



INSIDE CLEAR TALK

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ISSUE 29
”

SEPTEMBER 1997

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ClearTalk

Clear Talk is the information bulletin of Hong Kong Securities Clearing Company Limited. All contributions, enquiries, letters to the editor, and any other items of interest are most welcome and should be addressed to:

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Investor participation in CCASS is likely to cost investors less than proposed in the consultation paper issued in January 1997.

Stewart Shing, Chief Executive, said the minimum monthly usage fee for Investor Account Holders (IAH) will be determined after all operational issues have been finalised. He said preliminary estimates are that the fees will be lower than originally proposed. "It will also be further reduced as demand for the service grows," he said.

"A small amount of refundable deposit will be collected and a charge-free period for share transfer will also be provided to new IAHs. CCASS participants will then be able to move stocks from their stock accounts to IAHs' stock accounts without transaction fees. In general, the existing CCASS tariff will be applied to the new service," Mr Shing said.

The Company's project team on investor participation has looked into the various operational features including the following:

Admission Criteria

All Hong Kong residents aged 18 or above, Hong Kong incorporated companies and overseas companies registered under Part XI of the Companies Ordinance will be eligible to open direct Investor Accounts in CCASS and become IAHs. IAHs must have a local correspondence address and are required to designate a bank account to effect money transactions. They will have a CCASS stock account to record stock transactions and will be given a password to access CCASS.

Services Offered

Stock transfers -- Hongkong Clearing will provide stock transfer facilities to all IAHs. Stock transfer transactions will be initiated

by CCASS participants in the form of Settlement Instructions for affirmation by IAHs. Securities settlement will be effected on-line immediately after a Settlement Instruction is affirmed, provided that stocks are available.

Money settlement -- CCASS will generate electronic payment instructions to the clearing system of Hong Kong Interbank Clearing Limited to effect money settlement as it does for existing CCASS participants. Hongkong Clearing will act as a facilitator of money settlement between CCASS participants and IAHs.

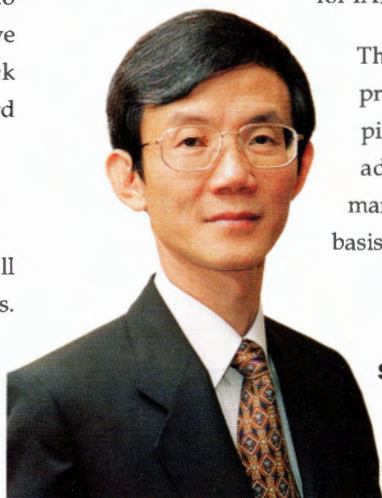
Deposit and withdrawal of share certificates -- Certificates registered in the name of IAHs or HKSCC Nominees will be accepted by Hongkong Clearing. Upon successful re-registration, the shares deposited will be available for use by IAHs, who can also withdraw physical certificates from their available stock balances.

Nominee services -- Comprehensive nominee services will be provided to IAHs, including shares under re-registration. Written advice will be sent to IAHs informing them of corporate action instruction deadlines. An enquiry function about the corporate actions will be provided.

Statements -- Daily activity statements and monthly statements will be mailed to IAHs as evidence of their shareholdings in CCASS, as well as records of stock account balances and money transactions.

Communication -- IAHs can use the touch-tone telephones or screen phones to access CCASS. They will be able to make enquiries, affirm stock transfer instructions, issue instructions on corporate activities and change passwords. Operator assistance will be available upon request. IAHs can also choose to complete instruction forms for presentation to Hongkong Clearing at the Service Counters Hall. Counter operators will perform the required function for IAHs according to their instructions.

The Company will launch the investor participation project in the first half of 1998. It plans to start with a pilot scheme to admit 1,000 IAHs to allow a gradual adaptation of the project by the Company and the market. IAHs will be admitted on a first-come-first-served basis.



Stewart Shing

Cost of CCASS participation may be reduced for investors

Quicker Disaster Recovery Planned by Hongkong Clearing

Hongkong Clearing is planning to shorten the time required for disaster recovery from four hours to two hours by the end of 1997. Peter Lam, Assistant Director and Head of the Technical Services Department told *Clear Talk* that this would put CCASS among the most advanced installations in terms of system recovery in Hong Kong.

Hongkong Clearing's disaster recovery procedures currently adopt a software approach. "Software performance depends on the mainframe CPU's capacity and system recovery takes around four hours. We plan to reduce our disaster recovery time to within two hours by using a hardware approach," Mr Lam said.

"We are using Remote Recovery Data Facility (RRDF) for our disaster recovery. Information on data for updating is transmitted in batches from the main data centre to the back-up centre during the day without immediate updating. Full records of all the data are transmitted to the back-up centre at day end. If there is a disaster at the data centre, Hongkong Clearing will retrieve the full records transmitted the previous night and update the records according to every batch of data for updating.

"RRDF is more time-consuming in data recovery and there is a time lag of a few minutes to transfer each batch of data for updating," Mr Lam said. "To overcome these limitations, we plan to implement Peer-to-Peer Remote Copy (PPRC). PPRC uses Remote Mirror Technology to support the back-up centre. Instead of transmitting information on data for updating in batches to the back-up centre, PPRC uses a disk controller to synchronise the data in the main centre with the back-up centre. Data

updates in the back-up centre are conducted simultaneously."

To meet the hardware requirement of PPRC, Hongkong Clearing will install a new fibre optic link and increase the memory storage capacity of the disk controller.

Disaster recovery procedures

Hongkong Clearing has had the disaster recovery procedures, including a fully-equipped back-up centre, since the first day of CCASS operations. The procedures

identify two types of disaster:

breakdown of the data centre,

including computer

breakdown, which forces the

Company to switch from

the main data centre to the

back-up centre; and

closure of the office for

reasons such as fire,

flooding and power failure,

which require temporary

relocation of the office.

"Switching from the main data

centre to the back-up centre is

not an easy job. We have to ensure the system is recovered with integrity -- the network is properly connected, data are fully transmitted and the recovery is finished as scheduled so as to keep the disruption to participants to a minimum.

"Time is always the most difficult part in the recovery.

At present, we are required to recover from disaster

within four hours. To meet this time requirement, the

recovery procedures clearly detail the working

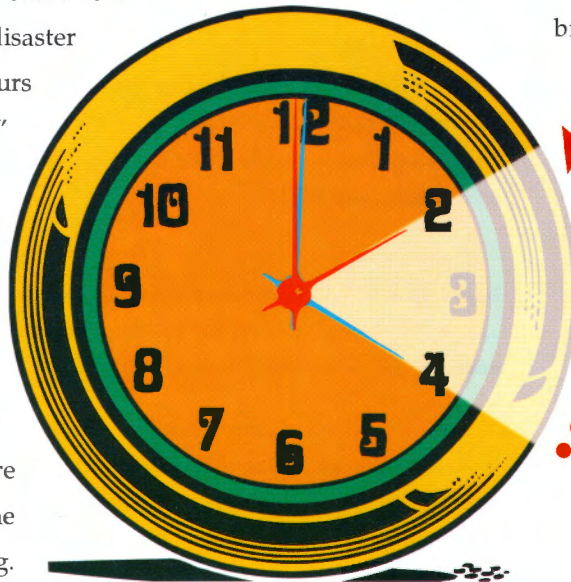
procedures of each computer element including the

network, system, applications, PCs and LAN

equipment. For example, we have to inform and

provide a password to the network supplier in order to

change the receiving destination. We also have to



coordinate with the supplier on follow-up arrangements and timing," Mr Lam said.

The back-up centre

The back-up facility was provided by IBM, as a sub-contracted agent at the beginning of CCASS operations. Since June 1994, Hongkong Clearing has operated its own back-up centre. Mr Lam said: "We must take into account a number of considerations when setting up a back-up centre -- the location, the costs, the level of competence and the potential for future development. If we locate it too close to the main data centre, we are exposed to geographical risk. If we site the back-up centre too far from the main data centre, it will take longer to relocate personnel during a disaster."

To provide additional protection, Hongkong Clearing has also set up one more back-up centre to store the

major CCASS software. "We have not had to execute the disaster recovery procedures since we started operations. But to ensure that they work smoothly and as planned, test drills are conducted twice a year. If any mistake is found in the test drill, we will correct it and conduct the test drill again until no mistakes occur.

Timely and effective disaster recovery procedures are essential for an information-based company like us.

We must make every effort to preserve the data and data flow. If CCASS fails, the whole securities market in Hong Kong would suffer, as well as Hongkong Clearing," Mr Lam said.



Peter Lam

CPU Upgrade

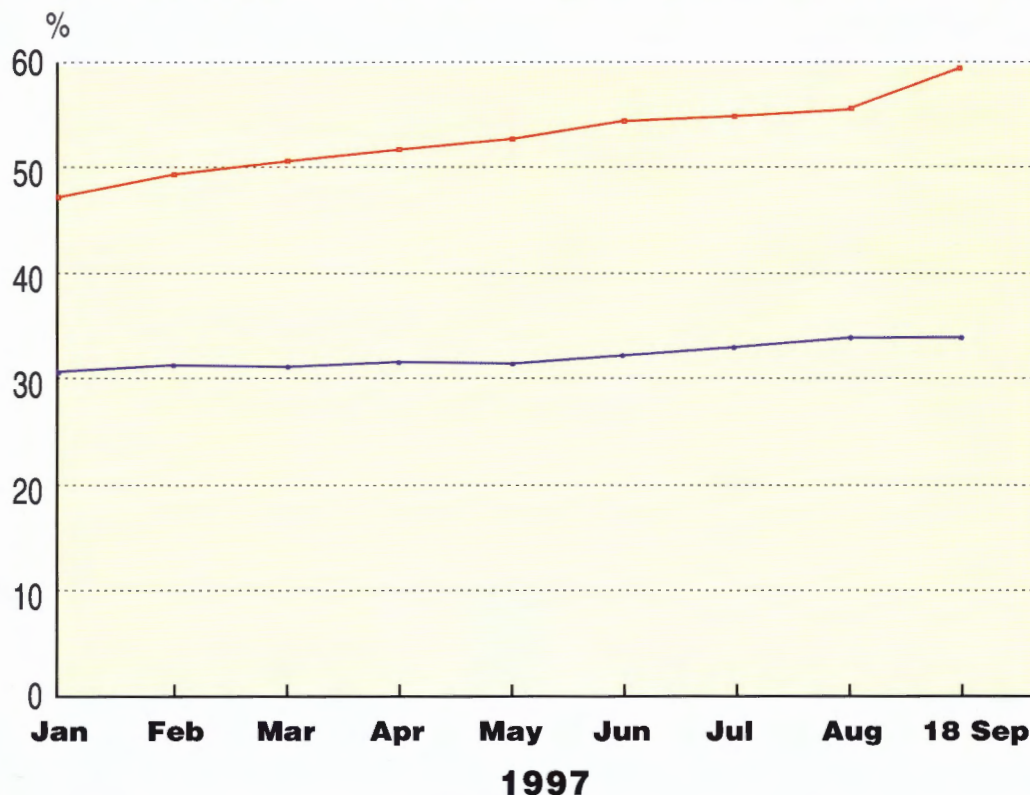
Hongkong Clearing is also planning to upgrade both mainframes in the main data and back-up centres. "In view of the increasing trade turnover, we are scheduled to upgrade the mainframes in the main data centre and back-up centre both to 140 MIPS (million instructions per second) in early October. This will increase the capacity of the main data centre by 60 per cent and the back-up centre by 140 per cent, said Peter Lam, Assistant Director of Technical Services.

This upgrade will enable CCASS to handle a peak volume of well above 400,000 trades a day. The total cost of the upgrade will be about \$20 million.

The level of service provided to participants will be raised with the upgrade. Both the response time and report download will be faster even during days of high trade turnover," Mr Lam said.



SHARES IN DEPOSITORY HIT RECORD



■ % of issued shares of admitted securities

■ % of market capitalisation of admitted securities

A new record has been set in the quantity of shares deposited in CCASS. As at 18 September 1997, the CCASS Depository held 434.4 billion shares valued at \$1,538.5 billion, representing 59.01 per cent of the issued shares of admitted securities in CCASS and 34.12 per cent of the market capitalisation of admitted securities.

Enhanced CCASS Terminal Project Updates

The launch of the Enhanced CCASS Terminal (ECT) project in May has received a favourable response from participants. The first installation quota of 50 ECTs was soon filled up. Hongkong Clearing is inviting more participants to install ECT.

Hongkong Clearing plans to arrange small group seminars later this year for participants who are interested in knowing more about ECT before subscription. The seminars will focus on new features including security control, smartcard device, Host-to-Host connection and on-line

browsing of circulars. Through demonstration and practice, participants will obtain hands-on experience in using ECT.

After installation of ECT, participants can attend training courses organised by the Customer Services Department. The first training session was held in August.

ECT application forms are available from the Participant Admission Department (Tel.: 2597 0621). For enquiries, please call the Customer Services Hotline at 2852 8000.

New CCASS functions introduced

enter

The following new CCASS functions were introduced on 4 August 1997.

Election instructions for option entitlement

Election instructions will be generated to CCASS participants who subscribed for securities through a warrant or bond conversion before book-close, but have not received the security by the last registration date before book-close. The information will be available through the *Enquire Announcement Information* function on CCASS terminals.

Hongkong Clearing already generates election instructions through CCASS terminals to participants with holdings or long positions in a security on which the issuer has declared a dividend with an option on which election is required to be made after book-close.

Entitlement Statement

The Entitlement Statement has been amended to reflect fully the subscription details of multiple

underlying stocks covered by basket warrants. Details of the charges for each underlying stock covered by the warrant will be shown on the statement.

Debt securities

The following reports have been revised to include the net settlement amount and obligations, in order to assist participants in the reconciliation of debt securities trades:-

- Provisional Clearing Statement
- Final Clearing Statement
- Next Settlement Day Due/Overdue Position Report
- Settled Position Report
- Settlement Report

The net settlement amount is the settlement sum including accrued interest.

Revised copies of the CCASS Terminal User Guide which include these changes are available from the Service Counters Hall on the 2nd Floor, Vicwood Plaza, Central.

Customer Services Staff Provide Useful Link with Participants

The Customer Services Department is the front line contact between Hongkong Clearing and CCASS participants. Polyana Hung, Manager of the Department, and her colleagues have the skills that make this all important contact of benefit to the participants.

She told *Clear Talk* that the Department's Hotline Services provide a key channel of communications with participants. It complements the services provided by the Computer Operations Department's Fault Reporting Centre. "They deal with the technical aspects of CCASS operations, and we handle usage, or operational matters," she said.

Ms Hung said the Department's Hotline staff gave personal attention to enquiries from callers. "Unlike some other hotlines, callers speak to one of our trained staff, rather than listen to computer generated voices giving instructions," she said.

"Many of our calls come from newly joined staff in participants' offices who are unfamiliar with CCASS functions, or do not fully understand corporate announcements. We are also very involved in introducing new or enhanced functions.

We also provide statistical information to management about areas of concern to participants; act as a conduit for suggestions and complaints; and provide immediate assistance in contingencies," Ms Hung said.

Ms Hung said, "Through telephone contacts with participants, we noticed that some of the participants are not aware of some existing

functions available in CCACS which can help to streamline their operation.

"Some participants had reported delays in printing large volume of reports in the morning during the recent period of heavy Stock Exchange turnover.

"This would not arise if they used the Overnight Report Distribution service," she said. "This service was introduced in 1994. Participants then had to subscribe to the service, but subscription is no longer required after a terminal enhancement in 1996.



Polyana Hung

"Participants using the service automatically receive CCASS reports printed during the night—as long as they remember to leave their CCASS printer switched on. They can also elect to have the reports downloaded to their PC hard disk, which saves time, space and makes data retrieval easier.

"Another function which is proving very useful for users is SI (Settlement Instruction) Batch Upload. This function is targeted at high SI volume participants, and enables them to prepare SI data in bulk on hard disk or diskette.

"Like Overnight Report Distribution, there is no charge for the service. Participants with a high SI volume only need to apply for the service, and if approved, Hongkong Clearing will give a validation diskette to participants to ensure that their data format meets CCASS requirements," Ms Hung said.

She told *Clear Talk* that the work could be very demanding at times. "However, the telephone calls and letters of appreciation we receive from participants and their staff make it all worthwhile," Ms Hung said.



Reunification Celebration Carnival

A team of ten staff members from Hongkong Clearing participated in a games competition organised by the Hong Kong Financial Community Committee for the Celebration of Reunification of Hong Kong with China in July 1997. Hongkong Clearing's team was the 2nd runner up out of 16 teams.



New head of Systems Development first met Hongkong Clearing nearly nine years ago

It's taken nearly nine years for Derek Fung to come to work for Hongkong Clearing.

He first met the consultants to what was then the Hong Kong Clearing and Depository Project Company Limited when he was a Manager at CDS, the Canadian



Derek Fung

Depository for Securities in Toronto, which provides nation wide clearing services for the Toronto and Montreal exchanges.

The Project Company consulted the Canadian

company as part of its research into securities clearing and settlement systems.

Hong Kong born Mr Fung completed his secondary education in Canada before going to the University of Toronto, where he graduated with a degree in Computer Sciences. He worked in Canada for ten years before returning to Hong Kong eight years ago.

He first worked in Hong Kong with a leading bank as a System Manager of the Custodian Services Department and the Business Information Unit. He then worked as Assistant Director, Information Technology, at an employee benefits consultancy before joining Hongkong Clearing as Assistant Director and Head of the Systems Development Department in July this year.

Mr Fung says his experience in Canada has made settling in at Hongkong Clearing easier as their systems and practices are very similar and conform to international industry standards.

CCASS STATISTICS

The market continued its upward trend in the month of June and July. Hang Seng Index closed at its new height at 16,365 on 31 July 1997.

Exchange Trades

In June, an average of 169,585 trades were processed daily in CCASS, involving nearly 9.7 billion shares with a value of \$21.0 billion. In July, the daily average trades handled by CCASS rose to 178,168, involving 10.7 billion shares with a value of \$19.5 billion.

During the months of June and July, 99.88 per cent of Exchange trades were processed daily in CCASS.

Netting efficiency of CNS trades

In June, an average of 167,111 Exchange trades valued at \$19.9 billion went through CCASS daily for CNS. An average of 15.69 per cent of the novated contracts created were due for settlement daily.

The daily average number of trades went through CCASS for CNS in July increased to 175,680 valued at \$18.5 billion. After novation and netting, 15.84 per cent of the novated contracts were due for settlement daily.

In June, novated contracts generated a daily average of \$39.7 billion in money obligations which were netted to \$6.9 billion. Daily average funds netting efficiency was 82.39 per cent. In July, \$37.1 billion a day in money obligations were netted to \$5.8 billion. Daily average funds netting efficiency was 84.33 per cent.

Settlement efficiency of CNS stock positions

The daily average settlement efficiency rate of CNS stock positions for June was 95.32 per cent on the due day and 99.79 per cent on the settlement day following the due day. The corresponding figures for July were 95.56 per cent and 99.81 per cent.

Settlement Instructions (SIs)

In June, an average of 37,444 SIs were settled daily in CCASS, involving 9.6 billion shares with a market value of \$40.1 billion.

In July, the figures dropped to 36,586 SIs, involving 9.1 billion shares with a value of \$34.4 billion.

Depository transactions

In June, the CCASS Depository handled an average of 2,895 deposit and withdrawal transactions per business day. The number of share certificates processed daily amounted to 60,000. The corresponding figures for July were 2,412 transactions involving 49,000 share certificates per business day.

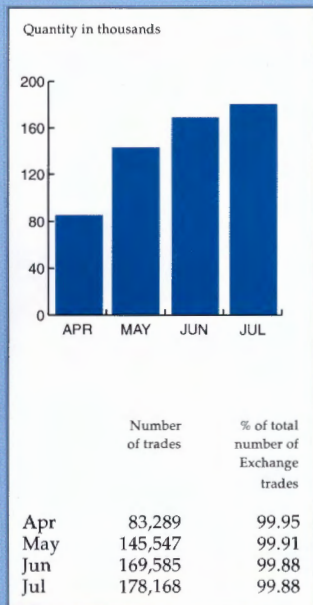
As at the end of July, 1,116 stocks had been admitted into CCASS for clearing and settlement. About 367.5 billion shares were under the custody of the CCASS Depository, representing 54.77 per cent of the total number of shares of the admitted stocks in issue. The total market value of the shares was \$1,596.9 billion, representing 33.18 per cent of the total market capitalisation of the admitted stocks.

Participants

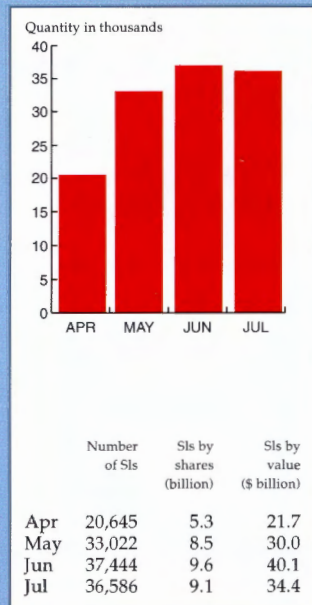
At the end of July, there were 565 CCASS participants, comprising 494 broker participants, 63 custodian participants, seven stock pledgee participants and one clearing agency.

OPERATIONS HIGHLIGHTS (APR-JUL 97)

Average daily Stock Exchange trades processed in CCASS
(including CNS trades, isolated trades and cross trades)



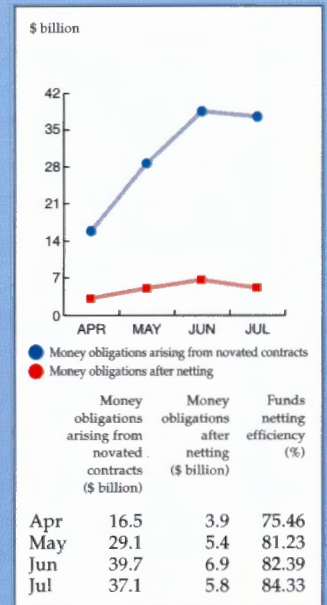
Average daily settlement instructions (SIs) settled in CCASS
(both receiving and delivering SIs are counted)



Securities under CCASS custody
(balances at the end of each month)



Average daily funds netting efficiency under CNS



Quick Quiz

1. What was the increase of the Guarantee Fund during the past 12 months?

2. Which interest rate does Hongkong Clearing use to calculate the interest paid to broker participants on marks collected?

3. What is the allocation algorithm for long CNS stock positions?

Answers on page 10.

CCASS NOTICE BOARD

Voting Instructions

In Annual General Meetings of listed companies, Hongkong Clearing will vote on behalf of the owners of the shares deposited in CCASS. Corporate voting instructions are automatically generated to participants in accordance with their shareholdings held in CCASS. A summary of the operational steps for participants to vote in CCASS follows:-

STEP 1

Choose MAINTAIN VOTING INSTRUCTION from Participant Menu Screen. Then choose CHANGE VOTING INSTRUCTION. The CHANGE VOTING INSTRUCTION PROMPT screen appears.

STEP 2

Input voting instruction number which can be found via the ENQUIRE CORPORATE VOTING INSTRUCTION and press <ENTER>.

If you forget the instruction numbers, input selection criteria such as stock code, announcement numbers or voting instruction status (Blank-all, P-pending, A-authorized, S-system processed, C-cancelled), and press <ENTER>. Then, choose vot-

ing instruction by typing "S" and press <ENTER>.

The CHANGE VOTING INSTRUCTION DETAIL screen appears.

STEP 3

Input or update voting details. Enter the number FOR, AGAINST or ABSTAIN for each resolution.

Remember that the total voting quantity for each resolution cannot exceed the shareholdings available for voting and any remaining votes will be considered as ABSTAIN.

STEP 4

Authorise your voting instructions within the voting period using the AUTHORISE VOTING INSTRUCTION function. Voting instructions cannot be amended once authorised and status of the voting instruction will be changed from *Pending* to *Authorised* and finally to *System Processed* the next day.

Voting instructions not authorised on or before deadline are treated as ABSTAIN votes.

DIRECT STOCK ADMISSIONS

During the two months of July and August 1997, a total of 117 eligible new issues were admitted to CCASS of which 8 issues adopted Jumbo Certificate arrangement.

	Ordinary Shares	Preference Shares	Registered Warrants	Debts	Rights	Total
Eligible new issues listed on the Stock Exchange and admitted to CCASS	7	-	104	-	6	117
Issues adopted Jumbo Certificate arrangement	7	-	1	-	N/A	8

Quick Quiz

1. As at 31 August 1997, the Guarantee Fund totalled \$358 million, representing an increase of \$113 million, or 46 per cent over the total on the same day in 1996. The Fund was composed of the broker participants' \$100 million contribution, \$158 million

in insurance cover and a \$100 million transfer from Hongkong Clearing's reserves.

- The prevailing savings rate.
- The allocation algorithm is based on the following order: age (oldest first), position price (highest), position size (smallest) and random.