Legislative Council Panel on Financial Affairs

Follow-up to the meeting on 5 January 2006 on the Review of the Derivative Warrants Market

Purpose

This note sets out the information provided by the Securities and Futures Commission (SFC) as requested by this Panel following the meeting on the review of the derivative warrants market held on 5 January 2006.

(a) Comparison with Other Major Financial Centres

2. The SFC was requested to provide a comparison with other major financial centres, such as the United States (US), the United Kingdom (UK), Italy, Germany and Singapore in the following aspects.

(i) The regulatory regime of derivative warrants including the role and market functions of derivative warrants in respective markets

3. Derivative warrants are financial instruments which give buyers the right, but not the obligation, to buy or sell an underlying asset at a pre-determined price on or before a specified date. They have a leveraging effect, i.e. a small change in the price of the underlying asset can result in a much larger change (in percentage terms) in the price of the derivative warrant, and thus potentially greater gains (or losses, as the case may be).

4. There are other products with similar features which are equally attractive to retail investors. For example, exchange traded options are also option products that give buyers the right but not the obligation to buy or sell the underlying asset at a pre-determined price on or before a specified date. Contracts for Differences (CFDs) are leveraged products that allow investors to take a bullish or bearish view on the underlying. All these can be viewed as substitutes for derivative warrants.

5. There is no retail derivative warrants market in the US but there is active retail participation in the exchange traded options market. However, the trading practices and market characteristics of derivative warrants and exchange traded options are quite different. Consequently it is not meaningful to include the US in the comparison of the regulatory regime.

6. In all the other markets mentioned, derivative warrants are offered as a product choice to retail investors. A comparison of the regulatory requirements for derivative warrants in different jurisdictions is at **Annex A**.

(ii) To assess and explain why there is a significant growth of the derivative warrants market in Hong Kong but not in other major financial centres.

7. Tables 1 and 2 below show the growth of derivative warrants in various markets in terms of their average daily turnover and the number of warrants listed at year-end. As mentioned above, there is no retail derivative warrants market in the US. Hence the US has not been included in the comparison.

Table 1 : Average Daily Turnover during the Year (in US$ million)

	2003	2004	2005	% change 2004/2003	% change 2005/2004
Hong Kong	136.8	270.4	440.9	+98%	+63%
UK	1.7	3.2	2.4	+93%	-24%
Italy	48.9	79.8	247.1	+63%	+210%
Germany	181.8	215.1	237.8	+18%	+11%
Singapore	< 0.1	3.4	27.1	+5,919%	+687%

Sources: World Federation of Exchanges (WFE) & Bloomberg

Table 2 : Number of Warrants Listed at Year-end

	2003	2004	2005	% change 2004/2003	% change 2005/2004
Hong Kong	530	863	1,304	63%	51%
UK	545	644	213	18%	-67%
Italy	2,594	3,021	4,076	16%	35%
Germany	21,431	27,297	34,263	27%	26%
Singapore	3	146	435	4,767%	198%

Sources: WFE & Bloomberg

8. In Hong Kong, the average daily turnover of derivative warrants increased 98% and 63% in 2004 and 2005. The number of warrants listed as of the end of 2004 was 63% higher than the level at the end of 2003, and the corresponding growth in 2005 was 51%. We believe the strong growth of our derivative warrants market is attributable to a number of factors including -

- the fact that derivative warrants provide a leveraged alternative to directly investing in the underlying stocks ;

- derivative warrants incorporate attractive features of products traded on the derivatives market but with the ease of trading in the cash market;

- issuers put a lot of resources to promote derivative warrants and as a result, investor awareness of this product has increased.

9. UK is an exception to the norm. The market was launched relatively recently in October 2002. However, the market has never really taken off. Turnover has contracted in 2005. The drop in the number of warrants listed in 2005 was mainly due to streamlining of products being offered with unpopular warrants not being rolled over when they expired. The growth of the derivative warrants market in the UK is restricted by the established over the counter (OTC) market of CFDs and fierce competition from other European derivative warrants markets. Retail investors are active in the OTC CFD market. Recently we have seen the launch of listed CFDs on the London Stock Exchange in order to compete with the OTC market. Warrants investors in the UK can also turn to other European markets that offer similar products with more choices and better liquidity.

10. After surging 63% in 2004 and 210% in 2005, Italy has overtaken Germany and become the 2nd most active derivative warrants market in the world. The number of warrants listed has also increased by 16% and 35% in 2004 and 2005. It should be noted that although the percentages appear to be lower than those for Hong Kong, Italy had an actual increase of over 1,000 warrants in 2005 compared with 441 warrants for Hong Kong.

11. Germany is probably the most established derivative warrants market in the world. As a result of being a mature market, we do not expect to see any substantial growth in percentage terms. Nevertheless, the market has maintained stable growth in 2004 and 2005, both in terms of turnover and the number of warrants listed.

12. Singapore is catching up through exponential growth, as shown by the 5,919% and 687% increase in turnover in 2004 and 2005 and the 4,767% and 198% increase in the number of warrants listed in 2004 and 2005. However, such large percentages are mainly due to the very low base for the calculation.

13. It should also be noted that some Asian markets have just launched/re-opened their derivative warrants markets and they have attracted strong trading interest. In the Mainland, for instance, the trading of warrants was resumed in August 2005 and the market has been growing rapidly. As at end-2005, there were seven warrants listed (four on the Shanghai Stock Exchange and three on the Shenzhen Stock Exchange). In the month of December 2005, the Mainland warrants market recorded a total turnover of US$15.4 billion. It surpassed Hong Kong to become the most active market in the world for that month. It was also reported by the media that several other Mainland listed companies planned to issue warrants and some brokerage firms had applied to issue warrants on the SSE50 Index. If the Mainland warrants market continues to grow with new issues and more participants, it is likely that the Mainland market will take over Hong Kong as the world's most active warrants market in the future.

(b) Investors Participation and Impact Assessment of the Derivative Warrants Market on Small Investors

14. The SFC was requested to provide a breakdown of the number and percentage of investors**,** transaction volume and value traded by different categories of investors and the investors' gain or loss positions. At present, trading information at the investor level (i.e. at the client level) is not available. As such, a breakdown of the number and percentage of investors by different categories is not available. Similarly, a breakdown of the transaction volume and value traded by different categories of investors, and the investors' gain or loss positions are also not available. Nevertheless, we have tried to estimate the level of retail participation based on certain assumptions.

15. To estimate the level of retail participation, we assume that transactions of less than a certain size are carried out for retail investors. It is because the transaction size of retail investors is usually smaller. It should be noted that such an assumption might have overstated the level of retail participation. A large order from a professional investor may be matched with several smaller orders on the other side in order to be executed. This large order may end up being broken down into several smaller transactions and they will be counted as retail transactions under the assumption. The analysis of trading value by transaction size as well as the analysis of number of transactions by transaction size are set out in Tables 3 and 4 below.

Table 3 : Trading Value by Transaction Size (%)

	Market	
Transaction Size	**% of total**	**Cumulative total (%)**
<HK$10,000	1.5%	1.5%
HK$10,000-20,000	3.8%	5.4%
HK$20,000-30,000	4.3%	9.7%
HK$30,000-40,000	4.1%	13.7%
HK$40,000-50,000	4.0%	17.8%
HK$50,000-60,000	2.9%	20.7%
HK$60,000-80,000	5.2%	25.9%
HK$80,000-100,000	4.6%	30.5%
HK$100,000-200,000	16.3%	46.7%
HK$200,000-300,000	9.9%	56.7%
HK$300,000-500,000	13.1%	69.8%
HK$500,000-1 million	20.1%	89.9%
>HK$1 million	10.1%	100.0%

Source: SFC Research

Table 4 : Number of Transactions by Transaction Size (%)

	Market	
Transaction Size	**% of total**	**Cumulative total (%)**
<HK$10,000	20.9%	20.9%
HK$10,000-20,000	19.6%	40.6%
HK$20,000-30,000	13.2%	53.8%
HK$30,000-40,000	8.8%	62.6%
HK$40,000-50,000	6.8%	69.3%
HK$50,000-60,000	4.0%	73.3%
HK$60,000-80,000	5.7%	79.0%
HK$80,000-100,000	3.9%	82.9%
HK$100,000-200,000	8.7%	91.6%
HK$200,000-300,000	3.1%	94.7%
HK$300,000-500,000	2.5%	97.2%
HK$500,000-1 million	2.1%	99.4%
>HK$1 million	0.6%	100.0%

Source: SFC Research

16. In 2005, there were a total of 22.6 million transactions in derivative warrants, with a total trading value of HK$1,706.7 billion. The average transaction size was HK$75,637, whilst the median transaction size was about HK$27,500. The transaction size ranged from HK$5 to HK$15.4 million. According to HKEx's Retail Investor Survey 2004, the median transaction size for retail investors was HK$30,000. It should be noted that the median transaction size of HK$30,000 was for the stock market as a whole (including derivative warrants), whilst the transaction size for the derivative warrants market was not separately covered in the survey. In the absence of any agreed level of transaction size as a cut-off point for retail investors, we have used the median transaction size of HK$30,000 of HKEx's Retail Investor Survey as a guide. According to the analyses, 9.7% of the total trading value and 53.8% of the transactions in derivative warrants during 2005 was below HK$30,000. The numbers suggest that retail participation of the derivative warrants market in Hong Kong in 2005 was significant in terms of the number of transactions, but not very significant in terms of transaction value.

17. The SFC was also requested to provide information about small investors in the derivative warrants market. In the last quarter of 2005, the SFC engaged an independent research centre to conduct the Retail Investor Survey 2005 (RIS 2005). A total of 5,210 adults were interviewed by telephone from September to November 2005. A total of 1,915 respondents (36.8%) had invested in one or more kinds of investment products (e.g. stocks, managed funds, bonds, derivatives, structured products, leveraged foreign exchange contracts) in the last two years and 246 of those retail investors had traded warrants. This represents a participation rate of 12.9% in warrants among Hong Kong retail investors being surveyed by the RIS 2005.

18. The SFC engaged the same independent research centre to carry out a targeted survey on warrant investors. The purpose of the survey is to understand their objective of trading warrants, knowledge level and whether they had made profits or suffered losses out of trading warrants. The Warrant Investor Survey (WIS) was conducted from January to February 2006. 250 warrant investors were successfully interviewed and 130 of them were among the 246 warrant investors identified in the RIS 2005. The remaining 120 warrant investors were newly identified through making calls to 12,702 randomly selected residential phone numbers. The majority of warrant investors perceived derivative warrants as risky. Of the 250 warrant investors interviewed in the WIS, 66% and 26.4% perceived the risks of derivative warrants were "very high" and "high" respectively. 4.8% considered the risk level as "medium". Only 2.4% opined that the risks of derivative warrants were "low". 76% of warrant investors understood that the underlying price is not the only factor affecting the price of a warrant. Among those who could pinpoint that the

underlying price is not the sole factor, 64.2% could at least cite an additional factor that could influence the pricing of a warrant. 47.6% of warrant investors understood that a higher implied volatility indicates that a derivative warrant is more expensive. 10.8% of warrant investors said that they knew nothing about warrants and simply bet on their luck. A very large proportion (76%) of warrant investors said that they had some knowledge and hoped to make short-term gains from speculative trading. Only 8.4% traded warrants for risk management or long-term investment purposes.

19. 16.8% of warrant investors had over 50% of their portfolios invested in derivative warrants in the past 12 months. 30.8% of warrant investors responded that they had made a net gain from trading derivative warrants during the past 12 months. 47.2% suffered a net loss while 12% broke even in their investments. 10% responded that they didn't know. Among those who made profits from trading warrants, their gains ranged from around HK$1,000 to around HK$300,000 with the median being HK$20,000. In percentage term, their gains represented approximately 2% to 300% of their capital used in trading derivative warrants. The median was 25%. Among those who lost money in trading warrants, their losses ranged from approximately HK$1,000 to HK$400,000 with the median being HK$20,000. In percentage term, their losses represented approximately 0.5% to 100% of their capital used in trading warrants. The median was 40%.

20. It should be noted that 47.5% of those warrant investors who made a loss on warrant investments in the past 12 months responded that they would continue to trade because -

- 53.6% said that they understood the risk of investing and were prepared to take the risk;

- 41.1% believed that they had learnt more about warrants and hoped to do better in their future trading;

- 37.5% hoped to recover their losses from further trading;

- 10.7% admitted that they were addicted to trading derivative warrants.

(c) Issuers' Participation

21. Table 5 below shows the number of listed derivative warrants, number of newly listed derivative warrants and issuer participation rate.

Table 5 : Number of Listed Derivative Warrants, Number of Newly Listed Derivative Warrants and Issuer Participation Rate			
	2003	**2004**	**2005**
Number of derivative warrants listed (period end)	530	863	1,304
Number of newly listed derivative warrants	678	1,259	1,682
Number of issuers	9	14	18
Percentage of new issues by the top 6 issuers	94%	87%	68%
Issuer participation rate (%)	61%	67%	75%
Sources: HKEx, Bloomberg & SFC Research			

The number of derivative warrants listed on the Hong Kong stock market was 1,304 as of the end of 2005. This was 51% higher than the end-2004 figure, which was 63% higher than the end-2003 figure. The number of newly listed derivative warrants was 1,682 in 2005. This was 34% higher than the 2004 figure, which was 86% higher than the 2003 figure. The increase was partly due to more issuers participating in the market and partly due to more warrants issued by each issuer. In 2005, a total of 18 issuers participated in the derivative warrants markets. This was twice the number in 2003. It should be noted that the number of derivative warrants issuers was within the range of 13 to 18 issuers in the past 5 years, except for the year 2003 when the number of active derivative warrants issuers fell to 9.

22. The 6 most active issuers issued 68% and 87% of all new issues of derivative warrants in 2005 and 2004 respectively. The corresponding percentage for 2003 was 94%. This was due to the low number of issuers in 2003. As more issuers enter the market, the market share of dominant players is diluted. The issuer participation rate was 75% for 2005. The corresponding figures for 2004 and 2003 were 67% and 61%. The issuer participation rate is the percentage of total value of transactions where an issuer takes part as either the buyer or the seller of the transaction. This follows the practice adopted by HKEx. The high participation rates indicate that issuers are taking an active role in fulfilling their obligation in providing liquidity to warrants that they issued.

23. The profits or losses made by issuers in issuing derivative warrants are not available. The listed derivative warrants business is usually only one part of a financial group's operations. Typically the listed derivative warrants business is integrated with activities in other products such as options, both on-Exchange and off-Exchange, unlisted structured notes, and other derivatives. Issuers seek to balance their exposure in respect of the underlying securities across the full range of their activities and only hedge a net exposure. Accordingly it is not possible to segregate the trading results of listed derivative warrants from that of the rest of a group's activities.

(d) Measures to Strengthen the Regulation of Issuers of Derivative Warrants

24. The proposed measures to strengthen regulation of issuers of derivative warrants and to curb improper trading practices in the market are included in the Six-Point Plan which the SFC is seeking comments from the public. We are currently reviewing responses that we have received. The final outcome will be dependent on the results of the consultation. We aim to publish a summary of responses by the end of March 2006.

(e) Impact Assessment of the Derivative Warrants Market on the Stability of the Stock Market

25. We have observed that market volatility has been declining in recent years. This is observed in other major markets around the globe as well as in major HSI constituent stocks. In 2005, the average volatility of the Hang Seng Index was maintained at the level of 11%. This was much lower than the average volatility of 16% in 2004 and 17% in 2003. This happened during a period when there was an active derivative warrants market in Hong Kong.

26. The share of derivative warrants in total market turnover is only one of the indicators which may show the potential impact of the derivative warrants market on the cash market. To assess the potential impact of the derivative warrants market, we should also look at other factors such as the relative size of the derivative warrants market compared with that of the stock market, and the effect of related hedging activities of derivative warrants. In terms of market capitalisation, at the end of 2005, the market value of all derivative warrants in the hands of the public was HK$ 4.6 billion, around 0.05% of the total market capitalisation of the stock market.

27. The SFC has also estimated, on a stock by stock basis, the theoretical total number of shares of the underlying stocks which all issuers must hold if they want to maintain a delta neutral position in respect of their

derivative warrants. The estimation is based on the assumption that they use the underlying stocks as the only hedging tool. The results indicate that the theoretical total number of shares of underlying stocks that would have to be held to fully hedge the risk arising from the issue of derivative warrants is relatively small compared with the number of outstanding shares of the underlying stocks in the market. For example, in respect of the 6 largest HSI constituent stocks (i.e. HSBC, China Mobile, Hutchison, CNOOC, Hang Seng Bank and Cheung Kong Holdings), the theoretical total number of shares needed to be held by issuers, as at the end of 2005, ranged from 0.05% to 1.7% of the outstanding shares in the market.

28. Furthermore, in practice, issuers manage the market risk relating to their derivative positions on a portfolio basis, i.e. by pooling all derivative instruments including both exchange-traded products (such as listed derivative warrants, listed stock options, listed index futures and listed index options) and over-the-counter products (such as unlisted structured notes, over-the-counter options, equity swaps, etc) together and assessing the net risk exposure. As a result, the actual number of shares of underlying stocks that they need to hold as hedges would likely be less.

29. A further point to note is that the high frequency of day-trading and the quick turn-around time for some trades in derivative warrants may have caused some issuers not to adjust their hedging positions so frequently in order to minimize hedging costs. High turnover does not necessarily equate to high hedging activities. This has the effect of reducing the potential impact of hedging activities on the underlying stock market. Consequently, daily turnover in the derivative warrants market relative to the total market turnover on its own should not be used as the only indicator to determine whether the derivative warrants market may pose a threat to the overall stability of the stock market. The SFC will continue to work with HKEx to monitor the activities in the derivative warrants market.

(f) Investor Protection – Feasibility of Suitability Check

30. As a member of the International Organization of Securities Commissions (IOSCO), the SFC has implemented in its regulatory structures the international conduct of business principles as basic standards of business conduct for its licensed and registered persons. Such standards are on a par with the corresponding conduct of business measures adopted by the Financial Services Authority in the UK to mitigate the risks to investors of investing in securitised derivatives (such as derivative warrants and certificates that are freely traded and are listed on stock exchanges). In particular, paragraphs 5.2

and 5.3 of the existing Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission (the Code) provide that:

> "Having regard to information about the client of which the licensed or registered person is or should be aware through the exercise of due diligence, the licensed or registered person should, when making a recommendation or solicitation, ensure the suitability of the recommendation or solicitation for that client is reasonable in all the circumstances."; and
>
> "A licensed or registered person providing services to a client in derivative products, including futures contracts or options, or any leveraged transaction should assure itself that the client understands the nature and risks of the products and has sufficient net worth to be able to assume the risks and bear the potential losses of trading in the products."

31. To secure an appropriate degree of protection for members of the public investing in derivative warrants, the SFC is monitoring market developments closely, and will issue further guidance, where appropriate.

(g) Why Facilitate Further and Identical Issues of Derivative Warrants

32. The proposals on facilitating further issues and identical issues are part of the Six-Point Plan which the SFC is seeking comments from the public. We are currently reviewing responses that we have received. The final outcome will be dependent on the results of the consultation. We aim to publish a summary of responses by the end of March 2006.

(h) Regulation of Financial Analysts

33. At the meeting on 5 January, some Members commented that it was not sufficient to require a financial analyst, at the time he provides an analysis or comments on securities in respect of a listed corporation in the mass media, to disclose his financial interest in the listed corporation. Some Members suggested that consideration should be given to prohibiting financial analysts from trading the securities they recommend so as to address the concern about financial analysts' potential conflict of interests when giving investment advice. In this connection, Members may wish to note that paragraph 16 of the Code sets out the requirements for addressing analysts' conflict of interests. These requirements were developed primarily based on the IOSCO principles and international best market practices. In addition to disclosure requirements for analysts who make commentary or recommendation

through mass media, paragraph 16.4 (b) also restricts dealing in or trading securities of a listed corporation by analysts within certain specified periods.

Securities and Futures Commission
March 2006

Annex A

Comparison of Regulatory Requirements for Derivative Warrants in Different Jurisdictions

Hong Kong	*UK*	*Italy*	*Germany*	*Singapore*
I. Requirement on Issuers				
Listing Rules require that an issuer of non-collateralised warrants must have a net asset value of not less than HK$ 2 billion. It must have a credit rating being one of the top three investment grades awarded by a credit rating agency recognised by the Exchange, or be regulated by the HKMA, the SFC or an overseas regulatory authority acceptable to the Exchange. *An issuer must be suitable to handle or capable of issuing and managing warrant issue and listing,.*	*An applicant must have permission under the Financial Services and Markets Act (or under similar regulation in overseas markets) to carry on its activities relating to securitised derivatives and be either a bank or a securities and futures firm.* *An issuer who cannot meet the requirements can obtain a guarantee commitment from a third party guarantor who fulfils the requirements.*	*Requirements for issuers of warrants are stipulated in Article 2.2.11 of the Rules of the Markets Organized and Managed by Borsa Italiana.* *Borsa Italiana requires issuers to provide consolidated financial statements for the past 3 financial years and have adequate information disclosure.* *It does not appear that there are requirements on issuer's financial positions or credit rating or regulatory status.*	*The Exchange Act requires the issuers to comply with the provisions enacted for the protection of the public and orderly stock exchange trading.* *The prospectus (which provides information on the issuer and the securities) must be approved or confirmed in accordance with the German Securities Prospectus Act.* *The requirements are very general in nature and typically refer to compliance with*	*The warrant issuer must be a reputable financial institution with minimum shareholders' funds of US$500 million or its equivalent; and supervised by a monetary or securities regulatory authority.* *An issuer who cannot meet the requirements must: (1) obtain a guarantee commitment from a third party guarantor who fulfils the requirements; or (2) fully collateralize the whole issue; or (3) have a long term rating of investment*

Hong Kong	UK	Italy	Germany	Singapore
If an issuer fails to satisfy the requirements, the Exchange may accept an unconditional and irrevocable guarantee arrangement by another person meeting the requirements.			*applicable laws and other requirements by issuers in the issuance of securities.* *It does not appear that there are requirements on issuer's financial positions or credit rating or regulatory status.*	*grade or its equivalent from a recognised credit rating agency.*
II. Further Issuance				
Allowed.	*Allowed.*	*Allowed.*	*Allowed.*	*Allowed.*
III. Quota Restriction				
None.	*None.*	*The total number of shares underlying an individual issue may not exceed 2% of the total number of shares in circulation. However, this applies only at the time of initial admission.* *After the listing, there is no restriction on*	*None.*	*The number of outstanding structured warrants (old and new together) based on a security must not exceed 50% of the issued shares of the company.*

Hong Kong	*UK*	*Italy*	*Germany*	*Singapore*
		size increase or the number of further issuance.		
IV. Liquidity Providers' Obligations				
Listing Rules require that issuers must appoint liquidity providers to provide liquidity via quote request or continuous quote. *An issuer shall provide liquidity for warrants that it has issued from five minutes after market has opened until the market closes.* *It should specify in the listing documents the minimum quantity of warrants for which it will provide liquidity and it must be at least ten board lots.*	*In the London Stock Exchange, market makers are required to provide quotations with minimum order size of 10,000 and a maximum spread of the greater of either 10% of the bid price or 1 pence during the trading day.* *Under certain special circumstances, market makers have no obligation to provide quotations.*	*In the electronic securitised derivatives market (SEDEX) of Borsa Italiana, the market makers (called specialists, which could be the issuers or a third party) must display continuous bids and offers with maximum bid-ask spread and minimum tradable quantity during the time specified by Borsa Italiana.* *Under certain special circumstance, the specialists may be temporarily*	*In the European Warrant Exchange (EUWAX) – the largest derivative warrant market in Germany, the obligations of market makers are:* *- To quote tradable bid and offer prices on a continuous basis throughout the entire trading hours.* *- The quotes are for a minimum trading volume of EUR3,000.* *- Under certain special circumstances market makers are not*	*Warrant issuers are not obliged to make markets for their issues, but if an issuer acts as a Designated Market-Maker (DMM) for its warrant, or appoints an exchange member as a DMM, the warrant issue will not need to meet the minimum placement spread and issue size requirements.* *A DMM's obligations are set out in the SGX-ST Rules.* *The identity of the market maker, the minimum quantity to*

Hong Kong	***UK***	***Italy***	***Germany***	***Singapore***
It should also specify the maximum time lag it will respond to quote request and the maximum bid offer spreads. *Other circumstances that it will not provide liquidity must also be specified in the listing documents.*		*relieved from the obligations specified.*	*obliged to fulfil their obligations.*	*which the quotations apply, and the circumstances in which no quotation will be provided, must be disclosed in the listing document.* *If there is no market maker, the listing document must provide an appropriate negative statement.*