

UNIVERSITY OF LJUBLJANA  
FACULTY OF ECONOMICS

DIPLOMA THESIS

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UNDERPRICING OF INITIAL PUBLIC OFFERINGS (IPOS)-  
A CASE OF EMERGING MARKETS IN ASIA

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## STATEMENT

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# INTRODUCTION

*“The Chinese have accomplished in only 20 years what would take many other countries two centuries to achieve”*

James Wolfensohn, former World Bank President (Pukthuanthong, Walker, 2007, p. 708).

The underpricing of initial public offerings (IPOs), which is defined as percentage change from the offer price to the closing market price on the first trading day, has garnered increased attention in both academic and professional arenas over the last two decades, given that the level of underpricing is not constant over time or across issuers. Particularly during the “internet bubble” period of 1999-2000, these first day returns have been economically and statistically large. For example, specific for this period, underpricing averaged over 65 per cent, which implies that a firm that went public with an offer price of €10 had a first day closing price above €16.50 (Dolvin & Pyles, 2007, p 214).

Traditional thought suggests that underpricing represents an opportunity cost to pre-existing owners of the firm (Loughran, Ritter & Rydquist, 1994, p. 170). Specifically, underpricing implies that shares are sold at a discount to market value, thereby diluting the worth of pre-existing equity. Given this effect, IPO researchers have primarily focused on finding the determinants of underpricing. Although many studies identified possible contributing factors (Ritter & Welch 2002, p. 1800; Ljungqvist & Wilhelm, 2002b, p. 730), probably most important being information asymmetry between current owners and management on one side and potential new investors on the other side, the reason for underpricing normally consists of issuer incentives to go public and different issuing mechanisms as well.

IPO issuing has now for a longer period of time been a permanent form of company financing in the developed western markets. Its importance is increasing also in minds of managers of the firms from the east. Most often average underpricing in developing markets is much stronger, time lag between IPO issue and IPO stocks actually beginning to quote on stock exchange market is often big and the level of risk is higher (Ritter & Welch 2002, p. 1804). The main purpose of my thesis is to examine the risk of investing in developing markets IPOs and to address the question whether the higher average return covers the increased risk of such investments.

Main field of research in the thesis is focused on previous analyses of IPO underpricing in China, Malaysia and a small stock exchange market, Sri Lanka (which is of somewhat similar size as Slovenian market but with higher number of IPO offerings in the past). Most of the thesis is devoted to the comparison of IPO markets in aforementioned emerging economies to the western IPO markets.

I will review the IPO underpricing from a somewhat different point perspective. Rather than concentrating on IPO firm and issue characteristics, I will address the demand side effect of

IPOs. It has been shown (Chan et al., 2004, p. 415) that many times firms deliberately (especially in developing markets) underprice their issue in order for investors to gain confidence in the firm and be willing to invest additional funds in the future. With that in mind I will also compare the importance of audit quality and earnings management in the developed markets opposed to the less developed market of IPO offerings. Specially in this field of knowledge and in the importance of intellectual capital disclosure authors recently came to some very interesting discoveries that can come to a great use for a future investor in IPOs. To these interesting findings of association between intellectual capital disclosure and level of underpricing I devote space after discussing about audit quality and its importance.

As to perfectly understand the topic the theoretical part is presented at the beginning of the thesis, concentrating on knowledge recovered from developed markets. The structure of the thesis is followed by the Chapter about IPO underpricing in China. Chapter 4 reviews other developing markets in order to distinguish different characteristics between those markets relating to China's. In chapter 5 I discuss about other important aspects with investing in emerging market's IPOs. I conclude with the short outline of the results and discuss specifically about important findings of my thesis.

## 1. IPO THEORY BACKGROUND IN DEVELOPED MARKETS

From 1980 to 2001, the number of companies going public in the United States exceeded one per business day. The number of initial public offerings has varied from year to year, however, with some years seeing fewer than 100 IPOs, and others seeing more than 400. Initial owners have raised through IPOs \$488 billion (in 2001 dollars) in gross proceeds, an average of \$78 million per deal. At the end of the first day of trading, their shares were worth on average at 18.8 percent more than the beginning price. For an investor buying shares at the first-day closing price and holding them for three years, IPOs returned 22.6 percent (Ritter & Welch 2002, p. 1795).

*Table 1: Top Ten IPOs in the world history*

Year	Company	Stock Exchange	Country	USD million
2006	Industrial and Commercial Bank of China Ltd.	Hong Kong & Shanghai	China	22,041.0
1998	NTT Mobile Communications Network Inc.	Tokyo	Japan	18,379.0
1999	Ente Nazionale per l'Energia Elettrica	Milan	Italy	17,408.0
1996	Deutsche Telekom	Frankfurt	Germany	13,036.0
2006	Bank of China Ltd	Hong Kong	China	11,152.0
2006	Rosneft Oil Company	Russian Trading System	Russia	10,656.0
2000	AT&T Wireless Services	New York	USA	10,620.0
1997	Telstra Corporation Ltd.	Australian	Australia	9,997.0
2005	China Construction Bank Corporation	Hong Kong	China	9,231.0
2007	PetroChina Co. Ltd.	Shanghai	China	9,154.0
	<b>Total</b>			<b>131,674.0</b>



The IPO activity and returns however exhibit substantial time variation, as shown in Table 2. There was a modest IPO activity in 1980s (about \$8 billion in issuing activity per year). In the 1990s, issuing volume roughly doubled to \$20 billion per year during 1990 to 1994, doubled again from 1995 to 1998 (\$35 billion per year), and then doubled again from 1999 to 2000 (\$65 billion per year), before falling back to \$34 billion in 2001. Similar happened with average first-day returns- they reached 7.4 percent in the 1980s and increased to 11.2 percent in the early 1990s, to 18.1 percent in the mid-1990s, and to 65.0 percent in 1999 and 2000, before falling back to 14.0 percent in 2001. Approximately 70 percent of the IPOs end the first day of trading at a closing price greater than the offer price and about 16 percent has a first-day return of exactly zero. Also the long- run performance of IPOs varies over time. Three-year market-adjusted buy-and-hold returns are negative in every subperiod, but not for every cohort year. (Ritter & Welch 2002, p. 1798).

Table 2: Number of IPOs in a sample, average return, gross aggregate proceeds, aggregate money left on table and average 3-year buy-and-hold return in USA, 1980-2001

Year	Number of IPOs	Average First Day Return	Aggregate Gross Proceeds, \$ Millions	Aggregate Money Left of the Table, \$ Millions	Average 3-Year Buy-and-Hold Return of IPOs	Average 3-Year Buy and Hold Return of IPOs, Market Adjusted
1980	70.0	14.5%	2,020.0	408.0	88.2%	35.5%
1981	191.0	5.9%	4,613.0	264.0	12.8%	-26.2%
1982	77.0	11.4%	1,839.0	245.0	32.2%	-36.5%
1983	442.0	10.1%	15,348.0	1,479.0	15.4%	-38.7%
1984	172.0	3.6%	3,543.0	86.0	27.7%	-51.3%
1985	179.0	6.3%	6,963.0	354.0	76.0%	-39.5%
1986	378.0	6.3%	19,653.0	1,030.0	18.6%	-20.4%
1987	271.0	6.0%	16,399.0	1,019.0	-18.0%	-18.9%
1988	97.0	5.4%	5,324.0	186.0	55.7%	8.3%
1989	105.0	8.1%	6,773.0	336.0	51.1%	16.8%
1990	104.0	10.8%	5,611.0	454.0	12.2%	-34.1%
1991	273.0	12.1%	15,923.0	1,788.0	31.5%	-1.7%
1992	385.0	10.2%	26,373.0	2,148.0	34.8%	-2.3%
1993	483.0	12.8%	34,422.0	3,915.0	44.9%	-7.8%
1994	387.0	9.8%	19,323.0	1,650.0	74.1%	-8.3%
1995	432.0	21.5%	28,347.0	5,033.0	24.8%	-62.3%
1996	621.0	16.7%	45,940.0	7,383.0	25.6%	-57.0%
1997	432.0	13.8%	31,701.0	4,664.0	67.7%	6.8%
1998	267.0	22.3%	34,628.0	5,352.0	27.1%	9.1%
1999	457.0	71.7%	66,770.0	37,943.0	-46.2%	-32.9%
2000	346.0	56.1%	62,593.0	27,682.0	-64.7%	-36.4%
2001	80.0	14.0%	34,344.0	2,973.0	n.a.	n.a.
1980-1989	1,982.0	7.4%	82,476.0	5,409.0	20.8%	-24.7%
1990-1994	1,632.0	11.2%	101,652.0	9,954.0	44.7%	-7.2%
1995-1998	1,752.0	18.1%	140,613.0	22,436.0	36.0%	-32.3%
1999-2001	883.0	65.0%	163,707.0	68,598.0	n.a.	n.a.
1980-2001	6,249.0	18.8%	488,448.0	106,397.0	22.6%	-23.4%

## **1.1. Why do companies go public?**

In most cases companies go public in order to raise equity capital for the firm and to create a public market so the founders and other shareholders can convert some of their wealth into cash at a future date. Nonfinancial reasons, such as increased publicity, play only a minor role for most firms in the Western IPOs<sup>1</sup> (Ljungqvist & Wilhelm, 2002b, p. 735).

### **1.1.1. Life cycle theories**

The first formal theory of the going public decision appeared in Zingales (1995). He observed that it is much easier for a potential buyer to spot a potential takeover target when the target is public. By going public, entrepreneurs thus help facilitate the acquisition of their company for a higher value than what they would get from an outright sale. In contrast, Black and Gilson (1998) point out that entrepreneurs in most cases regain control from the venture capitalists in venture-capital-backed companies at the IPO. Thus, many IPOs are not so much exits for the entrepreneur as they are for the venture capitalists.

Chemmanur and Fulghieri (1999) develop another theory that IPOs allow more dispersion of ownership, with its advantages and disadvantages. Pre-IPO “angel” investors hold undiversified portfolios and are not willing to pay as high a price as diversified public-market investors. There are fixed costs associated with going public, however, and insider’s information cannot be costlessly revealed—after all, small investors cannot take a tour of the firm and its secret inventions. Thus, early in its life cycle, a firm will be private, but if it grows larger, it becomes more appropriate to go public.

Public trading per se has costs and benefits. Maksimovic and Pichler (2001) point out that a high public price can attract product market competition. Public trading can, however, in itself, add value to the firm, as it may inspire more faith in the firm from other investors, customers, creditors, and suppliers.

### **1.1.2. Market- Timing Theories**

Lucas and McDonald (1990) develop an asymmetric information model where firms postpone their equity issue if they know they are currently undervalued. In case of bear markets the value of the firm would go to low and entrepreneurs will delay their IPOs until a bull market offers more favorable pricing. Firms also avoid issuing in periods when few other good-quality firms issue.

High IPO activity may follow high underpricing because underwriters encourage more firms to go public when public valuations turn out to be higher than expected and because underwriters discourage firms from filing or proceeding with an offering when public valuations turn out to be lower than expected. For example, in 2000, the Nasdaq Composite index had the lowest return in Nasdaq’s 30-year history, and the ratio of withdrawn offerings

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<sup>1</sup> Note the difference with publicity matter in developing markets in upcoming pages.

to completed offerings increased to 38 percent, a proportion much higher than normal (Ljungqvist & Wilhelm, 2002b, p. 732).

### 1.1.3. The Changing Composition of IPO Issuers

Types of firms going public have changed over the years. Table 3 shows that the percentage of technology firms increased from about 25 percent of the IPO market in the 1980s and early 1990s to 37 percent after 1995 and an amazing 72 percent during the Internet bubble, before returning to 29 percent in 2001. Similar course of action was shown by firms with negative earnings in the 12 months prior to going public. In the 1980s, only 19 percent of firms had negative earnings before going public. This gradually increased to 37 percent by 1995 to 1998, and then rose precipitously to 79 percent during the Internet bubble. It was uncommon for a prestigious investment banker in the 1960s and 1970s to take a firm public that with at least four years of positive earnings. Later, in the 1980s, four quarters of positive earnings was still standard. In the 1990s, fewer and fewer firms met this criterion. Still, the investment banking firm's analyst would normally project profitability in the year after going public. During the bubble, firms with no near future prospect of becoming profitable became common. For example, forecasts for eToys projected no profits for at least two years. At the time of going public in May 1999, forecasted EPS was  $-\$0.27$  for 1999 and  $-\$0.55$  for 2000. Even these forecasts were too optimistic as eToys liquidated in 2001 (Ritter & Welch, 2002, p.1801).

Table 3: Fraction of IPOs with negative earnings in USA, 1980-2001

Time period	Number of IPOs	Tech Stocks	IPOs with EPS < 0	Mean First day Return EPS < 0	Mean First-day Return EPS ≥ 0
1980-1989	1982	26.0%	19.0%	9.1%	6.8%
1990-1994	1632	23.0%	26.0%	10.8%	11.4%
1995-1998	1752	37.0%	37.0%	19.2%	17.4%
1999-2000	803	72.0%	79.0%	72.0%	43.5%
2001	80	29.0%	49.0%	13.4%	14.6%
1980-2001	6249	34.5%	34.0%	31.4%	12.5%

Source: J.R. Ritter, I. Welch: A Review of IPO Activity, Pricing, and Allocations, 2002, p. 1797

## 1.2. Theoretical Explanations of Short-run Underpricing

One way of classifying theories of underpricing is to determine whether asymmetric information or symmetric information is assumed in the process. With other words, we distinguish between theories in which IPO issuers are more informed than investors (perhaps about internal projects) and theories in which investors are more informed than the issuer (perhaps about demand).

### 1.2.1. Asymmetry of Information

If the issuer is more informed than investors, rational investors are afraid of a lemons problem- only issuers with worse-than-average quality are willing to sell their shares at the average price. To distinguish themselves from the pool of low-quality issuers, high-quality issuers are willing to signal their quality. Therefore better quality issuers deliberately sell their

shares at a lower price than the market believes they are worth, which deters lower quality issuers from imitating. By doing that these issuers can recoup their up-front underpricing post-IPO either in future issuing activity, favorable market responses to future dividend announcements or analyst coverage (Welch, 1989, p. 425). In common with many other signaling models, high-quality firms demonstrate that they are high quality by throwing money away. One way to do this is to *leave money on the table* in the IPO. On theoretical grounds, however, it is unclear why underpricing is a more efficient signal than committing to spend money on charitable donations or advertising. The evidence in favor of these signaling theories is, at best, mixed: There is evidence of substantial postissuing market activity by IPO firms (Welch, 1989, p. 425), and it is clear for some issuers to approach the market with an intention to conduct future equity issues<sup>2</sup>.

If investors are more informed than the issuer, for example, about the general market demand for shares, then the issuer faces a placement problem. The issuer does not know the price the market is willing to pay. To say that differently, an issuer faces an unknown demand for its stock. A number of theories model a specific demand curve. One can simply assume that all investors are equally informed, and thus purchase shares only if their price is below their common assessment. Therefore observed (successful) IPOs are necessarily underpriced. There are, however, some overpriced firms going public, which would not be predicted because all investors are assumed to know that these would be overpriced. A more realistic assumption is that investors are differentially informed. Pricing too high might induce investors and issuers to fear a winner's curse or a negative cascade (Welch, 1992, p. 700).

In a winner's curse, investors fear that they will only receive full allocations if they happen to be among the most optimistic investors. When everyone desires the offering, they get rationed. An investor would receive a full allocation of overpriced IPOs but only a partial allocation of underpriced IPOs. Thus, the average return would be below the unconditional return. To break even, investors need to be underpriced. In an informational cascade, investors attempt to judge the interest of other investors. They only request shares when they believe the offering is hot.

Benveniste and Spindt (1989) argue that the common practice of "bookbuilding" allows underwriters to obtain information from informed investors. With bookbuilding, a preliminary offer price range is set, and then underwriters and issuers go on a "road show" to market the company to prospective investors. This road show helps underwriters to assess demand as they record "indications of interest" from potential investors. If there is strong demand, the underwriter will set a higher offer price. But if potential investors know that showing a willingness to pay a high price will result in a higher offer price, these investors must be offered something in return. To induce investors to truthfully reveal that they want to

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<sup>2</sup> As it will be seen later on the signaling theory in order to have future seasoned equity offerings is very much present in developing markets.

purchase shares at a high price, underwriters must offer them a combination of more IPO allocations and underpricing of the issue.

Baron (1982) offers a different, agency-based explanation for underpricing. His theory also has the issuer less informed, but relative to its underwriter, not relative to investors. To persuade the underwriter to put in the above normal effort to market shares, it is optimal for the issuer to permit some underpricing, because the issuer cannot monitor the underwriter without cost.

Habib and Ljungqvist (2001) also argue that underpricing is a substitute for costly marketing expenditures. Using a data set of IPOs from 1991 to 1995, they report that an extra dollar left on the table reduces other marketing expenditures by a dollar. As with almost all other theories of underpricing, however, these trade-off theories do not for certain explain the severe underpricing of IPOs during the Internet bubble. During the bubble, the IPOs of many Internet firms were the easiest shares ever to sell because of the intense interest by many investors. It is difficult to believe that an underwriter could not have easily placed shares with half the underpricing that was observed.

### **1.2.2. Allocation of IPO Shares**

In recent years, more attention has been drawn to how IPOs are allocated and how their shares trade, especially in the developing markets. Part of the reason for the increased academic attention on share allocation is due to the increased public attention on perceived unfairness in how shares are allocated, given the large amount of money left on the table in recent years. Specifically, the allocation of shares to institutional investors versus individuals has been a topic of interest.

Loughran and Ritter (2002) explore the conflict of interest between underwriters and issuers. If underwriters are given discretion in share allocations, then this discretion will often not be used in the best interests of the issuing firm. Underwriters might intentionally leave more money on the table than necessary, and then allocate these shares to favored buy-side clients. There is some evidence that underpriced share allocations have been used by underwriters to enrich buy-side clients in return for quid pro quos to the management of the future prospective IPO issuers in a practice known as “spinning”, or even to influence politicians.

The mystery is why issuing firms appear generally content to leave so much money on the table, and more so when their value has recently increased. Loughran and Ritter use prospect theory to argue that entrepreneurs are more tolerant of excessive underpricing if they learn about a postmarket valuation that is higher than what they expected. In other words, the greater the recent increase in their wealth, the less is the bargaining effort of issuers in their negotiations over the offer price with underwriters.

Both the Benveniste and Spindt bookbuilding theory and the Loughran and Ritter conflict of interest theory predict slow price adjustment: The final offer price is not fully adjusted from the midpoint of the file price range when underwriters receive favorable information. Although the information revelation theory can explain underwriters' sluggish price adjustment to private information, it does not predict that there should be anything less than full adjustment to public information. Shares can be allocated mostly to individual investors or the majority of the stake can be held by institutional investors. Researchers find both placements bring different effects, depending on the sector, state of economy and the level of information available to investors. The mix of both private and institutional investors has in most cases shown as the best choice by issuing and underwriter firm.

Aggarwal (2000) and Zhang (2001) focus on the number of shares that are allocated. Aggarwal reports that if the underwriter anticipates weak demand, it will typically allocate up to 135 percent of the offering, taking a naked short position. The underwriter then buys back the incremental 20 percent, and has the option of buying back the other 15 percent, treating the shares as if they were never issued in the first place. Zhang argues that the allocation of these extra shares boosts the aftermarket demand for the stock. This is because institutional investors who allocated shares are likely to continue holding them, whereas if they had not received any shares in the first place, they would have been unlikely to buy them in the aftermarket. The extra buy-and-hold demand that results from the overallocation boosts the aftermarket price and increases the price at which issuers can offer shares. If the demand for an IPO is strong, underwriters do not take a naked short position because covering it would be too costly.

Once trading commences, if there is weak demand, the lead underwriter might attempt to "stabilize" the price through various activities aimed at reducing selling pressure. Price stabilization is the only instance in which the SEC permits active attempts at stock price manipulation. Price stabilization activities include pre-IPO allocation policy, post-IPO purchases of shares by the lead underwriter, and the discouragement of selling.

For IPOs with weak demand, underwriters discourage flipping<sup>3</sup> through moral suasion (i.e., the threat of withholding future allocations on hot issues) and the imposition of penalty bids. A penalty bid occurs when the lead underwriter takes back the selling concession (the commission) from a broker who has allocated shares that are flipped. The existence of penalty bids gives a broker an incentive to allocate shares to clients who are likely to be buy-and-hold investors. More controversially, after the shares have been allocated, a penalty bid also gives a broker a financial incentive to discourage a client from selling shares. For IPOs where there is a strong demand and a price jump, penalty bids are rarely imposed, and flipping may even be encouraged in order to keep market demand from pushing the price to unsustainable levels.

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<sup>3</sup> Flippers are temporary investors who purchase shares at the IPO and quickly turn around to sell their shares.

The practice of encouraging sales in this scenario explicitly assumes that there is a negatively sloped demand curve, and that the market price is not exogenous.

For shares not sold in the offering, preissue shareholders commit to a specified lockup period, during which they agree not to sell any shares without the written permission of the lead underwriter. Although there is no statutory minimum, most lockup periods are 180 calendar days in length and almost none are less than 90 days (Field and Hanka, 2001, p. 480).

### **1.2.3. Valuation of firms going public**

The most common method for valuing firms going public is the use of comparable firm multiples. But unfortunately, accounting data are in many cases too *unreliable* a measure of valuation to facilitate powerful tests, especially because many firms going public are being valued on the basis of their *growth options, not their historical financials*. Kim and Ritter (1999) find only small connection in explaining the pricing of IPOs using accounting multiples, even when using earnings forecasts.

Purnanandam and Swaminathan (2001) construct a measure of intrinsic value based on industry-matched Price/Sales and Price/EBITDA from comparable publicly traded firms for a sample of over 2,000 IPOs from 1980 to 1997. They find that, when offer prices are used, IPO firms are priced about 50 percent above comparables, which is an enormous difference. They also find that this initial overpricing with respect to comparables helps predict long-run underperformance.

## **1.3. Long-Run Performance**

Efficient markets proponents would argue that once an IPO is publicly traded, it is just like any other stock and thus the aftermarket stock price should appropriately reflect the shares' intrinsic value. Consequently, risk-adjusted post-IPO stock price performance should not be predictable. Post-IPO long-run performance is less of an IPO (or corporate finance) issue than it is a standard asset-pricing issue. In spite of that, many IPO shares have been difficult to sell short and thus have retained some peculiarity even post-IPO.

In measuring long-run performance, investor can focus either on absolute performance, or performance relative to a benchmark (abnormal returns). Table 1 shows that investing in an equal-weighted portfolio of IPOs over a three-year horizon did not lose money in absolute terms, but an investment in the value-weighted market portfolio would have resulted in a three-year market-adjusted return of -23.4 percent.

Only two semi-rational explanations exist for the long-run underperformance of IPOs. Miller (1977) assumes that there are constraints on selling IPOs, and that investors have heterogeneous expectations regarding the valuation of a firm. The most optimistic investors buy the IPO. Over time, as the variance of opinions decreases, the marginal investor's valuation will converge towards the mean valuation, and its price will fall. This argument

works even better when the float is small and not too many investors are required. This is consistent with the drop in share price at the end of the lockup period (and more public shares become available to the public), as documented by Bradley et al. (2001), Bradley et al. show the negative effect is much more pronounced in case of venture-capital (VC)-backed IPOs. Typically with these IPOs, the VCs allocate shares to their limited partners on the lockup expiration date, and many limited partners immediately sell. This shows up not only in negative returns, but exceptionally high volume.

A Second explanation is offered by Schultz (2001): He argues that more IPOs follow successful IPOs. Thus, the last large group of IPOs would underperform and be a relatively large fraction of the sample. If underperformance is being measured weighting each IPO equally, the high-volume periods are the ones carrying a larger weight, resulting on average in underperformance. Although this is a logical argument, it cannot predict underperformance when each time period is weighted equally.

Other researchers are less ambitious. Mikkelson, Partch, and Shah (1997) simply document that long-run return performance is also accompanied by poor financial accounting performance post-IPO relative to pre-IPO performance and/or industry conditions. So can the long run performance be predicted?

One explanation could be flipping by institutions in order to predict long-term returns on IPOs. The question is whether institutions find overvalued IPOs once the trading starts? Houge et al. (2001) find evidence suggesting that indeed they do. He also argues that managers tend to be overoptimistic and thus prone to overinvestment if the funds are available. Teoh, Welch, and Wong (1998a) attribute the poor post-IPO stock performance to “optimistic” accounting early in the life of the firm. It is not surprising that firms are eager to look good when they conduct their IPO, and that the market has difficulties in disentangling carefully hidden warning signals. This suggests that at least a part of the poor long-run performance is due to a market that is unrationally optimistic and unable to properly forecast tougher times ahead. Similarly, Purnanandam and Swaminathan (2001) find that IPOs that are priced high relative to public market comparables perform worse in the long run, even though they show higher first-day returns. Both papers point towards overconfidence, perhaps by both entrepreneurs.

The 2001 internet bubble has made it amply clear that even if there is a systematic long-run underperformance, it is difficult or impossible to exploit it in a reliable manner. Many short sellers lost a great deal of money on Internet bubble IPOs, and had to close out their shorts before they would have paid off.

#### ***1.4. Difference between European and American IPO Markets***

Late 1990s have been dominated by the spectacular rise and fall of the Euro (New Member) NM markets, presenting the busiest IPO market in European history. The 1990s also saw the



growth of bookbuilding in Europe. Researchers have documented that the gross spreads paid to underwriters are lower than in the U.S. Most recently, motivated by the excesses of the internet bubble of 1999-2000, research has been focusing on the allocation of shares and, once again, short-run underpricing.

Table 4: Average initial returns for 38 countries

Country	Source	Sample Size	Time Period	Avg. Initial Return
Australia	Lee, Taylor & Walter; Woo	381	1976-1995	12.10%
Austria	Aussenegg	83	1984-2002	6.30%
Belgium	Rogiers, Manigart & Ooghe; Manigart	86	1984-1999	14.60%
Brazil	Aggarwal, Leal & Hernandez	62	1979-1990	78.50%
Canada	Jog & Riding; Jog & Srivastava; Kryzanowski & Rakita	500	1971-1999	6.30%
Chile	Aggarwal, Leal & Hernandez; Celis & Maturana	55	1982-1997	8.80%
China	Datar & Mao; Gu and Qin (A shares)	432	1990-2000	256.90%
Denmark	Jakobsen & Sorensen	117	1984-1998	5.40%
Finland	Keloharju; Westerholm	99	1984-1997	10.10%
France	Husson & Jacquillat; Leleux & Muzyka; Paliard & Belletante; Derrien & Womack; Chahine	571	1983-2000	11.60%
Germany	Ljungqvist	407	1978-1999	27.70%
Greece	Kazantzis & Thomas; Nounis	338	1987-2002	49.00%
Hong Kong	McGuinness; Zhao & Wu; Ljungqvist and Yu	857	1980-2001	17.30%
India	Krishnamurti & Kumar	98	1992-1993	35.30%
Indonesia	Hanafi; Ljungqvist & Yu	237	1989-2001	19.70%
Israel	Kandel, Sarig & Woh; Amihud , Hauser & Kirsh	285	1990-1994	12.10%
Italy	Arosio, Giudici & Paleari; Cassia, Paleari & Redondi	181	1985-2001	21.70%
Japan	Fukuda; Dawson & Hiraki; Hebner & Hiraki; Hamao, Packer, & Ritter; Kaneko & Pettway	1,689	1970-2001	28.40%
Korea	Dhatt, Kim & Lim; Ihm; Choi & Heo	477	1980-1996	74.30%
Malaysia	Isa; Isa & Yong	401	1980-1998	104.10%
Mexico	Aggarwal, Leal & Hernandez	37	1987-1990	33.00%
Netherlands	Wessels; Eijgenhuijsen & Buijs; Ljungqvist, Jenkinson & Wilhelm	143	1982-1999	10.20%
New Zealand	Vos & Cheung; Camp & Munro	201	1979-1999	23.00%
Nigeria	Ikoku	63	1989-1993	19.10%
Norway	Emilsen, Pedersen & Sættern	68	1984-1996	12.50%
Philippines	Sullivan & Unite	104	1987-1997	22.70%
Poland	Jelic & Briston	140	1991-1998	27.40%
Portugal	Almeida & Duque	21	1992-1998	10.60%
Singapore	Lee, Taylor & Walter; Dawson	441	1973-2001	29.50%
South Africa	Page & Reyneke	118	1980-1991	32.70%
Spain	Ansotegui & Fabregat; Otero	99	1986-1998	10.70%
Sweden	Rydqvist; Schuster	332	1980-1998	30.50%
Switzerland	Drobetz, Kammermann & Walchli	120	1983-2000	34.90%
Taiwan	Lin & Sheu; Liaw, Liu & Wei	293	1986-1998	31.10%
Thailand	Wethyavivorn & Koo-smith; Lonkani & Tirapat	292	1987-1997	46.70%
Turkey	Kiyamaz; Durukan	163	1990-1996	13.10%
United Kingdom	Dimson; Levis; Ljungqvist	3,122	1959-2001	17.40%
United States	Ibbotson, Sindelar & Ritter	14,840	1960-2001	18.40%

Source: J.R. Ritter: *Differences between European and American IPO Markets*, 2003, p. 433

By the end of 1990s, there was a high volume of IPOs, especially in Europe. Aussenegg, Pichler, and Stomper (2003) report there were 158 IPOs in 1999 and 147 IPOs in 2000 on Frankfurt's Neuer Markt and Amtlicher Handel. By contrast, in 1961-1982, Germany saw only 19 IPOs, an average of less than one firm each year. According to the huge fluctuations in volume from period to period suggest that market timing considerations are relatively more important than the life-cycle considerations modeled by Chemmanur and Fulghieri (1999) in determining when a firm goes public.

In 1997, Germany's Neuer Markt was founded as a market for young growth companies. Other NM markets were established in Italy (the Nuovo Mercato), the Netherlands (Nieuwe Markt), Belgium (Euro.NM Belgium), and France (the Nouveau Marché). In about 1999, these NM markets linked under the Euro NM name, but the connection failed at the end of 2000 with the realization that, for small companies, investor interest remains local. During its five year existence, the Nemax 50 index of Neuer Markt stocks rose from its December 31, 1997 starting value of 1000 to a peak of 9631 on March 10, 2000, before collapsing to only 313 on October 7, 2002. In 2002, the Neuer Markt announced that it was shutting down (Ritter, 2003, p. 425).

Before the 1990s, firms going public in Europe, especially continental Europe tended to be much older than those going public in the U.S. For example, Vandemaele (2003) reports a median age of 28 years for 220 IPOs on the French Second Marché between 1984-1995 compared with the median age of seven years reported by Loughran and Ritter (2003) for 6,149 U.S. IPOs from 1980-2000. Even with the explosion of internet and technology-related firms going public in the 1999-2000 period, the median age of European firms going public remained higher than that in the U.S.

When pricing and allocation of Europe's IPO stock is concerned, authors have found quite different ways of pricing and allocating around Europe. Biais and Faugeron (2002) examine the choice of mechanism for selling IPOs in France. The French IPO market has been characterized by multiple mechanisms being used to sell IPOs without government interference in the choice. Fixed price (*offre à prix ferme*), auction (*offre à prix minimal*), and increasingly, bookbuilding (*placement garanti*) mechanisms have been employed by companies going public. Fixed price offerings have become uncommon in recent years, not only in France, but in other European countries as well. By fixed price mechanisms, Ritter (2003) is referring to contracts where the offer price is set relatively early, before much information about the state of demand is known.

In the U.S. bookbuilding typically starts with the setting of a file price range, for instance \$14-16 per share, and the commencement of a road show that might last two weeks. The difference between the minimum and maximum price is almost always \$2. During the road show, institutional investors test the ground for the demand of the IPO. If there is unusually weak or strong demand, a revised price range might be filed with the U.S. Securities and

Exchange Commission (S.E.C.), say \$16-\$18. At the pricing meeting, which typically occurs in the late afternoon prior to the start of trading, the offer price can be set at up to 20% above or 20% below the most recent price range. For example, with a price range of \$16-18, the offer price can be between \$12.80 and \$21.60 without a further pricing amendment. Loughran and Ritter (2002) report that the final offer price is set within the original file price range about 50% of the time, with about 25% of IPOs priced below the range and 25% above the range.

By contrast, in German IPOs the price range is typically not set before bookbuilding has started, with the pricing typically occurring seven trading days later (Aussenegg, Pichler & Stomper 2003, p. 5). The price range is frequently more than 2 Euros, but once set, IPOs never price above the maximum in Germany, and very rarely in other countries. According to Aussenegg, Pichler, and Stomper (2003), when-issued trading frequently occurs after the price range has been set, especially in Germany, where the practice appears to be most common. In general, short positions are taken by institutional investors and long positions are taken by individual investors. The final offer price is adjusted in the direction implied by the when-issued market price, but the adjustment is fairly modest, especially for upward revisions.

Ljungqvist, Jenkinson, and Wilhelm (2003) discuss the fees charged by underwriters for European IPOs are lower than those in the U.S. The fees are higher when bookbuilding is used than with auctions or fixed price offers. Holding other things constant, Ljungqvist, Jenkinson, and Wilhelm find that the gross spread is higher if there is a U.S. tranche or if an American underwriter is the bookrunner. They report that U.S. underwriters are more willing to revise the offer price upwards, however, if there is strong demand, benefiting the issuer.

One area of research that has recently been booming is that focusing on the role of analyst conflicts of interest. In the U.S., issuing firms are subject to a “quiet period,” whereby from the decision to go public until 40 calendar days after going public, analysts that are affiliated with underwriters are prohibited from issuing research reports or recommendations. The rationale for the quiet period is that all relevant information should be contained in the written prospectus, rather than other written documents.

The reason why analysts are important is that issuing firms place great importance on favorable analyst coverage once they are public. Because of the importance of analyst coverage in the issuing firm’s objective function, investment bankers have found that they can effectively compete for deals by both implicitly or explicitly committing to have a highly regarded analyst cover a stock and issue positive recommendations. Evidences in Krigman, Shaw, and Womack (2001) indicate that this desire by issuing firms is so strong that underwriters with top-ranked analysts are able to charge high direct fees (gross spreads) and leave more money on the table, and still have high market shares for IPO underwriting.

There is relatively little research using European data examining the role of analysts in the IPO process. Most importantly, quiet period restrictions do not exist in Europe, so that both affiliated and unaffiliated analysts can and do issue research reports while an IPO is being sold, as well as immediately after going public (Ritter, 2003, p. 428).

Another important difference between European and U.S. practice is that class action lawsuits are common in the U.S., but rare in Europe. A class action lawsuit overcomes the freerider problem where the suing party (the plaintiff) bears all of the costs but receives only part of the benefits if all shareholders are harmed. In the U.S., several law firms specialize in suing corporations and their officers and directors, in what are sometimes referred to as “strike suits”. If a firm does lose a suit, the shareholders lose twice. The first loss is what motivated the suit, and the second loss is from the payments made to the winning shareholders and their lawyers. Van der Goot (2003) argues that legal risk is one of the reasons that higher quality underwriters are less likely to take riskier companies public in the Netherlands.

In practice, almost all publicly traded U.S. firms pay for insurance, known as D&O (directors and officers) insurance, to minimize the impact if they are successfully sued. The insurance premia do reflect company-specific risks. Even though there are many abuses with class action lawsuits, it is also true that there would be more corporate fraud and insider trading if this threat did not exist.

Keloharju (1993) argued that the threat of lawsuits cannot be an important motivation for underpricing in countries like Finland where class action lawsuits are rare. If abuses are too extreme, as was the case with the March 2000 World On-line IPO on the Amsterdam Stock Exchange, however, lawsuits can arise. In the World On-line IPO, the company chairwoman, Nina Brink, had sold a substantial number of her shares immediately prior to the offering in a sale at a price of 6 Euros, much less than the offer price of 43 Euros, but with an additional payment contingent on the market price of the shares once trading commenced. Her transaction was economically equivalent to selling some of her shares in the open market immediately after trading commenced, and was apparently designed to avoid any lockup restrictions.

#### **1.4.1. Differences in Valuation, Control and Long-run Returns**

In Sweden, the vast majority of IPOs involve dual-class shares, where the stock sold to the public has inferior voting rights. Holmén and Högfeldt (2003) present evidence that the controlling shares with superior voting rights are in the end never sold in anything other than block transactions, preserving the control. Since shares with inferior voting rights typically sell at a discount, presumably the Swedish shares should sell at a lower market-to-book ratio than they otherwise would. Holmén and Högfeldt report that this is indeed the case. They argue that investors in Sweden are not as concerned about wealth transfers to controlling shareholders as they are worried about inefficient investment decisions.

Because IPOs tend to go public in industry-specific waves (think of the internet IPOs from 1999-2000), it is difficult to separate out bad luck from *ex ante* overvaluation if subsequent returns are low. Unlike the U.S., where samples of thousands of IPOs over many decades are available to measure long-term returns, relatively small sample sizes exist for most European studies. In Table 3, Japan, the U.K., and the U.S. are the only countries where the sample size is over 500 IPOs. Several studies use the cross-sectional distribution of long-run returns to examine whether the market correctly evaluated information at the time of going public. Roosenboom, Van der Goot, and Mertens (2003), for instance, find on a sample of IPOs from the Netherlands that long-term returns are more negative, the greater are the accruals in reported earnings.

Schuster (2003) discusses cumulative market-adjusted returns (CARs) in his report, with monthly rebalancing over 36 months, for seven continental European countries for IPOs from January 1988-January 1998. For all seven countries (France, Germany, Italy, the Netherlands, Spain, Sweden, and Switzerland), he reports negative 36-month CARs varying from -11.7% in Germany to -41.8% in Italy.

Another area of current research concerns IPOs from the former communist-bloc countries of Eastern Europe. Jelic, Briston, and Aussenegg (2003) examine the new IPO market in Poland, Hungary, and the Czech Republic. Following the fall of the iron curtain in 1989-1991, a variety of mechanisms have been used to privatize formerly state-owned enterprises in Eastern Europe. In general, the market value of individual companies has been much smaller relative to the privatizations in Western Europe during the 1980s and 1990s, when most state-owned telecommunications companies were privatized.

## **2. IPO UNDERPRICING IN CHINA**

Initial public offerings (IPOs) have been studied extensively in the developed markets. Recently, there has been a lot of interest in emerging markets as an important asset class in global portfolio management. However, the behavior of these, most often small emerging markets is relatively unknown. Based on the existing literature I will explore whether the behavior documented with respect to the developed markets is also observed in the emerging markets.

The IPO underpricing ‘anomaly’ is found to be present in every country with a stock market, including in developing markets such as China, Malaysia, Taiwan and Sri Lanka, markets to which I pay particular attention in the thesis. Institutional characteristic of stock markets in these countries differ markedly from those in other, more developed ones and so the research results can not be automatically imputed to “new stock markets”.

Literature in general reveals that issuer underpricing differs among developing countries, mostly as a result of various country level regulations. Some markets in South-east Asia were

under the strong influence of neighboring markets -- e.g. Singaporean influence on Malaysian stock market. In this region there are also equity markets that were more or less self introduced and developed a very specific legal frame of trading. This causes cross-listed shares of the same companies to be valued with extreme differences between different stock markets. The most important example of these is China stock markets, where they have A and B shares. Given the rise of China's importance in global economy, I decided to devote a significant part of the thesis to the overview of IPO underpricing in China.

Recent economic reforms in People's Republic of China (PRC) have included the privatization and listing of many state- owned enterprises (SOEs). The characteristics of Chinese IPOs and China's stock market differ markedly from those in other countries. One distinguishing feature of China's markets is that some shares are restricted to domestic investors (termed **A-shares**) while others (**B-shares**)<sup>4</sup> are meant for both PRC and non- PRC citizens<sup>5</sup> (Shanghai Stock Exchange, 2006, page 1). My thesis examines the pricing behavior of both types of shares and some of the correlations between them. Other distinguishing characteristics include the state retention of majority shareholding interest in many companies, and a significant time lag between the IPO and its listing on the stock exchange.

Three major reasons for the underpricing of A-shares are identified by researchers (Chen & Firth, 2004, p. 284). First, firms that have a long delay between the issue and the subsequent listing of those shares, price the IPO cheaply. This underpricing is required in order to compensate investors for uncertainty attached to a long **listing lag**. Second, firms that make **seasoned equity offerings** (SEOs) in the period of first two years after initial listing set a lower price for the IPO. Here, underpricing is used to create favorable investor sentiment that is helpful for the subsequent SEO (Welch, 1989, p 425). Third, when state or quasi-state ownership is high, agency cost increases, and liquidity decreases. In this circumstance, greater underpricing is required to compensate investors for their increased risk exposure (Chi & Padgett, 2005, p. 458).

## ***2.1. The corporatization and listing of China's state- owned enterprises (SOEs)***

In the early 1980s, China has determined to reform its economy so as to improve economic efficiency and enhance economic welfare of its population. One of the first steps the government took to operationalize the economic restructuring was the corporatization of state-owned enterprises. Selected SOEs were reorganized and formed into limited liability

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<sup>4</sup> Note that Chinese currency (yuan) can not be traded freely and next to court prosecution this is one of the main tools for the separation between A- and B-share market (in order for foreign investors not to be able to gain arbitrary profit).

<sup>5</sup> Since February 2001 domestic, Chinese population is able to invest in B-shares in its corresponding currencies. In reality domestic investors have very few incentives to hold B-shares since as it will be seen later on, average profit of holding A-share is much higher than holding B-shares, though risk level remains the same. For this reason mass majority of B-shares are owned by foreign investors.

companies with ownership represented by share capital. Three major categories of shares have been introduced in the corporatization (Chi & Padgett, 2005, p. 455):

- **Government shares**, which are owned by central and regional institutions, government ministries and departments. These shares are non-tradable.
- **Legal entity shares** (institutional shares) that can only be held by other SOEs, by a government controlled financial institutions, or by foreign partners of a corporatized foreign joint venture. These shares are non-tradable on China's two stock exchanges.
- Shares that can be traded (individual shares). **Traded shares** exist in three different types: employee shares, domestically owned A-shares, and foreign owned shares. According to the CSRC statistics, by the end of 2000 negotiable (tradable) shares comprised about 35.7% of the total shares in Chinese economy.

There are currently two organized stock exchanges in China. They are the Shanghai Securities Exchange (SHSE), which opened in December 1990 and the Shenzhen Stock Exchange (SZSE), which opened in July 1991 (Chen, 1997). Majority of the shares traded on these exchanges are owned by domestic (PRC) investors (A-shares). In 1992 a change was introduced and SOEs were allowed to raise capital from foreign investors. These shares, termed B-shares, rank *pari passu* with any existing A-shares and they have the same ownership rights and receive the same dividends (though in a different currency, normally USD) as the A-shares. An important distinction, however, is that A-shares can only be owned and traded by domestic PRC investors and B-shares can be owned and traded by domestic and foreign investors. This market segmentation is efficiently enforced and is shown by a very large disparity between A- and B-share prices (Fung, Lee & Leung, 2000, p. 185). On average for those companies with both A- and B-shares, the foreigner's shares are less than one-half the market price of the domestic shares. Note that in all other markets where there are domestic and foreign shares, the foreign shares are **more expensive** than domestic ones. A-shares premium in China is due to a lack of investment opportunities for PRC citizens (Poon, Firth & Fung, 1998, p. 210). In 1993 some SOEs were allowed to issue shares to foreigners and also for those shares to be traded the Stock Exchange of Hong Kong. These shares are termed **H-shares** and they are quoted and settled in Hong Kong dollars. A few SOEs have also recently issued shares to foreigners and are traded in the USA (termed **N-shares**) and elsewhere.

The difference in market prices between A-shares and B-shares are mirrored in the issue prices. Since 1994, companies that issue A-shares and B-shares at the same time (or nearly the same time) price the B-shares much cheaper than the A-shares even though they carry equal rights. The different issue prices are a result of different supply and demand characteristics of the two markets and the effective segmentation of domestic and foreign investors.

A-share IPOs are generally made at fixed prices that are disclosed in prospectuses at the beginning of the process (Su & Fisher, 1999, p. 180). The China Securities Regulatory Commission (CSRC) requires prospectuses to be published in designated newspaper. As previously mentioned a very important characteristic of many A-share IPOs is a long delay between the issue of shares and the listing of those shares on the SHSE and the SZSE. It is not uncommon for some IPO issues sold after 1990<sup>6</sup> to wait up to 6 months (or more) before listing. To proceed from the issue to its listing involves clearing various regulatory standards, which include satisfying the requirements induced by the two stock exchanges. Additionally, the **state regulates** the number of listing and timing of new listing and this adds to the delay. A-share IPOs are often oversubscribed, but there is little information given about the allocation system (Mok & Hui, 1998, p. 454).

Up to 2001, the China Securities Regulatory Commission (CSRC) set an annual quota of new shares to be issued each year. The quota was given either as the number of companies going public or as the number of shares going public each year, and was allocated among the provinces and state-industrial commissions according to criteria of supporting regional or industrial development goals, and not purely company ones. The CSRC started to transform this quota system into the verification system in 2001. As a result, investment banks are able to recommend companies to the CSRC for going public; however, it is still the CSRC that makes the final decision on companies going public. Also rights issues and seasoned equity offerings (SEOs) need permission from the CSRC (Chi & Padgett, 2005, p. 460).

Until the year 2000 most IPO offering prices were calculated according to formulae determined by the CSRC. The formulae were made up of two parts: earnings per share (EPS)<sup>7</sup>, and the P/E ratio. EPS figures came from companies' annual reports, and the CSRC itself set P/E ratios for issuers. Next to that the CSRC also took charge of the timing of IPOs according to the market capacity. After 2000, the CSRC started to allow investment banks and issuers some freedom to price IPOs. In August 2004 a new regulation was issued allowing investment banks to price IPOs given the feedback from institutional investors and the market. In this way, the CSRC hopes that IPO pricing can better reflect market conditions (Chi & Padgett, 2005, p. 463).

Foreign share (B, H, and others) IPOs require publication of a prospectus. The prospectus is detailed and is similar to that issued by companies in Hong Kong, Singapore, and other international financial centres. The B-share prospectus usually contains much more information than that of the A-share (Mok & Hui, 1998, p. 455). For this and other reasons,

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<sup>6</sup> Issues made in 1990 or earlier obviously have an extremely long delay in listing as the SHSE did not open until December 1990 and the SZSE did not open until July 1991.

<sup>7</sup> The definition of EPS varied from time to time. Before 1997 there were six different ways to calculate EPS and issuing companies could choose any of them. From 17 January 1997 the CSRC unified the calculation of EPS by choosing method 6 (average EPS of the last three years before listing) as the standard method for calculating the EPS for an issuing company.



Mok and Hui state that “foreign investors were much better informed than the domestic investors”. Chui and Kwok (1998) also argue that B-share investors are better informed. In contrast, however, Chakravarty et al. (1998) argue that B-share investors have less information on China stocks than domestic investors. They claim that a lack of knowledge about China by foreign investors and reduced access to local information puts B-shareholders at a disadvantage to domestic investors. In order to successfully sell B- (H and other) shares, the IPO companies hire internationally well known underwriters, auditors, and advisors. So, unlike A-shares, foreign share issues are underwritten by major international financial institutions and the reporting accountants and auditors are invariably one of the international Big Six (Five or later even Four) firms<sup>8</sup>. For B-share, the delay between the issue of IPO shares and their subsequent listing is quite short averaging less than 2 months. The long delays observed for some A-share listings simply do not occur for the foreign share issues.

## **2.2. Underpricing research design**

### **2.2.1. Measuring the level of underpricing in China's stock exchanges:**

Two different ways of measuring the level of underpricing are most common in the literature. One is used in the markets; where an average daily variability of stock index is low and the performance of other existing shares on the market have no greater effect on the newly listed IPO. This is normally the case in western developed economies with long term stock markets. In the case of China and other developing economies daily variability of the financial assets is higher and current securities often play an important role on the day of a new IPO. Thus the calculation for the first day returns of each new IPO is as follows:

$$RET = \frac{P_1}{P_0} - \frac{I_1}{I_0} \quad (1)$$

where RET is the first day return or underpricing,  $P_1$  is the stock market price at the end of the first trading day,  $P_0$  is the issue price,  $I_1$  is the index for the Shanghai or Shenzhen Stock Exchange at the end of the first day of trading of the IPO in question, and  $I_0$  is the stock exchange index at the issue date.

### **2.2.2. Determinants of underpricing**

Chen et al. (2004) use cross-sectional model to explain underpricing. Their model incorporates variables that have been examined in previous studies. A-share underpricing model is influenced mostly by three major components that influence the performance of the stock on the first trading day:

- Listing lag between the issue of the IPO and the first day of trading
- Proceeds raised in all seasoned equity offerings in the first two years after the listing

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<sup>8</sup> Note that further discussion about importance of underwriters, auditors and advisors is followed later in my thesis.

- The level of the share retention by the government or by governmental agencies

The listing lag and the ownership variables are characteristics unique to China, while seasoned equity offerings are very common also on other stock markets. A distinct characteristic of this sample of Chinese IPOs, gathered from 1991-1997 is a long delay between the IPO issue and the listing date (Chen & Firth, 2004, p. 287). The delay can amount to more than 1 year (the mean is 261 days). Reasons why should the investors be compensated for the listing lag are:

- Listing lag represents a reward for time, where we expect total returns to be higher, the longer the holding period of the investment
- IPO shares are less marketable if there is no listing and so LAG represents a return for marketability risk of the stock
- Long delay also means investors do not know the value of the shares and this increases uncertainty. Additional to this the stock is hard to use as collateral security for any borrowings, if there is no market value (Chowdhry & Sherman, 1996, p. 364)

For issues made after 1990, the long listing delay implies there is some problem at the IPO company and/or the company is not favorably considered by government, its regulatory agencies, and the stock exchanges. The listing lag in other countries around the globe is much shorter, so the researchers do not devote special attention to it.

IPO firms underprice their new issues also when they have plans to come back to equity market in the near future (Welch, 1989, p. 425). By underpricing their shares, firms ensure that investors who are successful in subscribing to the IPO earn high returns. These investors may therefore be more in favour to attend to subsequent equity offerings of the company<sup>11</sup>. Seasoned equity offerings are a very important source of external capital for companies since there is *no corporate bond market* in China (Chen & Firth, 2004, p. 288) and *bank borrowing is restricted*. Therefore companies which anticipate additional financing needs in the near future, will more heavily underprice the IPO in the belief that the high initial stock returns will make future rights issues more favorable to investors.

Another characteristic that is very significant to China is high state and legal entity ownership (Chen & Firth, 2004, p 290) The government and quasi-government shareholders may be motivated by things other than profitability and share price maximization. For example, the government uses SOEs in its policies to help maintain social stability, reduce unemployment, and re-direct economic growth to specific industries and regions. The greater the number of shares in the hands of the state, the more influence they have in urging management to follow

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<sup>11</sup> This explanation assumes that investors base significant level of decision for future investments to sentimentality towards company. Rational investor should judge each seasoned equity offerings on its own. More about “behavioral finance” in section: Seasonal affective Disorder and IPOs.

state policies instead of following the company ones. Furthermore, a large number of shares in the hands of the state implies there will be liquidity problems when the A-shares start trading. In order to induce investors to subscribe for shares in IPOs where the state sector has a very high ownership stake, the new issues are priced cheaply and this leads to high underpricing. Mok and Hui (1998) disagree with the Chen and Firth (2004) theory regarding government ownership. They argue that high level of government ownership gives confidence to investors since they will assume further development of the company in question is of great importance to officials. Based on their theory high government ownership will lead to lower underpricing and not to induce it.

For A-share IPOs companies must use Chinese underwriters and auditors. Until very recently underwriters and audit firms were owned by government so few significant difference among them is assumed<sup>12</sup>. Results of studies where authors have asked themselves how reputation of underwriter influences the performance of the IPO differ significantly. Normally evidence is shown in developed economies the performances of IPOs are mixed when they have known underwriter<sup>13</sup>.

**2.3. Results**

**2.3.1. Sample data and results**

A total of 734 A-shares and 117 B-shares were listed in the period 1991-1997. Ninety one companies issued both A- and B-shares. Due to missing data the sample size of A-share has reduced to 701 listings and all were made in period 1992-1997. Approximately 52% (48%) of A-share listings were on Shanghai (Shenzhen) exchange, and B-share listings are evenly split between Shanghai and Shenzhen (Chen & Firth, 2004, p. 293).

Table 5 shows the listing lags where the time between the issue of shares in the IPO to the date of its listing on the SHSE or SZSE is expressed in months. Half of A-shares were listed within 2 months but since it is a substantial percentage (almost 10%) of shares that wait more than 3 years to be listed on either of stock exchange investors cannot know during the process how soon will their shares be trading. These long delays are not observed in developed nations’ stock markets. In contrast to A-shares, the vast majority of B-shares are listed within 2 months of the IPO and there are no cases that extend beyond 6 months.

*Table 5: Number of months between the issue of the IPO and the listing of the IPO in China A- and B- shares stock market, 1991-1997*

	<b>A-shares</b>		<b>B-shares</b>
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<sup>12</sup> Lawsuits against financial advisors of IPOs in China are unheard of and so, unlike in the developed countries, there is no threat of litigation to spur performance or integrity of the advisors.

<sup>13</sup> Note that further investigation in importance of auditors is described later in the thesis

Number of months between the issue of the IPO and the listing of the IPO	Shanghai Securities Exchange (SHSE)	Shenzhen Stock Exchange (SZSE)	Total	Shanghai Securities Exchange (SHSE)	Shenzhen Securities Exchange (SZSE)	Total
≤1	157	138	295	44	17	61
2	61	48	109	12	19	31
3	18	35	53	1	16	17
4-6	42	44	86		8	8
7-12	32	22	54			
13-24	20	13	33			
25-36	1	3	4			
>36	33	34	67			
Total	364	337	701	57	60	117

Source: G. Chen, M. Firth.: *IPO Underpricing in China's new Stock Market, 2004*, p. 292

In Table 6 underpricing results are presented. The median (mean) underpricing for all A-shares is 145% (298). Thus, the median (mean) listing price is about one-and-a-half (three-times) the issue price after accounting for movements in the market index. The initial returns on Chinese IPOs by far exceed those found in other markets. The distribution statistics for underpricing are very similar across the two stock exchanges (Chen & Firth, 2004, p. 294).

Table 6: *Underpricing statistics of A- and B- shares in Chinese stock market (in %), 1991-1997*

	Mean underpricing	Median underpricing	Standard deviation	Minimum underpricing	Maximum underpricing
<b>1. A-shares</b>					
a.) Full sample:					
Total sample (n=701)	298	145	458	-18	3544
Shanghai sample (n=364)	300	156	462	-14	3187
Shenzhen sample (n=337)	295	137	460	-18	3544
b.) Listing lag ≤ 2 months					
Total sample (n=404)	110	102	80	-11	592
Shanghai sample (n=218)	103	97	76	-11	592
Shenzhen sample (n=186)	118	112	87	-10	476
c.) Listing lag > 2 months					
Total sample (n=297)	631	301	748	-18	3544
Shanghai sample (n=146)	628	358	629	-14	3187
Shenzhen sample (n=151)	635	203	843	-18	3544
<b>2. B-shares</b>					
Total sample (n=117)	25	10	53	-12	136
Shanghai sample (n=57)	20	9	26	-12	136
Shenzhen sample (n=60)	31	10	74	-6	127

Note: Underpricing is calculated as the first day return on the IPO stock minus the return on the market index calculated from the IPO prospectus date to the end of the first day of trading of the IPO.

Source: G. Chen, M. Firth.: *IPO Underpricing in China's new Stock Market, 2004*, p. 294

The underpricing of B-shares is much nearer to the underpricing observed in countries with long track records of stock markets such as Britain, Canada, the United States, Australia, and Europe and is much lower than in the Emerging markets of Central and South America, and

South East and East Asia. The median (mean) underpricing is 10% (25%). One factor that may explain the lower underpricing of B-shares vis-à-vis A-shares is the expertise of international sponsors and advisors to the B-share issues (Su & Fleisher, 1999, p. 185).

### **2.3.2. Reasons for underpricing**

Consistent with hypothesis previously mentioned, the listing lag is positively correlated and highly significant (Chen & Firth, 2004, p. 294). A long delay between the issue of IPO shares and the subsequent listing substantially increases the risk to the subscribers of the shares. Investors find it impossible to sell their shares if there is no listing and so they will be locked into their investment for a long time and with little idea of what their shares are worth. The risk is compensated by the heavy underpricing of the issue.

Also seasoned equity offering variable is shown positive in Chen and Firth research. This supports theoretical model by Welch (1989) which says companies will underprice their IPO if they plan to go back to the equity market for additional financing in near future. Since some companies have rather small IPOs because state sets quota for the number of shares to be issued and because the company is experimenting with corporatization for the first time (in this scenario the IPO is a pilot experiment for larger rights issues which will follow if the new issue is a “success”).

Higher government ownership has a positive correlation with underpricing. Large state and legal entity ownership is perceived as increasing agency costs for private shareholders. The control exercised by the state through its share ownership implies private shareholders have little influence on a firm’s strategic decisions and objectives and, likewise, they have little power to remove top executives. The results are also consistent with higher underpricing being compensation for greater liquidity problems that follow from a small free float of shares. These results from Chen and Firth research (2004) contrast with Mok and Hui (1998) predictions.

B-share IPOs are underpriced if firms plan to make future rights offerings and placements, and if the government retains high share ownership. Also shown with the B-shares is that the previous or simultaneously issuance of A-share has *no positive* effect on higher underpricing. This is probably due to requirement of prospectus publishing are revelation of some crucial information.

### **2.3.3. Underpricing and relative valuation ratios**

Investors value firms based on fundamental factors that include the price-to-book ratio and the price-earnings multiple. If the IPO issue price is below the value indicated by the fundamental factors, then underpricing occurs (Chen & Firth, 2004, p. 297).

The results from the A-share IPOs support the hypotheses mentioned at the beginning that the relative issue price-to-book value and the relative price-earnings multiple are positively correlated to the initial returns. The results are consistent with much anecdotal evidence that

price-to-book values and price-earnings multiples are crucial valuation factors in IPO prospectuses. The large underwriting firms are associated with lower underpricing. The results for B-share underpricing are not so strong. This indicates that domestic and foreign investors use price-to-book ratios and price-earnings multiples in their valuations of firms. Positive and significant correlation between seasoned equity offerings and relative price-to-book or relative price-earnings is also found. This suggests that firms deliberately price the IPO cheap when they plan to make future SEOs (Chen & Firth, 2004, p. 299).

## **2.4. Long- run performance of Chinese IPOs**

In this part of my thesis I will focus on the long-run performance of Chinese IPOs. I do not concentrate only on long-run performance over three years after listing of Chinese IPOs but also on some corporate characteristics and a cross- sectional analysis.

Empirical evidence shows that there are two main patterns associated with IPOs: short-run underpricing, and long-run underperformance. Loughran, Ritter and Rydqvist (1994) find that IPO underpricing phenomenon exists in all 25 countries investigated, with higher IPO underpricing in developing markets. When studying the operating performance of Chinese IPOs, Sun and Tong (2003) look briefly at the long-run share returns (raw returns and Hong Kong Seng Index adjusted returns) of IPOs and find stock returns show some small improvements up to five years after share issue privatization. Chan, Wang and Wei (2004) study 570 A-share IPOs and 39 B-share IPOs from 1993 to 1998 and from 1995 to 1998, respectively, and find that in the long run (within three years after listing) A-share IPOs slightly underperform the size- and/or book/market-matched portfolios, while B-shares outperform the benchmark portfolios.

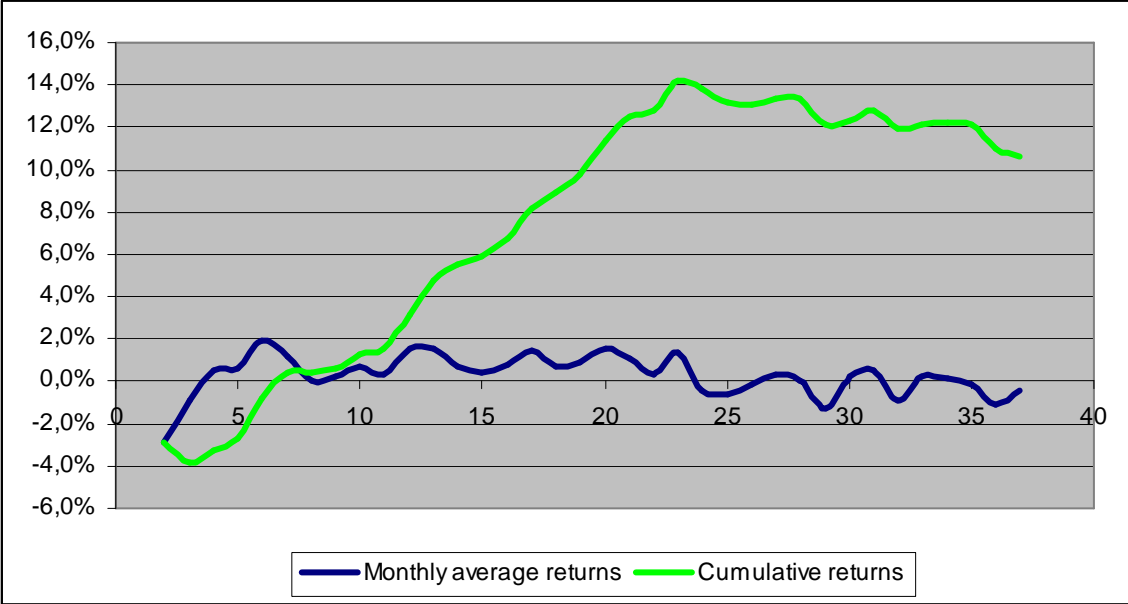
### **2.4.1. Sample data for calculation of the long run performance**

Sample data collected in order to calculate the long run performance of the 409 A-share IPO companies listed on both Chinese stock exchanges are from Chi and Padgett (2005) research. Companies were listed in the period between 1 January 1996 and 31 December 1997. Numbers of IPOs in both years were very similar, with 203 in 1996 and 206 in 1997. The results were calculated for the first three years on the stock market after the listing.

In the research made by Chi and Padgett (2005) the market-adjusted long-run returns for a period of 36 months following the first trading month were calculated. To allow for the severe initial underpricing and the time that these prices take to adjust downwards to market equilibrium, the first month of trading was excluded from the study of long-run returns. The monthly return was measured by comparing the closing price on the last trading day of the month to the closing price of the previous month. The benchmarks used are the Shanghai and Shenzhen A-share indices, as in the study of the short-run performance. The long-run returns incorporate dividend payments and are adjusted for rights issues.

The sample size remained the same throughout the 36 months after listing, which was consistent with the fact that in the Chinese stock markets there was no formal delisting system during that period. The average market-adjusted cumulative return over the three years after listing for the entire sample was found to be of only 10.3%. Monthly average returns and cumulative returns of IPOs in 36 months after the listing of it are presented in Figure 1.

Figure 1: Monthly average returns and cumulative returns of Chinese IPOs in months after listing



Source: J. Chi, C. Padgett: The performance and long-run characteristics of the Chinese IPO market, 2005, p. 461

**2.4.2. Explanation of the long-run performance and results**

The empirical evidence of the long-run performance of firms going public indicates that the PIPOs (Public-sector IPOs) and private-sector IPOs perform in quite different way and present the most important feature of long-run underpricing in China. Results find significantly positive three-year market-adjusted returns for the 409 IPOs that went public in 1996 and 1997 in China. A non-negative long-run abnormal performance for PIPOs coincides with the objectives of a market-oriented government, since a committed government is interested in building up a reputation for its privatization program by establishing a market-oriented economic environment.

A significantly negative relationship between government ownership and market-adjusted returns over the three years following listing is found, indicating that a listed company with less government ownership has a better long-run market performance. Improving the corporate governance of state-owned enterprises by introducing a variety of ownerships is one of the main reasons why the Chinese government wants to develop the stock market. As it was shown in the long-run, investors interpret lower government ownership as a sign of less political interference and improved corporate governance, and higher government ownership as a sign of inefficiency of management and fulfilment of political and social purposes by the government through the company. The negative impact of government ownership on the

long-run market performance of IPOs shows that privatization is good for the companies' development and is welcomed by investors. This result should, therefore, encourage the government to continue to enforce China's economic reforms (Chi and Padgett, 2005, p. 465).

*Table 7: Three year cumulative market adjusted returns, percentage of government ownership of the companies after the IPO, size of the offer, EPS and initial underpricing in China, 1996-1997*

<b>Variable</b>	<b>Mean</b>	<b>Median</b>	<b>Minimum</b>	<b>Maximum</b>
Three year cumulative market adjusted returns	9.3%	9.6%	-107.7%	243.2%
Govshare	72.1%	74.0%	41.6%	84.9%
Offersize (million yuan)	235.12	163.87	12.60	2.106.00
EPS (yuan)	0.4203	0.4001	0.1361	1.2098
Market-adjusted initial returns	127.3%	118.3%	-14.3%	441.3%

*Source: J. Chi, C. Padgett: The performance and long-run characteristics of the Chinese IPO market, 2005, p. 465*

Chi and Padgett (2005) also find the negative relationship between the supply and demand of shares and IPO long-run market returns. This indicates that the imbalance of supply and demand affects IPO long-run returns, and that listed firms with fewer shares perform on average better in the long run. In order to continue the development of the stock market, the Chinese government has been very cautious about the supply of shares. As a result, the quota system was not changed until 2001. Owing to the controlled supply through the quota system and limited alternative investment opportunities in China, the stock market performed especially well during the late 1990s. For the most part, the reason for firms having small offering sizes is that they cannot get larger quotas. Those are determined to them by CSRC as previously mentioned. Therefore, the smaller the offering size, the lower the supply of shares, and the better the long-run returns the stocks should have. Another possible explanation for this result is that Chinese stock markets were not well regulated during the nineties and price manipulation by institutions was very common. In practice, the smaller the offering size, the easier it is for institutions to control the share price of a company, and the higher the risk faced by investors – all these in turn imply higher long-run returns. This outcome may indicate that the government should reinforce its regulation of the stock markets to improve stock market efficiency.

Further the Chi and Padgett (2005) research significantly positive relation between high-tech industry and long-run performance. When a company has certain high-tech products, investors expect it to enjoy high growth in the future. Since most listed companies come from old state-owned enterprises, business development opportunities are almost the only element that distinguishes them from other firms. However, companies in the high-tech industry also face higher risk; and when investors take a bigger risk they expect higher returns in the long run.

As for the relationship between a firm's average earnings per share over the three years before listing and its long-run performance, the results are statistically insignificant. A potential explanation is that during the Chi and Padgett study period most issuing prices were



determined by a company's EPS before listing and the P/E ratio set by the CSRC. Since the CSRC limited the range of P/E ratios to between 14 and 16, if a company wanted to increase its issue price in order to raise more funds, it would have to try to manage and increase its earnings before being listed. Therefore, the reliability of earnings before listing could be questionable.

Finally, the initial and long-run performances are negatively related to each other. This is expected also from previous research (Carter & Dark, 1993, p. 380) - higher the return on the first trading day, the worse the long-run performance will be. The 'impresario' hypothesis predicts that, as IPOs are underpriced by investment bankers (in Chinese case, the government) to create the appearance of excess demand. In addition to the impresario effect, another possible explanation related to the Chinese market is the manipulation in the stock market during the study period. Owing to poor regulation of the stock market, it was possible for some institutions to buy a substantial number of outstanding shares of a listed company<sup>14</sup>, and try to control and increase its share price. When individual investors noticed the 'growth' of this company, institutions would then sell their shares to such investors and make abnormal returns. Although this process is illegal, it was quite popular in China during the 1990s. When institutions choose target firms, other things being equal, they can pick up firms with lower initial returns; since with lower initial returns the cost of controlling and increasing the share price is lower, and the potential for long-run abnormal returns is higher.

The uniqueness of Chinese IPO's market is seen in all fields. There are not many similarities with the developed world IPO processes and as it will be later on seen in my thesis, there are evident differences also compared to other developing markets.

## ***2.5. Recent developments in Chinese IPO market***

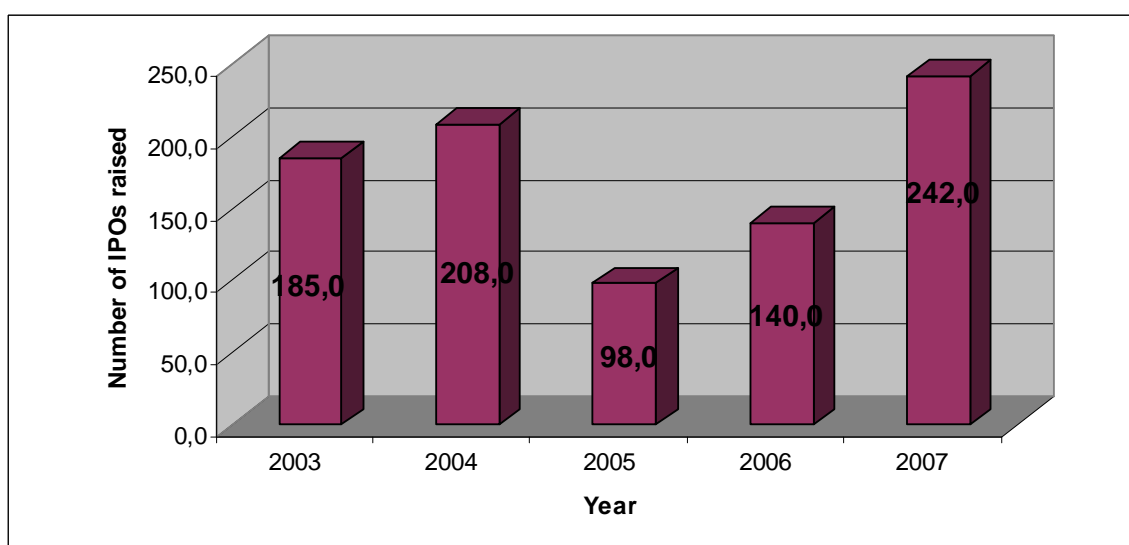
In their survey, PriceWaterhouseCoopers experts conclude that in 2007 the total number of new listings, the amount of funds raised, the market capitalization and the volume of trading grew significantly in 2007.

There was total of 242 IPOs in China in 2007 with the total amount raised amounting USD104 billion. A year before the number of IPOs reached 140, raising totally USD62 billion. In both years the amount raised exceeded the aggregated amount raised in United States (New York Stock Exchange, NASDA and AMEX) and United Kingdom (Main Market and AIM) combined. The average deal size in China in 2007 was USD 430 million, surpassing the same amount in US by 210 million, in UK for 260 million and almost incredibly 300 million in Europe.

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<sup>14</sup> Institutions usually buy a substantial number of shares of one listed company by using many individual accounts. In this case, the regulator does not know that all those shares belong to one institution, and the institution does not have to make its shareholdings public. Therefore, an institution is able to hold a substantial number of outstanding shares of one company before the markets take notice (Chi, Padgett, 2005, p. 467).

Figure 2: Number of IPOs in China, 2003 – 2007



Source: PriceWaterhouseCoopers Research, Greater China IPO Watch 2007, 2008, p. 2

The increase in 2007 is partly a result of an increase “return” of H-share firms to mainland China stock markets. The 12 H-share firms decided to also issue A-shares for their company and raised USD44,1 billion, representing 42,4% of the total amount raised with IPOs in that year. For instance only five H-share companies issue equity also in the form of A-shares in 2006, raising totally USD5,4 billion. Most famous come back of a single Chinese company to also A-share listing (before it was trading with H-shares since the year 2000) is PetroChina. Its 2007 A-share IPO raised USD9,1 billion and was due to a small percentage of company ownership issued to the public the first enterprise with the market capitalization higher than USD1 trillion ever in the world (PriceWaterhouseCoopers Research, 2008, p. 1).

Most of the new listing closed the first day trading price above the IPO issue price. In 2005 only 21 per cent of IPO issues had a negative first day performance. This percentage fell to 5 per cent in 2006 and 9 per cent in 2007. In 2007 45% of IPOs had a first day underpricing higher than 100%, while it was only 11% in 2006 and 2% 2005. As we can see the level of underpricing has deteriorated extremely since the end of 1990s but still it presents an important way of capital profit for domestic investors. That’s why many PRC citizens borrow money to invest in IPOs and it is not uncommon to have issues that have more than 1,000 times rate of oversubscription.

When it comes to sectors of industry IPO firms are engaged in PriceWaterhouse Research (2008) states that Retail, Consumer Goods and Services, and Industrials sector presented together 73%, 68% and 68% of the total number of IPOs in 2005, 2006 and 2007, respectively. Though the number of Financial sector companies is small compared to those previously mentioned, the amount of money raised in the highest in the Financials, especially in 2005 and 2006 when some very important China state-owned banks and insurance

companies were listed in Hong Kong and Shanghai. Due to previously mentioned PetroChina IPO in 2007 the portion of Energy & Utilities sector was the highest in the year.

Table 8: Top ten IPOs in China in 2007

	Stock Exchange	Funds Raised (USD million)
PetroChina Co Ltd	Shanghai	9,154
China Shenhua Energy Co Ltd.	Shanghai	9,124
China Construction Bank Corporation	Shanghai	7,955
Ping An Insurance (Group) Company of China	Shanghai	5,327
China CITIC Bank Corporation Ltd	Hong Kong & Shanghai	6,051
China Pacific Insurance (Group) Co Ltd.	Shanghai	4,111
China Life Insurance Group Ltd.	Shanghai	3,881
Bank of Communications Co Ltd.	Shanghai	3,454
China Railway Group Ltd	Shanghai	3,075
China Railway Group Ltd	Hong Kong	2,835
<b>Total</b>		<b>54,967</b>

Source: PriceWaterhouseCoopers Research, Greater China IPO Watch 2007, April 2008, p. 10

For 2008 the continuing process of Shanghai or Shenzhen listings of A-share IPOs of companies that already quote on Hong Kong market as H-shares. The process was stopped by the government in the mid July 2008 when Chinese government decided to wait with some further listings due to worse world capital market conditions. So the answer to the question how the Chinese IPO market will develop in the future depends a lot to world capital market conditions.

### 3. IPO PERFORMANCE IN OTHER DEVELOPING MARKETS

#### 3.1. IPO performance in Malaysia

As it is highly present in China, anomaly of IPO underpricing occurs also in other stock markets. As previously mentioned there are distinguishing features that make a Chinese IPO market unique also among developing markets. Therefore the analysis of other developing markets becomes of a great use to a potential investor in IPO segment.

Generally, the degree of underpricing in Malaysia is found to be substantially higher than found in the most of emerging markets. In quite recent study Leong, Vos and Tourani (1999), indicated that IPOs were underpriced by 107% using a large sample of 411 IPOs in the period from 1992-1998. Wong and Uddin (2000b) reported largely similar results with an average underpricing of 96.58%.

Another study by Wong and Uddin (2000a) has shown that Malaysian IPOs outperform the market with a positive **cumulative adjusted market return (CAR)** of 44% over three years from the listing day. This part of my thesis is focused on long- run performance of IPOs in

Malaysia<sup>15</sup>, oriented on the influence that growth and value effect have on long-run performance. The sample used for this comprises from 258 IPOs for the four year period spanning from 1992-1996 (Corhay, Stanly & Tourani Rad, 2002, p. 52).

### 3.1.1. Malaysian institutional framework

In Malaysia, companies are listed either on the main Board or the Second Board of the KLSE, and are classified into range of diverse sectors reflecting their core business. Firms in Malaysia employ the fixed-price method to go public whereby investors will specify the number of shares to which they subscribe to at the pre-announced subscription price<sup>16</sup>.

Following the close of applications for each public issue, company board members and representatives from Malaysian Industrial Development Finance Consultancy and Corporate Services (MIDFCCS) and the SC (Securities Commission meet to set the basis for allotting the shares. The prospective applicants are divided according to the amount of shares they are applying for and whether they are *Bumiputra*<sup>17</sup> or not. Bumiputras are the local indigenous people and are given certain privileges as stated in the New Economic Policy. A significant privilege is the preference given to them in the allocation of shares where at least 30% or more of the securities must be allocated to Bumiputra investors. The policy could also provide explanation for the high underpricing of Malaysian IPOs, given the political need to please the Bumiputra majority and to transfer wealth to them. Again the case of “dividing the bread and games” to the population is seen in the IPO process as it is also in China and in most other countries around the globe.

The main feature of the balloting process is that it is carried out in two different phases, in the presence of representatives from the board of directors of the firm in question, Anti-Corruption Agency, MIDFCCS, SC and others government agencies. Bumiputra investors are balloted in the first stage followed by mini-balloting from the reserve list of the Bumiputra portion. In the second stage, all unsuccessful Bumiputra portions are added to the public portion for the second balloting which increases the probability of success for the Bumiputra investors. The pricing mechanism of IPO is controlled by the SC rather than being market driven (Corhay, Stanly & Tourani Rad, 2002, p. 55).

### 3.1.2. Data

The initial sample size of listed IPOs on the Kuala Lumpur Stock Exchange between 1992 and 1996 collected is 298. Due to a lack of data available for research Corhay, Stanly and Tourani Rad had to reduce their sample to 258 IPOs.

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<sup>15</sup> Note, that long-run performance of IPOs in Malaysia is significantly better than long run performance in China.

<sup>16</sup> The difference with setting the price of shares in IPO process compared to the way of setting the price of shares in developed markets is very noticeable. Note that the IPO price setting in USA and Europe is presented at the beginning of the thesis.

<sup>17</sup> Dividing applicants on Bumiputra and non-Bumiputra investors is somehow similar to dividing shareholders on A- and B- shareholders.

The main reason for using IPOs from 1992 to 1996 is that there were not many IPOs till 1990. Another reason is that there is more information concerning the IPOs available from 1992 onward. The number of IPOs is not evenly distributed, with a lower level of issuing in 1992 and 1993. The levels of issuing activity reached its peak in 1996 with 92 IPOs, 89 of them are used in a sample.

Table 9: Distribution of initial public offering in Malaysia, 1992-1996

Year	Main Board	Second Board	Total	Total used in Sample
1992	25	20	45	26
1993	12	32	44	36
1994	19	47	66	60
1995	18	33	51	47
1996	40	52	92	89

Source: A. Corhay, T. Stanly & A. Tourani Rad.: *The long run performance of Malaysian initial public offerings (IPOs): Value and growth*, 2002, p. 55

### 3.1.3. Empirical findings

The long run performance of IPOs in the sample varies a great deal with a maximum cumulative adjusted return (CAR) of 479.4% compared to the minimum of -145.4%. The mean for the CAR is 41.7%, indicating that IPOs outperform the market over the 3-year period. This is similar to previous findings by Wong and Uddin (2000-a) who discovered a positive cumulative adjusted market return of 44% over the three years from the listing day.

The findings for the IPOs reported by Corhay, Stanly and Tourani Rad (2002) show that there is a positive correlation between cumulative market-adjusted returns and all the variables, namely book-to-market ratio, earnings-to-price ratio and cashflows-to-price ratio. The results indicate that the higher the ratios, the greater and the better the cumulative market adjusted returns are. Indirectly, this also provides the explanation for more outstanding performance of value IPOs compared to growth IPOs.

The number of days between the close of an IPO application and the first day of trading (the listing lag) is found to be slightly positively correlated to cumulative market adjusted returns. This could be argued that the longer the time period, the *less overreaction* there is on the first day of trading; as investors collect more information concerning the IPO<sup>18</sup>. As more information flows into the market after the listing date of the IPO, this will generate higher cumulative return for the typical IPO in the long run. As shown by Wong and Uddin (2000), there is a negative relationship between IPO initial returns and long run returns in Malaysia, in other words, the companies that performed better on the first trading day have less good long-run cumulative market adjusted returns, and vice-versa.

<sup>18</sup> Note that the influence of listing lag is quite different than in Chinese market

The IPO price is negatively related to the cumulative market adjusted returns although not statistically significant. This is reasonable as the larger the subscription price, the harder it will be for average investors to acquire the stocks in the long run as the price will be extremely high. Another fact that has influence on the IPO performance is the size of an IPO. The smaller the size of an IPO, the higher the IPO cumulative market adjusted returns. It could be argued that size is probably positively correlated to reputation in Malaysia as documented by Leong, Vos, and Tourani Rad (1999) whereby more reputable firms generally raise more money and there is no need to underprice as much as smaller firms.

Although the findings of Corhay, Stanly and Tourani Rad (2002) study shows positive cumulative market adjusted returns, other empirical studies (Leong, Vos, and Tourani Rad (1999), Wong and Uddin (2000)) have provided evidence that Malaysian IPO abnormal returns have actually declined over the years. The Malaysian market has become more mature and efficient with lower degree of underpricing. This might be due to the KLSE's efforts for trying to bring the KLSE to the higher level in the investment community and ensure a greater efficiency, better corporate governance and more transparency.

### ***3.2. IPO performance in Sri Lanka***

Sri Lanka's stock market is small even when compared to some of the regional markets in South Asia. The total market capitalization was around US\$2.7 billion at the end of 2005 (Colombo Stock Exchange, 2005). However, Sri Lankan market gained instant recognition back in January 1994 among world investors, when it was listed as the best performing market in the world. Unfortunately, this performance could not be sustained mainly due to the long and never ending ethnic problems the country had been facing over the last 30 years.

Between 1990 and 2000, there have been 86 IPOs in Sri Lanka. The period between 1992 and 1995 was the busiest period with more than 50 per cent of the total IPOs coming into the market. The market as measured by the ASPI index (Advanced Sustainable Performance Indices) reached its peak during this period and possibly explains the activity in the IPO market. During this period, especially the initial and the short-term returns of these IPOs could be influenced by the favorable market conditions. Hence, to rule out any effect of the busy issue period the Sure Peter's (2007) conducted a study to post-1995 IPOs by examining the 5-year period between 1996 and 2000. The sample consists of a good mix of PIPOs and NIPOs.

18 of the 30 IPOs sampled are privatized offerings. Of 18 NIPOs, 16 are from the plantation sector (tea and rubber) and one each from the manufacturing and agriculture sectors (therefore agriculture industry was the busiest in the IPO process in that period). The total amount raised by these 30 companies is Sri Lanka Rupee (LKR) 3.43 billion with an average size of an IPO is of LKR 114.37 million. The privatized IPOs accounted for approximately LKR 1.39 billion or 40 per cent of the total amount raised. Around 53 per cent of the issues in total were oversubscribed. The total number of privatized issues oversubscribed was 67 per cent, while

for the non-privatized issues the figure is much lower at 33 per cent. In Sri Lanka, the average time period of subscription to the offer and the trading of the stock on the exchange vary between 4 and 8 weeks.

### 3.2.1. Level of underpricing in Sri Lanka

From beginning of 1996 till the end of the year 2000 subscribers to the IPOs in Sri Lanka have received an average (median) initial excess return of 57.2 per cent (18.6 per cent). Of the total sample, 77 per cent of the IPOs had positive returns, while over 33 per cent of the issues gave a return in excess of 50 per cent (Suren, 2007, p. 803).

Table 10: Regression estimates for sample of IPOs in Sri Lanka, 1992- 1996

	All IPOs	PIPOs	NIPOs
Return %			
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 returns in %	57.2	97.9	-3.9
Median returns in %	18.67	67.30	5.10

Source: P. Suren: *Performance of initial public offerings and privatized offers; Evidence of a developing country*, 2007, p. 803

As expected, the issuer underpricing is present even in a small developing economy like Sri Lanka. The excess return found in this case of over 57 per cent is much greater than those seen in developed markets. Compared to China's and Malaysian level of underpricing the average return of Sri Lanka IPOs is very much comparable with similar results obtained in other developing markets such as in Thailand (47 per cent), Mexico (36 per cent) and Poland (44 per cent) (Suren, 2007, p. 804).

When the data are partitioned into PIPOs vs. the NIPOs, findings say that the economic returns for the investors change significantly. PIPOs had average (median) excess returns of 97.9 per cent (67.3 per cent) with a low of -39 per cent to a high of a massive 486 per cent. For the NIPOs, a *negative return* of 3.9 per cent (+5.1 per cent) is observed, however with less variability in the returns with a low of -72 per cent and a high of 30 per cent. In this case we can see a very important feature of IPOs in developing countries- it matters significantly if the IPO is done with previously owned government company or already privatized one.

### 3.2.2. Long-run performance

Table 9 evaluates the performance of the IPOs in the long run in Sri Lanka. Performance is measured using a buy and hold strategy of 1, 2 and 3 years.

In general, the holding period return shows that returns are positive and economically significant at 21.3 per cent (3.9 per cent) in the first year and 30.9 per cent (-1.7 per cent) in the second year. However, the excess returns disappear already by the end of the third year

when it declines to -12.9 per cent (-8.6 per cent). Only the second year return though is significant at the 10 per cent level.

Table 11: Long run returns based on a buy and hold strategy of IPOs in Sri Lanka, 1992- 1996

	All IPOs	PIPOs	NIPOs
1-year holding period returns			
Mean in %	21.35	43.33	-11.61
Median in %	3.97	4.72	-18.21
Standard deviation in %	55.99	97.97	40.57
2-year holding period returns			
Mean in %	30.92	54.66	-4.67
Median in %	-1.73	-4.66	-11.57
Standard deviation in %	94.22	112.1	40.99
3-year holding period returns			
Mean in %	-12.96	-4.09	-26.26
Median in %	-8.63	-17.71	-21.99
Standard deviation in %	54.28	54.54	53.37

Source: P. Suren.: *Performance of initial public offerings and privatized offers; Evidence of a developing country*, 2007, p. 806

By subdividing the sample into privatized vs. non-privatized samples, the excess returns is positioned into again another perspective. In the case of NIPOs, the results are very different from the results obtained for the total sample with companies, on the average, underperforming the general market. The CAR<sup>19</sup> moves up from -11.6 per cent (-18.2 per cent) to -4.6 per cent (-11.5 per cent) from the first to the second year, and then drops down to -26.6 per cent (-21.9 per cent) in the third year. The PIPOs on the other hand present a huge excess returns up to the end of the second year. The BHAR moves up (down) from 43.3 per cent (4.7 per cent) to 54.6 per cent (-4.6 per cent) from the first to the second year. At the end of the third year also PIPOs have experienced a negative CAR of -4.0 per cent (-17.7 per cent). The results are significant at the 10 per cent level for the first and second years. Overall, by the end of the third year, the results indicate that there is no significant difference in holding IPO stock vs. the market. However, the PIPOs have unexpectedly provided economically significant excess returns over the initial 2-year period.

The results obtained by Suren analysis (2007) seem different from a majority of the studies that show there is a negative return over the long term for all IPOs. In his working paper the unusual positive returns of the PIPOs in the first 2 years influence the overall results. The NIPOs more closely follow the same pattern, seen in other studies quoted previously, but the difference is that it does not show a statistically significant negative return.

#### 4. OTHER ASPECTS OF INVESTING IN EMERGING MARKET'S IPO

In this part of my thesis I will discuss about some important findings regarding investment decisions in emerging markets. The first part will be devoted to quality of auditor through IPO

<sup>19</sup> CAR= cumulative adjusted return



process and differences between them with respect to developed vs. developing markets (case of Taiwan). The second and final part of my thesis is discussing about intellectual capital disclosure and how it influences the level of underpricing of an IPO. This is shown on a case of Singapore since data for developing countries are poor or non-existing, but the final findings can be really useful to the future investor also in developing markets.

#### **4.1. Audit quality and earnings management**

An offering prospectus including externally audited financial statements for up to a certain period (different among different jurisdictions) is needed to be prepared in the IPO process. Accrual accounting provides management with discretion in the reporting of earnings, and thus enables management of the company to engage in earnings management in an IPO. Earnings management in general and earnings management in the IPO process in particular, have attracted growing attention in the accounting research, both in academics and investment arenas. The study by Zhou and Elder (2003), finds that big five auditors<sup>20</sup> and industry specialist auditors<sup>21</sup> constrain earnings management for IPO firms in the US. The question is how does their reference show in developing markets.

Earnings management in the IPO process is of particular concern for several reasons. First, management has incentives to engage in income increasing earnings management to ensure that the issue is either fully subscribed and/or priced higher to assemble greater proceeds. Management compensation and/or reputation depend on the success of the IPO. Second, at the issuing stage, earnings management is found to be negatively related to post issue earnings performance (Teoh, Wong & Rao, 1998b, p. 180) and post issue stock returns (Teoh, Welch & Wong, 1998a, p. 1950). As a result, at the issuing stage, earnings management has significant resource allocation implication. Third, APB 20<sup>22</sup> allows IPO firms to change accounting principles in the prospectus as long as financial statements of previous years are restated. This may present a chance for management to engage in earnings management. Fourth, there is significant information asymmetry between the owners-managers and investors and between informed and uninformed investors.

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<sup>20</sup> (1) Until 1998 we know the “Big Six” auditor firms (the merger between Coopers and Lybrand and Price Waterhouse to form PricewaterhouseCoopers did not take effect till 1 July 1998; thus, IPOs during until 1998 were still being audited by the Big Six audit firms – Arthur Andersen, Ernst and Young, KPMG, Coopers and Lybrand, Price Waterhouse and Deloitte); and (2) 1999-2002 and audited by the “Big Five” (the collapse and dissolution of Arthur Andersen took place in 2002, thus, for the period 1999-2002 it is presumed that the high quality reputation audit firms known as the “Big 5” comprised Arthur Andersen, Ernst and Young, KPMG, Pricewaterhouse Coopers and Deloitte); and (3) 2003-2004 and audited by the “Big Four” (following the demise of Arthur Andersen the audit firms comprising the Big Four were Ernst and Young, KPMG, Pricewaterhouse Coopers and Deloitte)

<sup>21</sup> Industry specialist auditors are the one having more than 10 per cent of market share in auditing among firms in particular sector

<sup>22</sup> APB (The Accounting Principal Board) is a former authoritative body of the American Institute of Certified Public Accountants (AICPA). It was created by AICPA in 1959 and issued pronouncements on accounting principles until 1973, when it was replaced by the Financial Accounting Standards Board (FASB). The APB 20<sup>th</sup> opinion's subject were Accounting changes met in July 1971. Their purpose was to define various types of accounting changes and establish guidelines for determining the appropriate reporting for each type

Audit quality research has focused primarily on differences between big five and non-big five firms. Research in the Australian audit market (Craswell, Francis & Taylor, 1995, p. 305) shows that industry specialist auditors receive a fee premium which represents a significant portion of the premium to big five firms in the Australian audit market. Elder (1999) finds that IPO underpricing tends to be lower for companies that use an industry specialist auditor. This evidence indicates that industry specialist auditors provide higher standards of audits compared with non-industry specialist auditors. Becker et al. (1998) find that unexpected accruals are reduced when existing publicly-traded companies use a big five auditor. They find that clients of non-big five auditors report unexpected accruals that are higher than unexpected accruals of clients of big five auditors. They interpret this as indicating that lower audit quality is associated with greater accounting flexibility.

#### **4.1.1. Sample data and results**

The sample in Chen, Lin Lin and Zhou research (2005) consists of 367 observations of new issues between 1999 and 2002 from the Taiwan Economic Journal (TEJ) database. The number of IPO companies is close to 80 each year from 1999 to 2001, and reduces to 56 in the year 2002. The big five auditors audit more than *80 percent* of the IPOs in any given year, except for the year 2002, which is around 90 percent of the IPOs. Findings of the Chen, Lin Lin and Zhou research (2005) are to somewhat similar to those in the developed world but they have some significant characteristics of Taiwan (and other developing markets).

Total accruals and unexpected accruals are significantly positively correlated with each other, which is expected. The big five variable is negatively related to total accruals and unexpected accruals. Industry specialist is insignificantly and negatively related to total accruals and unexpected accruals. This suggests that big five auditors constrain earnings management during the IPO process. Also there is a positive correlation between the big 5 and industry specialist variables.

These results suggest that big five auditors are associated with *lower unexpected accruals* in the fiscal year of IPO offering, and the role of audit quality is of great importance in reducing earnings management. The industry specialist variable is insignificantly negative when the big five variable is excluded, and is insignificantly positive when both big five and specialist variables are included. This is contrary to the findings in Zhou and Elder (2003) and Craswell, Francis and Taylor (1995) who state that industry specialization is an important element in auditor quality. The possible explanation is that the Taiwan audit market is comparatively smaller than the US, or the industry specialization is not well recognized as an important element of audit quality by the IPO companies in Taiwan.

Several control variables included in Chen, Lin Lin and Zhou research (2005), are significantly related to unexpected accruals. Operating cash flow is found to be negatively related to unexpected accruals, which suggests firms with strong operating cash flow position are less likely to use unexpected accruals to increase earnings in the IPO offering year. Firm

size is found to be positively related to earnings management, which means large firms engage more in income increasing earnings management in the IPO year. The level of leverage on the other hand is found to be negatively related to earnings management, suggesting that these firms are not using earnings management to satisfy debt covenant requirements. This shows that earnings management in the IPO year is unlikely due to concern over debt covenants. Finally, the research showed electronic companies engage in income increasing earnings management more than companies in other industries in the IPO year.

#### **4.1.2. Comment on results**

Findings in Taiwan indicate that auditor size is associated with lower unexpected accruals, consistent with high quality auditors constraining earnings management and providing more precise information. This is important given that management has incentive to engage in earnings management in the IPO process to garner greater proceeds and at issue earnings management is negatively related to post issue earnings performance and stock returns. The importance of this last statement is in realizing that given investors have very little information about these firms prior to the IPO process to evaluate or undo the earnings management. Results might be of interest to investors in IPO firms, given that at issue unexpected accruals are opportunistic and are consistent with the results of Teoh, Welch and Wong (1998a) who also find that at issue unexpected accruals are negatively related to post issue earnings performance and stock return. Auditor quality constrains earnings management in Taiwan, thus complementing the findings in Zhou and Elder (2003).

#### **4.2. Intellectual capital disclosure and IPOs cost of capital**

One central and still largely unanswered question in corporate disclosure research is whether a firm's disclosure policy has economic consequences and, if so, whether these consequences are economically significant. For an IPO issuer, underpricing is viewed as a major cost of capital. On the other hand, to an investor it is a possible profitable investment opportunity. Various theoretical models routinely cite asymmetrical information as a pivotal underlying determinant of underpricing (Ljungqvist, 2005, p. 35). Increased disclosure of financial and non-financial information by an IPO is mentioned as a potential mechanism for reducing asymmetrical information. Due to the nature of Intellectual Capital (IC) resources (such as their intangibility), conflicts with the underlying principles of the traditional reporting model and lack of regulatory oversight it is obvious that uncertainty surrounding IC is a major contributing factor to asymmetrical information between issuers and investors, especially in the current Information Age.

There is strong empirical support for the ex ante uncertainty-underpricing hypothesis. Researchers (e.g. Beatty & Ritter, 1986; Jog & McConomy, 2003; Schrand & Verrechia, 2004) theorize that disclosure is an *effective mechanism* for reducing ex ante uncertainty, and thus underpricing. Beatty and Ritter (1986) show that when the number of risk factors disclosed in the prospectus is higher, average underpricing is lower. Friedlan (1993) reports,

that underpricing is lower when the amount of information detailed in the prospectus is greater. Jog and McConomy (2003) find that average underpricing is lower for IPOs voluntarily disclosing management forecasts in the prospectus than for IPOs that do not. Finally, Schrand and Verrechia (2004) find a negative association between disclosure levels in the pre-IPO period and underpricing (except for internet firms, where a positive association is found).

As it turned out it is not always so and the Singh and Mitchell Van der Zahn research (2007) done in Singapore has shown an inverse association between level of IC disclosure and underpricing, results are therefore similar to those done by Schrand and Verrechia (2004) on IPOs of internet companies.

#### **4.2.1. Sample data and results discussion**

Singh and Mitchell Van der Zahn research data was collected from a sample of 334 Singapore IPOs listing on the Stock Exchange of Singapore (SGX) between 1 January 1997 and 31 December 2004. Singapore's economic prosperity is largely built on the development of management skills and use of IC resources given the nation's lack of natural and physical resources. Investors, therefore, require knowledge of IC resources when valuing an IPO, and will be interested in IC-related information. Also, prior research indicates underpricing in Singapore is historically high (Ljungqvist, 2005, p. 40) implying the potential high information asymmetry and the need for more disclosure. Singh and Mitchell Van der Zahn find that the amount of IC disclosure in Singapore IPO prospectuses increased annually from 1997 to 2003 before declining in 2004 (amount of IC disclosure in prospectuses was simply measured by counting the number of useful IC information disclosed). Underpricing averaged more than 27 per cent, with peaks in 1999-2000 and 2002-2003.

Their discoveries regarding the association between IC disclosure and level of underpricing can be attributed to various different explanations. Litigation risk offers one possible set of insights. Expectations about the future wealth creation potential of IC have dramatically increased during the 1990s (Garcia-Meca, Parra, Larran & Martinez, 2005, p. 70). Various IC measurement models have been proposed (and in some cases employed in practice). Nonetheless, a lack of consensus amongst IC experts on the most effective and appropriate method for measuring IC has increased an investor's ability to accurately value a firm's IC resources and its potential. One might presume that investors would bid down the strike price in light of this uncertainty. However, expectation of the potential of IC resources has increased the level of demand for those among investors. This may have prompted unsophisticated traders and investors to have a heightened fear they may miss a future "gravy boat" if the IPO's IC value creation potential materializes. Consequently, unsophisticated traders and investors could have aggressively bid up the IPO's strike price, particularly when IC-related disclosures were extensive.

While investor interest may have intensified in the wake of greater IC disclosure, the issuer may have been refusing to price the IPO at the level the market is willing to pay due to concerns with IC's problematic valuation and its associated ex-ante uncertainty. If projected benefits from the IC resources fail to materialize the firm's stock prices could decline sharply prompting costly litigation action and loss of reputation capital to the issuer. To minimize the threat of litigation the issuer may opt to keep the offer price low rather than raise it to a level investors are willing to pay.

As one of the reasons why would issuers reveal higher level of IC to the public before IPO, knowing that this will lead to higher underpricing, Singh and Mitchell Van der Zahn used Demers and Lewellen research results. In their recent work Demers and Lewellen (2003) hypothesized that issuers may willingly absorb the costs of receiving less proceeds from lower initial price offering if more intensive media attention and publicity following high first-day returns translates into the firm's product markets. Presuming (in response to IC information) that market participants bid up the IPO's strike price, IC reporting can be used as a means for advertising and marketing the firm. Setting a low issue price and disclosing more IC information can generate greater media interest via higher first-day returns. Heightened media attention can then attract existing and future customers to the firm's products, leading to increasing sales. Strengthened customer loyalty and relations could also be a result.

If a pre-IPO owner-manager's compensation is tied to sales, any increase in revenue derived from the advertising and marketing benefits of underpricing would offset losses incurred by leaving more "money on the table". Furthermore, if increased sales translate into higher stock prices the pre-IPO owner-manager will further benefit when selling additional retained shares after any locked-in period. Demers and Lewellen (2003) show that marketing benefits from IPO underpricing extend across different business sectors but are higher for internet firms and thus appropriate for Singaporean market.

While offering a plausible explanation, a major difficulty with the marketing-advertising view is that it hinges on the need for IC disclosure to actually influence media attention. Realistically, it is highly unlikely all IPOs will be capable of generating sufficient media attention that is then translated into the firm's product market. A strategy using IC disclosure for marketing and advertising in the IPO process, therefore, is only likely to be a suitable strategic tool for select industries or firms with an existing substantial media following.

Signaling theories of underpricing offer another potential explanation. Like the marketing-advertising view, signaling theory advocates adhere to the view that issuers forego higher returns at the time of the IPO if costs can be recouped later. Signaling theorists, however, suggest that costs are recouped via the equity market rather than the firm's product markets.

Overall, neither the litigation risk, marketing and advertising or signaling explanations provide a comprehensive rationalization for positive IC disclosure-underpricing association.

Singh and Mitchell Van der Zahn (2007) speculate that the most likely explanation is that firms were using greater IC disclosure as a signal of the IPO's future wealth creation potential. Further investigation is needed to either confirm or dismiss this speculative conclusion.

## **Conclusion**

The purpose of my thesis is to shed some light on the pricing of IPOs and, in particular, underpricing in emerging markets. These markets have quite some own features that distinguish them from developed markets. Those are particularly seen with IPO processes.

In China underpricing of A-shares is extremely high and by far exceeds that observed in other emerging and transitional economies. In contrast to the A-share results, underpricing of B-shares is much nearer to the international norms. Authors identify three major reasons for the underpricing of A-shares. First, the IPO is underpriced if there is a long listing lag, which is measured as the delay between the issue or sale of shares and their subsequent listing on the stock exchange. Listing lag is a measure of risk attached to IPOs and investors require a return to compensate them for the uncertainty involved. The second major factor in explaining underpricing is future equity offerings by the IPO company. Firms that go back to investors to sell more shares in the first few years after listing have greater underpricing of the initial public offering. The third factor is the ownership structure of the firm. Large retained share ownership by the government and legal entities results in greater underpricing. High government and quasi-government ownership increases agency costs for public investors and reduces the liquidity of a firm's stock. To compensate for higher agency costs and lower liquidity, investors require greater underpricing.

The average market-adjusted cumulative return and buy-and-hold return over three years after listing are found to be 10.3% and 10.7% respectively, which are both significantly positive at the 5% level. At the end of nineties, Chinese IPOs performed well during the three years after listing, especially in the first two trading years. Those companies with less government ownership, smaller offer sizes, high-tech features and lower initial returns are the best performers. Still, the effect of worse long run performance in the case when an IPO has an extremely high initial underpricing is strongly present in China.

Results in underpricing in Malaysia and Sri Lanka have been to some extent the same as in China, though both markets are more open for the foreign investors. Both markets show smaller initial underpricing and better long run performance. Especially the Malaysian stock exchange is becoming more and more attractive for foreign investors since its officials try to operate it similar as Singaporean one. By playing close to international rules the investors are becoming more profound to investing. Due to knowledge investors have about it and fewer legislation rules as in China an average underpricing is smaller but also more stable.

Next, I examine whether auditor size and industry specialization are associated with lower earnings management (lower unexpected accruals) for IPO companies in Taiwan. Auditor size is associated with lower unexpected accruals, consistent with high quality auditors constraining earnings management and providing more precise information. This is important given that management has incentive to engage in earnings management in the IPO process to garner greater proceeds and at issue earnings management is negatively related to post issue earnings performance and stock returns. This is also important given investors have very little information about these firms prior to the IPO process to evaluate or undo the earnings management.

Further, for investor also very important aspect is how important is the intellectual capital disclosure of the company for its IPO performance. Contrary to expectations a positive IC disclosure-underpricing association was found. Sub-sample analysis, however, shows the IC disclosure-underpricing linkage is strongest amongst a sub-sample of “IC intensive” IPOs. Overall, findings suggest asymmetrical information concerns associated with IC is not a determinant of underpricing among Singaporean IPOs. Rather, findings imply that Singapore issuers may use IC disclosures as a complementary strategic underpricing tool. Even though, investors should be careful by investing in a company with high IC disclosure. If investors, without knowing all the related risks (such as that associated with the intangible nature of IC), are bidding up the price they are willing to pay for an IPO based on the quantity of IC disclosures, an unhealthy speculative environment could evolve. Unscrupulous issuers could exploit a speculative environment by disclosing more IC information that could benefit them by creating greater media hype but disadvantage the investor as the additional information could be largely uninformative and misleading.

I conclude that being present at the emerging markets still presents a much higher risk compared to other countries and due to that average profit from investment is higher. A big problem also represents a high level of government intervention in the equity market which makes investors even less willing to invest in emerging markets IPOs. But if in the end they do decide to be present on those markets, findings regarding the quality of an auditor of an IPO, importance of intellectual capital disclosure and SAD effect can be an important tool to investor.

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# APPENDIX

## POVZETEK

### *Uvod*

Podcenjenost prvih javnih ponudb delnic, ki je definirana kot odstotna sprememba med začetno (ponujeno) ceno in ceno ob koncu prvega dne trgovanja, je privlačila pozornost strokovne in poslovne srenje v zadnjih dveh desetletjih. Podcenjenost se je skozi obdobja močno spreminjala, na Zahodu je bila še posebej velika v času »internetnega balona«, to je v letih 1999-2000, ko je v povprečju znašala kar 65%. To pomeni, da je delnica podjetja, katere izhodiščna cena je bila 10 EUR, konec prvega trgovalnega dne znašala 16,5 EUR (Dolvin & Pyles, 2007, str. 214).

Tradicionalna razlaga opredeljuje prvo javno ponudbo delnic kot oportunitetne stroške trenutnih lastnikov kapitala (Loughran, Ritter & Rydquist, 1994, str. 170). Točneje, podcenjenost pomeni, da so delnice ob prvi javni ponudbi prodane po nižani vrednosti, s čimer izvodeni vrednost obstoječega kapitala prvotnih delničarjev. Glede na to dejstvo so se raziskovalci na področju prvih javnih ponudb delnic osredotočili predvsem na vzroke, ki privedejo do omenjenega stanja. Verjetno najpomembnejši razlog za podcenjenost prvih javnih ponudb delnic je asimetrija informacij (Ritter & Welch, 2002, str. 1800; Ljungqvist & Wilhelm, 2002b, str. 730) med trenutnimi lastniki in poslovodstvom na eni strani in trenutnimi lastniki in bodočimi lastniki na drugi strani. Prav tako zelo pomemben razlog je želja izdajatelja po čimprejšnji kotaciji na trgu vrednostnih papirjev ter se za to ceno odreči določenemu delu trenutne vrednosti podjetja. Dodatni stroški nastanejo z izdajo delnic trgu, to so stroški revizorja, zavarovalca, odvetniških storitev idr.

Prva javna ponudba delnic je že vrsto let prisotna na zahodnih razvitih tržiščih, kot oblika financiranja pa se je v zadnjem obdobju močno razširila tudi na razvijajočih se trgih (Ritter, Welch 2002). Najpogosteje je povprečna podcenjenost delnic pri prvi javni ponudbi delnic na razvijajočih se trgih mnogo višja, čas med izdajo delnic in njihovo dejansko kotacijo na borzi je pogosto zelo dolg, prav tako pa je stopnja tveganja precej višja kot v zahodnih gospodarstvih.

Poglavitni del mojega diplomskega dela je tako namenjen podcenjenosti prvih javnih ponudb delnic na nekaterih razvijajočih se trgih, in sicer na Kitajskem, v Maleziji in Šri Lanki.

Pozornost bom namenil tudi pomembnosti kakovosti revizorjev pri postopku oz. njihovi vlogi pri odpravljanju t.i. »okostnjakov« v bilancah podjetij, ki so predmet prve javne prodaje delnic. Primer pomembnosti revizorja bom podal na primeru Tajvana. Prav pri slednjem področju so avtorji v zadnjem obdobju prišli do nekaterih zanimivih ugotovitev, prav tako

zanimive pa so tudi ugotovitve avtorjev glede povezave med količino in kakovostjo izdaje informacij o intelektualnem kapitalu ter višino podcenjenosti delnic.

### ***Teoretično ozadje podcenjenosti delnic na razvitih trgih***

V večini primerov prvih javnih ponudb delnic je bil glavni razlog za celoten proces zbrati lastniški kapital za podjetje in ustvariti odprti trg, na katerem bi ustanovitelji in ostali delničarji lahko svoja naložena sredstva v podjetju prodali v prihodnjih obdobjih. Nefinančni razlogi za prvo javno ponudbo delnic, kot so povečana publiciteta za podjetje, igrajo zgolj manjšo vlogo pri procesih na Zahodnih tržiščih (Ljungqvist, Wilhelm, 2002b, str. 735).

Teorija življenjskega cikla podjetja prvo javno ponudbo opredeljuje kot način, kako podjetnik mnogo lažje sporoči vrednost podjetja trgu in tako najde potencialne investitorje oz. prevzemnika Zingales (1995). Podjetnik lahko preko prve javne ponudbe delnic iztrži več za svoje podjetje kot pa preko direktne prodaje. Bolj pogosto je prva javna ponudba delnic način izhoda iz podjetja za prvotne strateške partnerjev podjetnika kot pa za podjetnika samega (Black & Gilson, 1998, str. 255).

Pri prvi javni ponudbi delnic je zelo velikega pomena tudi trenutek vstopa podjetja na kapitalske trge. Če so kapitalski trgi ravno v medvedjem trendu, lahko prva javna ponudba prvotnim lastnikom prinese mnogo manj denarja kot pa v bikovskem trendu (Lucas, McDonald, 1990, str. 1025).

V zadnjih štiridesetih letih se je zelo spremenila tudi struktura podjetji, ki vstopajo v proces prvih javnih ponudb delnic. S tehnološkim razvojem je vse več podjetij iz informacijsko-tehničnega področja, katere lastniki ponudijo trgu prek prave javne ponudbe ter vse manj podjetij iz živilskopredelovalne industrije, ter težkoindustrijskih obratov (Ritter & Welch, 2002, str.1801). prav tako se povečuje tudi delež podjetij, ponujenih na prvi javni ponudbi delnic, ki v letu pred procesom niso imela pozitivnega poslovnega izida. Slednje še v osemdesetih letih prejšnjega stoletja za trg ne bi bilo sprejemljivo.

Pri prvih javnih ponudbah delnic smo največkrat priča začetni podcenjenosti delnic podjetja, ki se podaja na trg vrednostni papirjev. Kat najbolj pogost razlog za to se omenja **asimetrija informacij** med potencialnimi investitorji na eni strani in prvotnimi lastniki ter managementom na drugi (Welch, 1989, str. 425). Ker se namreč obstoječi lastniki in poslovodstvom tega pojava zavedajo, bodo namenoma trgu ponudili odstotek podjetja po nižji ceni, kot bi bila za podjetje primerna. Ob dobrem začetnem donosu novih investitorjev bodo le ti bili tudi v prihodnje pripravljeni investirati v podjetje. Ob rasti cene delnice na kapitalskem trgu v prvem dnevu trgovanja se bo vrednost preostalega premoženja, naloženega v podjetju, prvotnim lastnikom povišala za bolj kot pa je znašala izgubljena razlika, ki je nastala zaradi namenske podcenjenosti delnice ob prvi javni ponudbi (Loughran & Ritter, 2002, str. 420).

Na dolgi rok delnice v prvi javni ponudbi v povprečju ne dosegajo tako velikih donosov kot ostale delnice, ki kotirajo na borzi vrednostnih papirjev (Miller, 1977, str. 1155). Razlog za slabši rezultat je v racionalnosti investitorjev, ki ob višji podcenjenosti delnice ob njenem prvem dnevu kotiranja predvidevajo, da se delnica ro v prihodnje ne bo tako dobro obnesla. Zato je dolgoročni donos ostalih primerljivih vrednostnih papirjev največkrat višji.

Schultz (2001) ponudi nekoliko drugačno razlago za slabši dolgoročni donos. Pravi, da uspešnim prvim javnim ponudbam delnic, sledijo nove. Investitorji se po prvem dnevu trgovanja pogostokrat umaknejo iz podjetij in sredstva naložijo v nove prve javne ponudbe delnic. Posledično ob povišani ponudbi delnic podjetij, ki so se prve pojavile na trgu vrednostnih papirjev, njihova vrednost pade, kar povzroči slabše dolgoročne rezultate.

Pri teoretičnem ozadju procesa prvih javnih ponub sem na koncu opredelil tudi nekatere najbolj tipične razlike med prvimi javnimi ponudbami delnic v ZDA in Evropi. V ZDA se interval cene delnice, ki bo ponujena javnosti, ponavadi določi že v naprej, npr. 14-16 USD, nato pa poteka močna promocija med potencialnimi investitorji. Razlika med najnižjo in najvišjo ceno delnice v procesu prve javne ponudbe je skoraj vedno 2 USD (Ritter, 2003, str. 434). Na sam dan prve javne ponudbe je lahko določitev dejanske prvotne cena 20% višja ali 20% nižja glede na začetni interval, odvisno od izkazanega interesa investitorjev. Končna dejanska cena je torej v ZDA v 50% primerov znotraj prvotnega intervala, v 25% primerov je cena določena višje ter v 25% primerov nižje (Loughran & Ritter, 2002, str. 170).

V Evropi, predvsem je to značilno za Nemčijo, pa je cenovni interval prvič oblikovan šele po vpisovanju potencialnih delničarjev, in sicer je ta interval določen šele sedem dni po vpisu za sodelovanje v prvi javni ponudbi delnic (Aussenegg, Pichler & Stomper, 2003, str.8). Določen cenovni interval je pogostokrat višji kot zgolj 2 EUR, vendar ko je določen, cena delnice v prvi javni ponudbi v Nemčiji nikoli ni višja od maksimalne določene z intervalom. Tudi v ostalih evropskih državah je cena v zelo redkih primerih višja od maksimalne.

Poleg zgoraj omenjene razlike med obema kapitalskima trgoma je zelo pomembna tudi razlika v pogostosti izpodbojnih tožb glede alokacije delnic v prvi javni ponudbi in ostalih delov celotnega procesa. Izpodbojne tožbe so v ZDA zelo pogoste, v Evropi pa do njih pride zelo redko (Van der Goot, 2003, str. 130).

Značilnosti procesa prvih javnih ponudb v Evropi in ZDA so v veliki meri podobne, prihaja tudi do nekaterih razlik, vendar so te značilne večinoma zgolj v samem procesu in ne toliko v končnem učinku za investitorje. Donosi podobnih podjetij so na obeh straneh Atlantika dokaj podobni, prav tako pravna varnost in količina razkritih informacij. Da bi predstavil razlike v omenjenih segmentih sem svojo diplomsko nalogo usmeril predvsem na preučitev razvijajočih se trgov ter tamkajšnjih procesov prvih javnih ponudb delnic.

## **Podcenjenost prvih javnih ponudb na Kitajskem**

Nedavne gospodarske in politične spremembe v Ljudski Republiki Kitajski (LRK) so privedle do privatizacije in uvrstitve na trg vrednostnih papirjev mnogih podjetij v državni lasti. Ob tem se značilnosti kitajskega trga vrednostnih papirjev močno razlikujejo od tistih na ostalih trgih, razlike so velike tudi v primerjavi z ostalimi trgi v razvoju. Taka zelo pomembna značilnost je, da na Kitajskem poznamo dve vrsti delnic, in sicer delnice A, ki so rezervirane le za državljane LRK, in delnice B, s katerimi lahko razpolagajo vsi investitorji<sup>23</sup>. Tako z delnicami A in B se trguje na Šanghajski borzi vrednostnih papirjev kot tudi na borzi vrednostnih papirjev v Shenzhen. Leta 1993 so izbranim državnim podjetjem dovolili tudi izdajo delnic za tuje državljane in so kotirale na Hongkongški borzi vrednostnih papirjev. Slednje imenujemo H delnice, valuta trgovanja z njimi pa je Hongkongški dolar. Pred kratkim so trgovanje z nekaterimi delnicami omogočili tudi na nekaterih ostalih svetovnih borzah, delnicam, ki tako npr. kotirajo v ZDA, pravimo N delnice.

Avtorji opredeljujejo tri najpomembnejše značilnosti podcenjenosti delnic A na Kitajskem (Chen, Firth & Jeong-Bon, 2004, str. 284). Prvi pomemben razlog je odlašanje s kotacijo delnic, ki so bile izdane preko prve javne ponudbe delnic. Močna podcenjenost delnic je zato pomembna z vidika nadomestitve negotovosti vlagateljev o tem, koliko je dejansko vredno njihovo premoženje, naloženo v delnice prve javne ponudbe. Drugi razlog je v sekundarnih (naknadnih) izdajah delnic podjetja v prvih dveh letih od prve izdaje delnic. Tu je podcenjenost prve izdaje delnic uporabljena kot orodje za pridobitev naklonjenosti vlagateljev po naknadnih vložkih denarja. (Welch, 1989, str. 425). Tretji razlog je v visoki stopnji pridržanja deleža v podjetjih, ki so bila predmet prve javne izdaje delnic, s strani državne oz. drugih državnih podjetij. V tem primeru do podcenjenosti prihaja zaradi dejanske znižane likvidnosti delnic v obtoku in višjih agentskih stroškov, ki jih prinaša državno lastništvo. Država ima namreč pogosto s svojim lastništvom v podjetjih tudi druge neekonomske cilje, kot sta čim višja zaposlenost in razvoj regije kot celote, ne pa le podjetja samega.

Prve javne ponudbe delnic A so načeloma izpeljane po določeni fiksni ceni, ki je razvidna iz prospekta objavljenega pred prvo javno ponudbo. Informacije, ki morajo biti vključene v prospekt, vključujejo podatke o številu delnic, dobi vpisovanja delnic in kot rečeno o ceni delnice, manjkati pa ne smejo tudi podatki o preteklem poslovanju podjetja, poslovnem okolju podjetja, opis obstoječega menedžmenta idr. Pomembna značilnost delnic A je velik časovni zamik med izdajo delnic in začetkom kotacije na borzi. Pogosto se zgodi, da ta zamik traja tudi 6 mesecev in več. Do omenjenih časovnih zamikov prihaja zaradi potrebe po izpolnjevanju predpisov obeh Kitajskih borz vrednostnih papirjev s strani izdajatelja. Še bolj pomemben vzrok zamika je interveniranje države v izdajanje papirjev, saj le ta predpiše število in časovni okvir za vsako prvo javno ponudbo delnic. Povpraševanje po delnicah A ob

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<sup>23</sup> V praksi zelo malo domačinov vlaga svoja sredstva v delnice B, saj so ob enaki stopnji tveganja in enakimi pravicami, ki jih prinašajo, v povprečju mnogo manj vredne kot delnice A. Tako so delnice podjetij, ki so izdale A in B obliko delnic, prve kar za 2 in večkrat dražje od delnic B.



prvi javni ponudbu je pogosto večje od ponudbe le teh, vendar pa je podatkov o načinu alokacije delnic med končne lastnike zelo malo (Mok & Hui, 1998, str. 454).

Prva javna izdaja delnic za tujce (B, H, N, idr.) zahteva objavo prospekta, ki je mnogo obsežnejši kot prospekt pri izdaji delnic A. Podrobnost prospekta je precejšnja in je primerljiva s podrobnostjo prospekta, ki ga morajo izdajati ostala podjetja, katerih delnice kotirajo na Hongkongški borzi. Zaradi večje podrobnosti prospekta delnic B Mok in Hui (1998) trdita, da so tuji delničarji mnogo bolje obveščeni o razmerah na trgu kot domači delničarji, lastniki delnic A. Podobno trdita tudi Chui in Kwok (1998), medtem ko Chakraverty, Sarkar in Wu (1998) trdijo, da so delničarji delnic B slabše obveščeni o razmerah na trgu. Trdijo namreč, da imajo tuji vlagatelji mnogo manj znanja o razmerah na kapitalskem trgu na Kitajskem. Ravno zato naj bi ob izdaji delnic B izdajatelj bili prisiljeni najeti svetovno znane revizorje in zavarovalca. Bistvena razlika v primerjavi z delnicami A je tudi v tem, da pri prvi javni izdaji delnic B običajno ne prihaja do zamud pri kotaciji delnic na borzo, saj je časovni zamik največkrat manjši od dveh mesecev.

V letih 1991-1997 je bilo skupno na Kitajskem 734 prvih javnih ponudb delnic A in 117 prvih javnih ponudb delnic B. 91 podjetji je izdalo obe obliki delnic. Mediana (povprečna donosnost) podcenjenosti delnic A je bila v omenjenem obdobju 145% (298%). Ob tem je potrebno poudariti, da je mediana zamika med izdajo in kotacijo teh delnic na borzi znašala kar 261 dni. Povprečna podcenjenost delnic A na Kitajskem je tako mnogo višja kot na ostalih kapitalskih trgih, med tem ko je tveganje za kapitalsko izgubo pri prvotnih javnih izdajah delnic A na Kitajskem zelo nizko, saj je najvišja izguba pri 734 prvih javnih izdajah znašala le 18%, najvišji kapitalski dobiček pa kar 3544%.

Zanimivo je podcenjenost delnic B popolnoma primerljiva s tistimi na ostalih trgih, kot so Velika Britanija, ZDA, Kanada in Evropa. Podcenjenost prvih javnih ponudb delnic B na Kitajskem je tako precej nižja kot na ostalih tržiščih v razvoju. Mediana (povprečna vrednost) znaša le 10% (25%). Nižjo podcenjenost B delnic lahko pripišemo dejstvu, da so pri ponudbi slednjih prisotni priznani svetovni zavarovalci in revizorji (Su & Fleisher, 1999, str. 185).

Empirični dokazi pravijo, da je pri prvih javnih ponudbah delnic značilno dvoje: kratkoročna podcenjenost se največkrat odrazi v slabšem učinku za vlagatelja na dolgi rok. Loughran, Ritter in Rydquist (1994) so v svoji analizi petindvajsetih držav ugotovili, da je podcenjenost prisotna v vseh državah, značilno pa je obratno razmerje med kratkoročnim in dolgoročnim učinkom. Chan, Wang in Wei (2004) ugotavljajo na podlagi vzorca 570 prvih javnih ponudb delnic A in 39 ponudb delnic B na Kitajskem med leti 1993-1998 in 1995-1998, da je dolgoročni učinek delnic A po treh letih od kotacije nekoliko slabši kot pri ostalih podobnih podjetjih po velikosti in/ali knjigovodski vrednosti/tržno vrednostjo. Dolgoročni učinek delnic B je bil nasprotno boljši od primerljivih podjetij po prej omenjenih kazalcih.

Raziskava Chi in Padgett (2005) je na podlagi analize 409 prvih javnih ponudb delnic A na Kitajskem, ki so se zgodile v obdobju med letoma 1996-1997, primerjala njihov dolgoročni učinek s podobnimi podjetji, ki kotirajo na Šanghajski oz. Shenzhenski borzi. Glede na njuno raziskavo je povprečna kumulativna donosnost v treh letih po prvi javni izdaji delnic znašala zgolj 10,7%. Donosnost delnic 409 podjetij, ki so ostale v večinski lasti države, je bila pozitivna skozi celotno obdobje. Ne negativna donosnost omenjenih delnic podjetij je posledica tržno orientirane vladne politike, ki želi s pozitivni (sicer nizkimi) donosi motivirati trg po nadaljnjem investiranju.

Na dolgoročno pozitivno učinkovitost prvih javnih ponudb delnic ima pomemben učinek višina odstotka podjetja, ki je bila s prvo javno ponudbo privatizirana. Višji kot je ta delež podjetja, manjša je verjetnost direktnega vpliva politike na poslovanje podjetij. Obstaja torej pozitivna povezava med količino prestrukturiranja poslovanja podjetij in deležem, ki je bil privatiziran. Višji kot je delež privatiziranega kapitala, večja je možnost za bolj učinkovito poslovanje. Še več, ker je eden od ciljev kitajske vlade višja produktivnost podjetij, naj bi na dolgi rok višji delež zunanjih investitorjev povišal učinkovitost podjetja. Posledično je povezava med deležem podjetja, ki je ostal v državnih rokah, negativno povezana s učinkovitostjo podjetja ter dolgoročnim učinkom delnic, ponujenih s prvo javno ponudbo.

Na boljši dolgoročni učinek vpliva tudi ponudba in povpraševanje po delnicah, ponujenih v prvi javni ponudbi. Če je povpraševanje ob začetku mnogo višje od ponudbe, je na dolgi rok pričakovati v povprečju boljši dolgoročni učinek delnic.

Chi in Padgett (2005) omenjata tudi pomen sektorja v industriji, s katerim se podjetje ukvarja, na dolgoročni učinek prvih javnih ponudb podjetij. Za merjenje razvitosti produktov, ki jih podjetje proizvaja, sta upoštevala stopnjo razvoja produkta. Če je podjetje delujoče v visoko tehnološki panogi, je pričakovati, da bo v prihodnje raslo hitreje kot pa podjetje iz delovno intenzivnega okolja. Seveda to tudi pomeni, da se bodo podjetja z višjo stopnjo uporabljene tehnološke opreme v produkcijskem procesu srečevala z višjo stopnjo tveganja (tekmovala ne bodo le na ravni domače proizvodnje, ampak bodo imela konkurente tudi iz drugih delov Kitajske in sveta), kar pa naj bi se odrazilo z višjim kapitalskim dobičkom na dolgi rok. Prav tako na dolgoročni učinek prvih javnih ponudb vpliva kakovost podjetij, ki se delno privatizirajo. Višja kot je produktivnost podjetij v treh letih pred prvo javno ponudbo delnic (merjena z dobičkom na delnico), boljši dolgoročni učinek delnice je pričakovati.

Kratkoročna in dolgoročna donosnost prvih javnih ponudb delnic sta negativno povezani. »Impresarij« (op.: ang: Impresario) teorija predvideva, da so prve javne ponudbe delnic podcenjene s strani investicijskih bankirjev (na primeru Kitajske je to država direktno) z namenom ustvariti vtis po presežnem povpraševanju po delnicah. Zaradi nedoločenega vzorca razdelitve delnic ob prvi javni ponudbi in slabe zakonodaje se je na Kitajskem dogajalo, da so

do pretežnega deleža ponujenih delnic prišle redke institucije<sup>24</sup>, ki so potem ob kotaciji delnice skušale vplivati na dvigovanje tečaja. Nepoučeni individualni investitorji so videli priložnost za investiranje v potencialno odlično naložbo in institucije so jim svoje deleže na prvi dan trgovanja prodale ter ustvarile neobičajne kapitalske dobičke. Institucije so potem svoj denar naložile v tiste naložbe, katerih primarna podcenjenost je bila nižja in je bila verjetnost za uspešno dolgoročno naložbo višja. Čeprav je tak proces dejansko nelegalen, se je v devetdesetih letih žal kar pogosto dogajal na Kitajskem.

### ***Podcenjenost prvih javnih ponudb v Maleziji***

Stopnja podcenjenosti prvih javnih ponudb delnic v Maleziji je v povprečju nekoliko višja kot pri ostalih razvijajočih se trgih. Študija Leong, Vos and Tourani Rad (1999) je pokazala kar povprečno 102% podcenjenost delnic pri 411 prvih javnih ponudbah delnic med obdobjem 1992-1998. Razlogi za višjo podcenjenost delnic v Maleziji so podobni kot pri ostalih razvijajočih se trgih: asimetrija informacij in pristranska alokacija delnic podjetij, ki so predmet prve javne ponudbe. Omenjena dejavnika sta več kot očitno prisotna v pravnem sistem Malezije.

V procesu prve javne ponudbe delnic namreč Malezijska komisija za gospodarski razvoj, finančno svetovanje in podjetniške storitve ter Malezijska komisija za nadzor trga vrednostnih papirjev sami določita kategorije, na podlagi katerih se bodo delnice razdeljevale. Potencialni vlagatelji so razdeljeni namreč glede na to, za koliko delnic so se prijavili pri prvi javni ponudbi in pa, ali spadajo med privilegirane, ponujene s prvo javno ponudbo, v Maleziji prekosile ostale Malezijske delnice, ki kotirajo na borzi. V prvih treh letih po kotaciji je namreč kumulativna donosnost delnic znašala kar 44%. Corhay, Stanly in Tourani Rad (2002) so v svoji študiji beležili povprečno stopnjo kumulativne dolgoročne donosnosti delnic v prvi javni ponudbi 41,7% v obdobju 1992-1996. Najvišja dolgoročna donosnost v tem obdobju je znašala 479,4%, najvišja pa je beležila izgubo v vrednosti 145,4%. Razlogi za rezultate pri dolgoročnem učinku prvih javnih ponudb delnic so podobni kot pri primerih s Kitajske.

### ***Podcenjenost prvih javnih ponudb na Šri Lanki***

Med leti 1990-2000 je v Šri Lanki prišlo do 86 prvih javnih ponudb delnic, od tega več kot 50% v obdobju 1992-1995. Surenovi študiji (2007) so vključene prve javne ponudbe delnic med letoma 1996-2000 in vključuje 30 prvih javnih ponudb delnic podjetij, od tega jih je država kot prvotni lastnik trgu ponudila 12. Pri dobri polovici vpisov podjetij je bilo povpraševanje po delnicah večje kot ponudba. V povprečju je med vpisom in kotacijo delnic na borzi pri omenjenih 30 prvih javnih ponudbah minilo med 4 do 8 tednov.

Povprečna podcenjenost (mediana) pri prvih javnih ponudbah delnic na Šri Lanki je bila 57,2% (18,6%). Skupno je 77% vseh prvih javnih ponudb beležilo pozitiven donos ob nastopu na trgu, dobra tretjina pa jih je beležila preko 50-odstotno rast v prvem dnevu trgovanja.

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<sup>24</sup> V ta namen so omenjene institucije deleže kupovale preko več bančnih računov, da je bilo še težje izslediti nakupe.

Delnice podjetij, ki jih je na trg ponudila vlada, so bile v povprečju mnogo bolj podcenjene kot delnice, ki so jih trgu ponudili zasebni vlagatelji. Povprečna podcenjenost državnih podjetij je znašala kar 97,9% (minimum je predstavljala izguba v višini 39%, maksimum pa 486% dobiček), medtem ko so nedržavna podjetja ob svojem prihodu na trg beležila zgolj 3,9% povprečno podcenjenost (minimum pri -79% in maksimum pri 30%).

Podobni rezultati so bili tudi na dolgi rok, ob čemer je potrebno poudariti, da so tako državna kot tudi podjetja, ki so bila na prvo javno prodajo delnic ponujena s strani zasebnih vlagateljev, v tretjem letu beležila negativni povprečni donos. Povprečni donos državnih podjetij je bil v povprečju pozitiven v prvih dveh letih, medtem ko je povprečni dolgoročni donos podjetij v zasebni lasti bil v vseh treh letih po začetku kotacije negativen. Na primeru prvih javnih ponudb na Šri Lanki smo tako lahko zaznali dokaj nenavaden pojav, saj so podjetja, ki so bila privatizirana s strani države in so imela že začetno podcenjenost višjo kot privatna podjetja, beležila relativno dober dolgoročni donos.

### ***Pomembnost kakovosti revizorja pri prvi javni ponudbi***

Ob procesu prve javne ponudbe delnic je nujno, da podjetje razkrije določeno količino podatkov z izdajo prospekta. V procesu prve javne ponudbe bi namreč v nasprotnem primeru bila verjetnost za prirejanje rezultatov bilance s strani vodstva podjetja še večja, s čimer bi poslovodstvom in prvotni lastniki lahko s prodajo dela podjetja na trgu zaslužili več kot pa je dejanska vrednost le tega. Prav zato je v zadnjem obdobju nadzor prikazovanja podatkov s strani podjetij in revizorjev (nezaupanje v izkaze izvira tudi iz afer kot so Enron, Worldcom in Parmalat) v poslovnem svetu pritegnilo toliko več zanimanja. Študija Zhou in Elder (2003) je ugotovila, da »Velikih pet« (Big five) revizorskih hiš<sup>25</sup> ter posamezni revizorji specialisti v določeni panogi pripomorejo k nadzoru prikazovanja podatkov v podjetjih v ZDA. Vprašanje tega dela moje diplome pa je, kako se njihova blagovna znamka odrazi na primeru razvijajočih se trgov.

Nadzor prikazovanja poslovnih rezultatov pri procesu prve javne ponudbe delnic je predmet nazdora zaradi več dejavnikov. Prvič, poslovodstvo lahko zazna spodbudo za prikazovanje boljših rezultatov kot pa so dejanski z namenom, da bi bila celotna izdaja delnic v prvi javni ponudbi tudi prodana investitorjem in/ali, da bi bila cena v prvi javni ponudbi delnic čim višja saj bi na ta način bil tudi dohodek poslovodstva višji zaradi uresničenega cilja o prodaji delnic. Drugič, ob izdaji delnic se je v preteklosti mnogokrat izkazalo, da so bili napovedani prihodnji rezultati podjetja dejansko pretirani (Teoh, Wong & Rao, 1998b, str. 180), posledično pa je bil tudi učinek delnice na trgu vrednostnih papirjev slabši od pričakovanega (Teoh, Welch & Wong, 1998a, str. 1950). Tretjič, načelo APB 20 dovoljuje podjetjem, da pred prihodom na borzo vrednostnih papirjev spremenijo način prikazovanja nekaterih računovodskih postavk, če prikazovanje teh računovodskih predpostavk spremenijo tudi v

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<sup>25</sup> Število najbolj priznanih revizorskih podjetij se je v zadnjem obdobju zmanjšalo s šest na štiri, glej razlago v angleškem delu diplome.

preteklih obdobjih poslovanja. Slednje bi se lahko izkazalo za dodatno priložnost posloводства prikazovati boljše rezultate ob procesu prve javne ponudbe delnic. In četrtič, kot vedno je prisotna velika stopnja asimetrije informacij med obstoječimi lastniki, poslovodstvom ter investitorji na eni strani in poučenimi ter nepoučenimi investitorji na drugi.

Raziskava Chen, Lin Lin in Zhou (2005) je zajela 367 prvih javnih ponudb na Tajvanu v obdobju med letoma 1999 in 2002. Okoli 80% revizorjev vseh podjetij v prvih javnih ponudbah je bilo iz skupine Velikih pet. Rezultati raziskave so pokazali, da prisotnost priznanega revizorja v procesu prve javne ponudbe delnic na Tajvanu pomeni manjše nepričakovane prirastke, dosledno z visoko kakovostjo revizorja v samem procesu, ki je tovrstne prirastke že predhodno prepoznal. Ugotovitev je pomembna za investitorja, saj lahko na osnovi te informacije lažje zaupa rezultatom prikazanim v bilanci, če je ob procesu prve javne prodaje delnic prisoten eden izmed priznanih svetovnih revizorjev.

### ***Informacije o intelektualnem kapitalu in proces prve javne ponudbe***

Eno glavnih in še vedno ne popolnoma definiranih področji v poslovnem obveščanju je, ali dostopnost do informacij podjetja nosi ekonomske posledice za podjetje. Povečano razkritje informacij finančnega in nefinančnega značaja je možno opredeliti kot mehanizem znižanja stroškov kapitala izdajatelja. Zaradi narave intelektualnega kapitala (neoprijemljivost oz. nezmožnost natančne definicije vrednosti tovrstnega kapitala) v poslovnem svetu je namreč jasno, da je prav slednje glavni razlog za asimetrijo informacij med akterji v procesu prve javne ponudbe in tudi kasneje. Zato so informacije o pomembnosti njegovega razkritja za podjetje velikega pomena.

V strokovni javnosti je močno prisotna teorija o ex ante nedolčenosti informacij, ki se odraža kot podcenjenost prve javne ponudbe. Raziskovalci (npr. Beatty in Ritter, 1986; Jog in McConomy, 2003; Sharand in Verrechia, 2004) zagovarjajo teorijo, da je razkrivanje informacij učinkovit mehanizem za zmanjševanje ex ante dvoma v investicijo. Beatty in Ritter 1986 sta dokazala, da je ob višjem številu razkritih informacij, ki predstavljajo neko določeno tveganje za podjetje, podcenjenost prve javne ponudbe manjša. Jog in McConomy (2003) ugotavljata, da je povprečna stopnja podcenjenosti prve javne ponudbe delnic pri podjetjih, ki so prostovoljno razkrila natančnejše načrte razvoja podjetja v prospektu, nižja kot pri podjetjih, ki tega v omenjenem procesu niso storila. Podobne rezultate sta odkrila tudi Schrand in Verrechia (2004).

Prav zato so odkritja, ki sta jih v svoji nedavni raziskavi zabeležila Singh in Mitchell Van der Zahn (2007) toliko bolj neverjetna, saj sta na primeru 334 prvih javnih ponudb v Singapurju med leti 1997 in 2004 odkrila pozitivno povezavo med ravnijo razkritja informacij intelektualnega značaja podjetja in pa podcenjenosti delnic ob prvem dnevu trgovanja na borzi. Narava poslovanja v Singapurju je še toliko bolj primerna za tovrstno raziskavo, saj se gospodarstvo zaradi naravnih pogojev ne srečuje z naravnimi viri za produkcijo in je sam produkcijski proces oz. posledično intelektualni kapital še toliko bolj pomemben. V

preučevanem obdobju je povprečna podcenjenost prvih javnih ponudb v Singapurju znašala 27 odstotkov z vrhuncema v letih 1999-2000 in 2002-2003.

Singh in Mitchell pozitivno povezanost med količino razkritih informacij o intelektualnem kapitalu in podcenjenosti delnic utemeljujeta z več razlogi. Potencialna možnost tožbe ob neuresničitvi ciljev, opredeljenih v prospektu, je ena glavnih (v tem primeru je potrebno poudariti pomembnost dobro razvitega sodnega sistema, ki v razvijajočih se gospodarstvih največkrat ne deluje povsem učinkovito). Še bolj je pomemben dejavnik zamujene »kokoši, ki nosi zlata jajca«. Na to razlago se navezuje tudi razlaga o pripravljenosti podceniti vrednost manjšega dela premoženja s strani obstoječih lastnikov z željo, da bo ob višjem interesu investitorjev vrednost njihovega preostalega dela v podjetju, ki trgu ni bilo ponujeno, toliko višja.

### **Sklep**

Namen te diplomske naloge je bil predstaviti razlike pri procesu in kratkoročni podcenjenosti ter dolgoročnih učinkov prvih javnih ponudb med razvitimi in razvijajočimi se svetovnimi gospodarstvi.

Na Kitajskem smo tako priča mnogo višji kratkoročni podcenjenosti in dolgoročnemu slabšemu učinku delnic A v primerjavi z delnicami B. Razlog za veliko razliko pri podcenjenosti je v časovnem zamiku med prodajo delnic v prvi javni ponudbi in začetkom njihove kotacije na borzi delnic A, namenski podcenitvi obstoječega premoženja s strani trenutnih lastnikov kapitala pred procesom prve javne ponudbe, saj želijo pridobiti zaupanje vlagateljev za kasnejše izdaje delnic ter velik zadržan delež lastništva po procesu prve javne ponudbe s strani države, ki bi s svojim vložkom v podjetju lahko zasledovala tudi neekonomske cilje.

Kot se je izkazalo tudi na ostalih razvijajočih se tržiščih, je zaščita domačih malih vlagateljev prisotna na večini teh tržišč. Navadno se to odraža v predpisani minimalni količini delnic, ki jih v procesu prve javne ponudbe mora dobiti lokalno prebivalstvo.

Ob koncu te diplomske naloge sem preveril tudi, kako se odraža pomembnost kakovosti revizorja pri prvi javni ponudbi delnic. Rezultat je bil pričakovan- prisotnost mednarodno priznanega revizorja je pomenila nižjo povprečno podcenjenost delnice ob prvem dnevu trgovanja. Zanimive so tudi ugotovitve pri razkritju intelektualnega kapitala v podjetju, saj se je na primeru Singapurja odrazilo kot pozitivno za podcenjenost delnic, če je podjetje v prospektu razkrilo čim več relevantnih informacij za investitorje. Na koncu sem se ustavil tudi pri učinku sezonske motnje in ugotovil, da je slednji prisoten tudi pri prvih javnih ponudbah, bolj tvegana podjetja pa so ob izdaji svojih delnic v jesenskih in zimskih mesecih še bolj podcenjena, kot če bi z izdajo počakala še nekaj mesecev.