

# **SURVEY ON THE USE OF ONLINE FACILITIES FOR TRADING PURPOSES BY DEALERS REGISTERED WITH THE COMMISSION AS AT 30 APRIL 2000**

## **EXECUTIVE SUMMARY**

- The use of online trading facilities and the provision of online services is increasing rapidly. The number of online brokers, the number of client accounts and online trading transaction volume have all increased two to three fold in the period from September 1999 (the last survey date) to end April 2000.
- Of the 28 existing online brokers as at end April 2000, 22 are providing online trading facilities in Hong Kong listed securities, two in overseas listed securities (predominantly US securities), two in both Hong Kong and overseas securities, and two in futures contracts.
- Online trading is still in its infancy: turnover constituted only 1.3% of the total market volume for Hong Kong securities in April 2000, and online brokers represented less than 4% of the total number of registered dealers in April 2000.
- Of the 844 registered dealers, 242 indicated an intention to launch online trading facilities within the next 12 months. Most of them are participants of the SEHK and the HKFE.
- Clients trading online are generally individuals and residents in Hong Kong.
- More local stockbrokers are forming strategic alliance with each other to provide online services.
- Most of the online brokers are using Internet and telephones (touch-tone and mobile) to communicate with clients. In addition, most of the online brokers indicated that they are planning to use WAP phones. Some are considering the use of a Personal Data Assistant (“PDA”). Development of online trading facilities is expected to be innovative.
- In view of the rapid developments in online services, more guidance to intermediaries and increased investor education on using online trading facilities will be necessary.

## BACKGROUND

1. In Hong Kong as elsewhere, there is a clear trend for brokers to offer online services in conjunction with the traditional modes of operation. To gauge the extent on the use of online facilities for trading and advisory services, to identify potential regulatory issues and to assist in planning our use of resources, the SFC has recently surveyed all registered securities and commodities dealers (a total of 844 brokers). These companies were requested to indicate whether they have current online trading operations, in general terms the nature of those operations and whether they are planning to provide online trading services in the next 12 months.
2. The SFC had previously performed a survey of 23 companies which, according to our records as at September 1999, used or intended to use online trading facilities in the conduct of their business. Only 10 out of the 23 brokers were found to have commenced using online facilities at that time. The current survey updates and extends that information.
3. The detailed findings of the current survey are summarised below.

### A SNAPSHOT ON THE CURRENT STATUS OF ONLINE TRADING BROKERAGES

4. The survey shows that as at 30 April 2000, there were 28 brokers providing online trading facilities to clients. 22 brokers provided online trading facilities in Hong Kong securities only. Two brokers provided online trading facilities in US securities only. Two brokers provided online trading facilities in both Hong Kong and overseas securities. The other two brokers were engaged in futures trading. A summary of the statistics is as follows:

	<b>Total number of brokers</b>
With current online trading operations	28
Proposed online trading operations	242
No intention to have online trading operations in the next 12 months	<u>574</u>
Total	<u>844</u>

5. The survey found that 242 brokers intended to provide online services in the next 12 months. Among the 242 brokers who have stated an intention to provide online trading services, four commenced business during May and June. With so many brokers expected to begin to offer online services in the next few months, the SFC has issued a letter asking for information about the new services, as they become available.

6. The above statistics show that the number of dealers with current online operations is relatively small as a percentage of the industry (less than 4%). The use of online trading facilities is still in its infancy.
7. On the other hand, it is also interesting to note that there are 574 dealers with no intention to provide online trading. These brokers are generally small brokers.

### COMPARISION WITH RESULTS IN SEPTEMBER 1999

8. Although online trading in Hong Kong is still in its infancy, the number of brokers providing online services is increasing fast. This can be seen in the following data:

	<b>Sept 1999</b>	<b>April 2000</b>	<b>Change</b>
Number of brokers with current online trading operations	<u>10</u>	<u>28</u>	+180%
Online trading transaction volume in HK securities	<u>\$523M</u>	<u>\$2,407M</u>	+360%
Total online trading transaction volume	<u>\$2,863M</u>	<u>\$8,735M</u>	+205%
Number of online trading accounts	<u>8,876</u>	<u>37,382</u>	+321%

9. For the 10 online brokers included in the survey as of September 1999, we noted that there had been a significant increase in their trading volume and in the number of trading accounts during the period from September 1999 to April 2000.
10. We also noted that online dealing in US securities was dominated by one firm which accounted for 98% of the US securities traded online in April 2000. The four major market players in Hong Kong online securities trading accounted for 83% of the total market turnover trading through online.

### BUSINESS ACTIVITIES

11. For the dealers that are currently providing or intending to provide online trading facilities, the types of services on offer are summarised in Appendix 1. As shown in the Appendix, securities dealing is the main service provided online. Other services such as provision of research information and real time price quotation are provided as auxiliary services to the securities dealing business.

12. It is also interesting to note that amongst the 26 dealers that have current online operations in securities dealing, half of them have or are planning to launch securities offering and margin financing business online.

## BUSINESS VOLUME

13. For the 28 dealers that reported that they have current online trading operations, the aggregate business volume for April 2000 is summarised as follows:

<b>Product</b>	<b>HK Market HK\$'M</b>	<b>Overseas Market HK\$'M</b>	<b>Total HK\$'M</b>
Equities, equities options and warrants	2,406	6,328	8,734
Futures and futures options	--	--	--
Funds	1		1
Total online transaction volume in April 2000	<u>2,407</u>	<u>6,328</u>	<u>8,735</u>
Turnover of SEHK in April 2000	187,952		
% of online transaction in Hong Kong equities, equities options and warrants over SEHK's turnover	1.3%		

14. We can see that dealings in overseas securities, mainly in the US securities, accounted for more than 70% of the current online trading volume. For the Hong Kong securities market, online trading constituted an insignificant portion of market turnover.

## CLIENTELE

15. Apart from one broker that only serves institutional clients through its dedicated trading system, clients of other online brokers are predominantly individuals and residents in Hong Kong.

## MODE OF OPERATION

### Trading hours

16. Of the 28 online brokers, 18 have systems that can accept client orders 24 hours a day. The remaining 10 brokers (all trading Hong Kong securities only) can accept orders during the trading hours of the SEHK. Operation hours for execution will depend on the respective exchanges' trading hours.

### Media for communicating with clients

17. The commonly used media to receive client orders include Internet and phones (touch-tone and mobile phones). Further, some brokers that are connected with the banks allow clients to place an order via a touch-tone telephone system similar to that of the electronic phone banking system. In addition, 19 online brokers indicated that they are planning to use WAP phones. Two brokers are also considering services provided through use of a Personal Data Assistant (PDA). We expect, therefore, that the media to communicate with clients will be varied, innovative and will include wireless applications.

### Online trading facilities

18. All the online facilities of the 28 online brokers can handle client orders and account instructions, send confirmation to clients in relation to execution and order cancellation and provide “real time” status reports concerning the client’s account. Further, the brokers’ systems can generally perform some checks on the client account details, such as cash and stock balances before the execution of clients’ orders.
19. In addition, all of the existing online brokers reported that their systems maintain a time sequenced audit trail.

### System development and security control

20. In relation to the systems used by the 28 existing online brokers, nine were developed in-house by the broker and/or a group company related to the broker. Another 18 brokers’ systems were developed by external vendors. The use of common external vendors amongst brokers was not prevalent with 11 vendors serving 18 online brokers. Further, one broker reported that its system was developed by both their group company and external vendors.
21. Information was obtained on security measures used in online trading facilities, including user IDs and passwords, SSL security standards, encryption and firewalls. All online brokers make use of user IDs and passwords to control clients’ access to the online trading system. However, the use of authentication technology is not common.
22. Eleven online brokers provide more than one media for receiving clients’ order instructions online, e.g. a combination of phone (touch-tone or mobile) and Internet. The security measures for different media used for online trading differ and may affect the level of security that the investors are subject to.
23. This matter of system development and hybrid systems has implications for systems support, security control and the capacity and willingness of vendors and others to provide after sales services. It has already emerged as an issue in SFC inspection and will be considered further in current series of special inspection visits being undertaken by the SFC.

### System Capacity and Contingency plans

24. All online brokers reported that their peak numbers of transactions per minute during the past six months were well below their system's maximum capacity. The online broker with the highest utilization of system capacity reported peak number of transactions per minutes (300 transactions) accounted for 60% of the maximum transactions (500 transactions) that its online system could process.
25. Most of the brokers reported that they have emergency back up for systems, power source, staffing, monitoring and technical support. However, we noted that some of the brokers' contingency plans were tested only during the transition to Year 2000. We are concerned that the contingency plan testing may not cover all aspects of the system, given the rapid and ongoing enhancement of the system requirements.
26. Eleven brokers reported that they have encountered some system failures during the past six months, mainly failure in communication lines and web servers. However, they claimed that the problems were fixed within a short period of time.
27. Again, these questions of the robustness of systems, the capacity to meet demand generated by very aggressive marketing and the adequacy of contingency plans are being reviewed in the special round of SFC inspections now underway. The experience to date indicates that the industry will need to do more to address risks in these areas.

### **FUTURE DEVELOPMENTS**

#### Preparation for AMS/3

28. For the 26 online securities brokers, all but two responded that they were planning to interface their online trading facilities with AMS/3. For the 242 brokers that intended to provide online trading facilities, 128 brokers or 53% indicated that they were planning an AMS/3 interface. It appears that execution via AMS/3 will become popular. The potential increase in turnover cannot be underestimated.

#### Turnover and system capacity

29. For those brokers with current online trading operations or those planning them within the next 12 months, we noted that generally the firms expected their average daily turnover would increase in the range of 5% to 40% after the launch of AMS/3. Based on these estimations, 14 companies expected their systems, including accounting records and information for clients, processing of clients' instructions, order execution and settlement might not be able to cope with the expected increase in capacity. However, all of them were planning to upgrade their systems before the launch of AMS/3. Information from international houses with experience in markets where Internet trading services are more common suggests that there will be a tendency to underestimate the capacity demands.

### Strategic alliance

30. Based on the survey, we note that more local brokers, in particular, the small to medium-sized firms, are planning to form strategic alliances to offer securities dealing online. Some small to medium-sized firms will form strategic alliances in offering online trading facilities in securities to remain competitive in the market.
31. Those alliances may well have been forced upon brokers in any event by increased competition and, generally, we believe they are to be welcomed as strengthening the industry. The exact shape of the alliances is yet to emerge and it is unclear whether the traditional concerns about sharing client details will be overcome. There may be some regulatory and supervisory issues that arise out of these alliances and the SFC will monitor the development.

### **COMMENTS FROM THE INDUSTRY**

32. Based on the questionnaires completed by the dealers with current online operations, comments in relation to the future development of online trading include concerns or requests in the following areas:
  - negotiable commission rate, and
  - more guidelines from the regulators over online trading.
33. The first is a matter that has recently been reviewed by the SEHK. The latter is the subject of ongoing work within the Commission.

### **ADDITIONAL REGULATORY ISSUES IDENTIFIED**

#### Suitability of financial products offered to clients

34. Almost all brokers with current online trading operation rely on prior disclosure in the client agreement in relation to the risk of dealing in the products involved. Only one online broker addresses this issue by requiring clients to pass a qualification test before permitting clients to trade online in their selected products.

#### Establishment of the true and full identity of a client

35. For the 28 online brokers, 13 of them require the clients to open accounts in person. Two brokers associated with banks rely on the banks to vet clients' identity. For those dealers who allow clients to open accounts without attending in person generally require clients to provide proof of identity, address and bank account details. For better control, some brokers require their clients to have account opening documents endorsed by lawyers, accountants or a notary public or contact the clients by phone to confirm the details. However, we noted that some brokers merely require clients to submit a copy of proof of identity without third party endorsement.

## **FURTHER WORK**

36. There is a need for the Commission to set out more comprehensive guidelines on online trading, particularly in the following aspects:

- account opening and digital signature,
- suitability of financial products offered to clients, and
- risk disclosure to clients who use online trading facilities.

These issues are being taken up in the SFC's Online Trading Working Group which brings together industry participants under the Chairmanship of the SFC. Several other important policy matters have also been identified in the inspection noted in paragraph 23. The most important of these issues concern system security, system capacity and system integrity. These issues will be taken up by the SFC in its special inspection programme.

## Appendix 1

Summary of services being/ to be provided by dealers with current online operation and dealers with intention to have online trading facilities

<b>Types of services</b>	<b>Number of dealers with online trading facilities</b>	<b>Number of dealers with intention to have online trading facilities</b>
Securities dealing	26	146
Real time price quotation for financial instruments	21	112
Research information	15	95
Provision of investment advice	5	47
Securities offers e.g. Initial Public Offerings, Placements, etc.	5	59
Securities Margin Financing	5	69
Futures dealing	2	48
Funds dealing	2	20
Stock borrowing and lending	1	10
Trade matching facilities for financial instruments	--	13