

Development of the Exchange-traded Fund Market in Hong Kong

Supervision of Markets Division¹

Executive Summary

The first exchange-traded fund ("ETF") was launched in the US in 1993. Since then, the global financial markets have experienced a phenomenal growth. In Hong Kong, the first ETF (the Tracker Fund of Hong Kong ("TraHK")) was launched in 1999. Today, TraHK is still one of the world's top 10 largest ETFs in terms of assets under management.

ETFs are open-ended funds traded on a stock exchange. Investors can buy or sell ETFs via their brokers in the same way they trade stocks. In addition, investors may create or redeem ETF units via the fund manager of the ETF. Arbitrage opportunities arising from the creation and redemption mechanism ensures that the market price of an ETF is trading close to its net asset value. Compared to traditional unit trusts or investment funds offered by fund managers or their agents, ETFs offer a number of distinctive advantages including convenience, transparency and low transaction costs. Investors can easily use ETFs for trading, hedging, arbitrage or efficient asset allocation.

During the past few years, the Commission has been working closely with the industry, HKEx and the government on initiatives aiming at developing Hong Kong into a regional ETF market. These include tick rule exemption, relaxation of restriction on naked

short-selling, stamp duty remission and transaction levy exemption for ETFs trading. The latest initiative was the publication of the Consultation Paper on the Draft Guidelines for Regulating Index Tracking ETFs under the Code on Unit Trusts and Mutual Funds. The Guidelines represents an important step towards creating a regulatory framework to facilitate the development of the ETF market in Hong Kong.

To improve the liquidity and facilitate the growth and development of the ETF market in Hong Kong, efforts should be put on further streamlining the regulatory framework, enhancing investor education and awareness of the product, widening the range of ETFs and automating procedures for creation, redemption and settlement of them.

Overview of the Exchange-traded Fund Market

Since the launch of the first ETF in 1993², the ETF market has experienced a significant growth in terms of number of ETFs available and their total assets under management. As of 31 December 2002, there were 280 ETFs worldwide with US\$141.62 billion of assets under management. Average daily turnover in December 2002 amounted to 175 million shares or US\$6.6 billion. Table 1 provides an overview of the global ETF market as of 31 December 2002.

[1] This article was prepared by Mr. Stanley Ng of the Supervision of Markets Division in April 2003.

[2] SPDR ("Spider"), an ETF tracking the S&P 500 index, was launched in the US on 11 April 1993.

Country (Number of managers)	Number of Primary ETF Listings	Total ETF Listings	Assets Under Management (US\$ billion)
US (6)	113	113	102.28
Europe (14)	118	192	10.69
Japan (4)	18	18	21.00
Canada (3)	16	16	2.88
Korea (4)	4	4	0.314
Australia (1)	3	3	0.226
South Africa (1)	3	3	0.554
Hong Kong (2)	2	4	3.09
India (1)	1	1	0.002
Israel (1)	1	1	0.342
Singapore (1)	1	6	0.184
Total	280	361	141.62

Source: Morgan Stanley Equity Research, "Exchange Traded Funds - A Global Overview" dated 29 January 2003.

What are ETFs?

ETFs are open-ended funds traded on a stock exchange. They could be listed or just admitted for trading. Most ETFs are structured as a fusion of an open-ended fund and a stock. Unlike unit trusts and other open-ended funds, investors do not purchase or redeem units of ETFs directly from the fund management companies or their agents. Instead, they purchase and sell the units of ETFs via the stock exchange during normal trading hours.

Most ETFs are designed to track an underlying stock index. There are broadly two types of tracking strategies: replication and representative sampling. Replication attempts to track closely an index such that an ETF holds substantially all the index constituents in the same weightings as in the underlying benchmarks. Representative sampling is used by ETFs that hold a sample of stocks that have similar characteristics such as market capitalization, industry weights, and liquidity to the

underlying index. ETFs using this strategy tend to have relatively more tracking risks than those using full replication.

In Hong Kong, TraHK is a full replication ETF designed to track the Hang Seng Index by holding shares in the companies included in the Hang Seng Index in substantially the same weightings. Most ETFs are passively managed by fund managers. Fund managers do not rebalance the ETF unless there are major changes in the underlying index (e.g. change of constituents or weightings).

Whilst ETF shares are normally bought and sold on the stock exchange, market participants may deal directly with the fund manager for creation and redemption of ETF shares³. Creation and redemption of ETF shares are normally made in large, pre-defined blocks of shares. For example, the minimum threshold for creation and redemption of TraHK is 1 million shares.

[3] *In most markets, the creation and redemption of ETFs are limited to authorized participants.*

Creation

Market participants can create new shares of an ETF by delivering the underlying stocks and a cash component (for rounding adjustments, accrued dividends etc.) to the fund manager.

Redemption

Market participants can present ETF shares to the fund manager in exchange of the underlying stocks and cash components.

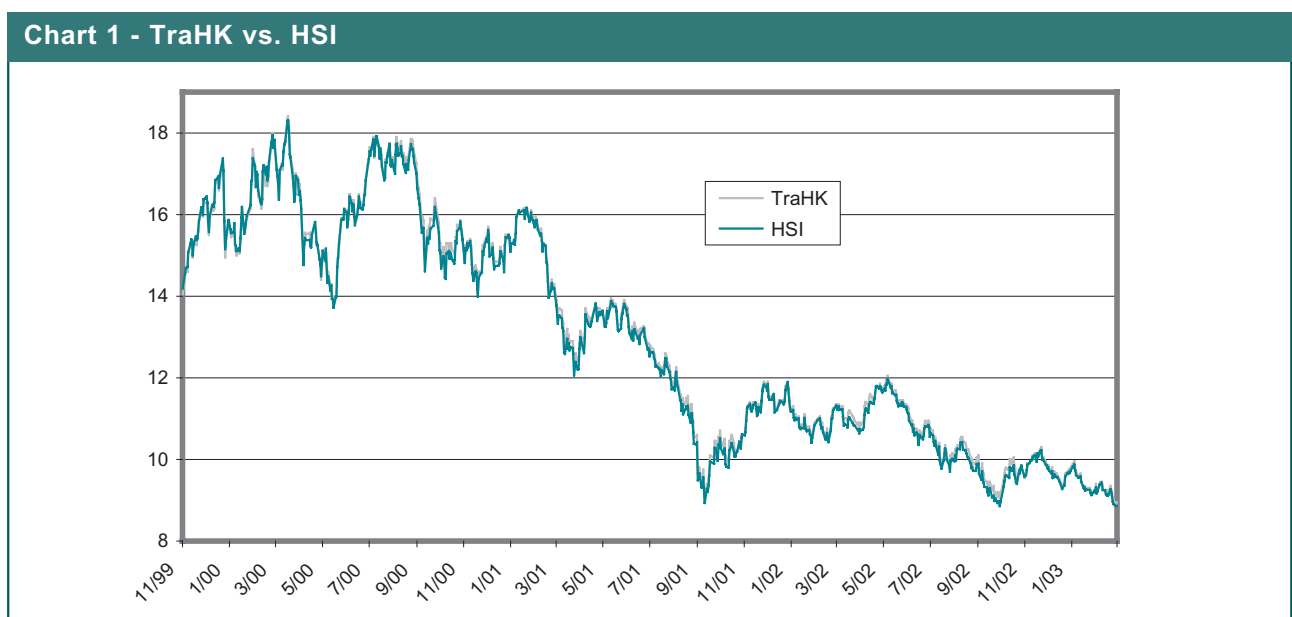
Market Prices of ETFs

As an ETF is traded on the stock exchange, its market price may diverge from the net asset value ("NAV")⁴. However, because of the existence of creation and redemption mechanism, the divergence should be minimal under normal circumstances (i.e. both the ETF and its underlying stocks have enough market liquidity).

If an ETF is trading at a premium to its NAV, market participants can purchase the cheaper underlying stocks in the market and deliver them to the fund

manager to create new ETF shares. They will then sell the ETF shares to earn an arbitrage profit. The increase in the supply of ETF shares reduces the premium of the ETF over NAV. On the other hand, if the ETF is trading at a discount to the NAV, market participants can purchase the cheaper ETF shares in the market and deliver them to the fund manager to exchange for the underlying stocks. They will then sell the underlying stocks in the market to earn a profit. These arbitrage activities lead to a decrease in the supply of the ETF and reduce the discount of the ETF to its NAV.

Because of the transaction costs involved in doing the arbitrage, the market price of an ETF will always maintain a small spread over its NAV. For markets with a futures market (e.g. Hong Kong) where investors can hedge their market risk, the spread is usually narrower. Chart 1 compares the market price of TraHK with the Hang Seng Index (divided by 1,000) during the period from 12 November 1999 to 11 March 2003.



[4] The NAV reflects the market value of the portfolio of index shares and the cash component and is calculated on a per unit basis.

Advantages of ETFs

ETF is the fastest growing financial product in the past decade. The growing popularity of the product could be attributed to the advantages that it offered to market participants and investors. As ETFs are open-ended funds, they offer the advantages that traditional open-ended funds offered to investors:

1. *Professional management*

ETFs are managed by professional fund managers. Usually, the fund managers of ETFs are major international asset managers with sound expertise and solid investment experience in global financial markets.

2. *Diversification*

ETFs invest in a portfolio of securities, offering investors diversified exposure to selected markets or sectors.

3. *Global exposure*

Some ETFs invest in overseas securities, giving investors an instant opportunity to invest in foreign markets.

In addition to the above advantages, ETFs also provide the following advantages:

1. *Convenience*

Investors can buy or sell ETFs like any other stock through brokers during the trading hours of the stock exchange. In other words, investors can day-trade ETFs. For many unit trusts offered by fund managers in Hong Kong, there is only one dealing per day.

2. *High transparency*

The underlying index and constituent stocks of an ETF are transparent and real time price quotations are disseminated by most markets during trading hours.

3. *Low costs*

The transaction cost of trading ETFs is similar to that of stocks. In Hong Kong, some foreign ETFs are exempted from stamp duty. As most ETFs are passively managed, the annual management fee and trustee fee are relatively low. For example, TraHK has a combined management and trustee fee of less than 0.1% of the total net asset value of TraHK per annum. For traditional unit trusts, the initial subscription charges could be as high as 5%, and the annual management fee may exceed 1%.

4. *Low initial investment*

ETFs are traded in board lots which are usually maintained at an affordable level. For example, the board lot size of TraHK is 500 shares. At a price of HK\$9, the minimum initial investment for TraHK is HK\$4,500. However, it should be noted that for creation and redemption of TraHK, the minimum size required is 1,000,000 shares (HK\$9,000,000). For most retail investors, this is not an amount that they can afford.

5. *Good liquidity*

ETFs are traded on the stock exchange during trading hours. Most ETFs have assigned market makers to provide firm bid-ask quotations to investors. Except for TraHK, all ETFs traded in Hong Kong have market makers to provide liquidity. The Commission is studying with SEHK the feasibility of introducing a market making system for TraHK.

6. *Full investment*

Unlike traditional open-ended funds where cash has to be held in anticipation of redemptions, ETFs do not have to hold cash for such purpose. This ensures that the fund is fully invested at all times.

7. *No margin requirement*

Unlike the trading of index futures contracts, investors trading ETFs do not deposit initial margin and are not subject to the daily variation adjustment of the futures market.

Uses of ETFs

ETFs provide investors an opportunity to invest in a portfolio of stocks with a single transaction. As such, investors can use ETFs to achieve various investment and trading strategies:

1. *Efficient asset allocation*

Investors can use ETFs to quickly and easily increase or reduce their exposure to a particular sector or country.

2. *Trading*

Investors who have a firm view on the general direction of a stock market can buy (if they are optimistic about the market) or sell short ETFs (if they are pessimistic about the market) to profit from the anticipated market movements.

3. *Hedging*

Investors who are holding portfolios of stocks can sell short ETFs to hedge against the negative impact

of a market decline on their portfolios. Equally, investors who would like to participate in the market can buy ETFs to hedge against the negative impact of a market rise before they accumulate their portfolio.

4. *Arbitrage*

Investors and market participants can arbitrage between an ETF, stocks of the underlying index and related derivatives contracts (if available) to earn profits. For example, investors in Hong Kong can arbitrage between the TraHK, Hang Seng Index and the Hang Seng Index Futures contract.

ETFs in Hong Kong

TraHK which began trading on 12 November 1999 was the first ETF listed and traded in Hong Kong. As at the end of 2002, its assets under management stood at about US\$3.059 billion and was ranked among the top 10 largest ETFs in the world in terms of assets under management. On 2 May 2001, iShares MSCI South Korea Index Fund ("iShares Korea") and iShares MSCI Taiwan Index Fund ("iShares Taiwan") were admitted for trading under the Nasdaq-Amex Pilot Program ("Pilot Program") of SEHK. In November the same year, iShares MSCI China Tracker ("China Tracker") was listed on SEHK. While TraHK and China Tracker are locally created ETFs with primary listing in Hong Kong, the other two iShares are foreign ETFs with primary listing in the US. Despite the rapid growth of ETFs in overseas markets, the turnover of ETFs traded in Hong Kong is far from satisfactory.

Table 2 summarizes the turnover of the ETFs (in HK\$ million) from 1999 to February 2003 (figures in brackets are average daily turnovers). Currently,

TraHK accounts for about 99% of the turnover of all ETFs.

	1999	2000	2001	2002	Jan 2003	Feb 2003
TraHK	12,565 (369.57)	19,971 (80.85)	20,586 (84.72)	12,231 (49.52)	665 (31.69)	584 (30.73)
China Tracker	n.a.	n.a.	125.7 (5.71)	595.8 (2.41)	5.32 (0.25)	5.20 (0.27)
iShares Korea	n.a.	n.a.	37.5 (0.23)	18.3 (0.07)	0.122 (0.01)	0.035 (0.00)
iShares Taiwan	n.a.	n.a.	65.3 (0.40)	62.0 (0.25)	1.045 (0.05)	1.614 (0.08)

Source: Bloomberg

Table 3 compares the average daily turnover of all ETFs against the average daily turnover of the Main Board of SEHK. The comparison illustrates that turnover of ETFs did not record any significant

growth during the past few years. At present, the turnover of ETFs accounts for less than 1% of the Main Board's turnover.

	1999	2000	2001	2002	Jan 2003	Feb 2003
Average Daily Turnover of ETFs (B)	370	81	86	52	32	31
Average Daily Turnover of the Main Board (A)	7,757	12,338	8,025	6,474	5,849	5,667
B/A in %	4.77%	0.66%	1.07%	0.80%	0.55%	0.55%

Source: Bloomberg and HKEx

Initiatives to Facilitate the Trading of ETFs in Hong Kong

To capture the opportunities offered by the rapid growth and development of ETFs worldwide, a number of initiatives aiming at developing Hong Kong into a regional ETF market have been introduced.

- All ETFs traded under the Pilot Program and other ETFs approved by the Commission can be short sold on a down tick. Currently, all the

four ETFs traded on SEHK are exempted from the tick rule. The SFC will work with HKEx to extend the tick rule exemption to hedging activities of ETF market makers.

- ETF market makers are allowed to do naked short sales in the performance of their market making functions or conducting hedging transactions. This aims to facilitate market making activities.
- ETF market makers' market making transactions are exempt from stamp duty.

- ETF market makers are exempt from payment of the transaction levy in relation to their market making transactions in ETFs.
- The SFC has been discussing with HKEx on possible improvement or enhancement of its systems to provide an optimal trading environment for ETFs, particularly, the automation of its manual procedures for creation, redemption and settlement of ETFs. The automation of these procedures will facilitate the launch of more new ETFs in the future.
- To create a platform for the admission of overseas ETFs based on the principle of "regulatory equivalence": overseas jurisdictions that share similar investment regulatory principles and are already effectively regulating ETFs in their home markets are considered "Acceptable ETF Regimes" under the Code.

In addition, listing rules and procedures for the listing of SFC authorised funds on SEHK will be revised so that ETFs that have been authorised by the SFC, whether primarily listed on overseas exchanges or not, may obtain listing status on SEHK via a streamlined process.

Recognising the inaptness of the current regulatory framework in facilitating the growth of the local ETF market, the SFC issued a Consultation Paper in March 2003 on draft guidelines for regulating passively managed index tracking ETFs under the Code on Unit Trusts and Mutual Funds (the "Code"). The draft ETF Guidelines aim to achieve three objectives:

- To provide appropriate regulations in the Code for regulating passively managed index tracking ETFs: this is achieved through the granting of general and specific relief from strict compliance with certain Code provisions;
- To enhance the disclosure and transparency of ETF documentation: proposing the use of a Key Features Summary, a Product Description Document and the publication of ETF documentation through electronic media such as the HKEx website etc;

The Way Forward

Given the rapid development in ETF markets worldwide and increased investor interests in ETFs, there is potential in further developing Hong Kong into a regional ETF market. To achieve this target, there is a need to further streamline the regulatory framework, automate procedures for creation, redemption and settlement of ETFs, widen ETF product range to meet the various investment and trading needs of investors and market participants, and launch more investor education programmes to uplift investing public's awareness of the characteristics, advantages and uses of ETFs. ■■