

# CHATROOM

## **Head of Clearing Derrick Fung Discusses Clearing and Settlement of Securities and Derivatives**



*Derrick Fung joined*

*HKEx in 2001 as Head of Cash Clearing*

*Operations and has been Head of Clearing since 1 April this year.*

*He came to HKEx from a large international bank where his last position was the financial controller of the Hong Kong branch. Before joining the bank in 1991, he spent six years in audit with an international accounting firm in Hong Kong and Melbourne, Australia. Mr Fung is a Chartered Financial Analyst and qualified as a Chartered Accountant in Australia.*

HKEx's Clearing Division is primarily responsible for ensuring the smooth operations of HKEx's three clearing houses. As the three are recognised clearing houses under the Securities and Futures Ordinance, the division has a duty to ensure that there are orderly, fair and expeditious clearing and settlement arrangements in place and the risks associated with the clearing houses' businesses and operations are managed prudently. The Clearing Division has four departments. In addition to running the clearing and settlement operations for HKEx's securities and derivatives markets, the departments provide depository, nominee and custody services for investors and clearing house Participants.

### **How are you approaching your new role?**

Before I took on this new role, I was mainly responsible for clearing, settlement, depository and nominee services in the securities market. I was familiar with the derivatives clearing business, but I have more to learn. Fortunately, we have very strong and competent teams in the Clearing Division. Over the years, we have acquired extensive knowledge and expertise, and we have built excellent execution capability to implement major projects and initiatives. With such a good foundation for success, I would emphasise the importance for us to maintain good team work and communication not only within HKEx internally but also with our Participants and others in the market.



### ***What are the similarities and differences of securities and derivatives clearing?***

At a high level, securities and derivatives clearing are very similar. All three of our clearing houses provide Central Counterparty (CCP) services for products traded in our markets and guarantee settlement for their Clearing Participants subject to different risk management measures put in place by our Risk Management Division. Our clearing and settlement processes are highly automated and our Participants are supported by our Common Collateral Management System to enable them to use their collateral efficiently among the three clearing houses. Also, third party clearing service has been available in both the securities and derivatives markets since it was added to CCASS (the Central Clearing and Settlement System for securities) in December 2007.

When it comes to operations, the mechanisms for the clearing and settlement of securities and derivatives products are very different. For the securities market, trades on the Stock Exchange (exchange trades) are settled two days after the trade day so we say they are settled on a T+2 basis. Securities settlement is done via electronic book-entry transfer of securities held in the CCASS accounts of the Clearing Participants. To facilitate settlement of exchange trades, a significant number of settlement instructions are processed for the transfer of securities between Clearing Participants and their clients.

Clearing and settlement of derivatives contracts is different because contracts tend to remain outstanding for a longer period of time rather than two days. Unlike securities, where the security itself is delivered and paid for in full, our derivatives contracts represent the obligation or the option to buy or sell a financial instrument or gold, which we introduced last year, at a future date, with the counterparty assuming the financial risk. Therefore, the clearing houses for our derivatives market evaluate the risk exposure of outstanding contracts and collect margin from market participants every day until the contracts are closed out, exercised or expired. Except for exercised stock options, which are physically settled through CCASS, futures and options contracts are mainly settled on a cash basis.

Securities and derivatives products are also subject to different clearing facilities. For securities, exchange trades are normally netted, which often results in a small amount of shares for settlement, thereby improving settlement efficiency and reducing funding costs. On the other hand, our derivatives clearing houses' Participants have the flexibility to determine how each trade should be dealt with by making use of the DCASS (Derivatives Clearing and Settlement System) account structure and post-trade services – for example, trade give-up – to manage their positions.



***What were the most important Clearing Division initiatives in recent years and what needs to be done to cater for future business needs?***

The infrastructure upgrade of CCASS rolled out in May 2002 and the launch of DCASS in April 2004 brought major functional and efficiency improvements to our clearing systems to support our market operations. Since then, we have been making numerous functional changes to enhance our services and to support new products. Apart from regular technical upgrades to align us with the latest system software and hardware, the capacity of both clearing systems has been significantly upgraded in line with their respective trading systems to meet the phenomenal growth in market transactions we have experienced over the past few years. Today, CCASS and DCASS can process 5 million and 2 million trades per day respectively without affecting the service level to our Participants. We continue to monitor the market and regularly review the capacity of our clearing systems to cope with markets' increasing turnover and support business expansion. In addition to system capacity, we also strengthened our system connection capability to support Participants' straight-through processing so as to further improve overall settlement operation efficiency. Participants can connect to us now through the use of our CCASS/3 Participant Gateway system or our DCASS OAPI (Open Application Programme Interface) system.

***What are the division's main goals and challenges?***

The core values of clearing houses are to provide services which can help reduce costs, minimise risks and increase efficiency of the overall market. We hold our values in our goals, which are to ensure at all times that the clearing infrastructure continues to meet international standards and best practices; that our market operations are safe and

efficient and meet the needs of our Participants; and that value-added services are introduced to our markets to align them with developments in other major financial centres. We also hope that our clearing infrastructure and services – for instance, our CCASS Participant shareholding disclosure and electronic voting services – will contribute to market transparency and the promotion of good corporate governance.

There are a few things on our radar screen. One is the introduction of T+2 Finality. At present, securities trades on the Stock Exchange are settled on T+2 but the money settlement, which is conducted by Hong Kong Interbank Clearing Limited (HKICL), is only completed in the morning of T+3. Hence, trades settled in the Hong Kong market do not achieve finality on T+2 and counterparty risk is extended overnight. Such risk has grown with the significant increase in trading turnover over the past few years and is expected to grow further. The failure of Lehman Brothers raised concern about the counterparty risk exposure of our Participants in respect of the settlement instructions settled under the same mechanism each day since these settlement instructions often have gross settlement value exceeding the daily trading turnover. With the support of the HKMA (Hong Kong Monetary Authority) and HKICL, we are finalising a proposed T+2 Finality model to effect money settlement at the end of T+2 for exchange trades and settlement instructions, and we plan to consult the market on the proposal by end of the third quarter this year.

We are also exploring OTC (over-the-counter market) clearing. Last year, we conducted a study on OTC clearing to identify any potential business (see “OTC Clearing Study Identifies Potential Business for HKEx” in the April 2009 issue of *Exchange*). While we recognise there are challenges in providing CCP services to the OTC market, potential regulatory developments in other major financial centres since the beginning of the financial crisis, such as the desire to increase transparency by building a

repository of trade data and reduce counterparty risk exposure in OTC transactions through CCP, may lead to potential business opportunities. We will continue to monitor developments in the OTC markets and the needs of market participants.

We continuously look at ways to expand the choices for clearing houses’ potential Participants to meet the demand of investors and market participants whether they are local or from overseas. Recently, we opened up HKSCC (Hong Kong Securities Clearing Company Limited) Participantship to overseas clearing houses and securities depositories interested in opening an account with CCASS for custody purposes. In addition, banks that are active in providing clearing services to Exchange Participants (EPs) in our securities market are keen to extend their service offering to our derivatives market. So we will review how we may admit banks that are not EPs as General Clearing Participants (GCPs) in the two derivatives clearing houses to align them with the clearing house for the securities market, which does not require its GCPs to be EPs.

Another possibility is extending our custody services to unlisted securities. We have been exploring with issuers how we can provide custody and nominee services for unlisted ELNs (equity-linked notes) with Hong Kong-listed securities as underlying assets. Although demand is not high for the time being, we will continue to discuss with our Participants opportunities to extend our custody and related services to other local and/or overseas securities.

We are also looking into improving our collateral management service. We see more Participants with businesses across our securities and derivatives markets. To better support their collateral deployment and cross-market operations, we need to make more efficient transfer of collateral among the three clearing houses possible by further enhancing the functional capability of our Common Collateral Management System.



## **How does the Clearing Division keep up with developments in other major markets?**

We frequently receive visitors from overseas institutions such as global custodians, securities service providers, clearing houses and central securities depositories (CSDs). Many share with us developments in their markets and sometimes offer specific suggestions on our market operations based on their experience. We are a founding member of the Asia Pacific Central Securities Depository Group and often participate in the meetings and seminars it organises for member clearing houses and CSDs to share information on their business practices and discuss issues facing their markets. In addition, we also participate in conferences organised by global CSDs and ISSA (International Securities Services Association) to discuss major industry trends, best practices and other issues.

We also have very good relationships with our mainland counterparts. Over the years, we have met frequently to exchange information and views on our clearing operations and market infrastructure. The MOU (Memorandum of Understanding) HKSCC signed with the China

Securities Depository and Clearing Corporation in September 2004 led to an extensive cross-training arrangement that has deepened our mutual understanding of the two markets' operations and regulatory frameworks, which should make us well-prepared for closer cooperation on the future development of the two markets.

## **What is the latest on the proposed move to a scripless securities market in Hong Kong?**

The legislation process for implementing the scripless initiative has been on hold since 2005. Recently, the Government proposed amending the Companies Ordinance to remove the statutory prohibition against scripless shareholding and paperless transfers in our securities market. At the same time, the SFC (Securities and Futures Commission) is leading discussions with us and the Federation of Share Registrars with a view to formulating an operational model for a scripless environment for market consultation.

## **What is the status of the Investor Account (IA) and Stock Segregated Account (SSA) with Statement Service offered by HKEx's securities clearing house?**

HKSCC introduced the SSA service to the market in March 1994 and the IA service was launched in May 1998. At the end of June this year, there were more than 21,000 IAs and about 1,800 SSAs opened in CCASS. Both SSA and IA are aimed at providing investor protection economically. Over the years, both the IA and SSA services have been significantly enhanced in response to the needs of our Participants and investors. Last year, we conducted a survey of investors with IA and SSA accounts and over 85 per cent of the respondents said they were satisfied with the services.

The discussion of the scripless market proposal may lead to further changes in the IA and SSA services to cope with the scripless model. Otherwise, we do not plan to make any major changes to our IA and SSA services for the time being.