Journal of Economics Bibliography
www.kspjournals.org
Volume 2 December 2015 Issue 4

An Overview Online Securities Trading Service in Hong Kong

By Tai-Yuen HON [†]

Abstract. The objective of this study is to examine the online securities trading service in Hong Kong. The upward trend in the contribution of retail online trading to total turnover value of online brokers continued, reaching 29% in 2013/14. However, international standards of anti-money laundering and counter-terrorist financing are set by the Financial Action Task Force. We expect that the client opening procedures (especially anti-money laundering) cannot satisfy both U.S. Securities and Exchange Commission and Hong Kong Securities and Futures Commission regulators. Some online brokerages will close their business in Hong Kong.
Keywords. Online Securities, Anti-money laundering, Hong Kong.
JEL. G20, G24.

1. Introduction

The number of do-it-yourself online investors has grown at a remarkable rate since the first electronic brokerage opened its virtual doors in 1995. Today, there are over 50 online brokerages where you can open an account in US. The US market is highly competitive. The online securities trading is dominated by four brokers[i]. To maintain high growth, large on-line brokers like TD Ameritrade, Options House, E*Trade and Scot trade are seeking to export online trading expertise and branding prowess gleaned at US to foreign lands. In 1999, the Hong Kong stock market was very fragmented, with more than 600 brokers conducting about 100,000 trades a day. Stock Exchange of Hong Kong Limited (SEHK[ii]) surveys[iii] indicate that the principal business for these brokers were the provision of agency service to their customers and thus commission earned from the equity brokerage was their major source of income. The online trading business was in infancy in Hong Kong in 1999. A dimension evolved when the SEHK introduced the third generation of the Automatic Order Matching & Execution System (AMS/3) by the end of 2000. This would provide a straight through trading platform that allowed investors to place orders anywhere and anytime through channels like the Mobile and Internet. Trade on the main board and growth enterprise marketwere effected through the Automatic Order Matching and Execution System (AMS) which displayed real price information and automatically matches buy or sell orders on a price/time basis. The present system, AMS/3.8, which was rolled out on 5 December 2011. AMS/3.8 system upgrade aims to achieve an initial capacity of 30,000 orders per second (scalable to 150,000 orders per second if necessary), as well as an average order processing latency of 9 milliseconds, to deliver significant advancement in the capacity and performance

† Hong Kong Shue Yan University, Department of Economics and Finance, 10 Wai Tsui Crescent, Braemar Hill Road, North Point, Hong Kong, China.
☎. (852) 2570 7110 ✉. tyhon@hksyu.edu

of the securities market infrastructure. The objective of this study is to examine the online securities trading service in Hong Kong.

This paper is organized as follows. Section 2 reviews the related literature, followed by Section 3 examines online securities trading in Hong Kong and the last section contains the conclusion.

2. Literature Review

Feng et al. (2014) found that when a securities broker's online trading system has appropriate Web site quality, users' perceived usefulness increases.When Web site quality meets the users' needs, users are more likely to feel at ease while operating the system. When users attain perceptions of usefulness about a system, they will have positive attitudes towards using it. Users will be more likely to accept an online trading system if they feel the system is easy to operate. If the users have positive attitudes towards using the system, they will be more inclined to use the system.The paradigm shift in the securities market brought by technological advancements seems to be well-received by investors. It has been estimated that around 40 million people in the United Stated utilize computers in trading stocks and other financial instruments because of their efficiency. Another countries that illustrates the warm investor reception for the use of the Internet for stock trading is Korea (Mandocdoc, 2013). Rossignoli et al. (2013) argue that the Italian market has experienced the explosion of online trading, and bank branches are no longer unique or preferential channels that customers use to perform transactions. They thus can identify which business models are emerging and consolidating, the role of technology (e.g. Web 2.0), and a typology of in- and outsourcing models that suit theemerging needs of banks. Srivastava (2011) find that there are several leading companiesinvolved in online stock trading in India. ICICI Direct, Sharekhan, An and Rathi ,Geojit securities, Indiabulls, Religare, Kotak Securities, Motilal Oswal Securities, Reliancemoney, India Infoline.com Securities limited , and IDBI Paisabuilder are themajor players in online Indian stock trading. Ministry of Communications and Information Technology, is of the opinion that the utility and relevance of digital commerce can be well understood by the fact that out of approximately 60 million internet users in India, nearly one third of this number are doing financial transactions over internet. Montazemi et al. (2008) show that the market structure of embedded interpersonal ties enables participants to takeadvantage of information asymmetry for profit taking. As a result, imposition of solely electronic trading systems on the present fixed-income market structure is at odds with the present interfirm market norms and business processes enacted for large transactions among market makers and institutional investors. Teo et al. (2004) conclude that nearly 80% of the Internet stock trading respondents in Singapore preferred using the Internet to trade over conventional means of trading. Stock brokerages could offer security and a premium service guarantee to encourage adoption. For instance, where the security breach is not the fault of clients, brokeragescould reimburse clients for losses incurred, or at least, cap the amount that clients are liable for. In fact, thishas already been practiced by some brokerages, sinceimage and trust are of vital importance to stocktrading in general and to Internet stock trading inparticular. Yang & Fang (2004) indicate that primary service quality dimensions leading to online customer satisfaction, with the exception of ease of use, are closely related to traditional services while key factors leading to dissatisfaction are tied to information systems quality. In addition, major drivers of satisfaction and dissatisfaction are identified at the sub-dimensional level. Konana et al. (2000) find that debate abounds as to whether e-brokerages have increased market efficiency and enhanced the social welfare. E-brokerages provide convenience, encourage increased investor participation, and lead to lower upfront costs. In the long run, they will likely reflect the market's increased efficiency as well. But in the short run, a number of questions remain unanswered—about transparency, investors' misplaced trust, poorly aligned investing incentives and irrational investing behavior. Cohen (2000) reveal that DLJ-Donaldson, Lufkin and Jenrette, one of the major online brokers in the U.S. – has a joint venture with the group led by Sumitomo Bank in Japan, including both Sumitomo and Daiwa group companies. This bank is still in the throes of regrouping and integrating the Daiwa securities companies. The poorly chosen name, DLJ direct SFG, will certainly be replaced with something else once Sumitomo and Daiwa figure out how to work together. Klein et al. (2000) find that many people are no longer willing to pay the premium that is embedded in full-service commissions but are not yet ready to pay separately for investment advice. Pricing for these investors should be based on their levels of assets or on "implicit" revenues, deriving from charges that are typically invisible to the consumer. (Implicit revenues come from sources such as interest rate spreads, in which an institution lends at a higher rate than it pays on its deposits; mutual-fund trailers, the fees that funds pay to brokers, based on the assets the brokers place with them; sales of proprietary products; and referral fees.) Alternatively, investors could pay a monthly or annual fee for investment advice as well as a limited number of trades. Firm sthat succeeded in portraying their investment advice as a professional servicecould even charge their customers by the hour.

3. Online Securities Trading in Hong Kong

We examined brokers in the US and Korea who were the first movers in North America and Asia and have launched their online securities trading since early 1995 and 1997. The Hong Kong market had been prepared for the launch of online services since end 2000. The observations and experience of US and Korea markets may give valuable guidance to the Hong Kong market. A study[iv] initiated by SEHK in late 1998 on 'the development of on-line service on the Internet platform' was conducted by Professor Henry Birdseye Weil, a senior lecturer at Massachusetts Institute of Technology Sloan School of Management. The study recommended that 'by proactively embracing and exploiting Internet technology', SEHK would lead the development of a virtual stock market and would position itself as one of the major stock exchanges. There were four prime benefits that induce customers to go online[v] according to Karen Buck, managing director of T.D. Waterhouse in Hong Kong: empowerment to let customer have control, convenience to place order, brokers' cost savings and high speed of order execution. With the AMS/2 stage, two key benefits are not yet available. They are speed of execution and the reduction of commission charge resulting from brokers' cost savings. However, a dimension would be evolved with the introduction of the AMS/3 automated execution system, and with the deregulation of the 0.25% minimum brokerage commission in April 2002. The US was the first mover in online trading back in early 1995. In Asia, Korea was the first mover and started two years later. Hong Kong market was ready for the launch of online services by end of 2000. Brokers in Hong Kong might be beneficial from the experience of US and Korea markets (see Table 1).

Table 1. *US and Korea online securities trading experience*

	First Start	Growth Last year	Market Share	# of Internet Brokers	Top Brokers	Commission Decreased By
US	95'	32% [1]	40%[3]	160	6 / 80%	70%[5]

Korea	97'	410%[2]	60%[4]	29	5 / 65%	85%[6]

(1) Online accounts 98' – 99'	(4) Total trading volume mid 00'
(2) % of online accounts 98'- 99'	(5) 96' –98'
(3) NYSE & NASDAQ order flow mid 00'	(6) 98'- 99'

Source: Compiled by Hon & Hon (2001, p.15) from materials of Securities &Futures Commission seminars regarding Internet Trading 2000

There were a number of brokers providing Internet trading services to customers. Only a few large players with substantial capital, expertise in management and IT investment were dominant in the markets. Successful online trading was heavily dependent on maintaining cutting edge technology. The development of such technology was complex and time-consuming but economies of scale were large. An analysis of major players in US is given below (see Table 2):

Table 2. *Major players in US in 2000*

	Schwab	E*Trade	TD Waterhouse	Fidelity	Ameri Trade	Datek
Trades per day	293,318	214,573	182,336	156,583	129,709	121,261
Marker Share	21.4%	15.7%	13.3%	11.4%	9.5%	8.8%

Source: Hon & Hon (2001, p.16) from US Bancorp Piper Jaffray Inc 1st Quarter 2000

Online trading facilitates cost savings among large brokers as substantial manual work in the back office was reduced. This provided rooms for reduction in commission charges to execute transactions which eventually benefits customers. In addition, commission charges to customers in US market were liberalized. The minimum commission rule in Korea had been abolished since 1999. Online brokers in US and Korea have had commission ' price wars' to gain market share, but, as weaker brokers exited or were forced to merge with others, commissions had stabilized. A comparison of commission charges for six largest brokers in the US is given below (see Table 3):

Table 3. A comparison of commission charges for six largest brokers in the US in 2000

As of Mar 00'	Schwab	E*Trade	Fidelity	Ameri Trade	DLJ	TD Waterhouse
Commission to trade 800 shares	$29.95	$14.95	$25	$8	$20	$12

Source: Hon & Hon (2001, p.17) from E*TRADE Guide to Online Investing

Ody (2011) find that Fidelity and TD Ameritrade[vi] were number one in in rankings of 14 top discounters in 2011. From commissions to customer service to whether customers can purchase stocks overseas was of supreme importance in determining who ends up on top. One of the lessons rank-and-file investors seem to have drawn from the brutal 2007-09 bear market was that professionals can lose money just as easily as they can. A corollary was that keeping costs down is crucial. As a results, many had decided to take investing into their own hands.

The Hong Kong stock market was very fragmented, with more than 600 SEHK brokers conducting about 100,000 trades a day in 1999. No one seemed to have a commanding market share, and no one had really established a net presence of any significance. Two formal surveys conducted by Securities and Futures Commission (SFC) on Hong Kong online trading[vii] as of September 1999 and April 2000 were released. We reviewed the online market situations, by reference to the key findings from the surveys together with some market news from several local newspapers, business journals and discussions with market analysts up to December 2000 (see Table 4).

Table 4. Online market situations in Hong Kong

	First Start	Growth Last year	Market Share	# of Internet Brokers	Top Brokers	Commission Decreased by
Hong Kong	98'	480%	1.3%	28	4 / 83%	----

Source: Hon & Hon (2001, page 18) SFC survey on Hong Kong online trading as of 30 April 2000

Today, the Hong Kong stock market is mature. Stock (Securities products) included equities (i.e. shares of listed companies), warrants, Callable Bull Bear Contracts (CBBCs), Exchange Traded Funds (ETFs), Real Estate Investment Trusts (REITs), bonds and other cash market products listed or traded on Hong Kong Exchange (HKEx). Hong Kong Exchange (2015a) report that the uptrend for online stock traders continued in 2014. Online stock traders accounted for 73% of all stock traders in 2014 (up from 69% in 2011), the highest in record. Among online stock traders, the proportion who traded online all the time continued to increase — 75% in 2014, up further from 73% in 2011. A typical online stock trader was 44 years old, with tertiary or above education, a monthly personal income of about HK$22,500 and a monthly household income of HK$45,000. Online stock traders tended to have younger individuals and individuals of higher education level and higher work status, a higher monthly personal income and household income. As a whole, online stock traders contributed the majority of total stock trading value (78%). In 2013/14, 247 Stock Exchange Participants (EPs) (57% of all responding EPs) reported (HKEx, 2015b) themselves as online brokers, compared to 250 EPs or 55% of responding EPs in 2012/13. The implied value of retail online trading increased by 19% in 2013/14, compared to the 5% increase in the total market turnover. Retail online trading accounted for 38% of total retail investor trading (compared to 39% in 2012/13) and 9% in total market turnover (compared to 8% in 2012/13). The upward trend in the contribution of retail online trading to total turnover value of online brokers continued, reaching 29% in 2013/14. International standards of anti-money laundering[viii] and counter-terrorist financing are set by the Financial Action Task Force (FATF). As a member of the FATF, Hong Kong implements recommendations promulgated by this inter-government body to combat money laundering and terrorist financing. In Hong Kong, legislation dealing with money laundering and terrorist financing includes: the Anti-Money Laundering and Counter-Terrorist Financing (Financial Institutions) Ordinance (AMLO), the Drug Trafficking (Recovery of Proceeds) Ordinance (DTROP), the Organized and Serious Crimes Ordinance (OSCO) and the United Nations (Anti-Terrorism Measures) Ordinance (UNATMO).The AMLO, which came into effect on 1 April 2012, imposes on financial institutions requirements regarding customer due diligence and record-keeping whereas the DTROP, OSCO and UNATMO require reporting of suspicious transactions regarding money laundering or terrorist financing. People residing in Hong Kong are free to seek out and to take advantage of financial services and products made available over the Internet[ix]. However, the provision of such services and products may fall within the SFC's purview and hence trigger regulatory concern. The SFC will not seek to regulate activities that are conducted from outside Hong Kong and over the Internet, provided that such activities are not targeted at persons residing in Hong Kong and are not detrimental to the interests of the Hong Kong investing public or to the market integrity of Hong Kong (Securities and Futures Commission, 2013). If investors want to look for the cheapest broker[x] in Hong Kong to buy Hong Kong stocks, the going rate from local firms is about 0.15-0.3%

with a minimum of HK$80-100. However, the lowest advertised rate is the local division of US group Interactive Brokers[xi], at 0.088% with a minimum of HK$18, while Standard Chartered charges 0.2% online and 0.3% by phone with no minimum.On-line trading is mature industry and is expected to be less-profitable in Hong Kong. The reason are the stage at saturation of penetration for personal computers and Internet Usage, the mature of market infrastructure, the dominant players (such as BOCI Securities, DBS Vickers, HSBC, KGI Securities, Phillip Securities Hong Kong), the commission reregulation, the technological sophistication (i.e.AMS/3.8) of the regionand the client opening procedures (especially anti money laundering) cannot satisfy both U.S. Securities Exchange Commission and Hong Kong Securities and Futures Commission regulators.We expect that some online brokerages will close their businessin Hong Kong.

4. Conclusion

The objective of this study is to examine the online securities trading service in Hong Kong. Demand, market acceptance for services and products are at the stage of saturation of penetration. The market for online securities services is mature in Hong Kong. International standards of anti-money laundering and counter-terrorist financing are set by the Financial Action Task Force. The client opening procedures (especially anti money laundering) cannot satisfy both U.S. Securities Exchange Commission and Hong Kong Securities and Futures Commission regulators. Some online brokerage companies will close their business in Hong Kong. However, system integrity in areas of security, reliability, capacity and contingency remains the highest concerns to the regulators and customers. To enhance the investor protection, issues under the clarification of client agreements, prominent warning message to customers and client priority should also be properly addressed. The limitation is that the study is based on documentary materials; for further investigation it might be useful to develop in-depth interviews with key figures involved in the implementation of business models.

Notes

[i] For details, please visitBest Online Stock Trading Brokers for 2015 at: http://www.thesimpledollar.com/best-online-stock-trading-brokers/

[ii] Under the reform, The Stock Exchange of Hong Kong Limited (SEHK), Hong Kong Futures Exchange Limited (HKFE) demutualized and together with Hong Kong Securities Clearing Company Limited (HKSCC), merged under a single holding company, HKEx. This was achieved by the approval of the Schemes of Arrangements of SEHK and HKFE at their respective general meetings on 27 September 1999, and which were then approved by the Court on 11 October 1999. The merger of the three institutions took operational effect on 6 March 2000, and HKEx listed itself on SEHK by introduction on 27 June 2000.

[iii] SEHK members' transaction surveys (1995 –1999), SEHK Library, (30 September).

[iv] Henry Birdseye Weil (1998). Conclusions and Recommendations for Hong Kong , SEHK Reports : Internet Investment Services, November 1-24

[v] Lachlan Colquhoun (2000). Online Trading, Hong Kong Securities Journal, Vol 1 Issue 2 Third Quarter,5 –9.

[vi] On January 24, 2006, Ameritrade Holding Corporation acquired TD Waterhouse USA from TD Bank Financial Group.Following the acquisition, it renamed itself TD Ameritrade. TD Ameritrade is one of the largest online brokerages.

[vii] Key findings (2000) , Survey on the use of online facilities for trading purposes by dealers, as at 30 September 1999 and 30 April 2000, SFC Survey

[viii] See Anti-money laundering & counter-terrorist financing in Hong Kong Securities and Futures Commission website.

[ix] Reference: Guidance Note on Internet Regulation

[x] For details, please visit the International Investor at: http://the-international-investor.com/comparison-tables/hong-kong-international-stock-brokers

[xi] Interactive Brokers is a US-based firm with registered offices in a number of other countries, including the UK and Hong Kong, and is one of two genuinely global retail brokerages along with Saxo Bank. The firm offers extremely low-cost Direct Market Access to a number of international exchanges in Asia, Europe and North America.

Reference

Cohen, A. (2000). Betting the house? Mutual funds go online in Japan. *J@pan Inc.* January, 26-30.

Feng, T.T., Tien, C., Feng Z.Y. & Lai, P. J. (2014). Web site quality and online trading influences on customer acceptanceof securities brokers. *Asia Pacific Management Review*, 19(1), 25-45. doi. 10.6126/APMR.2014.19.1.02

Hon, K. & Hon, D. (2001). The readiness of launching online securities trading service in Hong Kong. *Working Paper Series*, Economics Department, Hong Kong Shue Yan College, December, 1-29.

Hong Kong Exchange and Clearing Limited, (2015a). HKEx Retail Investor Survey 2014. Research and Policy, 1-66.

Hong Kong Exchange and Clearing Limited, (2015b). Cash Market Transaction Survey 2013/14. February, 1-18.

Klein, C. J., Malik, N. & Warren, D. (2000). Beyond day trading. *The McKinsey Quarterly*, 3, 34-41.

Konana, P., Menon, N.M., & Balasubramanian, S. (2000). The implications of online investing. *Communication of the ACM*, 43(1), 35-41.

Mandocdoc, D.K.C. (2013). A complement to the technological change in the exchange: Distressed securities market participants and investor protection. *Ateneo Law Journal*, 57, 1202-1218.

Montazemi, A. R., Siam, J.J. & Esfahanipour, A. (2008). Effect of network relations on the adoption of electronic trading systems. *Journal of Management Information Systems*, 25(1), 233-266. doi. 10.2753/MIS0742-1222250109

Ody, E. (2011). The best of the online brokers. *Kiplinger's Personal Finance*, 34-37.

Rossignoli, C., Zardini, A. & Cantoni, F. (2013). When customer behaviours change, should banks' approaches to online trading stay the same? *Journal of Internet Banking and Commerce*, 18(2), 2-16.

Securities and Futures Commission, (2013).CIS *Internet Guidance Note*, (Guidance Note for Persons Advertisingor Offering Collective Investment Schemeson the Internet), April, second edition, 1-7.

Srivastava, S., (2011). Impact of internet growth on the online stock trading in India. *Journal of Internet Banking and Commerce*, 6(3), 1-10.

Teo, T.S.H., Tan, M. & Peck, S.N. (2004). Adopters and non-adopters of internet stock trading in Singapore. *Behaviour & Information Technology*, 23(3), 211-223. doi. 10.1080/01449290410001685402

Yang, Z., & Fang, X. (2004).Online Service Quality Dimensions and Their Relationships with SatisfactionA Content Analysis of Customer Reviews of Securities Brokerage Services.*International Journal of Service Industry Management*, 15(3), 302-326. doi. 10.1108/09564230410540953