

## A Survey on the Retail Structured Notes Market in Hong Kong

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### Summary

- *During 1 June 2003 – 15 June 2005, a total of 118 retail structured notes were issued by 23 issuers. The aggregate issue size was HK\$27,346 mn. With a share of more than 60%, equity linked notes are the most common type of retail structured notes in Hong Kong.*
- *Of the 118 retail structured notes, 77 used Hong Kong stocks and/or indices as underlying securities. The aggregate issue size was HK\$16,221 mn, and the average issue size was HK\$211 mn. The 77 notes were issued by 18 issuers, which are mostly commercial banks and investment banks. Most of these retail structured notes were issued on a basket of stocks. Hong Kong stocks with larger market cap and high turnover appeared to be more common for being used as underlying securities. The term of these 77 retail structured notes ranged from nine months to seven years. The average term was 3.2 years.*
- *Market analysts believe that structured notes tend to lower volatility. With a growing structured notes market, the overall market volatility in Hong Kong has been by and large declining in recent years. This phenomenon has also been observed in other major markets around the globe. At the same time, the volatilities of major HSI stocks have also been declining.*

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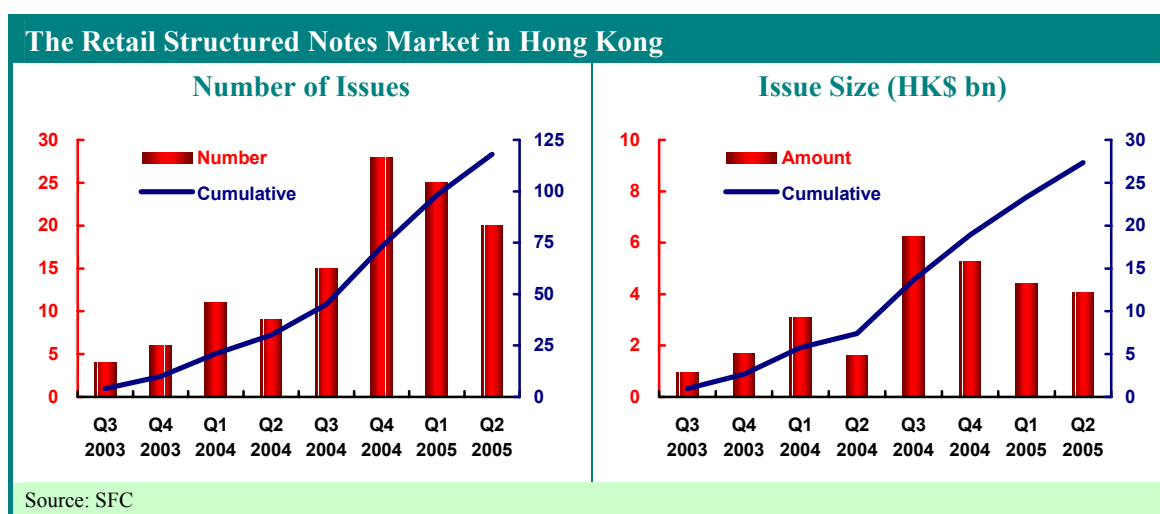
<sup>1</sup> This paper is for pure fact-finding and research purposes, and is not an attempt to comment on the developments of any markets/companies or interpret the policies concerned. The views expressed in this paper do not represent those of the SFC.

## Background

1. During June-July 2005, a survey was carried out by the Commission on the retail structured notes market. The purpose of the survey is to find out the size of the market, its major characteristics and its possible implications to the stock market of Hong Kong. Findings presented in this article are based on this survey.
2. A structured note is a medium-term note with one or more embedded risk/return modification components to change its return pattern. In general, the return of a structured note is linked to the performance of an underlying instrument such as a single stock, a basket of stocks, an index, a commodity, etc.

## Profile of the Retail Structured Notes Market

3. During 1 June 2003 – 15 June 2005, a total of 118 retail structured notes<sup>2</sup> were issued by 23 issuers. The aggregate issue size was HK\$27,346 mn, whilst the average issue size was HK\$232 mn. The size of retail structured notes market has recorded a strong growth in terms of number of issues and issue size since 2003Q3, although the growth rate appears to be stabilizing.



<sup>2</sup> This number excludes 15 plain vanilla capital raising note issues by HKMC, Airport Authority, MTRC, KCRC and Wharf during 1 March 2001 and 15 June 2005.

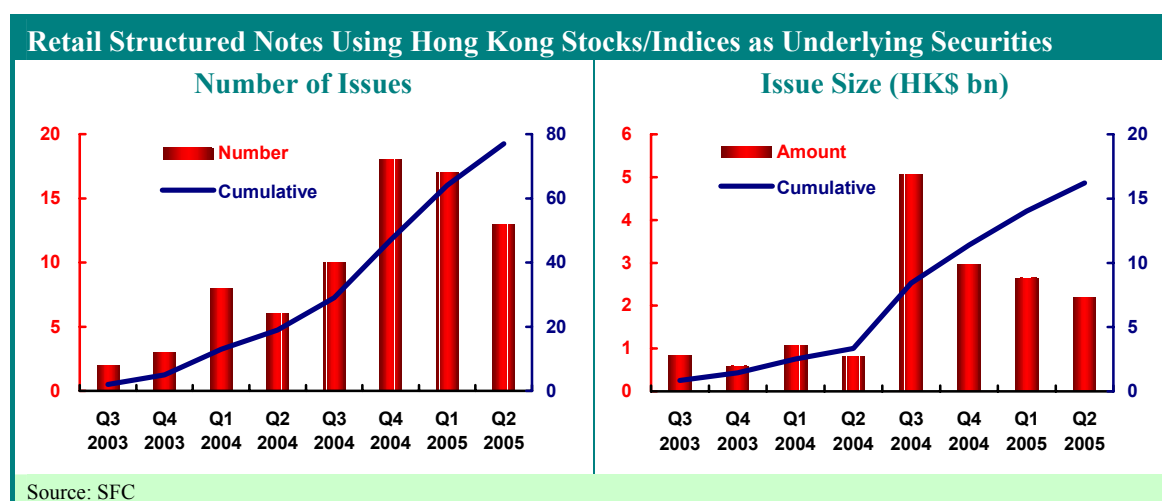
4. Equity linked notes<sup>3</sup> and credit linked notes<sup>4</sup> dominated the retail structured notes market, whilst hybrid securities<sup>5</sup> and index linked notes<sup>6</sup> were relatively less common. Equity linked notes accounted for over 60% by number of issues and by issue size.

Number of Issues and Issue Size of Retail Structured Notes (by Type)					
Type	Issues		Aggregate Issue Size		Average Issue Size (HK\$ mn)
	Number	% of Total	HK\$ mn	% of Total	
Equity linked note	77	65.3%	16,769	61.3%	218
Credit linked note	34	28.8%	9,570	35.0%	281
Hybrid security	6	5.1%	894	3.3%	149
Index linked note	1	0.8%	113	0.4%	113
<b>Total</b>	<b>118</b>		<b>27,346</b>		<b>232</b>

Source: SFC

### Profile of Retail Structured Notes Using Hong Kong Stocks/Indices as Underlying Securities

5. Of the 118 retail structured notes, 77 used Hong Kong stocks and/or indices as underlying securities. The aggregate issue size was HK\$16,221 mn, whilst the average issue size was HK\$211 mn. The 77 notes were issued by 18 issuers, which are mostly commercial banks and investment banks.



<sup>3</sup> Equity linked note is a debt instrument where the return and redemption are linked to the performance of a single equity security or a basket of equity securities.

<sup>4</sup> Credit linked note is a debt instrument where the return and redemption are linked to the credit of a single reference entity or a basket of reference entities.

<sup>5</sup> Hybrid security is a debt instrument where the return and redemption are linked to the performance of different asset classes (e.g. equity and credit/index/commodity linked).

<sup>6</sup> Index linked note is a debt instrument where the return and redemption are linked to the performance of a single equity index or a basket of equity indices.

## By Type

6. Most retail structured notes are equity linked notes issued on Hong Kong stocks.

Number of Issues and Issue Size of Retail Structured Notes Using Hong Kong Stocks/Indices as Underlying Securities (by Type)						
Type	No. of All Issues	Structured Notes Using Hong Kong Stocks/Indices as Underlying Securities				
		Issues		Aggregate Issue Size		Average Issue Size (HK\$ mn)
		Number	% of Total	HK\$ mn	% of Total	
Equity Linked Notes	77	72	93.5%	15,681	96.7%	218
Credit Linked Notes	34	0	0.0%	0	0.0%	Not applicable
Hybrid Securities	6	4	5.2%	427	2.6%	107
Index Linked Notes	1	1	1.3%	113	0.7%	113
<b>Total</b>	<b>118</b>	<b>77</b>		<b>16,221</b>		<b>211</b>

Source: SFC

## Equity Linked Notes

7. Of the 72 equity linked notes, most are issued on a basket of stocks.
- 66 used only Hong Kong stocks as underlying securities :
    - four used only one Hong Kong stock
    - 22 used 2-5 Hong Kong stocks
    - 33 used 6-10 Hong Kong stocks
    - seven used more than 10 Hong Kong stocks.
  - Six used a combination of Hong Kong stocks and overseas stocks :
    - one used four Hong Kong stocks and four Mainland stocks
    - one used one Hong Kong stock and 19 US and European stocks
    - the other four used Hong Kong stocks and other Asian market stocks, e.g. Singapore, Korea, Japan and Taiwan
      - ☞ two used 3-5 Hong Kong stocks and 9-15 Asian stocks
      - ☞ two used 6-7 Hong Kong stocks and 10-13 Asian stocks.

Number of Issues of Retail Structured Notes Using Hong Kong Stocks/Indices As Underlying Securities (by the Number of Stocks/Indices in the Note)					
Type	Number of stocks/indices in the note				Total
	1	2-5	6-10	>10	
Equity linked note	4	22	34	12	72
Credit linked note	0	0	0	0	0
Hybrid security	0	3	0	1	4
Index linked note	1	0	0	0	1
<b>Total</b>	<b>5</b>	<b>25</b>	<b>34</b>	<b>13</b>	<b>77</b>

Source: SFC

### *Hybrid Security*

8. Four hybrid securities used Hong Kong stocks/indices as underlying securities :
- two securities used only Hong Kong stocks
    - one used two Hong Kong stocks
    - the other used four Hong Kong stocks
  - one used one Hong Kong stock with 99 European and US stocks
  - one used the H-shares Index together with two overseas indices.

### *Index Linked Note*

9. The only index linked note used the H-shares Index as the underlying security.

### Retail Structured Notes Using 10 Most Common Hong Kong Stocks As Underlying Securities

10. Hong Kong stocks with larger market cap and high turnover appear to be more common for being used as underlying securities of retail structured notes. In fact, the 10 most commonly used Hong Kong stocks as underlying securities of such retail structured notes were among the 30 largest market cap stocks as of the end of June 2005 and the 30 most actively traded stocks in the first half of 2005. In addition, all the 10 most commonly used Hong Kong stocks are constituents of major benchmark indices :
- seven are Hang Seng Index (HSI) constituent stocks; and
  - three are Hang Seng China Enterprises Index (HSCEI) constituent stocks.
11. The following table shows the number of retail structured notes which used certain Hong Kong stock(s) as underlying and their aggregate issue size. For instance, a total of 53 retail structured notes used HSBC as underlying, whilst 36 retail structured notes used Hutchison as underlying. Because it is very common for retail structured notes to be issued on a basket of stocks, the summation of number of notes in the last column of the following table exceeds the total number of notes issued on Hong Kong stocks, i.e. 77.

### Number of Retail Structured Notes Using Hong Kong Stocks/Indices As Underlying Securities

	Number of Hong Kong stocks/indices in the note				Total
	1	2-5	6-10	>10	
HSBC	3	20	22	8	53
Hutchison	0	8	17	11	36
SHK Properties	0	11	16	6	33
PetroChina	0	6	19	5	30
China Mobile	0	2	17	8	27
Cheung Kong	0	8	11	7	26
China Life	0	1	20	3	24
China Telecom	0	0	11	8	19
CLP	0	6	9	3	18
Hang Seng Bank	0	7	4	7	18
<b>Total</b>	<b>5</b>	<b>25</b>	<b>34</b>	<b>13</b>	<b>77</b>

Source: SFC

#### By Term

12. The term of the 77 retail structured notes (those issued on Hong Kong stocks or indices) ranged from nine months to seven years. The average term was 3.2 years. The distribution of the 77 retail structured notes is as follows :
- eight issues (10.4%) had a term of more than five years;
  - 13 issues (16.9%) had a term of five years;
  - 17 issues (22.1%) had a term of 2-5 years;
  - 34 issues (44.2%) had a term of two years; and
  - five issues (6.5%) had a term of less than two years.

#### By Issuer

13. In terms of issue size, the largest issuer issued seven retail structured notes with an aggregate issue size of HK\$5,060 mn, 31% of the total. The top five issuers issued 44 retail structured notes with an aggregate issue size of HK\$11,809 mn, 72.8% of the total, whilst the top ten issuers issued 65 retail structured notes with an aggregate issue size of HK\$15,285 mn, 94.2% of the total.

## The Structured Notes Market Tends to Lower Market Volatility

14. Market analysts believe that structured notes tend to lower volatility. When investing in equity-linked notes, upon maturity, investors will receive either the principal amount in cash or the underlying stock if the price of that stock falls below the predetermined price. During an up-market, from the perspective of issuers, the chance of delivering the stocks decreases and issuers have to sell more shares of the underlying stocks, which helps cool down the market. In a falling market, issuers are more likely to deliver the underlying stocks to investors upon maturity and as a result, they need to hedge their risk by buying more shares.
  
15. With a growing structured notes market, the overall market volatility in Hong Kong has been by and large declining in recent years. This phenomenon has also been observed in other major markets around the globe. At the same time, the volatilities of major HSI stocks have also been declining in general. Some other factors for the declining volatilities include the strong balance sheets of the corporate sector and the active participation of hedge funds and investment banks in volatility trading and arbitrage activities.

