Analysis of the Recent Rebound in Market Turnover

Joseph Lee and Joanna Poon¹ July/August 2003

Executive Summary

The recent rebound in market turnover was in part attributable to price effect, an increase in trading activities of Mainland stocks, an increase in HSI Futures related transactions and an increase in trading activities of derivative warrants. There has been a spike in market turnover in the middle of each year since 2000. These spikes were mainly due to isolated incidents taking place in the middle of each year rather than a seasonal pattern. Past experience indicated that whether the recent rebound can be sustained depends, among other factors, on the economic growth.

The Recent Rebound in Market Turnover

- The average daily turnover in the second quarter was HK\$7.9 bn, rising 33% from the first quarter when the average daily turnover was HK\$6.0 bn.
- Among other factors, the recent rebound in market turnover was attributable to
 - > price effect;
 - > an increase in trading activities of Mainland stocks²;
 - > an increase in HSI Futures related transactions; and
 - > an increase in trading activities of derivative warrants.

Price Effect

• The HSI at the end of the second quarter was 11% higher than that at the end of the first quarter. During the first half of 2003, the HSI peaked at 10,030 on 17 Jun.

• At constant prices³, the estimated average daily turnover in the second quarter would be 20% higher than that in the first quarter.

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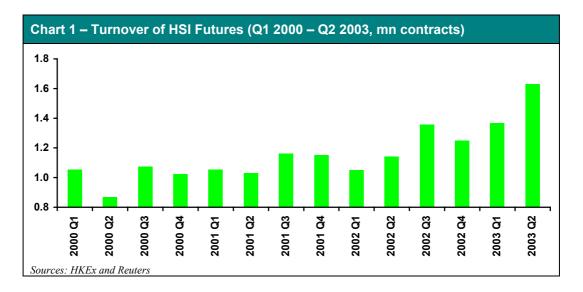
Mainland enterprises include H-share and red-chip companies; the former refers to state-owned enterprises listed in Hong Kong, whilst the latter refers to companies with at least 35% shareholding held in aggregate directly and indirectly by Mainland China entities. This follows the definition adopted by HKEx.

Constant prices are derived from deflating market turnover by the HSI at the end of the second quarter 2003. Therefore, market turnover at constant prices in this paper is an estimate of turnover at end second quarter prices.

Mainland Stocks

- Another factor was the increase in trading activities in Mainland stocks. The average daily turnover of Mainland stocks in the second quarter was HK\$2.7 bn, rising 32% from the first quarter when the average daily turnover was HK\$2.0 bn.
- The increase was in line with the market as a whole and could possibly reflect the relatively better performance of the H-share and red-chip indices during the second quarter. As of the end of Jun, the H-share and red-chip indices were 25% and 17% respectively higher than at the end of the first quarter, and were higher than the gain of the HSI.

HSI Futures Related Transactions



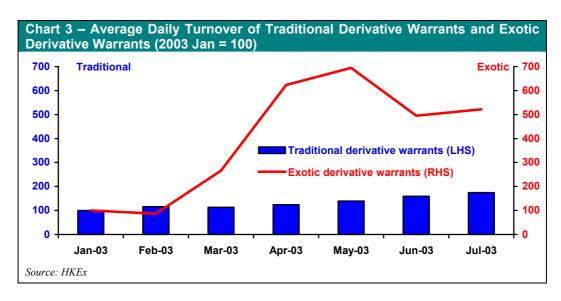
- The third factor could be the increase in HSI Futures related transactions. The turnover of HSI Futures was 1,629,945 contracts in the second quarter (Chart 1), rising a 19% from the first quarter when the turnover was 1,366,915 contracts.
- In notional value, the turnover of HSI Futures was HK\$746.2 bn in the second quarter, also rising a 19% from the first quarter when the notional value was \$629.0 bn.
- To the extent that part of the increase was due to arbitrage and hedging activities, the rise in the turnover of HSI Futures would reflect turnover on the cash market.
- According to HKEx's Derivatives Market Transaction Survey 2001/2002, 8.7% and 23.4% of the turnover of HSI Futures were attributable to arbitrage and hedging activities⁴.

A previous research paper (Research Paper No. 3) entitled *Arbitrage Activities Between HSI Stocks and HSI-Related Derivatives Products* gives an exposition in the arbitrage activities between HSI stocks and HSI-related derivatives products. The paper is downloadable from the SFC website http://www.hksfc.org.hk/eng/statistics/html/index/index0.html.

Derivative Warrants



- The fourth factor is the increase in trading activities of derivative warrants (Chart 2). As of the end of Jul, 288 derivative warrants were listed. The average daily turnover of derivative warrants amounted to HK\$864 mn in Jul (9.0% of the total market turnover). These compared to 315 derivative warrants listed at the end of Jan, with an average daily turnover of HK\$453 mn in Jan (7.7% of the total market turnover). In fact, HKEx's warrant market was the world's most active in terms of turnover in the first five months of 2003.⁵
- Issuers have introduced exotic derivative warrants which are more sophisticated and are primarily designed for more sophisticated investors. An "X" symbol is included in its name to differentiate exotic derivative warrants from traditional derivative warrants⁶. As of the end of Jul, 61 exotic derivative warrants were listed, with an average daily turnover of HK\$109 mn in Jul (13% of the turnover of all derivative warrants). These compared to 25 exotic derivative warrants listed at the end of Jan, with an average daily turnover of HK\$21 mn in Jan (4.6% of the turnover of all derivative warrants) (Chart 3).

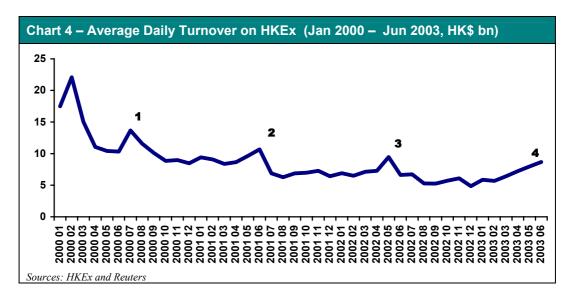


This is from HKEx's Publication *Exchange*, the July 2003 issue, page 11-13.

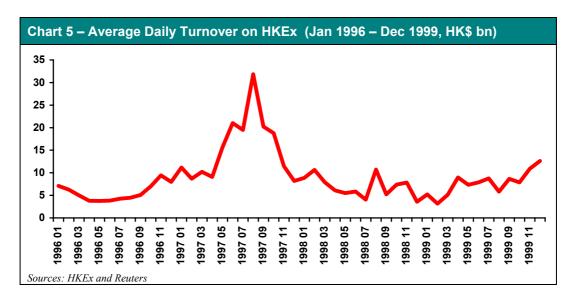
Both the SFC and HKEx have published educational articles on exotic derivative warrants which are available from their websites.

Spikes in Market Turnover in Mid-Year

- There has been a spike or a rebound in market turnover taking place in the middle of each year since 2000.
 - For instance, after the tech bubble burst in early 2000, market turnover picked up to HK\$13.7 bn in Jul 2000 (1 on Chart 4). This was 32% higher than a month earlier.
 - The next spike took place in Jun 2001 when the market turnover was HK\$10.7 bn (2 on Chart 4). This was 11% higher than a month earlier.
 - Another spike occurred in May 2002 as the market turnover rebounded to HK\$9.5 bn (**3** on Chart 4). This was 30% higher than a month earlier.
 - The fourth rebound took place in Jun 2003 when the market turnover was HK\$8.7 bn in Jun 2003 (4 on Chart 4). This was 9.0% higher than a month earlier.



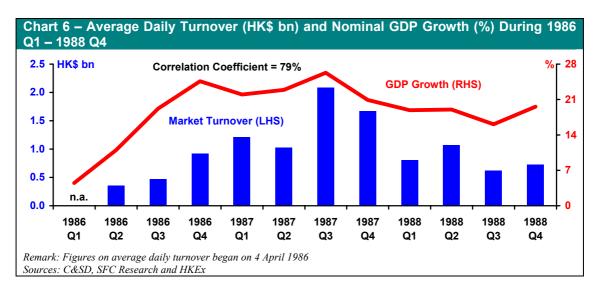
• Nevertheless, these spikes have not taken place prior to 2000, showing that this is unlikely to be a seasonal pattern (Chart 5).



- These spikes were mainly due to isolated incidents taking place in the middle of each year rather than a seasonal pattern.
 - ➤ In 2000, the rebound in market turnover in Jul was possibly attributable to the massive fund raising activities such as China Unicom and HKEx over that period.
 - > In 2001, the opening up of the B-shares markets in the Mainland subsequently propelled the trading of Mainland stocks on HKEx.
 - ➤ In 2002, the spike was largely due to price effect as the HSI peaked in the month.
 - ➤ In 2003, the rebound in turnover was due to price effect, an increase in trading activities of Mainland stocks and an increase in HSI Futures related transactions. Moreover, it is not certain whether such a rebound will be continued over a sustained period and this will depend, among other factors, on the performance of the economy.

Market Turnover and Economic Growth

- Among other factors, market activities move in line with economic growth⁷. A review of economic cycles over the past 20 years or so indicated that the two were positively correlated.
- For the previous four economic cycles, the correlation coefficient between market turnover and economic growth averaged 73%, with a range of 57% to 87% (Charts 6-9). These charts show that alongside with the continuous pick up in economic growth, the rebound in market turnover has largely been sustained for several quarters. This is in contrast to the spikes that took place for a few months.



⁷ Economic growth refers to an increase in GDP. Since market turnover is in current prices, GDP here is also based on current prices.

