

*Original Paper*

# A Preliminary Study of the Emerging and Developing Stock Market of China

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## **Abstract**

*The Chinese share market as an emerging and fast-growing listing venue has experienced a significant development since 2000. Prior studies on this market overwhelmingly concentrate on IPO-pricing-related and post-IPO performance-based propositions with lagging data. Adopting the updated data within the last couple of years, this paper comprehensively explores and accounts for some striking features of the Chinese stock market, and unfolds some new causes contributing to these characteristics.*

*Some new findings are revealed. 1) Two new factors may lead to the extreme under pricing in China's market, which are the unseasoned investor sand their high demands of IPO shares. 2) The foreign-currency trading platform is not effective and efficient to attract the overseas investors. 3) The imbalanced industry structure of the listed firms is very significant, the Chinese share market is dominated by the manufacturing firms. 4) The Growth Enterprise Market of China is essential to address the long-standing financing difficulties for the Chinese Small and Medium-sized Enterprises, which are unqualified to raise capital from the Primary Stock Market.*

## **Keywords**

*Chinese primary stock market, unique characteristics, new causes, growth enterprise market of China*

## **1. Introduction**

There are various stock exchanges around the world, but only approximately 50 exchanges are active [1]. They are roughly classified as: well-developed markets, such as NASDAQ America, New York Stock Exchange, London Stock Exchange, Singapore Stock Exchange; and developing markets, including Shanghai and Shenzhen Stock Exchanges in China, Brazil Stock Exchange, National Stock Exchange of India, Moscow Exchange in Russia (Claessens and Schmukler, 2007). Caglio et al. (2011) argue that this situation has been increasingly changing. Some developed markets are losing their leading role, but some developing markets are growing into global listing venues. The Chinese market is one of the fast-growing markets. With many years of consecutive economy growth, since 2010 China has become

the second largest economy community in terms of GDP in the world (Bloomberg, 2010). Meanwhile, China's stock market has become considerably active in aspects of both issuing amount and share number since then.

As Table 1 shows, the two Chinese exchanges—Shenzhen and Shanghai were globally ranked within the Top 5 exchanges. In 2010, Shenzhen Exchange was ranked NO. 1 in IPO firm quantity of 321 IPO companies, which occupied around 23 percent of global firm number ( $321/1393=23\%$ ). Shenzhen Exchange was also ranked at Top 3 in IPO amount of US\$30.2 billion raised, followed by Shanghai Exchange with US\$27.9 billion. In 2011, Shenzhen Exchange was still ranked NO. 1 in IPO firm number of 243 IPO companies, which occupied around 19.8 percent of global IPO number ( $243/1225=19.8\%$ ). Shenzhen Exchange and Shanghai Exchange occupied Top 3 and Top 4 respectively in IPO amount. Thus, China's stock market plays an important role in global financial markets.

**Table 1. Global Top 5 Exchanges in IPO Number and Amount in 2010 and 2011**

	2010	2011
Global NO. of IPO Firms	1393	1225
Capital Raised (US\$)Globally	\$284.6billion	\$169.9billion
Number of IPO Firms	Shenzhen (321)	Shenzhen (243)
	Australian (92)	Warsaw (123)
	Hong Kong (87)	Australian (101)
	New York (82)	Hong Kong (68)
	NASDAQ (76)	New York (67)
Amount (US\$billion)	Hong Kong (\$57.4)	New York (\$30.5)
	New York (\$34.7)	Hong Kong (\$25.3)
	Shenzhen (\$30.2)	Shenzhen(\$15.7)
	Shanghai (\$27.9)	Shanghai (\$15.1)
	Tokyo (\$14.3)	London (\$13.9)

Source: Dealogic, Thomson Financial, Ernst & Young (2012)

There is some literature discussing the Chinese equity markets from an institutional perspective (see Chen et al., 2000; Hung et al., 2012), but very little of them suggests that some characteristics attribute to the institutional context of the Chinese stock market. This study bridges this gap. It uses some up-to-date data to shed light on the unique characteristics from different perspectives. Employing a descriptive approach, it reveals some new causes that lead to these striking features. The aim of this paper is in an effort to trigger some potential researches to investigate further the propositions related to these new causes.

This paper is organized in two sections: the Chinese Primary Stock Market and the Growth Enterprise Market of China (GEMC), which are two different tiers of stock markets in China. This study firstly outlines the institutional context, and striking features of the Primary Stock Market, because this administrative (institutional) context is a basis to investigate any proposition from the Chinese financial market (Walter and Howie, 2006). Secondly, it presents the significance of establishing GEMC, and then explores the differences between the GEMC and Primary Market.

## 2. Chinese Primary Stock Market

This section outlines the institutional context of China's stock market, and then presents some unique characteristics.

### 2.1 Institutional Context

The most prominent context is that this market is a product of the Chinese economic reform converting the government-planned economy to the market-oriented economy. It provides the Chinese State-Owned Enterprises (SOEs) with a platform to achieve the privatization of state assets. Megginson and Netter (2001) suggest that the privatization of state assets is widely viewed as one measure for improving and achieving a long-run economic growth. According to Chen et al. (2000), the first privatization in China emerged in 1984, but the privatization process has proceeded very slowly. The Chinese government established Shanghai Stock Exchange (SHSE) in 1990 and Shenzhen Stock Exchange (SZSE) one year later to accelerate the process. Under this context, the Primary Stock Market is dominated by the Chinese SOEs. As Table 2 and 3 exhibit, the Top 10 A-shares (this is a type of shares in China's stock market, please refer to the second feature in the following subsection – Unique characteristics) in both issuing volume and market capitalization were overwhelmingly dominated by the SOEs in 2011.

**Table2. Top 10 A-Share by Issuing Volume in SHSE (2011)**

Code	Issuers	Issued Vol. (Million)	%
601288	Agricultural Bank of China	294,055.29	12.6
601398	Industrial & Commercial Bank of China	262,225.50	11.24
601988	Bank of China	195,525.05	8.38
601857	China National Petroleum Corporation	161,922.08	6.94
600028	China Petroleum & Chemical Corporation	69,922.06	3.00
601818	China Everbright Bank	40,434.79	1.73
601328	Bank of Communications	32,709.16	1.4
601998	China Citic Bank	31,905.16	1.37
601668	China State Construction	30,000.00	1.29
600018	Shanghai International Port	22,755.18	0.98

Sum	1,14,154.17	48.92
Total on the SHSE	2,333,237.21	100

Source: *Yearbook of Shanghai Stock Exchange 2012*

As the table shows, the most significant feature is that this group of issuers including six national banks (601288, 601398, 601988, 601818, 601328, 601998) and two national energy companies (601857, 600028) are owned by the government, apart from the last two ones. In addition, the 10 issuers' shares accounted for 48.92 percent of the total share volume issued in the SHSE with around 1,000 listed companies. By contrast, the top 10 issuers in US stock markets, even assuming all are national firms, retained around 5.08 percent of the total share volume by 4<sup>th</sup> January 2013 [3]. This reflects that China's Primary Stock Market is a SOEs-dominated listing platform that is designed for the SOEs.

**Table 3. Top 10 A-Share by Market Capitalization in SHSE (2011)**

Code	Issuers	Market Cap. (¥ M)	%
601857	China National Petroleum Corporation	1,577,121.04	10.68
601398	Industrial & Commercial Bank of China	1,111,836.11	7.53
601288	Agricultural Bank of China	770,424.87	5.22
601988	Bank of China	570,933.14	3.87
600028	China Petroleum & Chemical Corporation	502,040.43	3.40
601088	China Shenhua Energy Company Limited	417,717.99	2.83
601628	China Life Insurance Group	367,327.07	2.49
600036	China Merchants Bank	209,696.97	1.42
600519	Guizhou Maotai Group	200,680.19	1.36
601318	China Pingan Insurance Group	164,843.95	1.12
Sum		5,892,621.76	39.9
Total on the SHSE		14,769,275.78	100

Source: *Yearbook of Shanghai Stock Exchange 2012*

On the market capitalization of the 10 issuers, it accounted for 39.9 percent of the total capitalization in the same market. Similarly, all these issuers are completely national enterprises. Although an increasing number of non-SOEs have been listed on the stock market, and diversified ownership structure of listings (Cheng et al. 2013), the SOE firms have more privileges from the government than other non-SOE companies. For instance, the SOEs have favorable access to bank loans (Brandt and Li, 2003), lower costs of capital (Borisova and Megginson, 2011), and advantages in monopoly (Li, 2009). Consequently, the SOEs have advantages in policy supports and financial subsidies, which are able to promote their IPO performance (Powers and McDougall, 2005).

## 2.2 Unique Characteristics

The special institutional context of China's stock market may lead to its unique characteristics including extreme underpricing performances in the short run, a dual-currency trading mechanism, unbalanced industry structures.

(1) The most significant feature is remarkable underpricing performances in the short run. Although there are many determinants influencing IPO underpricing, the strict government regulation is a very vital factor in China (Gu, 2003). Unlike the pricing strategies in the US market, where the issuers with assistance of investment banks determine their issuing prices in a book-building method (Su and Fleisher, 1999; Sherman, 2000). In China, the IPO pricing is determined by the CSRC (Kimbro, 2005). The CSRC employs a price earning rate (PE) as a benchmark to determine the pricing range of an IPO. Based on the listed IPO firms during 1993 to 1998, their IPO prices were instructed around 13-15 times of PE. Currently, this benchmark for the majority of IPO firms maintains around 30 times (see Table 4). Once the CSRC confirms the pricing of an IPO, the share allocations are conducted by a lottery mechanism, and then the winners are allowed to purchase an amount of shares at the fixed IPO price. This administrative pricing approach gets the share prices deviating from the great demands of the public investors. Consequently, it results in a remarkable underpricing phenomenon.

**Table 4. PE Distributions in the SHSE (2011)**

PE Times	0-10	10-30	30-50	50-100	>100	Others
No. of Shares	57	68	395	166	143	140
%	5.88	7.02	40.76	17.13	14.76	14.45

*Source: Yearbook of Shanghai Stock Exchange 2012*

As Table 5 shows, the underpricing appears to perform dramatically in China than those in other countries. The average initial return in China's exchanges is 137.4%, which is more than 8 times of those in the exchanges of the US, UK and Hong Kong.

**Table 5. Comparison of Equally Weighted Average Initial Returns with Other Exchanges**

Categories	Exchanges	Sources	Samples	Period	Return
Developing	China	Chen et al.; Jia & Zhang	2102	1990-2010	137.4%
	Brazil	Aggarwalet al.; Saito; Ushisima	275	1979-2011	33.1%
	India	Marisetty and Subrahmanyam; Ritter	2964	1990-2011	88.5%
	Russia	Ritter	40	1999-2006	4.2%
	U.S.	Ibbotson et al.; Ritter	12246	1960-2011	16.8%
	U.K.	Dimson; Levis	4877	1959-2011	16.1%

Developed	Germany	Ljungqvist; Rocholl; Ritter;	736	1978-2011	24.2%
	Japan	Fukuda; Hebner & Hiraki; Pettway & Kaneko	3100	1970-2010	40.4%
	Singapore	Lee et al.; Dawson; Ritter	591	1973-2011	26.1%
	Hong Kong	McGuinness; Zhao & Wu; Ljungqvist & Yu; Ritter	1259	1980-2010	15.4%
	Australia	Lee et al.; Woo; Pham; Ritter	1562	1976-2011	4.4%

Source: Loughran et al. (1994).

Although the IPO underpricing is a global phenomenon across countries (see Loughran et al., 1994), I found three causes resulting in this anomalous performance.

The first cause is the unseasoned Chinese investors. As Figure1 indicates, a majority of the Chinese investors (35.31%+32.40%=67.71%) are under 40 ages, but the average age of the US investors is 51. In addition, the majority of the Chinese investors lack experience of share investment. Figure2 shows that only 4.52 percent of the Chinese investors have an over 15 years investment experience, in addition, 32.35 percent of investors have a less 3-year share trading record. In terms of their educational levels, as Figure3 shows, only 19.56 percent (15.82%+3.74%) of the Chinese investors hold a bachelor degree and above in SHSE. However, 56 percent of US investors have a bachelor degree (according to a report by Statistical Centre of Settlement Database of China 2011).

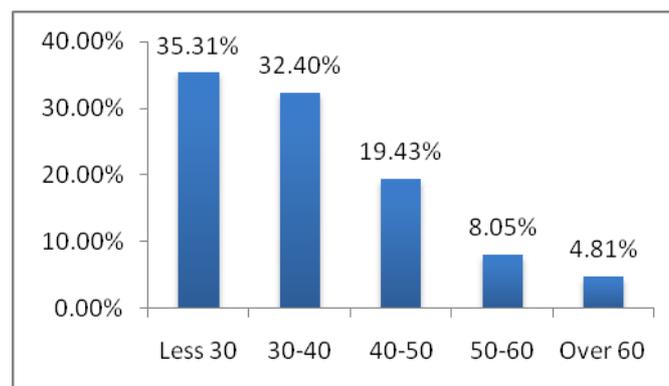
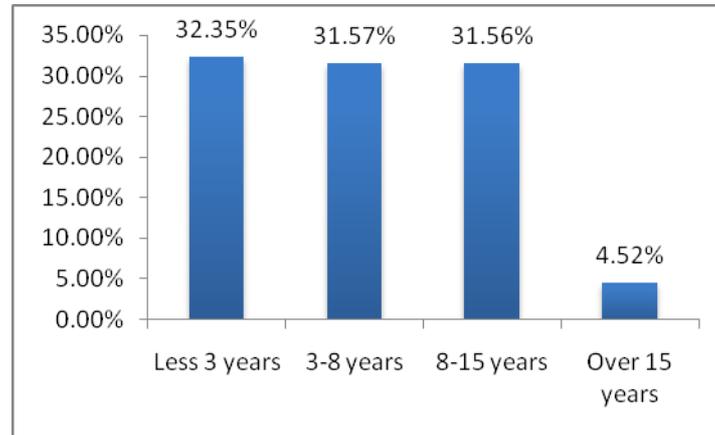
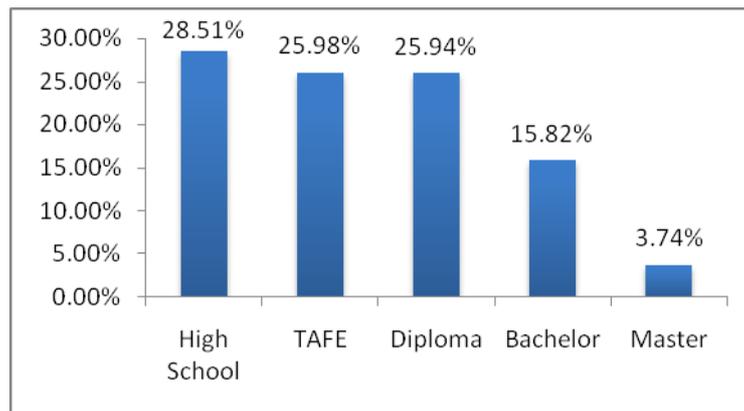


Figure 1. Age Range of the Investors in SHSE in 2012



**Figure 2. Investment Experience by Trading Years by 2012 in SHSE**



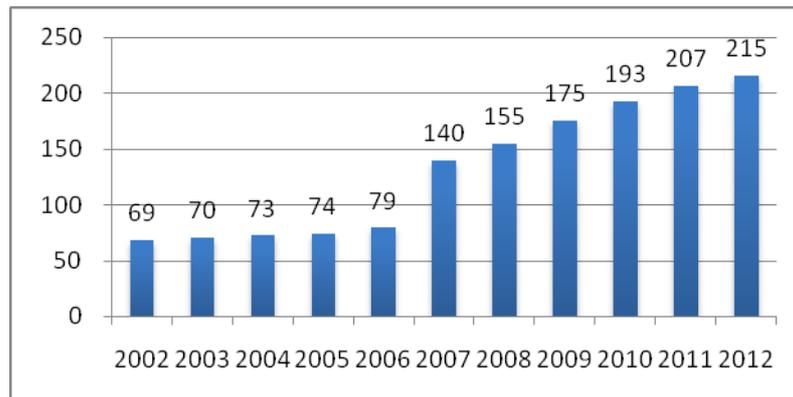
**Figure 3. Educational Background of the Investors in SHSE (2012)**

The second one is political incentives. The relevant politicians are likely to encourage this sort of underpricing IPOs, because of the strong government-oriented context in China. These politicians intend to through the high returns attract more prospective new issuers and political media coverages. Receiving a wide coverage in the top political media outlets is vital for these politicians because such visibilities may contribute to their political position in the Communist Part of China. As Banyan (2009) suggested, influential political media in China is more likely to draw attention from the national leaders, which is able to advance these politicians' career.

The last one is high demands to IPO shares. This high demands attribute to a large number of domestic investors in China. As Figure 4 shows, there was an increasing number of individual investors engaged in A-share trading in the last 10 years. There have been over 200 million individual investors in the Chinese Mainboard by the end of 2012. Derrien (2005) suggests that IPOs with high demands of individual investors are more likely to be overvalued and thus lead to sharp underpricings.

The high demands to IPO shares are also due to lacking alternative investment choice in China, so the Chinese investors like to pay high prices for the new shares. According to statistical records from

National Bureau of Statistics of China, the per capita income of the Chinese residents increased 14.75% per year on average during 2002 to 2012. Meanwhile, the bank interest rate of one-year term deposit remained around 2.60% within the 10 years, but the Consumer Price Index (CPI) rate remained around 2.63% on average per year. Consequently, the Chinese residents were willing to invest in shares for more returns rather than bank deposits.



**Figure 4. Number of Individual Investors in Mainboard 2002-2012 (M.)**

Additionally, this type of issuing mechanism lacks market-orientated factors, because the annual IPO quota is determined by the central government. As a result, the gap between the high IPO demands and unreasonable allocations result in the extreme underpricing too.

(2) The second feature is the dual-currency trading platforms. There are two types of shares or trading systems: A-share and B-share. The A-share is restricted to be traded by the domestic investors in the Chinese currency only. Since 2003 some qualified foreign institutional investors (QFIIs) have been allowed to trade A-shares in the same currency. The B-share was in early 1990s created specially for the overseas investors trading it in US or Hong Kong dollar, in order to attract foreign funds to the Chinese securities markets. Since February 2001, it has been available for the domestic individual investors to trade B-shares in a foreign currency. Apart from attracting more foreign investors, the Chinese government separated the share types to protect its financial market and economy from external impacts, as the emerging securities market and growing economy were still vulnerable. This unique dual-currency trade system is exclusive to China's stock market.

I found that the B-share platform has been marginalized and lagged far behind that of A-share, due to a limited number of issuers and investors, particularly foreign investors. As Table 6 demonstrates, only 54 firms issued B-share in SHSE, while 921 firms issued A-share there, which were around 4 times of B-share. The small number of B-share leads to its limited TMC. In addition, the DTTV reflects the B-share is an inactive trading platform because of its low trading value ¥3.06 million per day.

**Table 6. Comparison between A-Shares and B-Shares in SHSE 2011**

Types	NS	TMC (¥ M)	ATTV (¥ M)	DTTV (¥ M)	NI (M)	T.R.
A-share	921	147692.76	236809.12	970.53	85.5085	125.09
B-share	54	683.47	746.19	3.06	1.5417	86.8

Source: *Yearbook of Shanghai Stock Exchange 2012*

Note: NS means the number of stocks; TMC means the total market capitalization; ATTA means the annual total trading value; DTTV means daily total trading value on average; NI means the number of investors; TR. means the turnover rate.

As Table 7 illustrates, there were around 1.5 million B-share investors, which was low far more from 215 million A-share investors. Additionally, 95.34 percent of B-share investor was the domestic investor; by contrast, less 5 percent of B-share investor was from overseas. Lee et al. (2008) attribute this reason to less liquidity and relative risks in B-share platform. As a consequence, low demand of B-share for the foreign investors get the foreign-currency-based system marginalized and lagged far behind A-share.

**Table 7. Distribution of Foreign Investors for B-Share 2012**

Countries/Regions	No. of Investors	Percent
China	1,476,326	95.34
US	14,869	0.96
Canada	3,735	0.24
Taiwan	8,736	0.56
UK	2,390	0.15
Hong Kong	17,156	1.11
Australia	3,267	0.21
Japan	4,569	0.30
Germany	722	0.05
Singapore	1,935	0.12
Korea	1,784	0.12
Netherland	413	0.03
France	641	0.04
Macau	804	0.05
Others	11,025	0.71
Total	1,548,372	100

Source: *Annual Yearbook 2012 of Shanghai Stock Exchange*

Meanwhile, the prospect of an international board in China accelerates the marginalization of B-share. Recently, some media outlets frequently signaled the Chinese government has been engaged in preparation of an international board. Once this board is ready, it will attract more foreign companies to go public there. As such, the overseas investors will transfer from the B-share platform to the international board. As a result, the B-share trading system will be even more marginalized than ever.

(3) The third one is the imbalanced industry structure. The Chinese securities markets lean heavily towards manufacturing firms, due to China's economy structure. As Table 8 indicates, in China, the manufacturing sector in 2011 was predominant with 84 IPO firms, which accounted for approximately 32.31 percent of total IPO firms in the Chinese listing markets. This sector was the second largest sector with US\$11.7 billion capital raised, which accounted for around 27.08 percent of total capital. While the manufacturing sector was excluded from the top 5 groups in the US, and the dominant sectors are all service business-based industries. As a consequence, it is not surprising that China is well known as the World's Factory or the Global Manufacturer.

**Table 8. Top 5 IPOs Distribution by Industry Sectors in the Year of 2011**

	China	US
Number of IPO Firms	Manufacture (84)	High Technolgh (23)
	Materials (72)	Energy (25)
	High Technology (40)	Health Care (16)
	Consumer Staples (36)	Consumer Products (9)
	Comsumer Products (28)	Real Estate (9)
Capital Raised	Materials (US\$11.9b)	Energy (US\$9.3b)
	Manufacture (US\$11.7b)	High technology (US\$8.1b)
	Energy (US\$6.8)	Health Care (US\$5.9)
	Retail (US\$6.6)	Consumer Products (US\$3.9)
	Financials (US\$6.2)	Retail (US\$3.8)

Source: Dealogic, Thomson Financial, Ernst & Young (2011).

Although there is no a common view on what an ideal proportion of sector allocation should be in a stock market, a diversified market with a balanced industry allocation may be more attractive to investment portfolios, and consequently is conducive to a sustainable development of economy. As Table 9 demonstrates, industry sectors in global exchanges evenly distribute in general. However, the Chinese stock exchange presents a different distribution pattern. The manufacturing-related sectors in China account for 58.3 percent of total listings, which is extremely higher than the global average level 35.47%. By contrast, other sectors have a low proportion. In addition, service-related sectors dominating global exchanges, such as the financials at 9.07%, social services at 11.18%, the sectors

have very low ratio (0.70% and 3.6% respectively) in the Chinese market.

**Table 9. Distribution by Industry Sectors on Chinese Exchange & Global Exchange**

Industry Sectors	China Stock Exchange*			Global Exchanges on Average**	
	Capitalization(¥ Billion)	N. of Listings	% of listings	N. of listings	% IPOs
Total	6,115.2	1582	100	16492	100
Agriculture	92.6	29	1.83	9	0.05
Metals & Mining	734.5	151	9.54	1309	7.93
Manufacturing	3,257.2	923	58.3	5849	35.47
<i>Food &amp; Beverage</i>	<i>551.9</i>	<i>60</i>	<i>3.79</i>	<i>571</i>	<i>3.46</i>
<i>Household Goods</i>	<i>124.2</i>	<i>60</i>	<i>3.79</i>	<i>899</i>	<i>5.45</i>
<i>Paper &amp; Printing</i>	<i>70.5</i>	<i>32</i>	<i>2.02</i>	<i>88</i>	<i>0.53</i>
<i>Petrochemicals</i>	<i>480.6</i>	<i>184</i>	<i>11.63</i>	<i>670</i>	<i>4.06</i>
<i>Electronics</i>	<i>445.3</i>	<i>125</i>	<i>7.90</i>	<i>955</i>	<i>5.79</i>
<i>Machinery</i>	<i>1,055.3</i>	<i>350</i>	<i>22.12</i>	<i>1379</i>	<i>8.36</i>
<i>Pharmaceuticals</i>	<i>468</i>	<i>91</i>	<i>5.75</i>	<i>738</i>	<i>4.47</i>
<i>Others</i>	<i>60.4</i>	<i>21</i>	<i>1.33</i>	<i>549</i>	<i>3.32</i>
Public Utilities	126.4	29	1.83	227	1.38
Construction	143.7	26	1.64	605	3.67
Transportation	68.5	28	1.77	344	2.09
IT	377	162	10.24	2061	12.50
Wholesale & Retail	255.9	64	4.05	836	5.07
Financials	278.7	11	0.70	1496	9.07
Real Estate	401	64	4.05	575	3.49
Social Services	232.7	57	3.60	1844	11.18
Media	81.8	19	1.20	758	4.60
Others	65.1	19	1.20	579	3.51

\* This group of data was collected from the official website of the Shenzhen Stock Exchange updated on November 2012. Dataset on the Shanghai Stock Exchange is not involved.

\*\* This group of data is from Caglio et al. (2011).

I found that this feature attributes to China's macro-industry structure. In the past 20 years from 1990 to 2010, it has experienced 5 times of structural adjustments. As Table 10 illustrates, the significant features are ① The proportion of the Primary Industry to GDP sharply decreased from 27.1% in 1990 to 10.2% in 2010. ② The Secondary Industry dominated China's industry structure remaining at

around 45%. ③ The Tertiary Industry gradually increased from 31.6% to 43.0% in 2010. Therefore, the Secondary-Industry-dominated features of China's macro-industry are reflected in its stock market. According to Memedovic and Lapadre (2010), the proportions of the three industries in developed countries account for around 2%, 32%, and 66% respectively. This structure is expected to be adjusted in the future.

**Table 10. Structural Adjustments in China's Macro-Industry 1990-2010 (%)**

Years	GDP	Primary Industry	Secondary Industry	Tertiary Industry
1990	100.0	27.1	41.3	31.6
1995	100.0	19.9	47.2	32.9
2000	100.0	15.1	45.9	39.0
2005	100.0	12.2	47.7	40.1
2010	100.0	10.2	46.9	43.0

Source: Website of National Bureau of Statistics of China ([www.stats.gov.cn](http://www.stats.gov.cn)).

To sum up, these unique characteristics (anomalous underpricing, dual-currency trading mechanism, unbalanced industry structure) and their causes in the Chinese stock market get it totally different from overseas markets.

### 3. The Growth Enterprise Market of China

As studies suggested, a vibrant stock market may contribute to Gross Domestic Product (GDP) and employment growth (e.g., Weild and Kim, 2009). Meanwhile, some stock exchanges view the listings as considerable source of revenue, so they lower their entry thresholds or set up new listing platforms for the small and fast growing firms, in an effort to attract more firms to go public there. This strategy may help these exchanges obtain more incomes (Jenkinson and Ljungqvist, 2001). So far, the majority of developed equity markets have established their Growth Enterprise Market (or called Secondary Board; Alternative Market) to diversify their trading platforms to cater for different investors, such as the NASDAQ in New York, the AIM in London, the SESDAQ in Singapore, the HKGEM in Hong Kong.

The purpose of establishing the GEMC is not only diversifying the Chinese capital market, but also addressing the long-standing financing difficulties for the Chinese SMEs. The SMEs act as a pivotal role in terms of boosting economy, creating employment opportunities, advancing innovation in China. By the end of 2011, the Chinese SMEs have contributed to approximately 50 percent of national tax revenue, 60% GDP, 80% job opportunities, 65% patents and intellectual properties (according to the database from the Ministry of Industry and Information Technology of China).

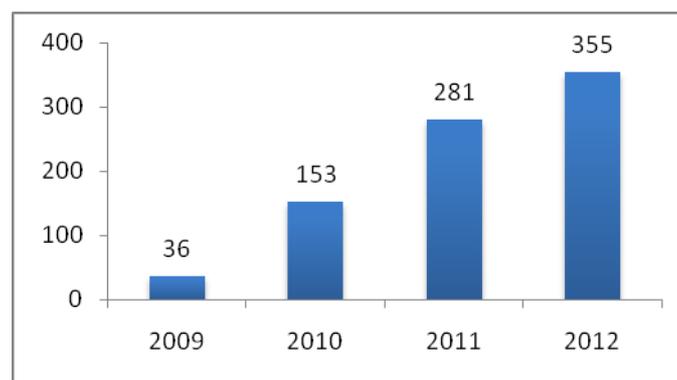
The Chinese SMEs have been confronting financing difficulties for years (Chen and Wang, 2009).

According a survey (conducted by the National Development Centre of Peking University) in 2011, 78 percent of SMEs have experienced or were experiencing financial shortage in Zhejiang –a SMEs dominated state. Additionally, 50 percent of owners of the SMEs raised fund through loanings from their relatives and friends, and other informal channels. They have no access to bank loans because of their high rate of loan default and low credit rate (Chen et al. 2010). Because of the SMEs' contribution to the Chinese economy, the central government is keen to broaden the financing channels for the SME sand to bridge the financing gap. Under this circumstance, the GEMC was established, Cui et al. (2010) suggest that IPO markets are able to provide SMEs with efficient financing platforms, and reduce their financing cost greater than other channels.

The GEMC was inaugurated in Shenzhen Stock Market on 30<sup>th</sup> October 2009 with 28 initial IPO companies. This market not only facilitates capital-raising for those growing SMEs that possess high profitability, technology innovation and advanced business models, it also facilitates venture capitalists exiting from their investee companies. According to the latest record of the GEMC official website, by 10 September 2012 there have been 355 listed companies with total market capitalization at RMB ¥924,877,099,614 and the total amount of issued shares 58,572,665,181.

### 3.1 Significances of Establishing the GEMC

The significances of the GEMC are fourfold. First of all, the GEMC provides those thriving entrepreneurial companies with direct fundraising opportunities. As Figure 5 shows, 355 firms have raised capital through IPOs in the listing market by 2012. The total amount of RMB ¥ 184.1 billion has been raised by August 2011. According the record from the CSRC website, there has been 262 IPO applicants on the IPO shortlist by 11<sup>th</sup> July 2013. It is expected that the number of listed firms on the GEMC will be over 500 very soon. Therefore, the GEMC facilitates small firms to raise fund for their future growth.



**Figure 5. Number of Listed Firms on GEMC (2009-2012)**

Secondly, this market provides the venture capital investors, who invest in those entrepreneurial companies, with an optimum exit channel, which motivates the Chinese venture capital industry. As table 11 outlines, the GEMC has become the preferred IPO market for venture capital investors to exist

since its inception in 2009, and over 40 percent ( $125 / 310 = 40.3\%$ ) and 52 percent ( $50 / 95 = 52.6\%$ ) venture-capital-supported firms achieved their IPOs on the GEMC in 2011 and 2012 respectively.

In terms of investment return rate for venture capitals, the GEMC had the best performance among the major IPO markets in the last three years. Over 12 times of return rates in the GEMC in 2010 and 2011 are overwhelmingly greater than the counterparts in any other markets. Therefore, the GEMC facilitates venture capital investors to exit with higher return rates.

**Table 11. Distribution of IPO Firms Supported by Venture Capital 2009-2012**

	2009		2010		2011		2012	
	Firms	Return Rate						
GEMC	32	8.39	63	12.13	125	12.9	50	5.03
SZSE	33	/	80	9.38	93	5.22	23	4.84
SHSE	0	/	9	7.03	25	5.71	13	2.20
HK	12	/	31	1.64	6	2.11	5	-0.1
NASDAQ	4	/	14	2.81	34	3.86	4	7.73
NYSE	1	/	14	5.71	27	4.52	0	0
Total	82		211		310		95	

Source: CV Source ([www.chinaventure.com.cn](http://www.chinaventure.com.cn)).

*IPO Return Rate on average = (Pre-IPO share amount \* IPO Price – Investment Amount) / Investment Amount.*

Thirdly, the GEMC helps the IPO firms standardize their corporate governance. Vast majority of entrepreneurial companies in China are run in a nonstandard way at their early stage, but they need gradually set up a modern corporate governance system catering for the IPO requirements. One of the traditional functions of stock exchanges is to develop corporate governance codes and recommendations for IPO firms. According to Provision 19 in the Provisional Administrative Regulations of Initial Public Offerings (PARIPO) in the GEMC, it requires that the issuers must set up a perfect governance structure of corporate, including shareholder meeting, board of directors, board of supervisors, independent director, board secretary, and audit committee systems. These appropriate regulations and behavior standards to these directors, supervisors and other executive managers enforce they fulfill their duties according to the laws. In addition, the GEMC requires, prior to submitting the IPO documents, the sponsors must conduct due diligence and assessment on the issuers. According to Provision 54 in the PARIPO, the sponsors who provide the CSRC with any fake information or document will be punished. They are also obliged to supervise and guide the issuers to operate regularly and lawfully on an ongoing basis.

Lastly, it promotes the Chinese multi-level capital market that is composed of the Mainboard, the GEMC, and the Over-The-Counter Market, which serve those corporations at different developing stages. According to 'Development Report of the Chinese Capital Market by the CSRC in 2008', establishing a perfect multi-level capital market is an ongoing undertaking by 2020. The Mainboard serves those large-sized companies that need more external fund to expand and to be a leader in their industry; the GEMC serves those fast growing companies that raise capital for their technology innovation; the Over-The-Counter Market provides those companies that are unqualified to be listed on the GEMC with a fundraising channel.

### 3.2 Comparison with China's Primary Market

The global alternative markets are inherently different from the Mainboard in their home country, in particular, these second-tier markets are independent but complementary to their primary market. These alternative markets aim to provide a listing platform for the small and fast-growing entrepreneurial firms that are unable to fulfill the listing regulations on the primary market (see Derrien and Kecskes, 2007; Corwin and Harris, 2001). Like other alternative markets, the GEMC facilitates IPOs for those start-up companies with high technology and potential growth, which are unqualified to go public on China's Mainboard. Thus, the GEMC is different from China's Primary Stock Market in terms of their IPO firms, listing requirements and investors.

(1) *Different preferences to IPO firms.* The GEMC and Mainboard have different preferences to IPO applicants because of their different establishing purposes. The Mainboard prefers the state-owned and large-sized companies. According to CSRC record, there has been 953 SOEs listed on the primary market by the end of 2012, accounting for around 40 percent of total listed firms on the market. As Table 12 shows, the average assets per firms on the Mainboard is 11.68 billion in 2011, which is far more greater than 1.47 billion on the GEMC, so the size of firms on the Mainboard is greater than the counterpart on the GEMC.

Whereas, the purpose of establishing the GEMC is to facilitate the small firms raising capital for their high potential growths and innovative technologies, so it is a growth-and-profit-preferred market. As Table 12 indicates, the listed firms on the GEMC had higher growth rates in net profits (31.08% > 14.45% in 2010, 12.83% > 5% in 2011), incomes (38.02% > 25.69% in 2010, 26.27% > 15.79% in 2011) than the firms on the Mainboard. In addition, the net profits per share on the GEMC are also greater than those on the primary market (0.67 > 0.5 in 2010, 0.7 > 0.5). Therefore, the firms on the GEMC are featured by growth and profit.

**Table 12. Comparison of Listed Firms in the GEMC and Mainboard (2010-2011)**

		2010	2011
Mainboard	Average Assets per Firm	/	11.68 billion
GEMC		/	1.47 billion
Mainboard	Net Profit Growth Rate	14.45%	5%
GEMC		31.08%	12.83%
Mainboard	Net Profit per Share	0.5	0.5
GEMC		0.67	0.7
Mainboard	Income Growth Rate	25.69%	15.79%
GEMC		38.02%	26.27%

Source: Collected and sorted CSRC website ([www.csrc.gov.cn](http://www.csrc.gov.cn)).

In addition, there are different industry coverages in the two tiers of trading venues. As Cheung and Liu (2013) suggested, the principal market covers the firms from diversified industry classifications, while the GEMC covers a small fraction with limited industries. According to ‘Advices on Recommending Firms to Go Public in the GEMC’ (No.8 CSRC Notification 2010), the Chinese government gives IPO priority to firms from these industry sectors: clean energy (NE), new materials (NM), biomedicine (BI), IT, advanced manufacture (AM), environment friendly (EF), marine engineering (ME), modern agriculture (MA), and other innovative firms. Unless having cutting-edge technologies and business models, the IPO applicants are restricted from these traditional sectors: textile, public utilities, construction and real estate, transportation, food, and other sectors against industry policies.

(2) *Different listing requirements.* The two tiers of listing markets are designed for different developing stages of firms, so their listing standards are different. According to two independent IPO documents ‘Administration Regulations for Initial Public Offerings in Primary Market’ and ‘Provisional Administration Regulations for Initial Public Offerings in Growth Enterprise Market’, the listing standards in China’s Mainboard market are very stricter than those in the GEMC (see Table13).

**Table 13. Comparison of the Listing Requirements between the Two Markets (2012)**

Criteria	Primary Stock Market	Growth Enterprise Market
Main Body	A joint stock limited company existing and conforming to the relative China’s laws and regulations.	Share issuers have fully paid for registration capital, and the founders or stock- holders have completed the transaction of their assets as part of registration capital. There is no any issue with asset ownership.
Business Years	At least 3 consecutive business years.	At least 3 consecutive business years.

Profitability	Positive net profit each financial year in the last three years and its accumulative net profit above RMB¥30 million; or Business cash flow of net sum more than RMB¥50 million in the three financial years, alternatively, at least RMB¥300 million accumulative income during this period.	Consecutive profitability with net profit of more than RMB¥10 million in the last two years, and keeping growing in the future; or having net profit of more than RMB¥5 million from the last year, plus at least RMB¥50 million income and income growth rate above 30%.
Asset Requirements	Intangible asset ratio to net assets more than 20% in the last financial statements.	At least RMB¥20 million net assets by the end of financial year without any outstanding deficit.
Share Amount	At least RMB¥50 million stock sum after IPOs. RMB¥1/share	At least RMB¥30 million stock sum after IPOs. RMB¥1/share
Core Business	Core business unchanged remarkably in the last three years.	Core business prominent, and IPO for developing core business only.
Defacto Controllers	Defacto controllers unchanged in the last three years.	Defacto controllers unchanged in the last two years.
Horizontal Competition	No horizontal competition with controlling shareholders, De facto controllers and business under their control.	No horizontal competition with controlling shareholders, De facto controllers and business under their control.

*Source: Collected and sorted from the official website of China stock exchange market*

As Table 13 shows, the most significant feature between the two tiers of listing platforms is that the listing requirements on the GEMC are less stringent than the counterparts on the primary market. In other words, listing on the secondary market is easier relative to on the principal market. In profitability, the GEMC requires consecutive profit records in the last two years, while the Mainboard requires them in the last three years. The GEMC requires an issuer's accumulative net profit over RMB¥10 million in the last two years, while the Mainboard requires it at least RMB¥30 million in the last three years. In assets, the GEMC requires at least RMB¥20 million of net assets in the last fiscal year without any outstanding deficit; the Mainboard requires an intangible asset ratio to net assets less 20%. In share amount, the GEMC requires at least RMB¥30 million stock sum after IPOs; the GEMC requires at least RMB¥50 million stock sum after IPOs.

Since the entry thresholds in the GEMC are lower than those in the Mainboard, it implies that there is more unrevealed information of the firms listed on the GEMC. Presumably, the information asymmetry in the GEMC is much more prevailing than in the Mainboard. As a consequence, the quality of the issuers in the Mainboard are likely to be better than those in the GEMC, but the growth potentials of

the listed firms on the GEMC are greater than those in the Mainboard (Cheung and Liu, 2013).

(3) *Differently experienced investors*. Unlike the Mainboard, the GEMC adopts an investor access system to protect unseasoned investors from this highly risky market. According to Provisional Regulations on Adequacy of Investors in the GEMC (No. 14 CSRC Notification 2009), prior to trading on the GEMC, all investors must have over (including) two year trading experience in the primary market, and sign an agreement about the investment risks in the market, in order to remind the investors that the GEMC has higher risks than the primary market. The securities institutions should assess the risk-bearing capacity of the potential investors, and fully disclose investment risks to the investors. Meanwhile, the GEMC gradually establish risk alert systems and further education mechanisms to consolidate the investor protection in the emerging market.

To Sum up, the GEMC is different from China primary stock market because of their different establishing backgrounds, different listing requirements for firms at developing stages, and differently experienced investors.

#### **4. Conclusion and Limitation**

This preliminary study on the Chinese emerging and developing share market explores some new causes that result in the significant features. Based on the up-to-dated data, it reveals some new findings that are rarely discussed to account for the characteristics. This paper suggests three main factors: unseasoned investors, unreasonable investor's demands to IPO shares, imbalanced industrial structure of the listed firms, which may all contribute to these features. It also finds that the foreign-currency trading platform has no significant contribution to boost the Chinese financial market. On the contrary, the alternative share market-GEMC facilitates those small companies to raise capital and diversifies the Chinese equity market.

This paper, as a phased achievement, is a part of my PhD dissertation, which empirically investigates the relationships between the financial determinants that influence the approval probability of an IPO in the emerging GEMC. It provides the further empirical study with an institutional context, although the incremental contribution to existing knowledge is limited. The main purpose of this paper is here to ignite more potential discussions on the aforesaid factor sand other fresh questions arising in the developing market, which are expected to be contributive. Additionally, this paper is expected to draw more potential attentions to the developing stock market; the GEMC is a virgin but fertile area in academia, which possesses abundant and unique research resource for researchers to study and explore.

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## Endnotes

[1]. This statistics was based on the figure of stock exchanges that attracted some studies to investigate them, but some literature proposed lower number than this. For example, Caglio et al. (2011) investigating stock markets in 90 countries, suggest 32 countries have active listing markets with a substantial number of cross listings, but they do not indicate the number of active markets in each counties.

[2]. Bloomberg, 2010, "China Overtakes Japan as World's Second-Biggest Economy," Available at: <http://www.bloomberg.com/news/2010-08-16>.

[3]. <http://investing.businessweek.com/research/sectorandindustry/overview/sectorlanding?region=us>.