postulates that the excess returns are contributed by investor overoptimism on equity valuation. This would be more applicable in frontier emerging markets where the market is small, investors are unsophisticated and few security analysts follow companies. The Sri Lankan stock market has been shown to be at best weak form efficient (Peter and Fernando, 2010; Samarakoon, 1996).

Underpricing has been extensively reported from developed and emerging economies. Over the last two decades studies in emerging countries have increased with the channeling of funds to these booming economies. Ibbotson (1975), Ritter (1984) Dewenter et al (1997), Menyah and Paudyal (1996), Perotti and Guney (1993) Paudyal, Saadouni and Briston (1998), Peter (2007), Adjasi et al. (2011) and Heerden and Alagidede (2012) among others have documented this phenomenon. Studies have also evaluated performance of privatized initial public offerings and compared them to the private IPOs. They have found that in the majority of cases SIPs are significantly underpriced offering superior returns in comparison to the private IPOs.

The evidence on long term performance of IPOs is mixed. Menyah et al., (1996) in UK and the multi country by Megginson, Nash, Netter and Schwartz (2000) documented positive returns over a three year period. Paudyal et al., (1998) in his study on IPOs in Malaysia found no significant difference.

A number of studies have attempted to identify factors driving underpricing of IPOs in general and underpricing of privatized IPOS. Menyah et al (1995), Paudyal et al (1998), Dewenter et al (1997), Hensler et al (2000) have documented their findings related to a number of developed and developing countries. Demand multiple, market volatility, ex ante stock price uncertainty, ex ante market uncertainty, size of issue, underwriters reputation were found to explain the variances seen in underpricing in selected countries.

3. Data and methodology

During the 1996 to 2000 period a total of 30 companies came out with IPOs, with 18 of them being privatized offerings and 12 non privatized offerings. From a total of 18 companies that were privatization IPOs, 16 of the issues emanated from the key strategic plantation sector (tea and rubber) and one each from the manufacturing and agriculture sectors.

		Amount Raised	Average Subscription	Average Price
	Number of Issues	(LKR billions)	(%)	(LKR)
Privatized	18	1.394	49	14.00
Non-privatized	12	2.036	153	19.42
Total	30	3.431	91	16.17

Table 1: Summary data on the initial public offerings

The total amount raised by these 30 companies was LKR 3.43 billion with an average size of an IPO of LKR 114.37 million. The privatized IPOs accounted for approximately LKR 1.39 billion or 40% of this amount. Around 53 percent of the issues in total were oversubscribed. The number of privatized issues oversubscribed was 67 percent while for the non privatized issues the figure was 33 percent.

The initial raw premium (discount) to the investor who purchased the stock at the offer price is calculated. However, this assumes that there is no time lag between the offer and trading of the stock. However, in Sri Lanka, the average time period from subscription to the offer and the trading of the stock on the exchange varies between 4 to 8 weeks. The period is similar to what was found in Malaysia. In order to adjust for a possible change in market conditions causing an impact on the changes in the price, the excess market returns are analyzed through

$$R_i = (\underline{P_l} - \underline{P_0}) - (\underline{M_l} - \underline{M_0})$$
$$P_0 \qquad M_0$$

where R_i is the excess return, M_1 is the ASPI index at the end of the first day of trade and M_0 is the ASPI index one month before the first day of trade. It is assumed that the average period from subscription to initial trading is one month.

In order to assess the factors driving the excess returns, an OLS equation is used as shown in (3).

$$R_i = \alpha_0 + \beta_1 DM_i + \beta_2 MV_i + \beta_3 EAS_i + \beta_4 EAM_i + \beta_5 PRIV_i + \varepsilon_i$$

Initial excess return is denoted by R_i while the independent variables are denoted by; DM_i – demand multiple; MV_i – market volatility before listing; EAS_i – ex ante uncertainty of the stock; EAM_i – ex ante uncertainty of the market; $PRIV_i$ - dummy variable for privatized IPO;

Demand multiple, market volatility, ex ante uncertainty of the stock, size of the offer and timing (as measured by the number of IPOs issued prior to the year under consideration) and underwriter reputation were initially considered. Ex ante uncertainty of the market was included after assessing the characteristics of the working of the local stock market. Underwriters' reputation was not considered important in Sri Lanka with its limited market and the small number of firms with underwriting capability. The amount of capital raised was relatively similar to each other and the small window of five years that was considered for the study excluded, size and timing as factors that could influence performance. A concise description of the factors used as explanatory variables are given below.

a) Demand Multiple

Subscription for an IPO would be dependent on the market perception of the differential between full value of the stock and offer price and, then the ability of the market to fully absorb the issue. A situation of demand exceeding supply would mean that the market regulators and the company would have to work out the basis of allocation. In order to broad base ownership and create a share ownership population, the authorities encouraged companies to give preference to the small individual investors. Hence, it was common to find in cases where the issue was heavily oversubscribed, lots of 1000 shares or less were allocated to individual investors. The large institutional investors received only a very small percentage of the shares originally applied for. They would then be reasonably expected to step into the market and purchase the shortfall. However, the dispersion of small lots of shares among a large number of local individual investors makes it difficult for these institutions to source the quantity that they desire, making the stock unattractive for them in the short term. Hence, in this case, the high positive relationship seen between initial excess returns and the demand multiple in previous studies, may not be as apparent here. It is hypothesized that the demand multiple (measured as the number of times the issue was oversubscribed) would have only a marginally positive impact on the initial excess returns.

b) Market Volatility

In nations like Sri Lanka with its small-capitalized markets and few sophisticated investors, the market is generally highly volatile and can be classified as relatively market inefficient. The average time period taken from the offer date of the IPO to the actual trading of the stock may vary from 4 to 8 weeks. During this relatively long period, market moving news may have altered the outlook for the particular stock or for the market in general. As explained by Paudyal et al. (1998), the company would take this factor into account when setting its price in order to make sure that the true value of the stock does not dip below the offer price, even in the worst case forecast for the market. Following Menyah et al. (1995) and Paudyal et al. (1998), the author has used standard deviation of daily market returns, two months prior to the date of listing to measure this volatility. It is expected that market volatility would have a positive impact on the premium offered.

c) Ex ante stock price uncertainty

Ritter (1984), Paudyal et al. (1998) and others have shown that the initial excess return can be explained by the ex ante uncertainty of the share price, once it is listed. It is theorized that uninformed investors would be willing to pay a higher price and thus contribute to the higher initial excess returns. For emerging countries like Sri Lanka where markets are information inefficient and informed investors are a minority this factor is expected to be more pronounced. The standard deviation of daily returns for each IPO up to one year from the time of listing is used.

d) Ex ante market uncertainty

The argument was developed earlier that the markets in developing countries have higher variability. Similar to the effect of ex ante stock price uncertainty affecting the initial excess returns, it was hypothesizes that the uninformed investor would be willing to pay a higher price, if they were uncertain of how the market would react to the new issue being listed. The standard deviation of the market daily returns, up to two months from listing was used to capture the market sentiment or market volatility. Lee and Kuo (2010) in their study in Taiwan, found support that market volatility was significant in explaining IPO performance

Keeping in mind the contextual setting of the country under study, the paper attempts to identify whether and how the identified factors influence the initial premium of IPOs in Sri Lanka. The privatized IPOs and the non privatized IPOs were also analyzed separately to distinguish any differences in the factors driving the excess initial returns for each of the sub groups.

4. Performance of IPOs

a) Issuer underpricing

The initial excess returns given in Table 2(a), shows that subscribers to the IPOs in Sri Lanka have received an average (median) initial excess return of 57.2% (18.6%). Of the total sample, 77 percent of the IPOs had positive returns, while over 33 percent of the issues gave a return in excess of 50 percent. The statistics indicates that the initial premium is positively skewed.

As expected, the results support previous findings of issuer underpricing seen in developed and emerging economies worldwide. The excess returns are much greater than those recorded in developed markets and similar to some of the studies in developing economies. In the comprehensive study done by Ibbotson et al., (1988) of 8,668 IPOs covering a period from 1960 to 1987 in countries predominantly from the developed world showed an average return of only around 16.4%. The average returns found here is comparable with similar studies undertaken by Dewenter et al., (1997) in Malaysia of 53% and Paudyal et al., (1998) also in Malaysia of 62%, Thailand (47%), Poland (44%) and Mexico (36%).

The relatively excessive returns in developing markets are attributed to the fact that the asymmetry of information is more pronounced. The raw and excess returns for the entire sample are statistically significant at the 1% level.

Table 2

(ล)) Summarv	of number	of companies	providing initia	l excess returns
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Return %	Number		
	All IPOs	SIPs	NIPs
Less than 0	7	3	4
0 - 50	13	5	8
50 - 100	4	4	-
100 - 200	4	4	-
Over 200	2	2	-
Total Firms	30	18	12
Mean Return in %	56.1	97.9	- 4.3
t statistic	2.819 ^a	3.350 ^a	-0.505
Median Return in %	20.0	67.3	2.0
t statistic	1.004	2.304 ^b	0.234
Standard Deviation in %	109.1	124.0	29.3
^a Significance at the 1% level	el ^b Significance at the 5% level		

(b) Test of differences in returns between SIPs and NIPs

Test Method	Raw Return		Excess Return			
(1% significance level)	Statistics	Critical	<i>P</i> -value	Statistics	Critical	P-value
Parametric tests						
One way analysis of variance	$F_{s} = 7.53$	$F_c = 7.64$	0.010	$F_{s} = 7.70$	$F_{s} = 7.64$	0.009
Non Parametric tests						
Mann-Whitney U test	$Z_{s} = 3.09$	$Z_c\!=\!2.57$	-	$Z_s\!=\!2.92$	Zc=2.57	

Economic returns on share issue privatizations (SIP) have outperformed those from non privatized IPOs (NIP). SIP had average (median) excess returns of 97.9% (67.3%) while the NIPs had a return of -3.9% (+5.1%). The results are similar to the Paudyal et al., (1998) study, where privatized companies recorded returns of 103% (80%) while NIPs recorded returns of only 53% (29%). However, the results in Dewenter et al. (1997) had mixed results with France and UK offering superior returns while in Canada and Malaysia, only private IPOs offering superior returns.

Perotti (1995) argued that governments underprice the IPOs since it could affect the value of the company by changing state policies. Governments in developing economies like Sri Lanka are more likely to underprice the IPOs, in order to obtain the consent of the general public to selling public assets. The evidence is consistent more with the signaling rather than the asymmetry information proposition. The excess returns from SIPs were statistically significant at the 1% level while the excess returns from the NIPs sample showed no significant difference between the groups.

One-way analysis of variance and the Mann-Whitney non parametric tests were used to check whether the returns from the two sub groups, SIPs and NIPs are significantly different from each other. As seen in Table 2(b), both results showed that the excess returns for the two sub groups are significantly different at the 1% level of significance.

4.1 Short and long term returns

The investor has been provided with a cumulative 6 month excess returns of an average (median) of 14.2% (10.0%), significant at the 5% level as seen in Table 3. The excess positive returns though lower, are present even at the end of the 12 month period. The six month returns of the privatized IPOs have provided 19.8% (23.9%), significant at the 10% level, and increased to 24.2% (18.2%) over the 12 month period. The 12 month return is however statistically not significant. The non privatized IPO returns are much lower, though the same pattern of declining returns over the 12 month period is shown. The evidence indicates that the excess returns start to deplete after 6 months and is not significantly different from the market returns. The differences between the groups for both 6 and 12 month periods are however, not statistically significant.

	All IPOs	SIPs	NIPs
6 month cumulative returns			
Mean in %	14.18	19.81	5.72
t statistic	2.291 ^b	2.144 ^c	0.867
Median in %	10.05	23.92	-3.48
t statistic	1.624	2.589 ^b	-0.528
Standard Deviation in %	33.89	39.20	25.50
12 month cumulative returns			
Mean in %	11.69	24.15	-7.01
t statistic	0.939	1.414	-0.411
Median in %	6.55	18.19	0.67
t statistic	0.526	1.065	0.039
Standard Deviation in %	68.18	72.48	59.14
1 year holding period returns			
Mean in %	21.35	43.33	-11.61
t statistic	1.398	1.876 ^c	-0.991
Median in %	3.97	4.72	-18.21
t statistic	0.260	0.204	-1.555
Standard Deviation in %	55.99	97.97	40.57
2 year holding period returns			
Mean in %	30.92	54.66	-4.67
t statistic	1.798 ^c	2.069 ^c	-0.395
Median in %	-1.73	-4.66	-11.57
t statistic	-0.101	-0.177	-0.978
Standard Deviation in %	94.22	112.10	40.99

Table 3: Cumulative returns

3 year holding period returns			
Mean in %	-12.96	-4.09	-26.26
t statistic	-1.308	-0.318	-1.705
Median in %	-8.63	-17.71	-21.99
t statistic	-0.871	-1.377	-1.427
Standard Deviation in %	54.28	54.54	53.37

^b Significance at the 5% level ^c Significance at the 10% level

The long term performance was measured using a buy and hold strategy of one, two and three years, excluding the initial excess returns. Holding period return are 21.3% (3.9%) in the first year and 30.9% (-1.7%) in the second year. The excess returns decline to -12.9% (-8.6%) in the third year. Only the second year return though, is significant. The results are contrary to Barry and Jennings (1993) who indicated that most of the benefits of the underpricing accrue to subscribers of the IPO. The sub division of the groups to privatized and non privatized samples, provides clear evidence for the above results. In the case of NIPs, the HPR moves up from -11.6% (-18.2%) to -4.6% (-11.5%) from the first to the second year, and then drops down to -26.6% (-21.9%) in the third year with the results not statistically significant. The SIPs, have offered huge excess returns up to the end of the second year. The HPR moves up (down) from 43.3% (4.7%) to 54.6% (-4.6%) from the first to the second year. However, this return dissipates to -4.0% (-17.7%) by the end of the third year. Results are significant at the 10% level for the first and second years. The SIP's have unexpectedly provided economically significant excess returns over the initial two year period. The results of the two groups are significantly different for the 2 year holding period.

The results obtained here seem different to a majority of the studies that show there is a negative return over the long term for all IPOs. Here the unusual positive returns of the SIPs in the first two years influence the overall results and are similar to Megginson et al., (1999) study which reports excess holding period returns are positive for the one, three and five year holding periods. However, the NIPs more closely follow the same pattern as Levis (1993) and Menyah et al., (1995), Ritter (1991) and Aggrawal et al., (1993) where the IPO's shows a decline in return performance.

5.2 Determinants of Excess Returns

A summary of the results done for all IPOs, SIPs and NIPs is given in Table 4. The demand multiple, market volatility, ex ante stock and market risk and privatization explains 68% of the excess return in Sri Lankan IPOs. This corresponds favorably to the Paudyal et al. (1998) study that explained only 35% of the variation for all IPOs. However, interpretation of this result needs to be looked at in the light of the sub group results where the SIPs have driven the overall figure higher. The results in Malaysia and Sri Lanka should correspond very closely if offset for the mix between SIPs and NIPs.

The explanatory capability for the SIPs is 69% and is very similar to previous studies conducted by Paudyal et al. (1998) that explained 78% of the variation in Malaysia and Menyah et al. (1995) that explained 71% of the variation in UK. However, when it comes to the NIPs, these factors have less of an effect on

explaining the excess returns. In this case only 25% of the variation is explained and for the case in Malaysia it dropped down to 10%. It seems clear that there are some different factors driving NIP returns.

All IPOs	SIPs	NIPs
-0.240	1.311 ^c	-0.177
0.047	0.051	0.369 ^c
-152.603 ^a	-155.736 ^b	-22.879
-23.207 ^b	-46.665 ^c	-7.750
300.674 ^a	347.426 ^a	55.325
1.000^{a}	-	-
68.4%	69.4%	25.8%
13.554 ^a	10.659 ^a	1.955 ^a
30	18	12
	All IPOs -0.240 0.047 -152.603 ^a -23.207 ^b 300.674 ^a 1.000 ^a 68.4% 13.554 ^a 30	All IPOsSIPs -0.240 1.311° 0.047 0.051 -152.603^{a} -155.736^{b} -23.207^{b} -46.665° 300.674^{a} 347.426^{a} 1.000^{a} - 68.4% 69.4% 13.554^{a} 10.659^{a} 30 18

Table 4: Initial	excess return	determinants
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^a Significance at the 1% level ^b Significance at the 5% level ^c Significance at the 10% level

The coefficients of the demand multiple have provided mixed results. While the coefficient is positive in all cases indicating that *ceteris paribus*, higher demand would drive the excess return higher, it is not significant for both the case of all IPOs and SIPs. Only the coefficient of the NIPs was significant at the 10% level. The relatively less significance of this factor could possibly be due to the general method of devolvement in Sri Lanka, where the emphasis is on the small individual investor. This wide dispersion of the shares makes it a less attractive option for the institutional investors who require liquidity. This liquidity factor is reinforced by the fact that almost 67% of the SIPs were oversubscribed with high retail demand and hence ownership widely dispersed. On the other hand only 34% of the NIPs were oversubscribed making them more liquid and hence a relatively more attractive stock.

Contrary to expectation and previous findings, the market volatility has shown an inverse relationship with initial excess returns for the total sample, and is significant at the 1% level. The signs remain negative for the sub groups of SIPs and NIPs, but only significant at the 5% level for the SIPs. The coefficient itself is much larger for the SIP versus NIPs. A possible explanation for the inverse relationship could be sentiment factor in the market. If the companies found that the general market mood was of optimism, then they would be tempted to price their stock closer to their full value than if it was not, thus leading to less of a premium on listing. On the average the market had picked up around 4% prior to the new listings, giving weight that this might be a possible explanation to the contrary findings. To analyze this further, the data was partitioned into those companies that were listed prior to a positive market performance during the two months leading to the listing, and those listed during a negative performance. The results are not shown, but the average excess returns for companies that were listed during the positive market performance were 30.3% and 75.7% for those that were listed prior to a negative performance. However, though the difference is economically significant, statistically the excess returns were not different to each other. The results were similar when partitioned. For the SIPs, the average excess returns for companies that were listed during the positive market performance were 62.2% and 109.5% for those that were listed prior to a negative performance. In the case of NIPs, the average excess returns were -5.7%, and -0.2% for those that were listed prior to a positive and negative performance respectively. In both cases the excess returns were not statistically different to each other.

The ex ante uncertainty associated with the price of the IPO shows a negative relationship, again contrary to previous results and our hypothesis. The results are significant at the 5% level for all IPOs and at 10% for the SIPs. For the NIPs, it is not significant. However, the magnitude of the coefficient is much small than that observed for market volatility. This anomaly could be due to the fact that the uninformed investors in this case, the small individual investors may have already been provided the shares they requested based on the preferential allocation method used. Because of this, they may have not been interested or more likely, not have the capacity to purchase in the secondary market and therefore affect the price as predicted. In order to explore this possibility, all the IPOs were separated into two separate groups based on the level of ex ante uncertainty. The average ex ante uncertainty for all IPOs was used as the basis for separation. It was found that the group with low uncertainty had an average subscription rate of 51.8% while the higher uncertainty group had only an average subscription rate of 4.5%. The difference in the mean was significant at the 5% level. Hence, it is possible that the allocation method of favoring wide dispersion of shares and the lack of purchasing power among the small investors may have contributed to the contrary findings.

The same evaluation was done separately for the SIPs and the NIPs. In the case of SIP's it was found that the group with low uncertainty had an average subscription rate of 48.6% while the higher uncertainty group had only an average subscription rate of 4.4%. Again the difference in the mean was significant at the 5% level. For the NIPs, the group with low uncertainty had an average subscription rate of 55.5% while the higher uncertainty group had only an average subscription rate of 4.9%. However, the difference in the mean was not significant.

The ex ante market uncertainty as predicted, showed a positive relationship between it and the initial excess returns for all the three cases. The magnitude of the coefficient was also the largest, in comparison with all the other variables. It was also statistically significant at the 1% level for both the total sample of IPOs and for the SIPs. Once again for the NIPs, it was not significant. It would be revealing to study the impact of this factor on IPO performance in other emerging economies to verify the findings seen here in Sri Lanka Finally as shown earlier, privatization had a positive impact on the excess returns for the IPOs. This was significant at the 1% level.

5. Conclusions

The study attempted to explain the factors driving high underpricing of IPOs seen in Sri Lanka. The level of underpricing identified of around 57%, is more in line with the results recorded for middle income countries such as Malaysia (62%), Mexico (36%), Poland (44.4%) and Thailand (46.7%). Since a majority of the companies in the sample were privatized, they had an established presence in the market and operating in relatively stable industries. Therefore, privatized IPO's would be expected to be priced, close to their full value. The results did not support this concept. Excess returns from these issues were very much higher, providing returns of around 98% compared to a -4% return for the NIPs. It is believed that the Government trying to sell the concept of privatization to the country and to the employees of the companies may have made them set a price much below the fair value of the company. Analysis of whether the returns from the two sub groups were different from each other showed that, they were significantly different at 1% level.

The cumulative average returns for 6 and 12 months showed average returns of 14% and 11% respectively. The results indicate that on average IPOs did not offer investors any significant return over the market during the first 12 months of it being listed. SIPs however, offered investors above average returns of 20% in comparison to 6% for NIPs over the 6 month period. For the 12 month period the returns from the two sub groups were not statistically significant.

Over a 2 year period, IPOs outperformed the market giving investors an excess return of 31% (10%). This return was not seen though at the end of the 3 years. The SIPs also follow the same pattern, where at the end of the 2 years, the returns are 55% (10%), but decline to -4% at the end of the 3 year period. The results were however, contrary to other long term studies where after the initial underpricing, the IPOs underperformed and the prices only picking up only after a 4 to 5 year post listing period.

When the reasons for the initial excess returns were analyzed, market volatility, ex ante stock price uncertainty, ex ante market uncertainty and privatization all had an impact on the magnitude of the excess initial returns. The demand multiple however failed to have a significant impact. However, market volatility and ex ante stock price uncertainty were contrary to previous studies, negatively related to the returns. The results for the SIPs were also similar to the overall results for all IPOs. In the case of NIPs these factors were unable to explain their performance with only the demand multiple showing any significance.

Interestingly, some of the differences existing even with the relatively more developed markets like Malaysia, Thailand etc, in terms of capital market development, may account for the unusual relationships seen between market volatility and ex ante uncertainty on excess returns. Investment sentiment rather than fundamentals seem to be driving initial excess returns. However, this is normally associated with *"hot issue"* periods. But the sample selection deliberately avoided this period in this case. Further, research in markets similar to the Sri Lankan case would be able to add more light on these issues.

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