

Turnover Behaviour of the Hong Kong Stock Market

Joseph Lee and Yan Yuhong¹

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Summary

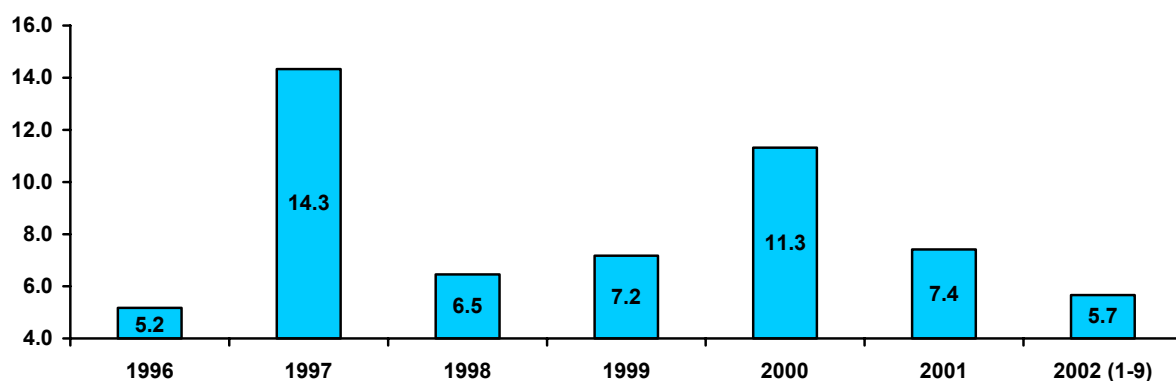
Turnover of the Hong Kong stock market has declined recently. The purpose of the paper is to explore the factors for the decline and examine whether such decline is a worldwide phenomenon or unique to Hong Kong.

- Turnover of the Hong Kong stock market has not been high except during peak periods.
- The shrinkage in turnover is to a large extent a global phenomenon.
- Much of the drop came from price effect.
- The fall in turnover was mainly attributable to non-HSI stocks (by stock type) and to retail investors (by investor type).
- Peak periods in both 1997 and 2000 showed that the increase in turnover was largely driven by non-HSI stocks and retail investors. Turnover of HSI stocks has been stable.
- Compared to 1997, retail investors in 2001 held a smaller portfolio of stocks for a longer period of time. They traded less frequently with a smaller average order size. These might have translated into the decrease in market turnover.
- The drop in the trading activities of retail investors hit Category C brokers most.
- There is an increase in the interests in alternative investment channels (such as guaranteed funds and bond funds), which may possibly affect the attractiveness of investing in the stock market.

Introduction

- Turnover of the Hong Kong stock market has not been very high (an average daily turnover of less than HK\$10 bn) except during the peak periods of 1997 and 2000 (Chart 1). The average daily turnover decreased from HK\$11.3 bn in 2000 to HK\$7.4 bn in 2001, and further to HK\$5.7 bn in the first nine months of 2002.²

Chart 1 – Average Daily Turnover on HKEx (HK\$ bn)



Remark: see footnote 2

Source: HKEx

¹ Mr Joseph Lee is the Senior Manager and Miss Yan Yuhong is the Assistant Manager of the Research Department of the Supervision of Markets Division, SFC. Views expressed in this paper are the authors' and do not represent those of the SFC. Information contained in this paper is obtained from websites, annual reports and fact books of stock & futures exchanges and regulatory bodies, information vendors, research institutes and other organizations. While information from these sources is believed to be reliable, it is not guaranteed as being accurate and the most current. Readers are free to use the information contained in this paper, but any usage should not be related to the SFC.

² Turnover figures in this paper refer to stocks on the main board. Turnover figures for stocks on the GEM and other securities such as warrants, listed debt instruments, ETFs and Nasdaq shares are not included.

A Global Phenomenon

- The fall in market turnover is in fact a global phenomenon, as turnover of major markets also declined (Table 1). Correlation analysis between Jan 2000 and Aug 2002 shows that the turnover of the Hong Kong market was positively correlated with those of major markets (Chart 2). For instance, the correlation coefficients between the turnover of the Hong Kong stock market and that of Nasdaq, London and Tokyo were 0.62, 0.62 and 0.67 respectively. This was in line with the high correlation between the benchmark indices of these markets (correlation coefficient between the HSI and Nasdaq was 0.92, that between the HSI and the FTSE 0.93 and that between the HSI and the Nikkei 0.90).
- Correlation between the turnover of HKEx and that of the NYSE was low at 0.24. This reflected in part the stable turnover of the NYSE throughout the period, and in part the relatively lower correlation between the HSI and the Dow (correlation coefficient was 0.74).
- The Dow has dropped 24% since the end of last year, after a fall of 7% during 2001. Nevertheless, the market turnover on the NYSE has been stable, implying that the turnover on the NYSE in volume terms has indeed increased.

Table 1 – Average Daily Turnover of Major Markets (2000 Q1 – 2002 Q3, US\$ bn)

	2000				2001				2002			2000	2001	2002	2001/2000	2002/2001
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Year	Year	Ytd	YoY (%)	YoY (%)
HKEx	2.23	1.22	1.54	0.95	1.03	1.18	0.78	0.84	0.83	0.91	0.64	1.49	0.96	0.79	-35.5%	-17.1%
Nasdaq	94.89	76.4	73.41	76.65	61.62	45.67	32.92	35.97	36.75	30.11	22.23	80.34	44.05	29.70	-45.2%	-32.6%
London	10.71	7.79	7.12	6.75	8.3	6.75	6.24	6.7	6.52	7.12	6.40	8.09	7.00	6.68	-13.5%	-4.5%
Japan	10.78	8.52	7.26	6.35	6.52	6.77	5.48	5.56	5.67	6.04	5.26	8.23	6.08	5.66	-26.1%	-7.0%
NYSE	47.45	42.93	39.98	44.42	46.78	41.99	39.58	38.22	42.19	41.03	40.14	43.70	41.64	41.12	-4.7%	-1.3%

Sources: HKEx, FIBV, Bloomberg and websites of various exchanges

Chart 2a – Average Daily Turnover (2000 Q1 – 2002 Q3, US\$ bn)

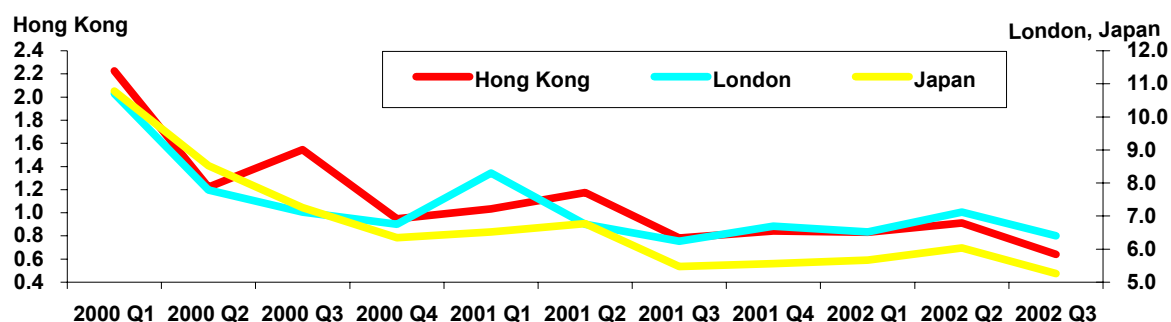
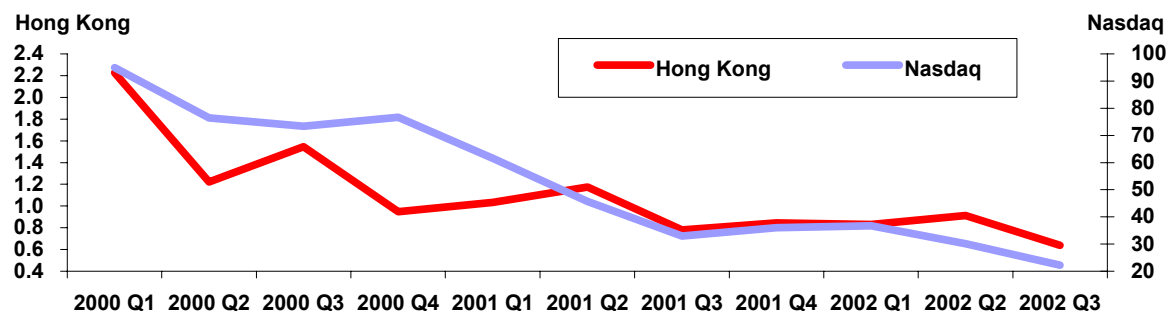


Chart 2b – Average Daily Turnover (2000 Q1 – 2002 Q3, US\$ bn)

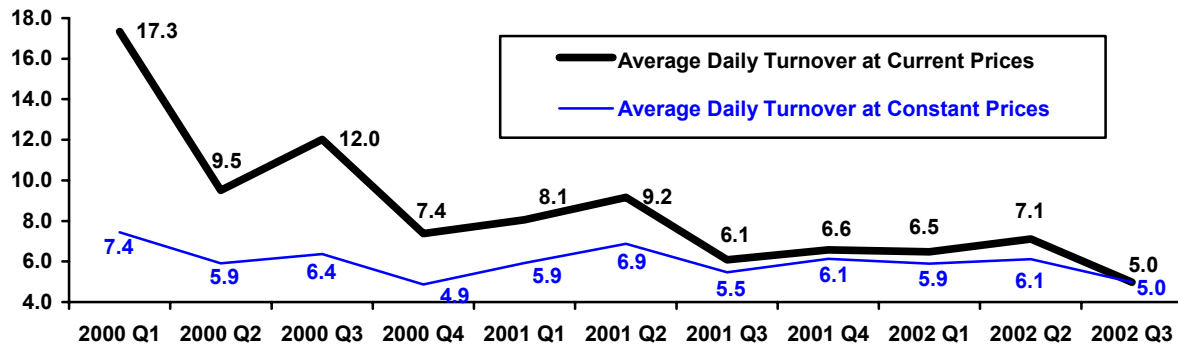


Sources: HKEx, FIBV, Bloomberg and websites of various exchanges

Shrinkage acute since 2001 Q3

- The shrinkage in turnover became apparent in 2001 Q3 when the average daily turnover was HK\$6.1 bn (Chart 3). Since then, turnover has remained low. The turnover fell further to HK\$5.0 bn in 2002 Q3. The fall of HK\$2.1 bn was 30% from HK\$7.1 bn in Q2.

Chart 3 – Average Daily Turnover on HKEx (2000 Q1 – 2002 Q3, HK\$ bn)



Remark: see footnotes 2 and 3

Sources: SFC, HKEx and Bloomberg

Price Effect

- On a quarterly basis, the average daily turnover declined 71% from the peak of HK\$17.3 bn in 2000 Q1 to HK\$5.0 bn in 2002 Q3. However, the decline was largely due to price effect. At constant prices, the average daily turnover fell from HK\$7.4 bn in 2000 Q1 to HK\$5.0 bn in 2002 Q3.³
- Since the end of 2001, the HSI has dropped 20% to 9,072 at the end of Sep 2002. This followed the decline of 25% during 2001. The total loss of market cap amounted to about HK\$2,013 bn from its peak on 4 Sep 2000.
- In sum, the drop in stock prices has effectively created two effects:
 - a decrease in turnover in value terms (but a much smaller decrease in volume terms); and
 - a loss of wealth for the investing public, which might have contributed to a lower incentive to trade and subsequently a lower turnover.
- Similarly, the shrinkage in turnover in major overseas markets was largely attributable to price effect. For instance, the average daily turnover in London dropped 40% between 2000 Q1 and 2002 Q3, while the FTSE index also receded 40% over the same period. The corresponding figures for Nasdaq were 77% and 53% and for Tokyo 51% and 32%.

³ Constant prices are turnover-weighted average prices in 2002 Q3.

Driven by Non-HSI Stocks

2002 Q3 vs 2002 Q2

- The fall in market turnover was in part due to the drop in the turnover of the HSI constituent stocks⁴ which shrank 10% from HK\$3.2 bn in Q2 to HK\$2.9 bn in Q3 (Table 2).
- In fact, the fall was mostly attributable to the decrease in the turnover of:
 - Mainland enterprise stocks which shrank 38%; and
 - Other stocks (i.e. non-HSI stocks and non-Mainland enterprises) which fell 56% over the same period.

Table 2 – Average Daily Turnover by Stock Type (2002 Q3 vs 2002 Q2, HK\$ bn)

	2002 Q2	2002 Q3	Change (Amount)	Change (%)
HSI constituent stocks	3.2	2.9	-0.3	-10.4%
Mainland enterprise stocks	2.1	1.3	-0.8	-38.2%
Other stocks	1.8	0.8	-1.0	-55.7%
TOTAL	7.1	5.0	-2.1	-30.1%

Remark: see footnotes 2 and 4

Sources: SFC, HKEx and Bloomberg

2002 Q3 vs 2001 Q3

- We arrive at the same conclusion that the fall in market turnover was mainly due to the drop in non-HSI stocks if we compare 2002 Q3 figures with those a year ago.

Table 3 – Average Daily Turnover by Stock Type (2002 Q3 vs 2001 Q3, HK\$ bn)

	2001 Q3	2002 Q3	Change (Amount)	Change (%)
HSI constituent stocks	2.9	2.9	0.0	+0.3%
Mainland enterprise stocks	2.4	1.3	-1.1	-45.0%
Other stocks	0.8	0.8	0.0	-3.7%
TOTAL	6.1	5.0	-1.1	-18.2%

Remark: see footnotes 2 and 4

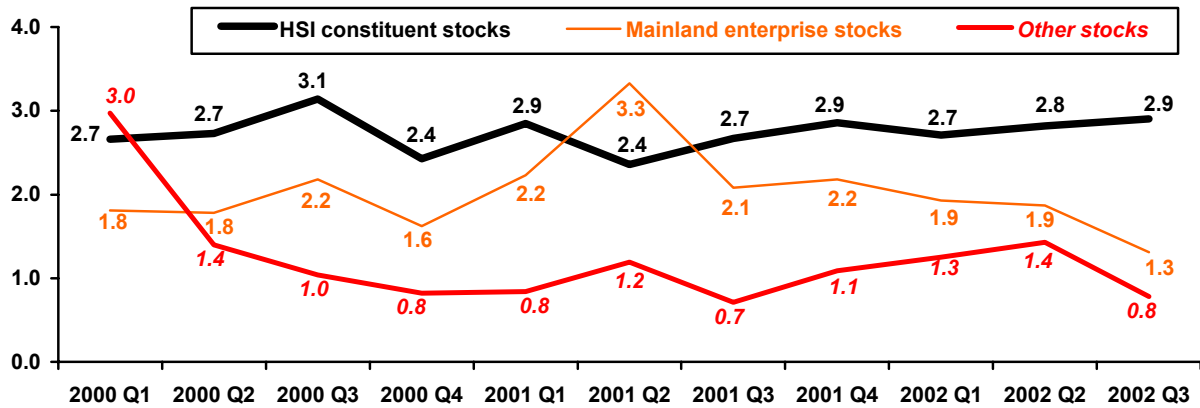
Sources: SFC, HKEx and Bloomberg

Shrinkage in Turnover was Driven by Non-HSI Stocks – Constant Prices

- At constant prices, the average daily turnover of:
 - HSI constituent stocks has been stable since 2000 Q1 (Chart 4);
 - Mainland enterprise stocks dropped from the peak of 2001 Q2 (the surge in the turnover of Mainland shares in 2001 Q2 was predominantly driven by the opening up of the B markets in the Mainland in Mar 2001); and
 - Other stocks also suffered declines.

⁴ HSI constituent stocks in this paper do not include those which are also belonged to the category of Mainland enterprises (i.e. H-shares and red-chips).

Chart 4 – Average Daily Turnover at Constant Prices (2000 Q1 – 2002 Q3, HK\$ bn)

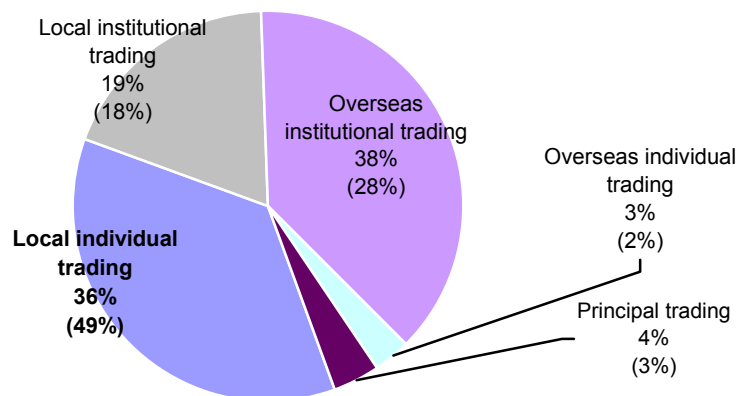


Remark: see footnotes 2, 3 and 4
Sources: SFC, HKEx and Bloomberg

Retail investors' share is shrinking

- The drop in turnover of non-HSI stocks was largely the result of the fall in trading activities of retail investors. The Cash Market Transaction Survey conducted by HKEx shows that local individual trading accounted for 36% of the total market turnover for the year ending Sep 2001 (Chart 5). The corresponding figure was 49% a year earlier.

Chart 5 – Share of Turnover by Investor Type (The Year Ending Sep 2001, %)



Remark: Figures in Parentheses are 1999/2000.
Source: Cash Market Transaction Survey 2000/2001, HKEx

- In addition, according to HKEx's Retail Investor Survey, retail investors in 2001 held a smaller portfolio of stocks for a longer period of time than in 1997 (Chart 6). They traded less frequently with a smaller average order size. These might have translated into the decrease in market turnover.

Chart 6a – Value of Stock Holding

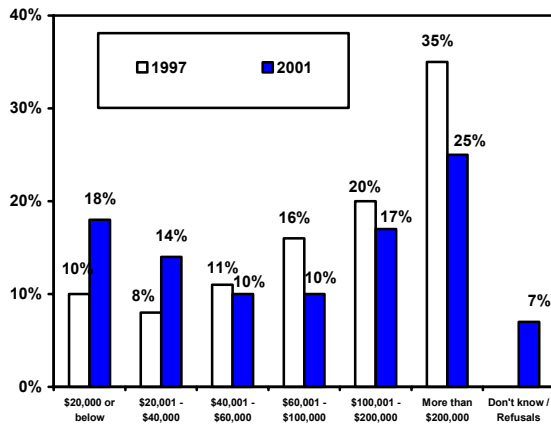


Chart 6b – Duration of Stock Holding

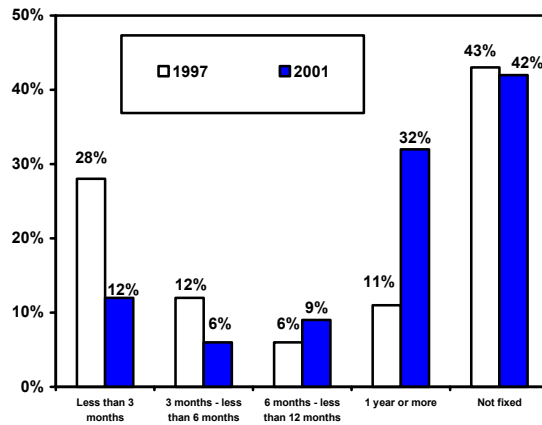


Chart 6c – Number of Transactions Made in the Past 12 Months

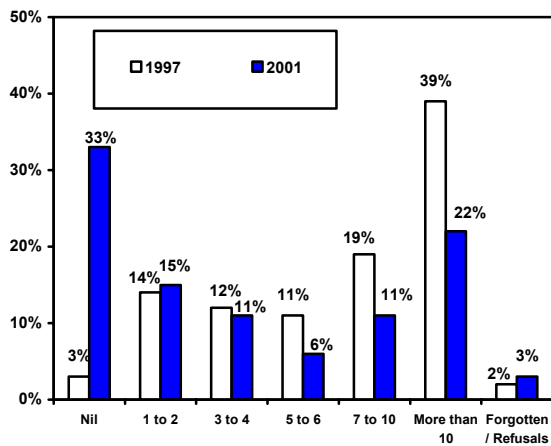
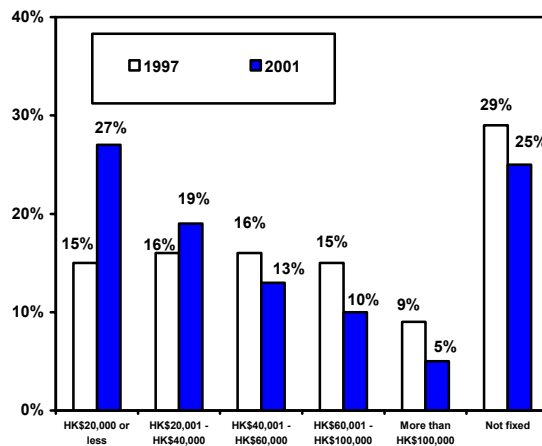


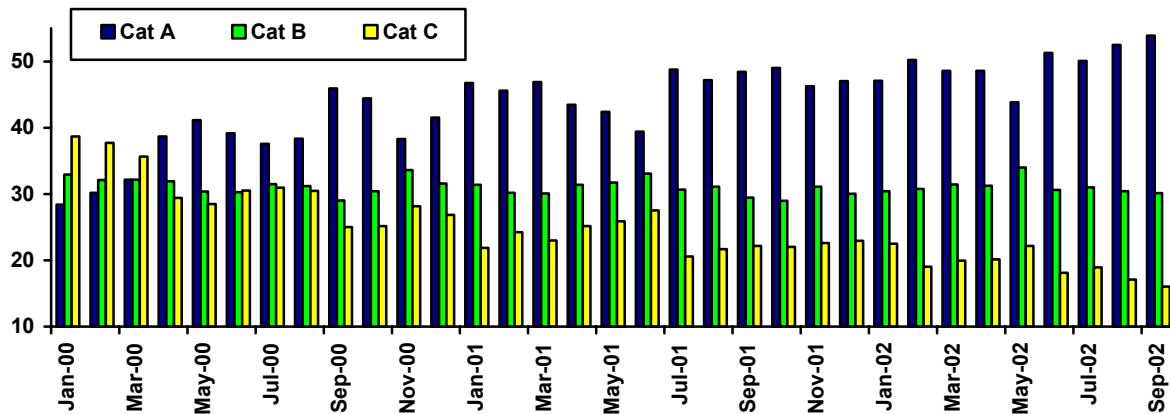
Chart 6d – Value of Each Transaction



Source: Retail Investor Survey 2001, HKEx

- As a result of the drop in the trading activities of retail investors, Category C brokers suffered in market share. The share of Category C brokers fell from 39% in Jan 2000 to 16% in Sep 2002, whereas that of Category A brokers rose from 28% to 54% (Chart 7).

Chart 7 – Market Share of Brokers by Category (%)



Source: HKEx

Turnover During Peak Periods was Driven by Non-HSI Stocks and Retail Investors

Turnover during peak periods in 1997 and in 2000 was largely driven by non-HSI stocks and retail investors. The HSI peaked at 16,673 in Aug 1997 and at 18,302 in Mar 2000. Comparisons of turnover (breakdown by stock type) between the peak period and one year after the peak period were made. The drops in the turnover of HSI constituent stocks in both periods were much milder than those of other stock types.

While the drop in 1997 was mainly due to the fall of turnover of stocks of Mainland enterprises, that in 2000 was the result of the drop of tech stocks (Table 4). In both peak periods, turnover of the HSI constituent stocks remained relatively stable.

Table 4 – Average Daily Turnover by Stock Type of Two Peak Periods (HK\$ bn)

	1997 Q3	1998 Q3	Change (Amount)	Change (%)
HSI constituent stocks	5.5	4.5	-1.0	-18%
Mainland enterprise stocks	9.2	1.1	-8.1	-88%
Other stocks	6.9	0.4	-6.5	-95%
TOTAL	21.6	6.0	-15.6	-72%
	2000 Q1	2001 Q1	Change (Amount)	Change (%)
HSI constituent stocks	4.1	4.2	+0.1	+1.7%
Mainland enterprise stocks	3.9	2.9	-1.0	-27%
Other stocks	9.3	1.0	-8.3	-89%
TOTAL	17.3	8.1	-9.2	-54%

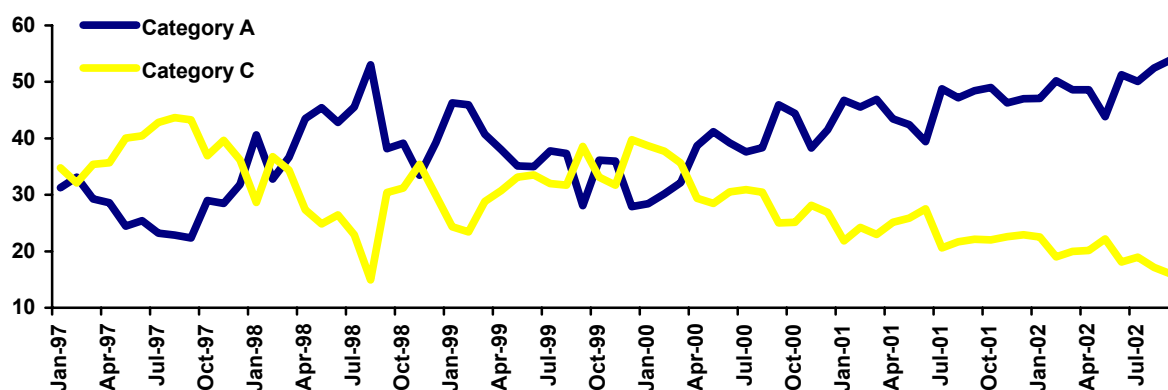
Remark: footnotes 2 and 4

Sources: SFC, HKEx and Bloomberg

The drops in turnover in both peak periods were also attributable to the fall in trading activities of retail investors. HKEx's Cash Market Transaction Survey shows that the share of local individual trading fell from 53% of the total market turnover for the year ending Sep 1997 to 41% a year later.

Regarding the impact on brokers, the share of Category C brokers reached the peak of 44% in Aug 1997 (23% for Category A). It fell to 15% in Aug 1998 (53% for Category A). Similar pattern repeated in the peak period of 2000. As the share of Category B brokers has been relatively stable, the shares of Category A and Category C brokers just mirror each other (Chart 8).

Chart 8 – Market Share of Category A and Category C Brokers (%)

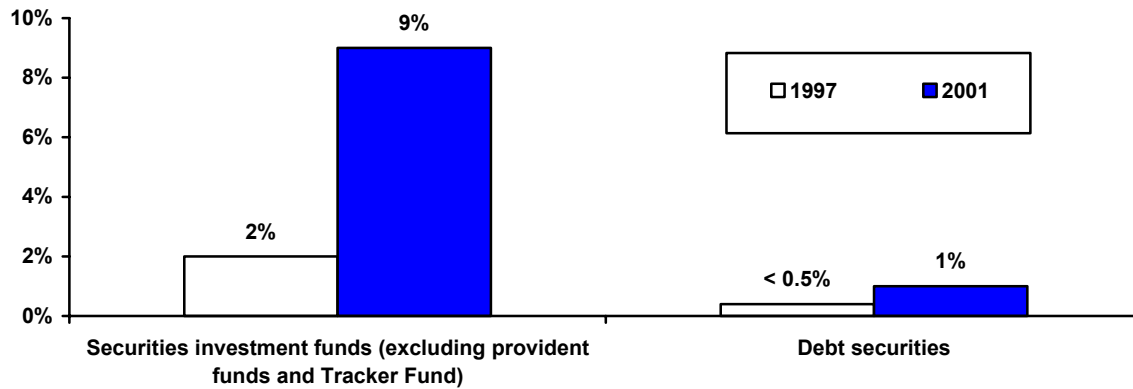


Source: HKEx

Increase in the Interest in Alternative Investments

- HKEx's Retail Investor Survey also suggests that the number of securities investors has increased their participation in other investments such as investment funds and debt securities (Chart 9). This may possibly affect the attractiveness of the stock market.

Chart 9 – Investment in Securities Products other than HKEx Products (% of adult population)



Sources: Retail Investor Survey 1997 and Retail Investor Survey 2001, HKEx

- Besides, statistics from the Hong Kong Investment Funds Association (HKIFA) show that the net fund sales increased almost 2 times from HK\$10.9 bn in 2000 to HK\$32.3 bn in 2001. In 2002 H1, the net sales were HK\$22.4 bn.
 - According to the HKIFA, the growth was underpinned by the surge in demand of retail investors for guaranteed funds. The net sales of guaranteed funds grew from HK\$320 mn in 2000 to HK\$29.3 bn in 2001 and HK\$15.5 bn in 2002 H1.