

Alternative Measures of the Size of the Stock Market

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Summary

- *The Hong Kong stock market was the 8th largest in the world (2nd in Asia) by market cap as of the end of November 2005, but it was only the 16th most active stock market in the world by market turnover (5th in Asia) for the 12 months ending November 2005.*
- *Market cap of the Hong Kong stock market was relatively high because it serves two economies, namely Hong Kong and the Mainland. More specifically, 37% of the total market cap was due to Mainland stock²s (i.e. H-shares and red chips together).*
- *Benchmarking against the size of the economy, the ratio of market cap as percentage of GDP was very high for Hong Kong (ranked 1st in the world). This was primarily due to the listing of Mainland enterprises in Hong Kong. In addition, many listed companies in Hong Kong have substantial investments in the Mainland and overseas markets, and therefore their market cap does not necessarily have a direct relationship with the GDP of Hong Kong.*
- *Market turnover was less impressive because a large proportion of many listed companies is held by families or strategic institutional investors. The free float market cap (i.e. the proportion of shares available for trading) is smaller. Nevertheless, there appeared to be a strong institutional interest in the trading of Mainland stocks, especially the H-shares.*
- *With a high market cap but a relatively low market turnover, the turnover ratio (defined as market turnover as percentage of market cap) is therefore much lower. Nevertheless, the turnover ratio varies significantly across different stock types. For instance, the ratio was relatively high for H-shares.*
- *The ranking of the Hong Kong stock market varies across different indicators. Nevertheless, whatever indicators are used, the Mainland factor is one of the most important reasons underpinning the position.*

¹ This paper is for pure fact-finding and research purposes, and is not an attempt to comment on the developments of any markets/companies or interpret the policies concerned. The views expressed in this paper do not represent those of the SFC.

² Mainland stocks include H-shares and red chips. Following HKEx's definitions,

- H-share companies refer to companies incorporated in the PRC and approved by the CSRC for a listing in Hong Kong. The par value of the shares is denominated in RMB, and the shares are subscribed for and traded in HKD or other currencies.
- Red chip companies refer to those which
 - have at least 30% shareholding held in aggregate by Mainland China entities, and/or indirectly through companies controlled by them, with the Mainland China entities being the single largest shareholders in aggregate terms. Or
 - if the shareholding of the company held in aggregate directly and/or indirectly by Mainland China entities is below 30% but is 20% or above and there is a strong influential presence, on a judgmental basis, of Mainland China-linked individuals on the company's board of directors.

Mainland China entities include state-owned enterprises, and entities controlled by provincial and municipal authorities.

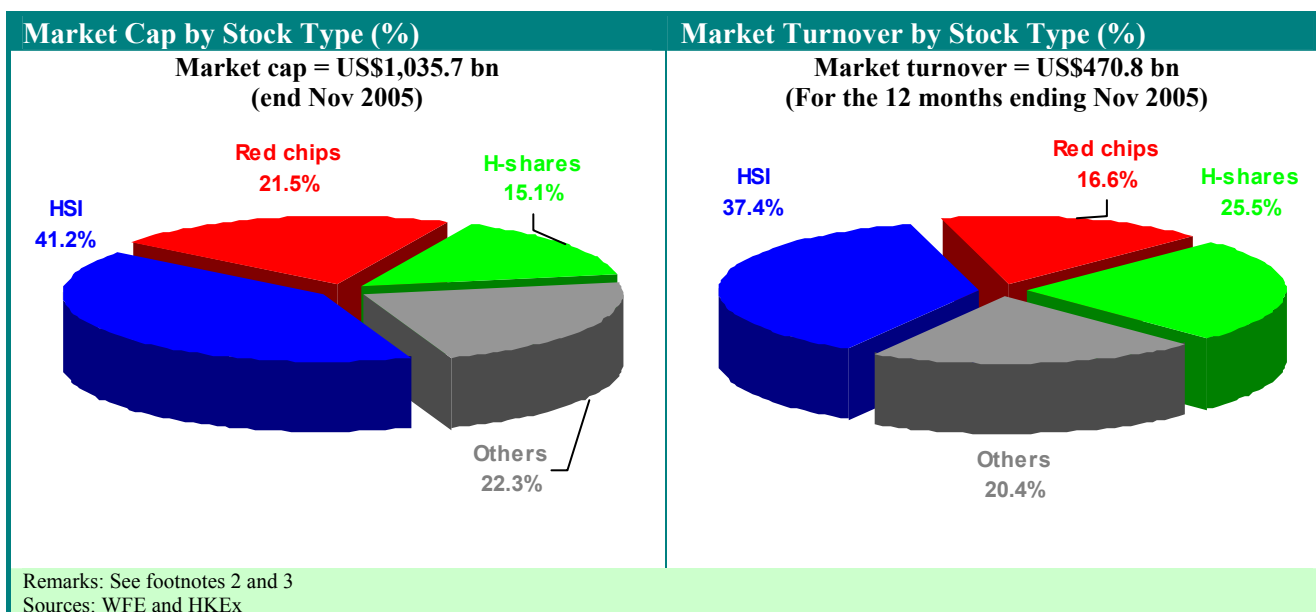
Objective

1. The objective of this paper is to provide a better understanding of the size and trading activities of Hong Kong stock market using different indicators. The paper also discusses some characteristics of Hong Kong stock market. It benchmarks the size of the stock market against GDP and analyses its position against major overseas markets.

Market Cap

2. Market cap is the most commonly used indicator to measure the size of a stock market. As of the end of November 2005, the market cap of the Hong Kong stock market was US\$1,035.7 bn (HK\$8,031.5 bn). According to the World Federation of Exchanges (WFE), Hong Kong stock market was the 8th largest stock market in the world and the 2nd largest in Asia. The following table shows the ranking of the top 25 stock markets (by market cap) in the world as of the end of November 2005. In this paper, analysis and comparisons will be on these 25 stock markets.
3. As of the end of November 2005, the HSI stocks³ accounted for 41.2% of the total market cap. The shares for red chips and H-shares were 21.5% and 15.1% respectively. In other words, Mainland enterprises (i.e. H-shares and red chips together) constituted 36.5% of the total market cap. The remaining 22.3% were mainly 3rd and 4th liners.

³ Where a company belongs to both HSI and red chips, it is classified into red chips in this paper. It follows that the HSI stocks as mentioned in this paper do not include any red chips. As of the end of November 2005, 10 red chips are also HSI constituents. They are: China Merchants Holdings (144), Denway Motors (203), Citic Pacific (267), China Resources Enterprise (291), China Unicom (762), CNOOC (883), China Mobile (941), Lenovo Group (992), COSCO Pacific (1199) and BoC Hong Kong (2388). They accounted for 30% of the HSI market cap, or 17% of the market total as of the end of November 2005.



The Top 25 Stock Markets in the World by Market Capitalisation (end November 2005)								
	Market Cap		Market Cap / GDP		Total Turnover		Turnover Ratio	
	US\$ bn	Ranking	(%)	Ranking	US\$ bn	Ranking	(%)	Ranking
NYSE	13,426.4	1	115%	11	14,031.4	1	105%	13
Tokyo	4,133.1	2	89%	16	4,066.9	4	98%	14
Nasdaq	3,648.3	3	31%	24	10,138.9	2	278%	1
London	2,955.4	4	138%	9	5,657.1	3	191%	2
Euronext @	2,525.9	5	93%	14	2,875.2	5	114%	11
Toronto	1,431.8	6	146%	7	885.8	11	62%	17
Deutsche Börse	1,167.2	7	43%	22	1,883.6	6	161%	5
Hong Kong	1,035.7	8	635%	1	470.8	16	45%	19
Spanish Exchanges (BME)	1,013.3	9	102%	12	1,574.7	7	155%	6
Switzerland	907.2	10	252%	2	960.5	10	106%	12
Australian	796.4	11	126%	10	674.3	13	85%	16
Italy	755.8	12	45%	21	1,305.3	8	173%	3
OMX Exchanges	746.6	13	91%	15	850.8	12	114%	10
Korea	653.2	14	96%	13	1,087.5	9	166%	4
JSE South Africa	513.6	15	241%	3	199.3	22	39%	20
Bombay	503.7	16	73%	18	153.3	25	30%	23
Sao Paulo	480.0	17	79%	17	162.6	24	34%	21
Taiwan	440.3	18	144%	8	554.4	15	126%	9
Shanghai	273.1	19	17%	25	237.1	19	87%	15
Mexico	258.7	20	38%	23	56.0	31	22%	24
Singapore	245.9	21	230%	4	116.3	27	47%	18
Oslo	178.9	22	72%	19	229.3	20	128%	7
Kuala Lumpur	175.8	23	149%	5	53.6	32	30%	22
Istanbul	153.4	24	51%	20	195.4	23	127%	8
Santiago	139.8	25	149%	6	18.5	40	13%	25

Remarks:

- Market capitalisation includes common and preferred shares, but excludes investment funds, rights, warrants, convertibles and foreign companies (definition adopted from WFE).
- Ranking of the total turnover is based on all members of the WFE. American Stock Exchange (AMEX) was the 14th most active stock exchange, with a total turnover of US\$601.9 bn for the 12 months ending November 2005.
- Euronext includes exchanges of Amsterdam, Brussels, Lisbon, and Paris.
- BME Spanish Exchanges comprise Bolsa de Barcelona, Bolsa de Bilbao, Bolsa de Madrid and Bolsa de Valencia.

Data downloaded on 30 December 2005
Sources: WFE, World Bank and SFC Research

Market Cap as % of GDP

4. Market cap as percentage of GDP measures the size of a stock market relative to the size of an economy. With a GDP of US\$163 bn in 2004, the ratio⁴ was 635% for Hong Kong as of the end of November 2005. This was the highest in the world.
5. Among other factors, the high market cap-to-GDP ratio for Hong Kong is mainly due to two reasons :
 - the listing of Mainland enterprises in Hong Kong; and
 - the expansion of “Hong Kong” companies into overseas countries.
6. The listing of Mainland enterprises in Hong Kong means that the Hong Kong stock market is effectively serving two economies, namely Hong Kong and the Mainland. As of the end of November 2005, Mainland enterprises accounted for 36.5% of the total market cap. As percentage of GDP of Hong Kong, the market cap of Mainland enterprises was about 232%. Stripping out Mainland enterprises, the ratio would be about 403%. This was still a very high figure, and it alone is already able to put Hong Kong in the number 1 position.
7. Another main reason for such a high ratio is that many listed companies in Hong Kong have substantial investments and businesses in overseas countries. The major sources of earnings of these listed companies are outside Hong Kong. In other words, the large market cap of these companies does not necessarily have a direct relationship with the GDP of Hong Kong.
 - The market cap of HSBC alone was US\$181.8 bn (HK\$1,409.5 bn) as of the end of November 2005, 112% of the GDP of Hong Kong. HSBC derived 27% of its pre-tax profit for the financial year 2004 from Hong Kong.
 - Other non-Mainland blue chips which have main sources of earnings outside Hong Kong include Esprit, Li & Fung, Johnson Electric and Yue Yuen. Another non-Mainland large cap stock is Standard Chartered Bank.
 - Apart from blue chips, many Hong Kong listed companies have substantial investments in the Mainland and in the region. Their market cap does not necessarily have a direct relationship with the GDP of Hong Kong.
8. The market cap-to-GDP ratio was also high for Switzerland, South Africa and Singapore. Some common characteristics of these markets (including Hong Kong) are that they
 - serve as regional financial hubs, which attract listing of overseas companies⁵;
 - have domestic companies with significant regional and international business;
 - have a sound legal framework and a relatively developed economy; and
 - possess a domestic economy of a relatively small size.

The market cap-to-GDP ratio for these four markets were all above 200%. In contrast, for those more mature markets such as the US (146%), the UK (138%), Japan (89%) and Germany (43%), the ratio was lower.

⁴ The ratio was based on the market cap of the Hong Kong stock market as of the end of November 2005 and the GDP of Hong Kong in 2004.

⁵ According to the WFE, the percentage of overseas companies listed in Switzerland, South Africa and Singapore were 30%, 6.4% and 17% as of the end of November 2005.

Market Turnover

9. Market turnover measures the trading activities on a stock market, i.e. the value of securities bought or sold during a period. For the 12 months ending November 2005, market turnover on the Hong Kong stock market was US\$470.8 bn.⁶ According to the WFE, it was the 16th most active stock market in the world and the 5th in Asia. The ranking of Hong Kong in terms of trading activities was not as high as that suggested by the market cap.
10. Although the HSI stocks accounted for 41.2% of the market cap, their share in market turnover was only 37.4% for the 12 months ending November 2005. In contrast, whilst H-shares constituted 15.1% of the market cap, their share in market turnover was 25.5%. The share of red chips in total market turnover was 16.6%, whilst that for the other stocks was 20.4% for the 12 months ending November 2005. Turnover of Mainland stocks therefore contributed a total of 42.1% to the total market turnover. This illustrates that investors have a strong interest in the trading of Mainland stocks, especially the H-shares.
11. There appeared to be a strong institutional interest in trading of H-shares. Like the HSI stocks, more than half of the trading of H-shares was conducted by Category A brokers⁷. For the first 11 months of 2005, 58% of the trading of H-shares was handled by Category A brokers, whilst the market shares of Categories B and C brokers were 32% and 10% respectively. In addition, the share of Category A brokers has steadily increased in the trading of H-shares. In 2002, the market share of Category A brokers was 45%, whilst those for Categories B and C brokers were 36% and 19% respectively.

Trading Activities of H-shares by Broker Category			
	Category A	Category B	Category C
2002	45.0%	36.2%	18.8%
2004	51.2%	33.3%	15.5%
2005 (1-11)	57.6%	31.9%	10.4%

Remarks: See footnotes 2 and 7
Source: SFC

Turnover Ratio (Market Turnover as % of Market Cap)

12. Turnover ratio measures the trading activities on a stock market relative to the size of the stock market. For the 12 months ending November 2005, the turnover ratio for the Hong Kong stock market was 45.4%. This would mean that for all stocks listed on the Hong Kong stock market, about 45% of all outstanding shares were traded once on average during the year. In terms of turnover ratio, the ranking of Hong Kong was only the 19th among the 25 selected markets and the 7th in Asia.

⁶ The turnover figure refers to the trading activities of common stocks on the Hong Kong stock market during the 12 months ending November 2005. It does not include the trading activities of other securities such as equity warrants, derivative warrants, ELIs, debt securities, unit trusts, rights, iShares and Nasdaq stocks.

⁷ SEHK participants are categorized into Categories A, B and C, based on the value of transactions handled. Following the methodology of HKEx, Category A brokers refer to the 14 most active SEHK participants, whilst Category B brokers refer to those ranked 15-65 and the rest are Category C brokers.

13. By stock type, the turnover ratio for the 12 months ending November 2005
 - for HSI stocks was 41.3%;
 - for red chips was 35.1%;
 - for H-shares was 77.0%; and
 - for others was 41.7%.

14. The turnover ratios for HSI stocks, red chips and other stocks were 35-41%. The relatively high turnover ratio for H-shares was in part due to the strong trading interest of institutional investors, as illustrated earlier. The high turnover ratio for H-shares could also be explained by the fact that a significant portion of the shares of HSI stocks and red chips were held by families or strategic institutional investors. For red chips, at least 30% of the outstanding shares are directly or indirectly owned by Mainland entities. For most HSI stocks (with the exception of HSBC), major shareholders are families. This phenomenon is also observed for other stocks. Therefore, the actual free float for these companies is much lower. In contrast, with the exception of some H-share companies where there are a few strategic shareholders, the entire market cap⁸ of H-shares are generally available for trading. This also explains why the turnover ratio for H-shares is much higher.

15. It is interesting to note that the turnover ratios for the markets with high market cap-to-GDP ratio were also relatively lower in general:
 - South Africa was 39%; and
 - Singapore was 47%.

16. For the large developed markets, the turnover ratio was higher:
 - US was 142%;
 - UK was 191%; and
 - Japan was 98%.

⁸

Whilst all H-shares are available for trading, a certain portion of the shares of red chips are not.

- All H-shares are tradable and are available for trading. Whilst this is the market cap of the H-share companies, this is also the free float market cap. The state-owned portion of these companies are non-tradable and are not available for trading. This portion is not included as part of the market cap of H-share companies.
- For red chips, all shares (including shares owned directly or indirectly by Mainland entities) are tradable and included in the calculation of market cap. Since a significant portion of the shares are held by Mainland entities and are not available for trading, the free float market cap is much smaller.

The only exception is China Construction Bank (CCB), which was listed on HKEx in October 2005. CCB is listed as an H-share company after the share reform. All its shares are tradable, but not all are available for trading as a large part are held directly or indirectly by Mainland entities. In other words, like red chips, although the market cap of CCB is very large, its free float market cap is much smaller. Excluding CCB, the turnover ratio for H-shares was 140% during the 12 months ending November 2005.

Summary of Hong Kong Stock Market by Stock Type					
		Market Cap		Total Turnover	
		(end Nov 2005)		(For the 12 months ending Nov 2005)	Turnover Ratio
		US\$ bn	% of GDP	US\$ bn	%
Hong Kong	Market Total	1,035.7	635%	470.8	45.45%
	- HSI	426.7	262%	176.2	41.30%
	- H-shares	156.1	96%	120.2	76.99%
	- Red chips	222.2	136%	78.0	35.12%
	- <i>Mainland enterprises (H-shares and red chips only)</i>	378.3	232%	198.2	52.39%
	- Others	230.7	142%	96.2	41.70%
Remarks: See footnotes 2, 3 and 4					
Sources: WFE, World Bank, HKEx and SFC Research					

Conclusion

17. The ranking of the Hong Kong stock market varies based on different indicators. Nevertheless, whatever indicators are used, the Mainland factor is one of the most important reasons underpinning our position.