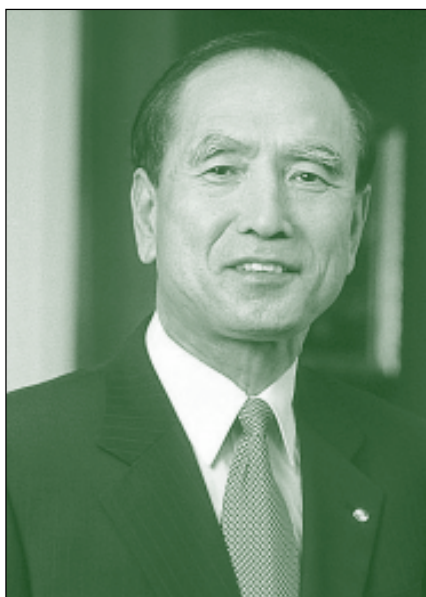


## SECTION 4 : INTERNATIONAL PERSPECTIVES

**Yung-Joo Kang**  
*Chairman & CEO*  
Korea Stock Exchange



Yung- Joo Kang is the Chairman and CEO of Korea Stock Exchange. A senior civil servant, he held several distinguished positions earlier, which include, Member, Monetary Policy Committee of the Bank of Korea; Auditor, the Bank of Korea; Commissioner, National Tax Tribunal, Ministry of Finance and Economy; Financial Attache of Korean Embassy in Paris and Brussels.

# Growth of On-line Trading

## KOREA STOCK EXCHANGE

The rapidly advancing technology, particularly the Internet, has drastically changed the social and economic landscapes and every aspect of our daily lives. In the securities industry, the Internet has facilitated on-line trading, changing the way the market works, as well as the way the investors access the market. Having taken advantage of information technology at an opportune time, Korea has emerged as a front-running country of on-line trading in the global securities markets. I am pleased to share Korean experiences in fostering on-line trading.

“On-line trading” is broadly defined as a trading mechanism where investors place orders and confirm trading results via electronic communication channels, such as the Internet, mobile phones, and Personal Digital Assistants (PDA). In Korea, the whole process of securities transactions, from order placement and routing, order execution, to trade confirmation, is fully automated, thus enabling the investors who have placed orders to confirm their trading results within a few seconds.

### Development of On-line Trading

On-line trading in Korea was introduced in 1997. With the revision of the Securities and Exchange Act (SEA) in January 1997, order placement through electronic communications channels was allowed. Previously, securities companies had to receive orders from their customers in a form of document or through telephone or fax. LG and Daewoo securities companies led the introduction of the Internet-based on-line trading by launching in-house Home Trading Systems (HTS) in April 1997.

Initially, on-line trading was not well received by investors, as the concept of e-commerce was new to them. Once the investors recognized its advantages, however, on-line trading flourished rapidly, especially among individual investors. The portion of on-line trading on the Korean stock markets, including the KSE and KOSDAQ, was merely 2.9 percent in 1998, but it jumped to 25.4 percent in 1999, 55.9 percent in 2000, and 66.6 percent in 2001. The trading value of on-line trading continued to grow in 2002, but the market share slightly decreased to 64.3 percent.

In terms of trading value, the usage of on-line trading in Korea is the highest in the world. In Korea, on-line trading is mostly used by individual investors. Equity derivatives are traded on-line: The portions of on-line trading in index futures and options markets are 45.5 percent and 55.8 percent, respectively. The number of on-line accounts has increased steadily, reaching 5.3 million or 66.4% of total number of accounts at the end of 2002. The Internet is the tool that is most widely used in Korea for on-line trading. Less than five percent of the online trading is made by other means, such as PDA, ARS, and mobile phones. Of 42 domestic and 17 foreign securities firms in Korea, 35 domestic securities firms are offering on-line trading services as an extension of traditional businesses. No foreign firm in Korea offers on-line trading service.

### Factors behind the Drastic Growth of On-line Trading

The drastic growth of on-line trading in Korea did not happen by chance. Rather, it is a product of the joint efforts of the government, market operators, securities companies, investors, etc.

Now, let me elaborate on the key factors that have fostered the growth. First, the rapid growth of Internet-using population in Korea: The government's strong drive in development of the national communications infrastructure has created the foundation for on-line trading, i.e., the computer literate and Internet using population. Since 1995, the Internet-using population in Korea had more than doubled every year until it reached 19 million in 2000. At the end of 2002, 26.3 million Koreans or 59 percent of all Koreans were using Internet, and, more importantly, 10.4 million people subscribed to broad bandwidth Internet network.

Second, the creation of an environment: The government and KSE deregulated the relevant laws and regulations. The government amended the SEA to abolish the provision limiting the place where securities companies could receive orders from their customers in February 1999. The measure led to the appearance of a number of "cyber branches". The KSE fully liberalized the brokerage commissions in September 1997, allowing securities companies to determine their own rates autonomously. The liberalization of brokerage commission triggered a price competition among securities companies, ending up with the reduction of fees for on-line trading. The

lower commission induced more investors to on-line trading, as well as more frequent transactions. Additionally, the KSE increased the bid and ask quotations made available to the public, thereby assisting investors in making informed investment decisions.

Third, automated trading system and enhanced computer infrastructure: The KSE fully automated its trading system in September 1997 and gradually expanded its daily order processing capacity, taking into account the expected increase in trading volume. In order to provide their customers with ready access to information on price and corporate analysis, securities firms increased their investments in system automation. Also, they made use of a variety of tools for on-line trading, including PDA, ARS, and mobile phone, and alliances with commercial banks.

Last but not least, the features and the environment of the Korean securities market have been very much favorable for the growth of on-line trading. The Korean individual investors generally prefer short-term investment, resulting in high turnover ratio. In terms of trading value, individual investors, who appeared to easily adapt to on-line trading, take up over 70% on the KSE market. It is also noticeable that after the 1997-98 financial crisis, the securities market was on the bullish trend and subsequently trading was very active, making on-line trading attractive among those who sought lower cost trading opportunities. Active marketing programs taken by securities firms, including the return contests and temporary exemption of brokerage commissions, also contributed to a boom of on-line trading.

### Impact on Securities Market

The prevalence of on-line trading had significant impacts on the trading patterns of investors, trading volume, transaction costs, securities service industry, and overall market operations. The speed and lower transaction costs of on-line trading encouraged investors to trade frequently in pursuit of short profits, making swing trading prevalent on the market. The day trading accounted for 30 percent of the total trading value of



the KSE market in early 2001. In the meantime, the prevalence of on-line trading resulted in some undesirable consequences. For example, exploiting the quotation information made public, some devious investors have repeatedly attempted to mislead other investors by placing unreasonably large orders at prices that would be unlikely to be executed.

It is believed that on-line trading has significantly contributed to the growth in trading volume. The market value turnover ratio broke through the 200 percent level for the first time in 1998 when the trading volume of on-line trading picked up,

**The prevalence of on-line trading had significant impacts on the trading patterns of investors, trading volume, transaction costs, securities service industry, and overall market operations. The speed and lower transaction costs of on-line trading encouraged investors to trade frequently in pursuit of short swing profits, making day trading prevalent on the market.**

and has stayed beyond that level since then. As mentioned earlier, transaction costs have been significantly lowered after on-line trading was introduced. Initially, a 0.5 percent of brokerage commissions were applied to both on-line and traditional transactions. Due to the price competition, brokerage commissions for on-line trading continued to be lowered. Currently, the brokerage commissions for on-line trading are around 0.1 percent, whereas those for traditional transactions are around 0.5 percent. Lowering of the capital requirements for the establishment of broking-only securities firms prompted appearance of several broking-only securities firms, which are exclusively engaged in on-line trading businesses. The low fee strategies of these securities firms further accelerated price competition.

Lastly, after on-line trading was introduced, individual investors could have an easy and speedy access to market information.

The number of securities market-related websites increased rapidly, providing a variety of information, including quotation information, corporate disclosure, financial information, research papers and financial news, on a real-time basis. Thus, it can be said that on-line trading contributed to the alleviation of the information asymmetry among the market participants, particularly between the individual and institutional investors.

### Challenges and Responses

Though on-line trading has had positive effects on the securities market in many respects, it raised some challenges to the KSE. For instance, excessive day trading increased the price volatility, and some devious large investors attempted to mislead investors by placing fake orders. To solve the problems associated with the placement of fake orders, the KSE discontinued the practice of making available the aggregate bid and ask order quantities during continuous trading hours. At the same time, the bid and ask quotations made available to the public were increased from the highest and lowest fives each to the highest and lowest tens each.

Along with the extensive use of the Internet by investors, it has been noticed that unconfirmed rumors or fictitious information were floated on the cyber space. As a counter measure for it, the KSE established a cyber watch system that monitors rumors or news on the cyber space. Furthermore, in order to prevent hacking through the Internet and improve the stability and security of the computer systems, a variety of measures were taken to maintain the integrity and security of the systems, including digital signature.

Despite the growth in trading volume for the last several years, the same can not be said about the profitability of most securities firms. Considering the fact that major income sources of securities firms are brokerage commissions, the declining profitability might, to some extent, be attributable to the excessive reduction of commissions for on-line trading. It is expected that securities firms will pursue restructuring to reduce their operating costs and enhance their competitiveness, and will make efforts to provide specialized services.

In conclusion, on-line trading can flourish when certain conditions are in place and interact with each other positively. Among others, large Internet-using population, well-established communication infrastructure, the provision of incentives for on-line trading, deregulation and favorable market conditions are necessary to encourage on-line trading. It should be kept in mind that on-line trading has both positive and negative effects on the securities market. It is necessary to address the negative effects. Ignoring the risks involved, one might be drowned while sailing the ocean.

# BSE Training

Soft Skills  
Personality Development  
Self Development  
Stress Management

# Centre For Self Development

BSE enjoys a unique distinction of creating comprehensive infrastructure for promotion of skills and expertise in capital markets. BSE Training, its capital market training division, has emerged as a leading facility in financial and capital market training that currently offers about 30 short term courses attended by about 5000 participants every year. Its wide range of publications disseminate useful information on capital markets to a large number of capital market professionals and investors in India and abroad.

Encouraged by the warm response for its knowledge-related initiatives, BSE has set up a Centre for Self Development with a commitment to promote soft skills, personality and self development among professionals in various sectors. This initiative of BSE will help the nation emerge as a major resource centre for skills in professional management.

For participation in the programme  
And design of exclusive customised  
Programme for corporates please  
Write to email : [swyam@bseindia.com](mailto:swyam@bseindia.com)

 BSE