

Future Tasks for Developing Korea's Capital Market Infrastructure*

Young Do Kim

Abstract

Korea's capital market infrastructure has steadily matured through institutional and system improvements, but it may face new tasks with the recent changes in the international and domestic financial environment. Countries around the world have been undertaking financial internationalization through their capital market institutions. Korea has made some efforts towards this, centered on the Korea Exchange and Korea Securities Depository, but must reexamine the direction of infrastructure development and set a comprehensive blueprint for internationalization.

* Opinions expressed are those of the author and do not necessarily reflect the official positions of the Korea Institute of Finance.





Korea's Capital Market Infrastructure

Capital market infrastructure may be described as providing the front office functions related to dealing and trading and the back office functions related to clearing, depositing, and settlement. Since 2000, Korea's capital market infrastructure has steadily matured through the launch of a consolidated exchange, agreement on allocation of responsibilities among market institutions, and improvements to various market rules and IT systems. This has allowed market participants to enjoy safer and more efficient trading, which is at the core of capital market development. However, Korea must set a new development direction for its capital market infrastructure appropriate for the rapidly changing financial environment following the global financial crisis.

Korea's capital market infrastructure must adjust to the rapid changing financial environment.

Currently, the Korea Exchange (KRX) and Korea Securities Depository (KSD) provide capital market infrastructure services, with each given exclusive control over its responsibilities. Although the allocation of responsibilities does vary in each country according to such factors as degree of capital market development, the present structure in Korea is fundamentally based on a 2006 agreement between the KRX and KSD in which the KRX handles securities trading and clearing business, while the KSD handles settlement business. Non-OTC derivatives trading, clearing, and settlement is also entirely handled by the KRX. However, changes in the financial environment, such as the establishment of OTC trading infrastructure, the internationalizing of capital market institutions, and the emergence of alternative trading systems, is raising the need for change in Korea's capital market institutions as well, which have been granted monopoly status.



International Developments in Capital Market Infrastructure

There is a growing need for Korea to keep pace with increasing efforts worldwide to build up OTC trading infrastructure.

Following the global financial crisis, efforts accelerated worldwide to build up the infrastructure for OTC securities trading, including for derivatives. As this took place, the need has gradually grown for Korea to take part in this. During the 2000's, OTC trading infrastructure and facilities were already rapidly being developed overseas, led by the private sector. The crisis drew further attention to the need to build new infrastructure, such as establishing central counterparty (CCP) clearing houses and trade repository (information warehouses) for clearing OTC derivatives trades, and many governments carried out measures to establish these. OTC clearing services are already provided in Europe and the US, and Asia has been moving quickly to do so, such as the Singapore Exchange's (SGX) launch of a central counterparty for interest rate swaps in an existing system known as AsiaClear. To keep step with these international flows, change is called for to Korea's current capital market structure that currently splits responsibilities between the KRX and KSD.

Further, in line with the internationalization of the financial markets, countries around the world have been attempting to shore up competitiveness by providing cheap and convenient services for investors and companies through cross-border consolidation and cooperation on the core market institutions for both front and back office capital market services.

In terms of securities exchanges, during the 2000s, Euronext was launched, which merged the Brussels, Amsterdam, Paris, and Lisbon exchanges as well as the London International Futures and Options Exchange (LIFFE), as was the OMX exchange in northern Europe, which consolidated the Stockholm, Copenhagen, and Helsinki exchanges. In 2007, the US NYSE acquired Euronext, and in 2008, NASDAQ completed its consolidation with OMX, expanding



transcontinental consolidation. Recently, Asian exchanges have been busily seeking out consolidation, as merger discussions have been ongoing between the Australia Stock Exchange (ASX) and the Singapore Exchange, and the Tokyo Stock Exchange (TSE) and the Hong Kong Exchange (HKE) are looking for their partners, as Asia has become more active in moving to expand its market position and reach in trading infrastructure.

In back office business as well, consolidation to secure competitiveness has been going on. The US Depository Trust and Clearing Corporation (DTCC) consolidated five depository clearing houses between 1999 and 2003 to take on the form of a holding company, while in Europe, Euroclear was launched, which combined the central clearing houses of the UK, France, Belgium, and the Netherlands.

Aside from such movements, the growth of alternative trading systems (ATS), or types of OTC trading markets, has also had a dramatic impact on capital market infrastructure. ATSs refer to various types of systems that replace part of the functions of regular exchanges. They have won great popularity since, unlike regular exchanges, they broker block trades that assure the confidentiality of trading information such as order quantities and asking prices. ATSs are called variously as electronic communications networks (ECNs), multilateral trading facilities (MTFs), proprietary trading systems (PTSs), and crossing networks. The anonymous trading market, Dark Pool, is a kind of ATSs.

In the US, following Regulation ATS (1998) etc., and in Europe, following the introduction of the Markets in Financial Instruments Directive (MiFID) (2007), ATSs have grown rapidly. According to estimates by market research firm Celent, in 2010 in the US, ATSs such as BATS and Direct Edge held a roughly 40% market share, while those in Europe such as Chi-X Europe, BATS Europe,

The growth of ATSs, which are types of OTC trading markets, has also had a dramatic impact on capital market infrastructure.



and Turquoise held around a 25–30% share.

With the rapid growth of ATSs, regular exchanges' share of listed stock transactions has fallen considerably, with the NYSE's share falling from 79% in 2005 to 22.8% as of March 2010. ATS development has lagged in Asia, where regular exchanges still are found to retain some 99% of stock trading. However, in 2010, Japan, Australia and others began to ease regulations on ATSs, and they are expected to grow rapidly.

Korean Market Institutions' Responses & Future Policy Tasks

To respond to such global changes, Korea's market institutions above all have focused on improving the IT systems that are at the core of infrastructure. The KRX already developed and began operating in 2009 the next generation IT system called EXTURE, while the KSD is targeting the operation of such a system from February 2011.

In terms of internationalization, the KRX has over the past two years linked with the CME (KOSPI 200 forwards) and Eurex (KOSPI 200 options), building a 24 hour derivatives trading system. Further, the KRX has exported IT systems to help establish exchanges in southeast Asian countries such as Laos and Cambodia, and is aggressively building cooperative ties with overseas capital market institutions. The KSD also has made consistent efforts towards internationalization, such as signing an MOU with EuroClear.

Regarding ATSs, this past November, the KRX introduced an auction block trading system for investors wanting confidential transactions. This may be viewed as a move to counter the ATS services that could become competitors.

Yet even these efforts appear insufficient to adjust to the future financial environment. Today's capital markets are rapidly globalizing thanks to

Korea's efforts to develop its capital market infrastructure appear still insufficient to adjust to the future financial environment.



regulatory easing and IT advances, and the concept of national borders has long since disappeared, with cross-border competition intensifying by the day. Japan has decided to launch an international corporate bond issue market in Tokyo from next April to absorb demand from companies across Asia. Korea's capital market institutions themselves have made partial progress towards internationalization, but owing to their monopoly status, the overall incentive framework is inadequate, and effective results and a blueprint for the future are not being seen.

In Korea, there has been heated debate over the ownership structure of the OTC derivatives clearing house being set up currently. However, according to recent research by the BIS¹⁾, the ownership structure of clearing houses does not significantly affect market risk. Thus, rather than dither with unproductive debate, it's necessary to focus on setting up the relevant systems and facilities for an OTC trading organization as soon as possible.

To develop Korea's capital market infrastructure further, both institutions and policy makers need to more actively offer support that takes into account ongoing changes in financial markets. Re-examining the overall ownership and governance structure of Korea's capital market institutions, and analyzing the impact of introducing ATSs on Korea's capital markets is imperative. Further, an environment able to realize the genuine internationalization of Korea's capital market institutions must be formed. While doing so, the recent flash crashes in stock markets from internationalization and IT development and the impact of the rise in high frequency or algorithm trading must be scrutinized, and appropriate systems and supervisory measures put in place. Korea must also reevaluate and set a longer-term business development strategy for its capital market infrastructure. 

Policy makers must be aware of changes in the financial markets and actively review ways to support the domestic infrastructure.

1) BIS, "Market structure developments in the clearing industry: Implications for financial stability" November 2010.