

**New Financial Products and
their Impact on
the Asian Financial Markets**

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Executive Summary

Financial Innovation and New Financial Products

A multitude of new products have been introduced into the financial markets in recent years. Such innovation has been driven by deregulation, new information and technologies, and the evolution of investor preferences.

New financial products have been designed to assume three roles. First, they may enable us to capitalize on arbitrage opportunities, making the market more competitive and efficient. Second, they can be used as a risk management tool. Investors seek out the products that best fit their risk profiles and satisfy their needs. Finally, they may fuel speculative transactions. This role may work to accelerate financial market growth, or even destabilize the entire financial system, depending on how they are used. Although markets for such products are not well-developed in many Asian countries, their impact will grow as global players become increasingly involved in these emerging markets.

Introduction of New Financial Products: the Korean Experience

1) Capital Markets Consolidation Act

The ‘Capital Markets Consolidation Act’ went into effect in February 2009. The Act has four main features. First, it adopts a negative system for defining financial products. Products are divided into securities and derivatives depending on the possibility of

losses exceeding principal with the obligation for additional payment. Specific financial products are, however, also enumerated for the purposes of regulatory stability. The second feature of the Act is a functional regulatory approach, meaning that the same regulations are applied if the financial function is of the same nature, regardless of the form and institution. Third, the Act expands the scope of financial investment services. It allows financial investment companies to do concurrent business encompassing six financial investment services, provided that a Chinese wall is well established to prevent conflicts of interest. Finally, the Act upgrades investor protection by strengthening the duty of product guidance, and by adopting the know-your-customer rule and the suitability principle.

The Act is expected to enhance the efficiency of the capital market's financial intermediary role. Financial investment companies are now able to design structured securities and engage in principal investment. Individual investors can incorporate these new financial investment products into their portfolios. In addition, upgraded investor protection will boost confidence in the capital market.

2) Cash Management Accounts

Cash management accounts were introduced in Korea in 2004. They have grown significantly just recently, as the Capital Markets Consolidation Act adds the payment and settlement capabilities to make it feasible. Since they pay higher interest rates than bank deposits, there have been large shifts of money from banks to securities companies. Banks did introduce CMA-type deposit accounts, but they have not been successful in

attracting customers. This heightened banks' funding costs as they were impelled to raise funds through higher cost certificates of deposit and bank debentures.

Securities companies were criticized for not providing customers with proper information, so regulators drew up guidelines on CMA services best practices and urged securities companies to adopt self-regulatory systems to adhere to these guidelines. Regulators required securities companies to inform customers about the assets invested in and about what risks the customers are exposed to, etc.

3) P-CBOs

The Korean government introduced the primary collateralized bond obligation (P-CBO) program in order to ease liquidity constraints and to support SMEs. A P-CBO is a type of asset-backed security (ABS) in which newly-issued corporate bonds serve as the underlying asset. SMEs issue new corporate bonds and sell them to a special purpose vehicle (SPV). The SPV then issues a CBO made up of a pooling of these bonds and sells it to investors. Credit enhancement is provided through various channels, including banks and credit guarantee funds. The SPV issues both senior and junior tranche bonds, with senior tranche usually at AAA grade.

P-CBOs boost access to funds for SMEs with low credit ratings. In fact, the distinguishing feature of the P-CBO program is in facilitating the issuance of corporate bonds by SMEs. By pooling bonds of different levels of risk, overall risk of default decreases. Strict surveillance by credit rating agencies renders them a relatively safe and

fairly attractive investment. Furthermore, P-CBOs can offer higher yields than general corporate bonds to mezzanine tranche investors. In short, P-CBOs can be a useful instrument for resolving the credit mismatch problem that exists between investors and SMEs, thus filling the financing gap for SMEs.

4) Foreign Equity Investment Funds

The strong Korean won from 2006 to 2007 made the Korean government worry that exports would suffer. The government exempted foreign equity investment funds from the 15.4% capital gains tax, hoping that this would increase demand for foreign currencies and induce a weaker won. Fund managers, however, hedged their positions against exchange rate risk, and the policy did not work out as planned. To make things worse, a flight to quality due to unstable financial markets and a current account deficit led the won/dollar exchange rate to skyrocket in 2008. Since most of foreign equity investment funds had hedged against the exchange rate by selling FX forwards or futures, investors could not gain from the soaring won/dollar rate. This example shows how difficult it is to design a policy to achieve its goal. When a government designs a policy, it should consider unpredictable market movement and market participants' reaction.

5) Knock-In Knock-Out Forward

A KIKO forward is a structured product consisting of long put and short call positions. It allows the holder to sell dollars at a preset exchange rate (option exercise price) when

the exchange rate moves within predetermined lower and upper barriers. Companies can customize the structure by choosing the barriers, the strike price, the nominal amounts of the put and call options and the expiration date. The bearish movements of the won against the U.S. dollar since March 2008 have been taking a heavy toll on local exporters which had used the product for speculation to the extent that their positions that surpassed their export volumes. Financial institutions did not have to report the volume of KIKO transactions because they broke up the product into call and put options and only the separate positions are reported to the Financial Supervisory Service. Hence, the supervisory authority was not aware of the potential risks involved in KIKO forwards until big losses were realized by SMEs. Recently, the Korean government has tried to construct a new information gathering system related to new financial products. Financial institutions are now supposed to report when they sell these new financial products.

Policy Recommendations

New financial products can provide investors with various access channels to the capital market. Yet they can also trigger systemic risk by transferring risk to investors, who may be incapable of deal with it. Building a sound financial infrastructure is thus crucial to maintain stable financial markets.

1) Enhancing transparency in financial markets

If financial markets are transparent and efficient, risk will be distributed to fully aware

and willing investors. This is possible when information asymmetry is minimized. The sometimes exotic and illiquid complex derivative instruments are, however, not easy to value and price. There is little information and disclosure on such instruments, especially when traded over-the-counter. When investors cannot price the products, cannot measure the total losses by financial institutions, and don't know who holds those products, uncertainty in the market increases. This, in turn, increases risk aversion and erodes confidence, triggering systemic risk. Hence, reporting and disclosure to market participants as well as regulators are critical to enhancing market transparency. Supervisors should have appropriate information gathering and analyzing capabilities.

2) Regulation on conflicts of interest

Credit rating agencies are supposed to ease information asymmetry. Yet with a large share of their revenues and profits coming from the rating of complex structured finance products and from consulting and modeling services to the issuers of those products, conflicts of interest have grown. Regulation is needed to prevent agencies from mis-rating new and exotic financial instruments.

3) Setting up clear rules and not over-relying on market discipline

Over-reliance on market discipline may result in a situation where agency problems lead to poor monitoring and where credit risk is transferred to those least able to understand and manage it. Even though reliance on market discipline is useful to deal with financial innovation and regulatory arbitrage, we need to set up clear rules and regulations that

are consistent with principle-based regulation and supervision.

4) Extending clearing house-based transactions for OTC products

New complex financial instruments are more liquid and easier to price when such instruments are more standardized and traded in clearing house-based exchange rather than over-the-counter. Clearing house-based exchanges lower counterparty risk because financial instruments are subject to appropriate margin requirements and are appropriately marked-to-market on a daily basis. Standardization should also reduce operational risk.

5) Building appropriate consumer protection rules

Government should give particular care to protecting general investors by mitigating information asymmetry. Sophisticated investors are usually more aware of potential risks from new financial products. When financial institutions sell new financial products to general investors, potential risks implicit in the products should be made known to them. Failure to do so may result in costly legal disputes if losses are realized.

6) Macro-prudential supervision

Strengthening macro-prudential supervision, which concentrates on the systemic components of financial markets, is now being stressed in many countries. Without a comprehensive perspective, the contagious nature of a crisis can be underestimated even

in countries where financial institutions are thought to be sound. New financial products have made it much easier to transfer risk across the financial system, and thus can intensify the contagion effect in a crisis period. Hence, the development of early warning systems about the emergence of risk and vulnerabilities in the financial system, the conducting of macro-stress testing to verify the degree of resilience of the financial sector to shocks and propagation mechanisms with cross-border and cross-sector dimensions, and other macro-prudential regulations regarding leverage, risk concentration and maturity mismatches are necessary. Macro-prudential supervisory authorities should work closely with micro-prudential supervisory authorities, the latter of which put more emphasis on losses incurred by individual financial institutions. For this purpose, information exchange is important: macro-prudential supervisory authorities must have access to micro-prudential information, and vice versa.

7) International coordination

Reforms of financial regulation and supervision should be coordinated at the international level. Regulatory arbitrage may result in financial intermediation moving to jurisdictions with lighter regulations. As the world becomes financially globalized, international coordination of financial policies is necessary to avoid unbalanced regulations between countries.

I. Introduction

The pace of financial innovation has gathered momentum in the past decade, with innovative products and technologies constantly being developed and introduced. This has been driven by deregulation, new information and communications technologies, and the evolution of investor preferences.

Although it is not entirely clear what defines a product as truly ‘new’, we can think of them as fulfilling three different roles. Number one is regarding asset allocation, namely, enabling us to capitalize on arbitrage opportunities. This allows more scope for providing or acquiring funds, thereby making the market more competitive and efficient. The impact of this may ripple to the entire macro economy, not merely the financial industry itself. Number two is risk management. New financial products can be used as tools for savers and investors to tailor their financial positions to best fit their risk profile. And the last role they play is in facilitating speculative transactions. Sometimes such transactions may accelerate financial market growth, but in others it may destabilize the entire system. Since speculators take advantage of the leverage implicit in these products, poor investments may result in great losses that can affect the entire market. Some major financial disturbances in the past decade have occurred after such innovations. As is well observed, global and regional financial markets have recently been significantly affected by the development of new financial products.

Although the market for new financial products is not well-developed in many Asian countries, their impact will grow as global players become increasingly involved in

these emerging markets. In this respect, it is important to review the impact of new financial products on regional financial markets and to discuss how to minimize their side effects while maximizing their positive effects. In particular, appropriate regulations are critical to preserve financial stability and these regulations must evolve at the same pace as the development of new financial products.

In this study we will review and analyze the overall status and role of new financial products in the process of financial development, and their overall impact on financial stability, market structure, and performance for market participants in the ASEAN+3 countries. Based on these analyses, we will offer relevant policy recommendations and regulatory measures to reduce the potential risks from introducing these products into Asian countries.

II. Introduction of New Financial Products: the Korean Experience

1. Capital Markets Consolidation Act

1-1. Background

The 'Financial Investment Services and Capital Market Act' or 'Capital Markets Consolidation Act', passed the National Assembly on July 3 2007 and went into effect in February 2009.

The need for the Act was twofold. First, capital market development had been relatively slow compared to the banking industry. Korean banks enhanced their competitiveness through restructuring and diversification into other lines of business, improving their profitability and growth potential. Meanwhile, the capital markets industry had not undergone such restructuring and failed to diversify. As a result corporate financing through the capital market began to shrink and the capital markets failed to keep pace with real economic growth.

This stagnation is mainly attributed to the regulatory system. As different laws are applied to different types of financial institutions (securities, futures, asset management companies), the same financial functions are governed by different regulations. The law specifically enumerated the types of securities and derivatives that are allowed, and advanced investor protection were not in place. Finally, concurrent business among the securities, asset management, and futures industries had been strictly prohibited.

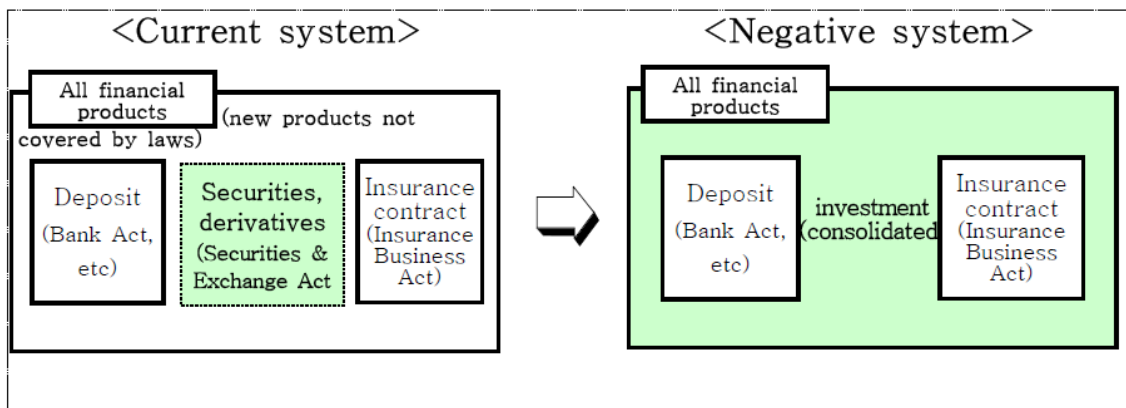
Contents of the Act

Part	Chapter	Contents	Detailed Contents
1: General Rules	-	General Rules	○ Objective, definition
2: Financial Investment Service	Chapter 1	Licensing & Registration	○ Requirement & procedures of licensing & registration
	Chapter2	Governance	○ Approval of major shareholder change ○ Outside director, auditor ○ Internal control system, compliance officer ○ Minor shareholders' rights
	Chapter3	Regulation on Soundness	○ Regulation on equity capital ○ Restriction on transactions with major shareholders ○ Accounting treatment ○ Management disclosure
	Chapter4	Regulation on Business Activities	○ Common regulation on business activities - Investment solicitation - Ban on compensating loss& liable for damage, etc ○ Regulation on business activities by financial service
3: Issuance & Distribution of Securities'	Chapter1	Issuance Disclosure	○ Registration statement
	Chapter2	M&A related system	○ Take over bid, 5% Rule, etc
	Chapter3	Secondary Market Disclosure	○ Business report, other reports on major issues
	Chapter4	OTC Transactions ,etc	○ Restrictions on OTC transactions, OTC sales by foreigners
4: Regulation on Unfair Transaction	Chapter1	Insider Trading	○ Return gain on sales of trading securities, insider trading, etc
	Chapter2	Price Manipulation	○ Ban on market manipulation
	Chapter3	Irregular Transaction/short selling	○ Ban on comprehensive fraud, short selling
5: CIS Vehicle	Chapter1 ~11	CIS Vehicle	○ Definition & composition of CIS ○ CIS securities, CIS organizations, agencies, etc
6: Financial Investment Service's Related Organizations	Chapter1 ~8	Financial Investment Service's Related Organizations	○ Korea Finance Investment Association, Korea Securities Depository, Securities Finance Corporation, merchant banks, etc
7: Korea Exchange	Chapter1 ~6	Korea Exchange	○ Structure & establishment of exchanges ○ Market monitoring, dispute settlement, etc
8: Oversight & Discipline	Chapter1 ~4	FSC's Execution	○ Order& approval, probe & verdict ○ Investigation, fines
9: Supplementary Rules	-	-	○ Report illegal activities via e-document, etc
10: Penal Clause	-	Punishment Regulation	○ Punishment, fines, bilateral punishment

1-2. Major Features

A. Negative System for Defining Financial Products

The Act adopts a broad-based definition of a ‘financial investment products’ as any product with the possibility of principal loss, regardless of name or form.



Financial products are divided into securities and derivatives, based on the possibility of the loss exceeding principal with obligation for additional payment. The securities are then classified into six different sub-categories with a broad-based definition for each. Derivatives are categorized into three groups, forwards, swaps and options. As a comprehensive definition could undermine regulatory stability, however, specific financial products are also enumerated as examples alongside the broad definition (known as the negative system in addition to the positive system).

Classification of Financial Products

Classification	Comprehensive definition	Financial products to be included(ex)
Debt securities (draft bill of §4③)	Debts are marked	National bond, local bond, special bond, corporate bond , some commercial paper, etc
Equity securities (§4④)	Shares of investment is marked	Stocks, warrant, subscription certificate, stakes in limited company, limited partnership
Beneficiary certificate (§4⑤)	Beneficiary rights are marked	Trust beneficiary's rights, beneficiary certificate of investment trust
Investment contract securities (§4⑥)	Contractual rights regarding profit/loss incurred in accordance to outcome of investment in joint business is marked.	Special type of indirect investment securities including Netizen fund, etc
Derivatives linked securities (§4⑦)	Contractual rights regarding profit/loss linked to changes in underlying assets' prices and indicators are marked.	ELS, ELW, CLN, etc
Depository receipt (§4⑧)	Rights of deposited securities are marked in depository receipt which is issued by those who are entrusted to deposit those securities outside of an issuing country.	Korea Depository Receipt(KDR), Global Depository Receipt(GDR). American Depository Receipt(AD)

B. Functional Regulation Approach

The Act moved away from silo or institutional approach to regulation and supervision, and took a more 'functional approach' under which the same regulation is applied if the financial function is of the same nature regardless of the form and institution.

It re-classified financial investment services, products and clients according to their economic nature. Financial investment services have now been broadened and simplified into (1)dealing, (2)brokerage, (3)asset management, (4)discretionary investment, (5)advisory, and (6)trust business. Investors are divided into (1)non-

professional investors and (2) professional investors.

It then defines financial functions by combining 'financial investment product' or 'financial investment service' with 'clients'. For example, one financial function would be 'investment brokerage' (service) of 'securities' (product) targeting 'non-professional investors' (client). Each 'financial function' shall be governed by the same regulations on entry, soundness, and business activities.

Financial investment companies choose which areas (service + products + investors) they want to engage in, and get approval at one time by meeting the appropriate requirements for each. For example, financial investment companies can apply for several financial functions that they want to engage in by filling in one application form. In that case, the entry requirements (ex: equity capital) for each business function are added together. That is, it is an add-on system in which additional financial functions may be sought and then screened by regulatory bodies.

C. Expansion of the Scope of Financial Investment Service

The Act allows financial investment companies to conduct concurrent businesses encompassing six financial investment services (dealing, brokerage, asset management, discretionary, advisory service, trust business) if a Chinese wall is established to guard against potential conflicts of interest.

It also expanded the scope of FX services so that authorized financial investment services may be conducted in foreign currencies. Another feature was to establish the

legal grounds for allowing FICs to offer incidental services including money transfer, payment and settlement so that they can engage in transfer/settlement services using deposit accounts, and deposit/withdrawal services using ATMs.

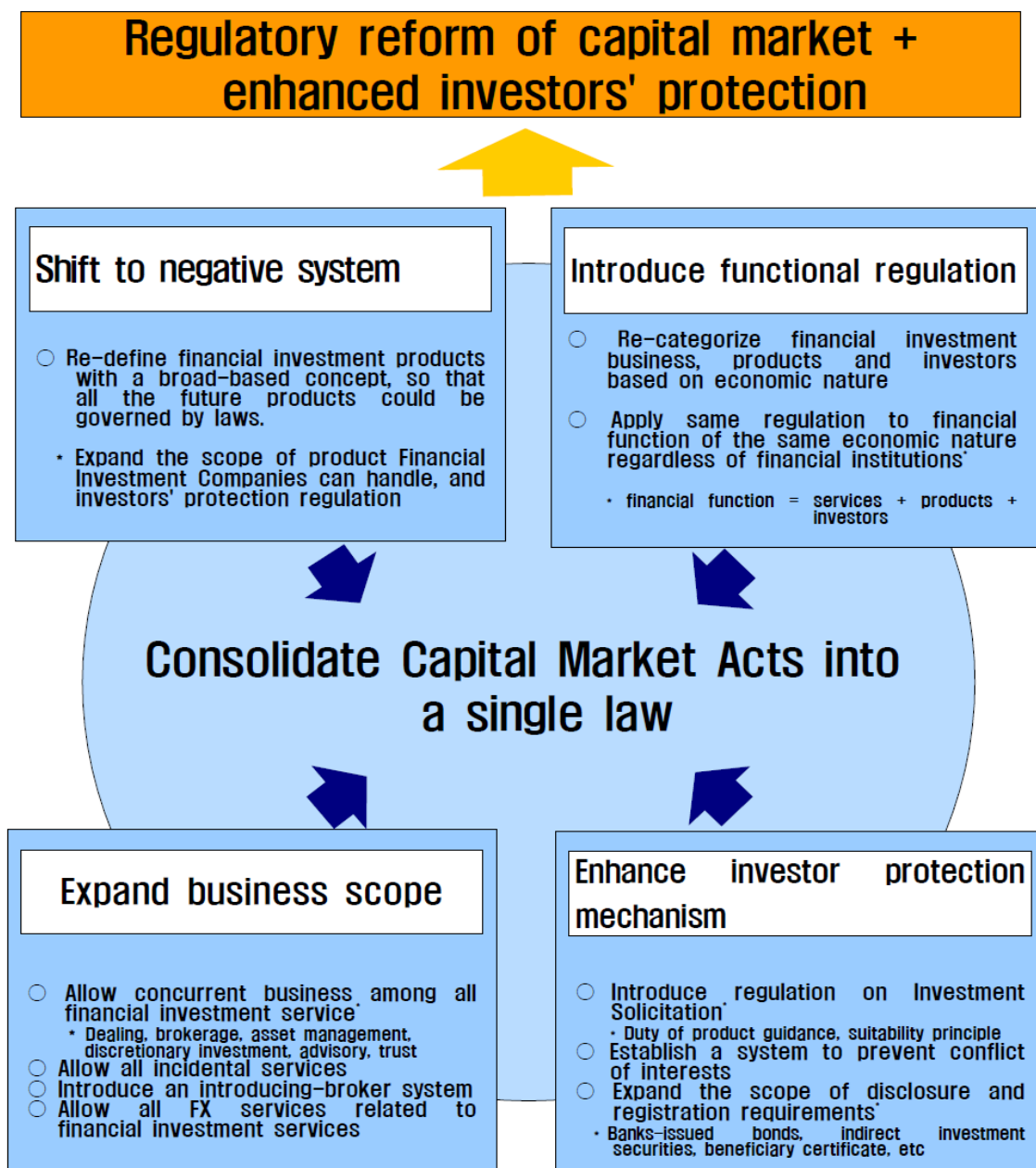
It also re-classified fund categories into four and lifted restrictions on the scope and type of assets to be managed by funds. For example, securities funds must continue to invest mainly in securities (50% or more of assets), but are allowed to invest in real estate within a limited range. Real estate funds, meanwhile, are allowed to invest in real assets (gold, etc.) within a limited range, thus increasing the flexibility of asset management. It is now possible to establish mixed asset funds that can freely invest in any assets without limiting the main investment assets to a specific type.

D. Upgrading investor protection

The Act upgraded consumer protection regulation by strengthening duty of product guidance, and adopting the know-your-customer rule and the suitability principle. FICs are now obliged to provide information regarding the content and underlying risk of products, ensuring that investors fully understand what they are being offered. Failure to do so will result in the securities company being held liable for losses incurred by investors. Also, FICs should get information about investor characteristics (investment objective, wealth status, investment experience) through interviews and tailor financial products to investor needs (suitability principle). Non-requested investment solicitation through calls or visits is prohibited to protect investors' privacy and so as not to disturb them.

To prevent conflicts of interest, FICs are obliged to set up an internal control system and disclose any such conflicts to investors. They are not allowed to render related services until conflicts are resolved by either organizational separation and /or prohibition of employees holding more than one position and, if necessary, setting up a Chinese wall.

Approach of the Capital Market Consolidation Act



1-3. Expected Effects of the Act

First, the Act is expected to enhance the efficiency of the financial intermediary role played by the capital market. Corporations can secure capital in the most appropriate way via various structured products in addition to stocks and bonds. Various kinds of derivatives can enable companies to hedge risks associated with corporate management. As for consumers, new financial investment products featuring various combinations of risks and yields allow assets to be tailored according to investor needs. Thus, an ideal environment can flow through the capital market. As for the FICs, they are now able to design structured securities and engage in principal investment. Moreover, innovative companies shall be given further opportunities to secure necessary capitals.

Second, the upgraded investor protection scheme will boost confidence in the capital market. Consumers can make more informed investment decisions and that will in turn allow more money to flow into companies through the capital market.

Third, the Act will facilitate the emergence of larger scale investment banks in Korea and stimulate consolidation in the non-bank financial sector. Some are doubtful, however, about the likelihood of prompt consolidation in the sector, which the Korean government appears to be aiming for. Given the business strategy of smaller players, which are focusing on brokerage and proprietary trading, they may still try to remain niche players.

Fourth, the Act is also expected to trigger more human capital investment, building expertise in the Korean financial arena. This is, of course, very positive in terms of the further development of the financial service sector in Korea.

Lastly, the Act will pose greater challenges as well as opportunities to Korea's commercial banks, given that they are exposed to a more competitive environment for the cash management market.

2. Cash Management Account

2-1. Overview

Although 'cash management accounts' have been around in advanced countries for many years now, they were not introduced in Korea until 2004. Their balance has remained at a low level, but the Act should change this by adding a new function to it, that is, the payment and settlement capability. You can now make a direct deposit of a paycheck to their CMA account, pay bills or buy stocks from it, and even own check cards linked to it. With its higher interest rate, there have been large shifts of money from banks to financial investment companies.

To counter this, banks have offered higher interest rates on savings accounts and introduced new products such as swing accounts. They nonetheless could not stop the drain of funds and are now suffering from an extreme shortage due to lower interest rates than their non-banking rivals. They as yet see no particular countermeasures.

To make up for this fund shortage, banks have relied more on market funding facilities such as certificates of deposits (CDs) and bank debentures, paying a higher interest rate. This means more burdens on funding and it squeezed down net interest margins, given the competitive loan market conditions. Rising interest rates may, in return, further delay the recovery of the sluggish economy.

2-2. Background

Managing both long-term investments and day-to-day finances at once allows for a more comprehensive view of your assets, making it easier to monitor and track your overall financial picture. CMAs are investment accounts that offer a convenient and simple automatic sweep of cash balances, and consolidating funds makes for an easy way to monitor and manage financial assets.

With a CMA account, you can invest, save, and spend using a full array of everyday transaction services, such as direct deposit, online bill payment, ATM transactions, and a credit card payment. Cash balances in CMAs are automatically swept into short-term investment products such as money market trusts (MMT), repurchase agreements (RP), or money market funds (MMF). CMAs have been favored by consumers as they can reap high gains.

MMTs provide over 5 percent annual investment return as long as the money is put in for at least one day, by investing in financial institutions' notes or call loans. These

products are luring investors as they can withdraw their investment right away unlike MMF that take an extra day.

RPs, in which financial institutions sell securities to the investor in return for cash while agreeing to repurchase those securities at a later date, are also drawing investors seeking stable income over relatively short period of time. RPs sold by Tong Yang Investment Bank, for example, provide over 4 percent investment return for over two months' investment.

2-3. Market Status

The outstanding balance of CMAs surpassed 33 trillion won as of January 2009, according to the Korea Financial Investment Association (KOFIA). This is sharply up from a mere 8.6 trillion won at the end of 2006. The number of CMA accounts also rose to 8.1 million from 1.4 million during the same period as more investors shifted their funds from bank deposit accounts to CMAs in pursuit of higher interest. The free-style CMAs provide interest rates of over 4 percent.

With the low interest rate regime continuing, a lot of people are seeking out different ways to accumulate capital beyond letting money sit in bank accounts. As investors are shunning the stock market amid global turmoil and an uncertain outlook, CMAs are expected to become increasingly popular.

CMA Accounts Offered by Korean Securities Companies

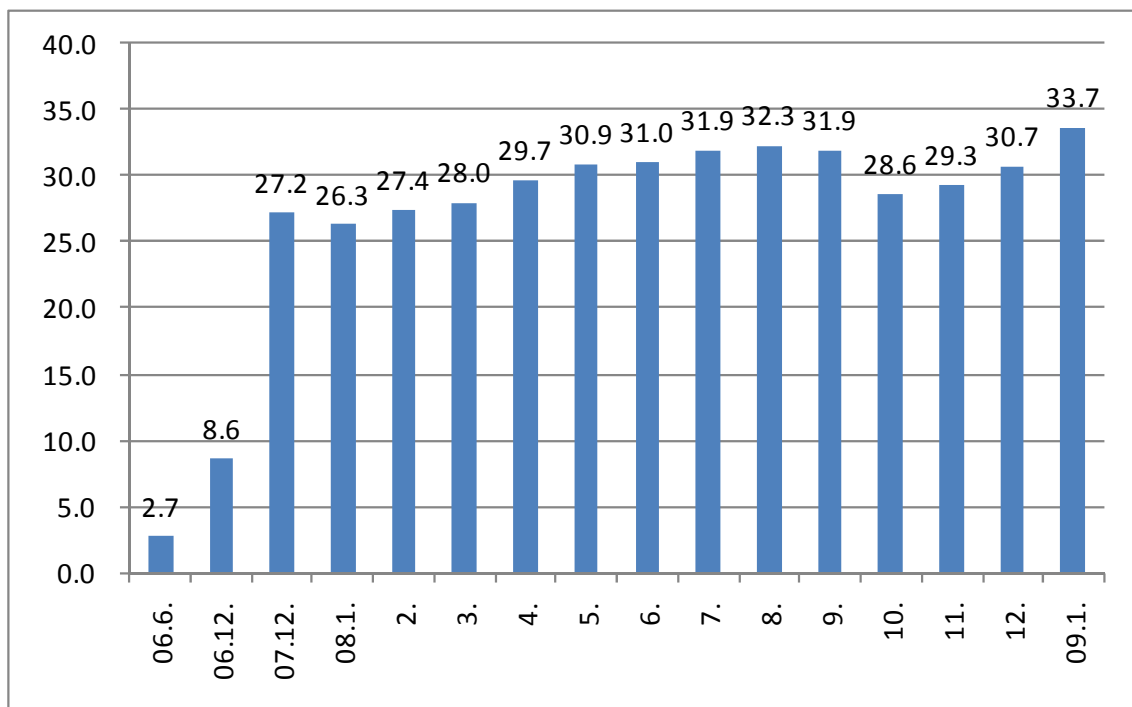
(Unit: Mil KRW)

Types	# of Providers	Individual		Corporate	
		# of Accounts	Balances	# of Accounts	Balances
RP	25	5,151,968	18,934,106	18,053	1,881,427
MMF	10	529,508	4,070,344	29	156
Merchant Banking	2	1,894,115	5,553,689	42,303	343,121
Others	7	423,373	1,619,816	3,465	1,326,055
Total		7,998,964	30,177,955	63,850	3,550,759

Note: As of January 23, 2009

Trend of CMA Balances

(Unit: Tril. KRW)



2-4. Impact on the Market

The banking and securities sectors in Korea have been at odds over a number of issues since the government mapped out the Capital Markets Consolidation Act. Banks have shown reluctance toward allowing brokerage firms to provide payment and settlement services to customers as it could erode banks' customer base and slow down overall business, which accounts for about 60 percent of the financial market.

A spike in balances in cash management accounts (CMA) means an exodus of money from ordinary bank accounts, and CMAs are continuing to draw in money. This 'money move' has led to banks asking the government to flex its legislative muscle to help them counter the growing number of brokerage firms.

With brokerage houses moving to raise CMA interest rates and providing more services such as CMA check cards, stock trading and equity fund consulting, banks are facing greater challenges in improving their bottom lines.

To lure back retail customers, banks unveiled temporary deposit products that carry interest rates of more than 6 percent, raised interest rates on savings accounts, and introduced new products such as swing accounts in which banks move deposits to high-interest accounts to offer higher rates for customers. Banks have also released new types of demand deposit accounts, through which customers can invest indirectly in stocks and bonds, like CMAs, in a desperate bid to stop the erosion of core deposits.

Woori Bank, the country's third largest lender, launched the sale of auto management accounts (AMAs) last month, through which depositors can enjoy up to a 4.8 percent

interest rate. AMAs invest in bonds and money market funds, securing higher interest for depositors while still providing the same level of banking services as ordinary deposit accounts. Meanwhile, Hana Bank, the fourth-largest lender, introduced so-called portfolio management accounts (PMAs), through which depositors can enjoy basic banking services and invest in stocks and bonds just like brokerage firms' CMAs. The bank offers more than 4 percent interest to PMA holders.

Such deposit accounts with higher rates will hurt interest margins, but an increasing number of commercial banks are turning to the devices to win back customers lost to brokerage firms. The CMA-type deposit accounts offer an annual interest rate of more than 4 percent, while ordinary deposit accounts pay less than 1 percent.

The more severe problem, however, is that these costly deposit products are still not attracting as many customers as had been hoped. The products, along with banks' money market deposit accounts (MMDA), have failed to edge out securities firms' CMAs. MMDAs allow banks to invest depositor funds in bonds and certificates of deposit for stable and short-term interest gains. Market analysts state that banks need to hurriedly find their edge by developing innovative products as the shift of money to CMAs and other attractive instruments will accelerate.

Other analysts assert, however, that there is a limit as to how much rates can be raised in a bid to attract customers. Given that CMA rates use the money market rate as a benchmark, competing for higher rates to attract depositors has its restraints. Further, the Financial Supervisory Commission (FSC) is mulling over whether to allow banks to

provide equity-linked securities products in addition to equity-linked deposits, which they already offer.

Meanwhile, banks have increased their reliance on bank debentures and certificates of deposit (CDs) in order to make up for extreme fund shortages from the drop in deposit accounts. Due to a weak appetite for the increased supply of CDs and bonds, however, CD rates have risen to as high as 5.6 percent. This means more burdens on borrowers, as continued rises in the benchmark CD rates point to interest rate hikes on floating-rate mortgages. The rising interest rates have stymied recovery in the sluggish real estate market. Domestic and overseas issuance of bank bonds had served as an alternative means of securing financing, but that ran into a speed bump as financial markets got slammed by subprime defaults worldwide.

2-5. Consumer Protection

The FSS has called on securities companies to provide customers with quality, transparent services for their cash management accounts (CMA). It criticized brokerage houses for marketing CMA services with ambiguous taglines, and failing to give customers appropriate information about the risks involved in opening such investment accounts.

Securities firms haven't been so clear on the risks and functions of the products when offering them to customers. The marketing schemes often confuse consumers, as they find it hard to distinguish types of CMAs just by looking at descriptions of products and

services. Regulators thus drew up guidelines for CMA services after gathering opinions from industry and urged securities companies to adopt self-regulatory systems in accordance with the guidelines to conduct best practice of CMA services.

Under the guidelines, securities companies are required to make investors or customers fully aware that they are ‘investing’ in CMAs. When investing CMA funds in short-term instruments, such as repurchase agreements and money market funds, funds must make clear that these are serving as the underlying assets. Securities firms should notify consumers that such an investment structure does not guarantee investors the principal allocated in CMAs, and that there are risks accompanying investments in short-term instruments. The guidelines also require firms to provide exact investment returns in accordance with daily fluctuations in the money markets and to change their advertising schemes.

3. P-CBO Program

3-1. Background

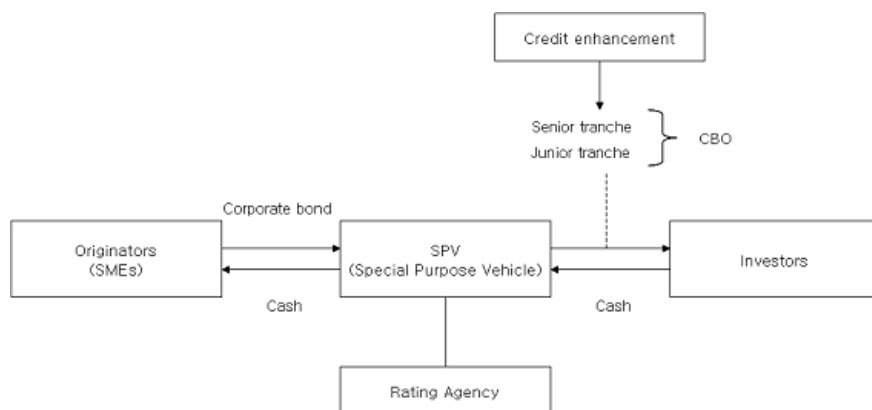
Corporate bonds were issued heavily before and right after the financial crisis in Korea in 1997, and these bonds started to mature in the second half of 2000. Only a small number of large corporations, however, were able to raise funds through issuing bonds and commercial paper. The post-crisis capital market was paralyzed as the volatile corporate bond market virtually eliminated investor confidence. Banks undergoing government-led restructuring were also hesitant to make new loans to the corporate sector. As a result, concerns were raised over the possibility that companies who were

rolling over their debt would go bankrupt, creating another financial crisis. With the tightening money and capital markets, the Korean government introduced the primary collateralized bond obligation (P-CBO) program in order to ease liquidity constraints and support SMEs. Started in 1999, the P-CBO program was expanded to include venture firms in 2001.

3-2. Basics of the P-CBO Program

A P-CBO is a type of asset-backed security (ABS) in which newly-issued corporate bonds serve as the underlying asset. SMEs issue new corporate bonds and sell them to a special purpose vehicle (SPV) (or special purpose company (SPC)). The SPV then issues a CBO based on a pool of these bonds and sells the product to investors in the market. The SPV has a contract with the originator to manage its own assets. Credit enhancement is provided through various channels, including banks and credit guarantee funds. The SPV issues both senior and junior tranche bonds, with senior tranche usually rated AAA grade.

Basic Structure of P-CBO Issuance



The P-CBO issuance process is as follows: 1) Selection of company and underlying assets; 2) Credit rating and enhancement; 3) Selection of SPV's trustee and reinforcement of liquidity; 4) Bond redemption.

The first stage, company selection, is crucial because of its relation to the credit rating. The credit risk of the entire portfolio depends on the underlying assets that comprise the portfolio. Second, the credit rating is based on the risk of default and the cash flow of the portfolio. Credit enhancement is provided mainly by the Small Business Corporations (SBC), banks, or credit guarantee funds such as the Korea Credit Guarantee Fund (KODIT) and the Korea Technology Credit Guarantee Fund (KIBO). Without such credit enhancement, the amount of senior bonds that can be issued with AAA ratings would be limited to only a portion of the total value of the underlying assets, usually 40-70% depending on the average credit quality of the pool. Credit enhancement, however, ups this proportion to most of the total value of the underlying assets (e.g. over 90%). Third, a trustee of the SPV reinforces liquidity and monitors cash flow in order to protect the investors. Finally, the process of the P-CBO process is over when the issued bonds are redeemed.

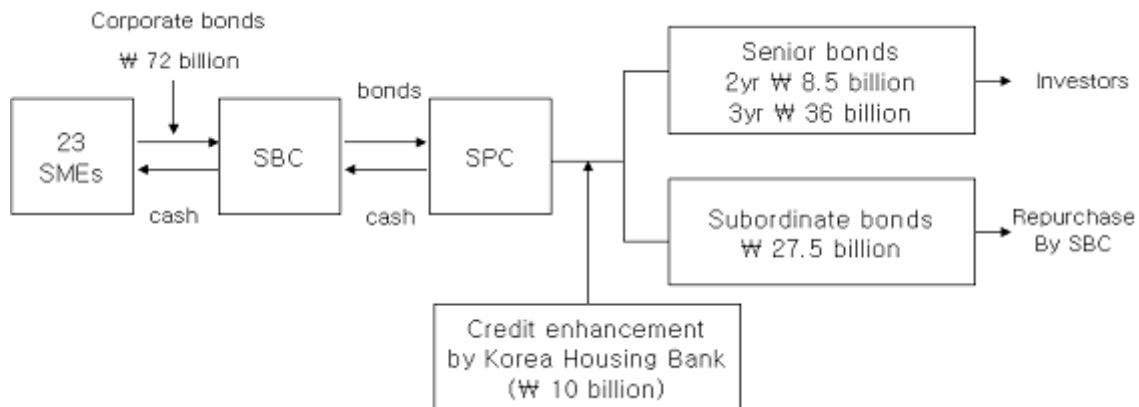
P-CBOs offer additional funding channels to SMEs that have low credit ratings. In fact, the distinguishing feature of the P-CBO program lies in facilitating the issuance of corporate bonds to help finance SMEs. Pooling bonds with different levels of risk reduces the overall risk of default. Moreover, because P-CBOs are issued with strict surveillance by credit rating agencies, they are a relatively safe and fairly attractive

investment. Furthermore, P-CBOs can offer higher yields than general corporate bonds to mezzanine tranche investors. In short, P-CBOs can be a useful instrument for resolving the credit mismatch problem that exists between investors and SMEs and thus filling the financing gap of SMEs.

3-3. Variations on P-CBOs

The first P-CBO program was launched by the SBC in 1999. The SBC pooled 72 billion won of new corporate bonds issued by 23 SMEs. Credit enhancement was provided by the Korea Housing Bank in the form of liquidity facilities. The SBC provided additional enhancement by repurchasing 27.5 billion won of the subordinate junior tranche. The senior tranche, worth 44.5 billion won, was sold to investors.

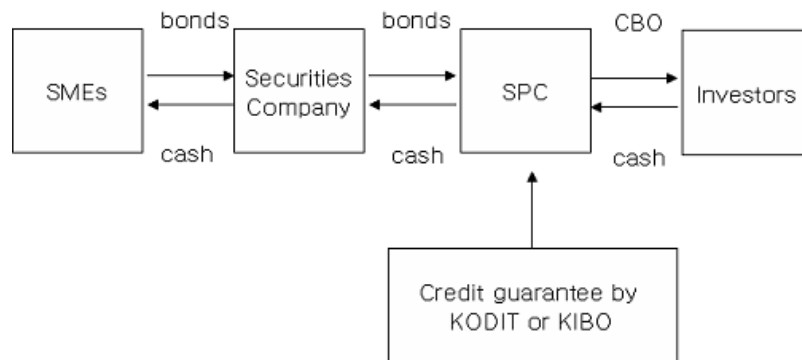
Basic Scheme of First P-CBO Program by SBC



In July 2000, the Korean government introduced a special guarantee program applicable to P-CBO issuance and started to use credit guarantee funds, namely KODIT and KIBO, for this purpose. With credit enhancement in the form of credit guarantees provided by

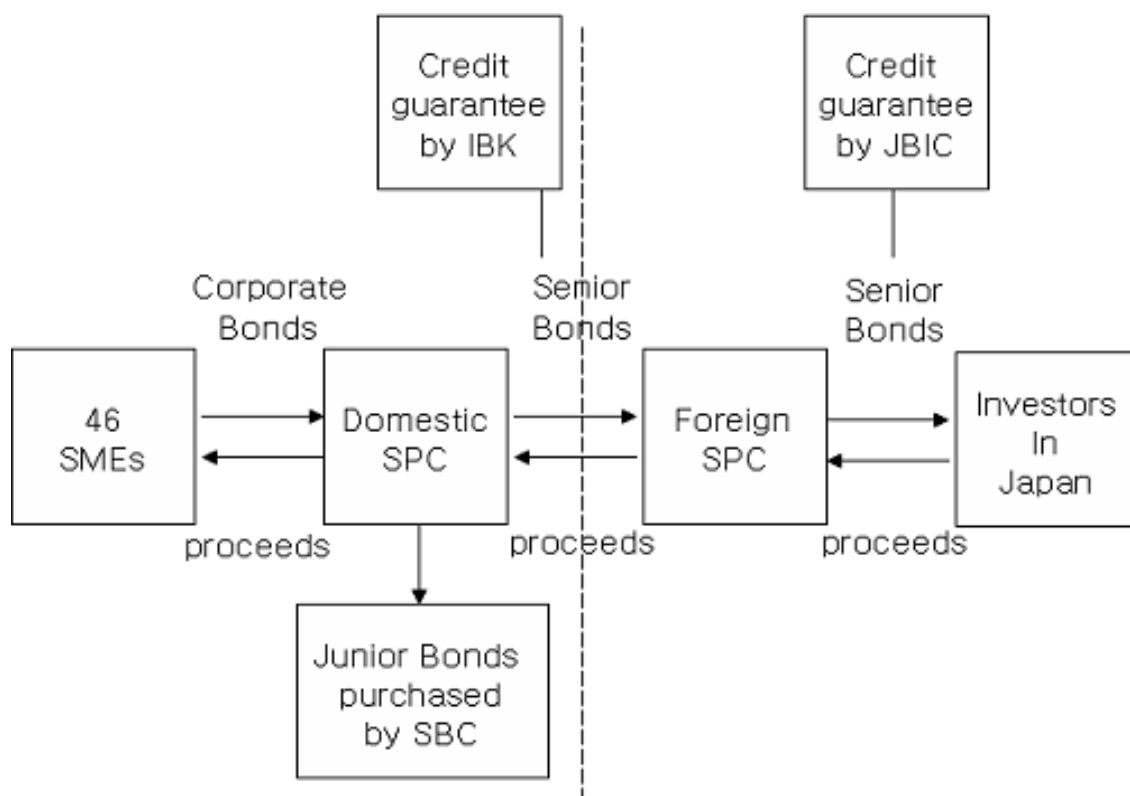
KODIT or KIBO, the share of total value in the senior tranche of the P-CBO deal rose to 93-97%, thus maximizing the funding efficiency of the program. Institutional investors prefer P-CBOs with a credit guarantee from KODIT or KIBO because the credit ratings of guaranteed bonds are more stable.

P-CBO Program with Credit Guarantee



In 2004, the SBC, in cooperation with a domestic securities company, led the issuance of a cross-border P-CBO. 46 Korean SMEs participated in the 10 billion yen P-CBO issuance in Japan. Credit guarantees were provided by the Industrial Bank of Korea (IBK) and the Japan Bank for International Cooperation (JBIC). A dual SPC structure was used and the subordinate tranche of the CBO issued by the domestic SPC was purchased by the SBC, providing additional credit enhancement. The senior tranche of the CBO was acquired by the foreign SPC established in Japan and then distributed to investors in the Japanese market.

Cross-Border P-CBO Issuance with Dual SPC Structure

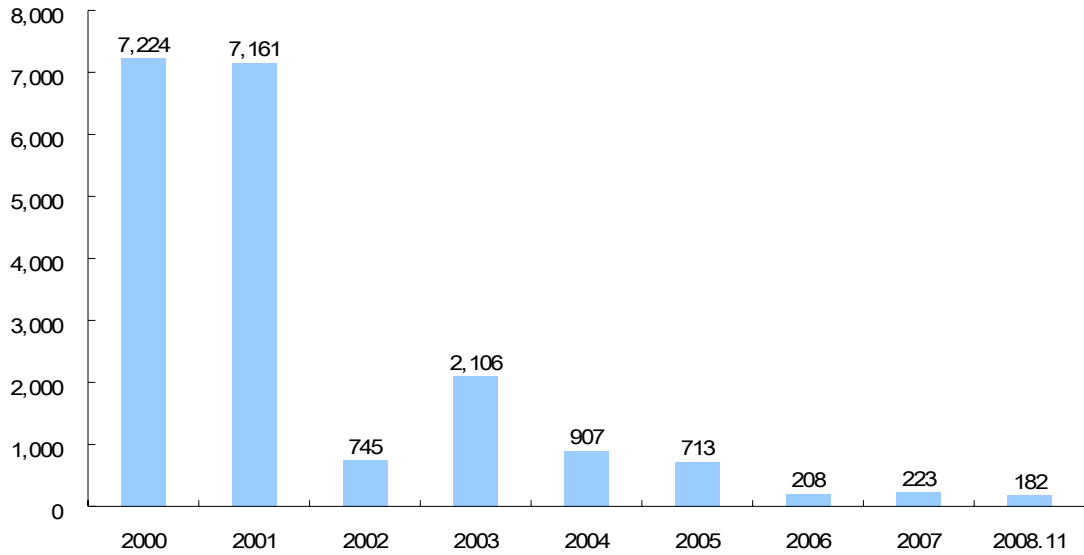


3-4. Status of P-CBOs in Korea

In August 2000, the first KODIT-guaranteed P-CBO was issued, with a value of 1.55 trillion won and bonds pooled from 54 SMEs with credit ratings ranged from BBB+ to BB-. Senior bonds of higher than AA grade accounted for 97% of the total amount of issuances, or 1.5 trillion won. In order to stabilize the widening financing gap in 2000 and 2001, P-CBOs were issued in the amounts of 7.22 and 7.16 trillion won, respectively. As the corporate bond market began to stabilize, however, P-CBO issuance has abated as has the ratio of P-CBO to total corporate bonds and to ABS. In the early stages, people insisted that government intervention could distort the market, but the P-CBO program has contributed to the economic resuscitation of many companies.

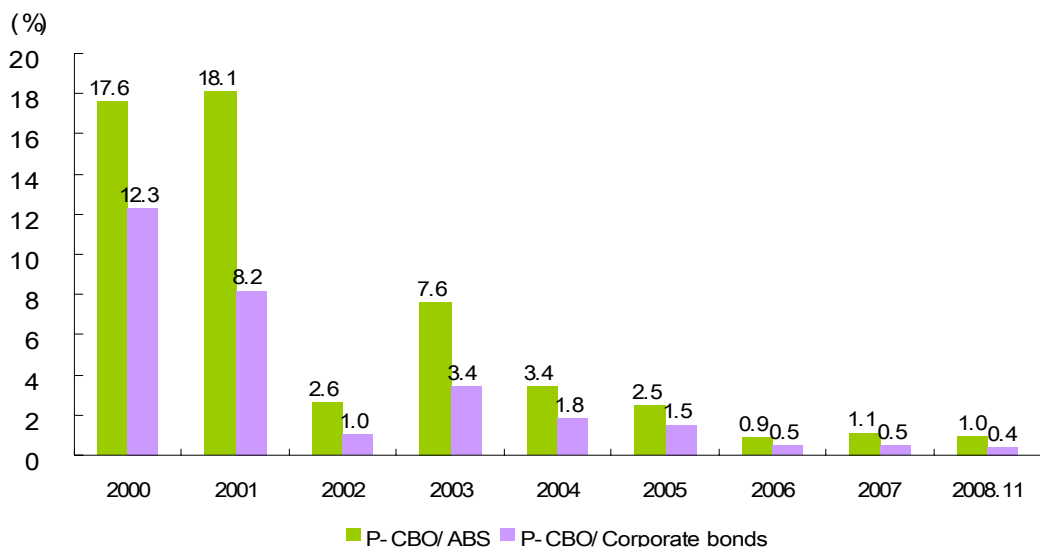
Total Amount of P-CBO Issuances

(unit: billion won)



Source: Financial Supervisory Service.

Ratio of P-CBO Issuances to Corporate Bonds and to ABS



Source: Financial Supervisory Service.

Outstanding P-CBO/CLO Guarantees

(unit: billion won)

	P-CBO/CLO guarantees
2003	4,340
2004	3,056
2005	1,946
2006	1,110
2007	375

Source: KODIT.

Following the introduction of the P-CBO program, many companies with poor credit ratings (below BBB- grade) were able to issue corporate bonds through the capital markets. As a result, companies were able to cut down on financing costs and temporarily smooth out liquidity constraints. As a study by KODIT has shown, when sorted by credit rating, the “sub-investment grade” groups' ratio of P-CBO issuance during 2000-2006 was 46.8%, a level similar to that of the “investment grade” group.

P-CBO Issuance by Investment and Sub-investment Grade Groups (2000-2006)

(unit: billion won)

	Investment Grade	Sub-Investment Grade	Total
Amount	9,253	8,109	17,334
(Ratio)	(53.2%)	(46.8%)	(100.0%)

Source: KODIT.

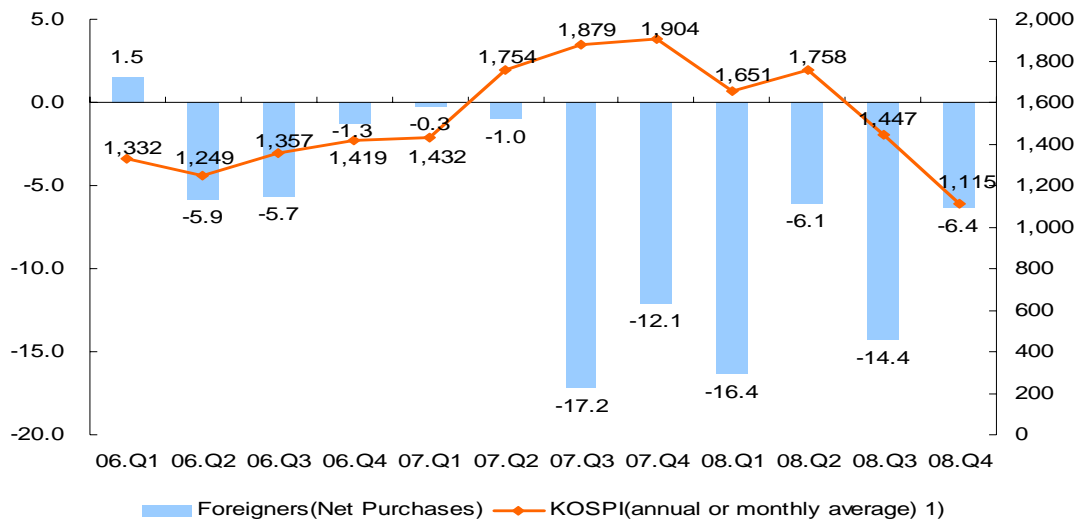
4. Foreign Equity Investment Funds

4-1. Background

The stock market in Korea grew bullish from the second half of 2006. Foreign investors, in fact, began to withdraw from Korean stocks at this time, but the market

Foreigners(Net Purchases), KOSPI

(unit: tril won)



Note : 1) 1980.01.04=100

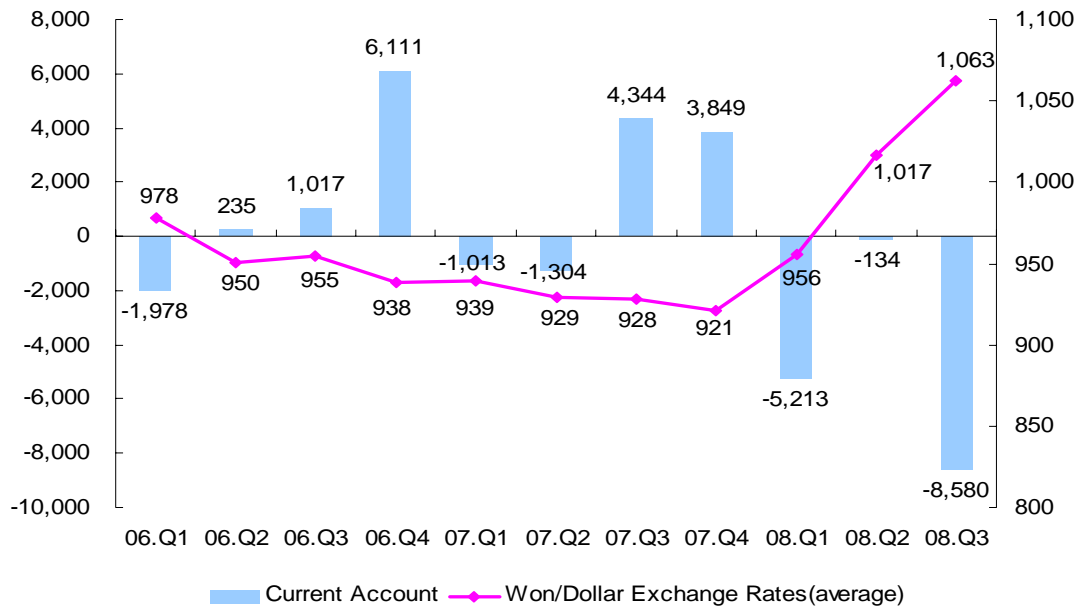
Source: Financial Supervisory Service, Bank of Korea

boomed thanks to increased domestic investor participation. Foreign net sales volume bottomed in the third quarter of 2007 at 17.2 trillion won. Even when the KOSPI index climbed above 2,000 in October 2007, foreign investors fled stocks. As foreign net sales deepened, KOSPI index began to fall.

Despite this, the won remained strong against the dollar, staying under 1,000 until the end of April 2008. This was mainly due to the current account surplus that existed until 2007. There were no imminent concerns in the foreign exchange market until the current account worsened, turning to a deficit in 2008. Since the Korean economy is export-oriented, it is highly sensitive to exchange rate movements.

Current Account , Won/Dollar Exchange Rates

(unit: mil USD)



Source: Bank of Korea

As the won remained strong from 2006 to 2007, the Korean government worried that exports would suffer. As long as the current account remained in surplus, there seemed no risk of an abrupt depreciation. Hence, at that time, the only concern was that the strong Korean won would persist and have a negative impact on exports.

As the stock market rode a worldwide boom through the end of 2007, increasing numbers of individual investors purchased domestic or foreign equity investment funds. Investment in foreign equity funds took off dramatically after 2006, going from 10.9 trillion won at the first quarter of 2006 to 73.0 trillion won at the end of 2007. Investors noticed higher returns on investment in emerging markets such as China, India, and

Vietnam and turned their attention to funds investing in these markets. Another driving force for the dramatic increase was a tax break on capital gains from overseas equity funds that was put in place in June 2007.

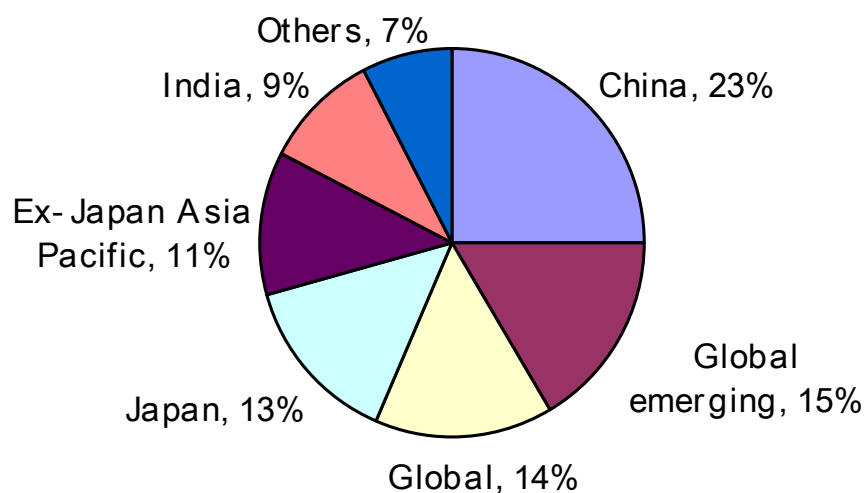
Returns on stocks in emerging market in 2006

	China	India	Vietnam	Korea
Return	130.4%	46.7%	144.5%	4.0%

Source: Korea Center for International Finance

The flow of foreign equity investment funds was directed mainly-about two thirds- into emerging markets such as China, India, and Vietnam. Since the return on investment in those areas was especially high, target markets were not diversified. Hence, investors were highly exposed geographically to concentration risk. As the foreign stock market boom was expected to be sustained, money outflows towards emerging markets were also sustained. This increasing foreign investment was thought to be a tool to make the foreign exchange rate stable because the current account looked healthy and led the Korean won to remain strong. There were also concerns, however, about concentration risk as many investors were exposed to just a few emerging markets.

Geographical Distribution of Foreign Investment Funds(Nov. 2006)



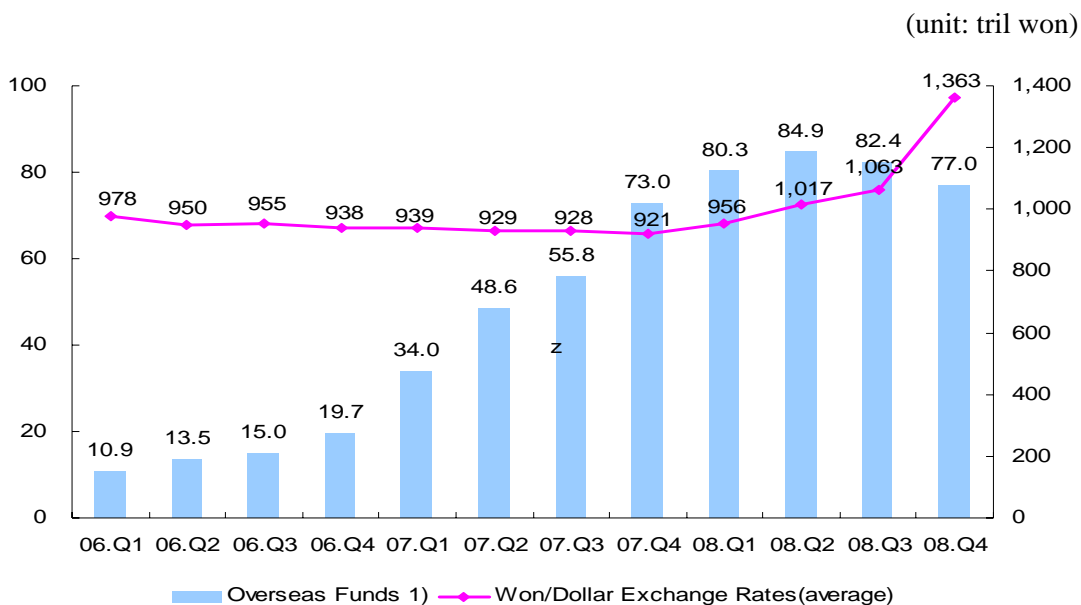
Source: Korea Center for International Finance

4-2. Tax Exemption for Foreign Equity Investment Funds

The average won/dollar exchange rate fell from 978 won at the first quarter of 2006 to 921 won per dollar at the end of 2007. The Korean government proposed a tax break on gains from investing in foreign equity funds in early 2007. Although the proposal met some opposition, it was adopted in June 2007, granting huge benefits to investors until the end of 2009. Previously, though there were no taxes on capital gains from Korean funds, a tax of 15.4 percent was levied on profits from foreign fund investment. The new exemption boosted returns on foreign equity investment funds significantly whereas before, they did not yield the same after-tax return as the Korean equivalent with the same pre-tax return. With the added incentive, people flocked to foreign investment funds. In fact, after the Korean government announced the proposal in mid-January, Korea's securities brokerages and banks were bombarded with calls from

customers asking for recommendations on overseas funds.

Foreign equity investment funds, Won/Dollar exchange rate



Note : 1) Outstanding amount of investment funds

Source: Asset Management Association of Korea, Bank of Korea

The tax break, however, was not given to all funds that invest in overseas assets. Although offshore funds place their investment in foreign stocks, they were not eligible for the tax exemption. Foreign funds are defined as those formed in Korea, while offshore funds are those created overseas before they are sold in Korea.

The Korean government adopted the tax exemption to encourage investors to make their investments in US dollars so that the value of the dollar would rise. Since the Korean won was strong, exporting companies struggled from lack of price competitiveness. Tax exempt foreign investment funds would heighten demand for US dollars, dragging down the value of Korean won. The government was hoping this new measure would generate sufficient overseas investment to have a fairly significant impact on stabilizing

the exchange rate.

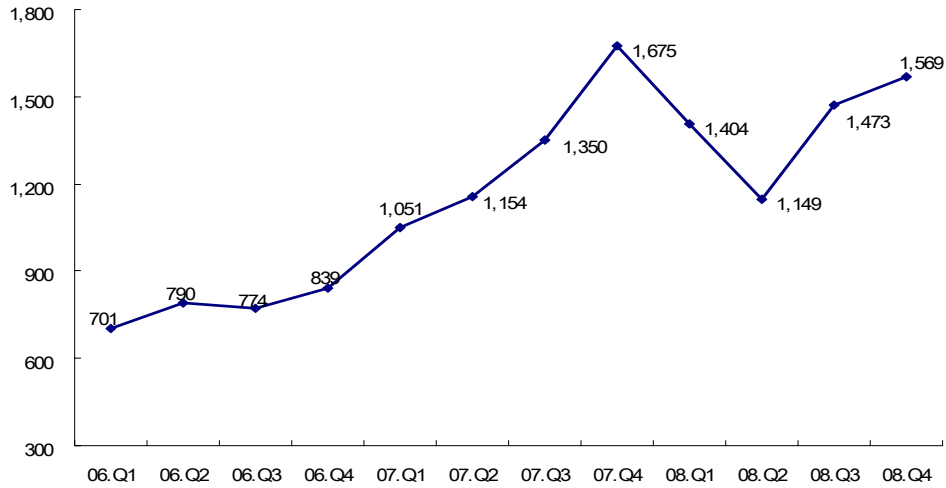
4-3. The Effects of the Tax Exemption for Foreign Equity Investment Funds

The main intent of the tax exemption on foreign equity investment funds was to stabilize the exchange rate by enhancing the demand for foreign currency. This did not work out as planned. As the size of foreign equity investment funds got larger, the funds were exposed to higher foreign exchange risk. There was a remarkable increase in dollar futures and forwards trading during the period from 2006 to 2007. Although it is very hard to estimate how many forwards and futures transactions were implemented for hedging purposes by foreign equity investment fund managers, a significant part of the total forwards and futures trading surge was likely related to the increasing volume of foreign equity investment funds.

The tax exemption on foreign equity investment funds was intended to stimulate demand for foreign currency to drive down the won, the policy could not achieve this if those very same funds hedged their positions against exchange rate risk. For example, suppose a fund manager hedges his position by buying US dollars in the market and selling FX forwards to Korean commercial banks. Then the banks will try to hedge their position too. If Korean banks arrange a swap agreement with the Korean branch of a foreign bank, then the branch will have to borrow US dollars overseas. Hence, this process cancels out the fund manager's increasing demand for US dollars. In fact, in September 2007, about 81.4 percent of foreign equity investment funds were found to have hedged their position against exchange rate risk, according to the Financial Supervisory Service.

USD Futures Trading Volume

(unit: thousand contracts)



Source: Korea Exchange

Korean Banks' Foreign Exchange Transactions through Customer Market (Daily Average)

(unit: 100 million dollars)

	2006	2007				2008		
		1Q	2Q	3Q	4Q	1Q	2Q	3Q
Spot	25.5	31.1	39.7	48.3	53.1	42.8	44.5	40.2
Forward	9.4	11.1	11.8	16.2	17.3	18.7	16.7	15.1

Source: Bank of Korea

Bad things, of course, always eventually happen. Foreign investors kept moving out of the stock market and, on top of that, Korea experienced a current account deficit in 2008. Unstable financial markets due to the subprime mortgage turmoil made the won/dollar exchange rate skyrocket, especially in the second half of 2008.

If investors were hedged against exchange rate risk through forwards or futures, they would be better off when the rate decreased, i.e. the won became expensive. On the other hand, investors would lose out on potential gains when the exchange rate increased. When the tax exemption was proposed, it was believed that the won was likely to remain strong for the near future. Due to the high hedge ratio of foreign equity investment funds, investors of those funds did not obtain gains from the won/dollar exchange rate surge. Fees for hedging were even charged to the investors.

In sum, when the tax exemption was introduced, it was expected to put upward pressure on the won/dollar exchange rate, which was regarded as low at that time. This did not happen, as foreign equity investment funds hedged against exchange rate risk through futures and forwards. As worldwide financial markets destabilized, investors' appetite for risk worsened. A flight to quality induced foreign investors to exit from emerging markets, including the Korean market, which helped, along with the current account deficit of 2008, to push up the won/dollar exchange rate. Eventually, the won/dollar exchange rate became too high and many problems occurred. For example, it was very hard for Korean financial institutions to borrow foreign currency since the subprime mortgage turmoil that threatened financial market stability also heightened credit risk. With no major source of US dollar inflow, the won/dollar rate could only rise. Yet since most foreign equity investment funds were hedged against exchange rate risk, investors could not reap gains from the soaring rates and even had to pay hedging costs. Finally, the Bank of Korea embarked on a currency swap agreement with the US Federal Reserve, which secured supplies of up to 30 billion US dollars in October 2008, and the

rising won/dollar exchange rate finally stabilized.

In retrospect, the tax exemption on foreign equity investment funds did not achieve its goal of stabilizing the exchange rate. In addition, investors did not enjoy gains from the rising rate. Since global stock markets were bearish in 2008, they also could not earn gains from investments in foreign stock markets. When the policy was designed in 2007, the Korean government tried to push up the won/dollar exchange rate, but after just one year or so, it tried to pull down the rate. This exemplifies how difficult it is to design a policy that ends up achieving its stated goal.

5. Window KIKO Forward

5-1. Background

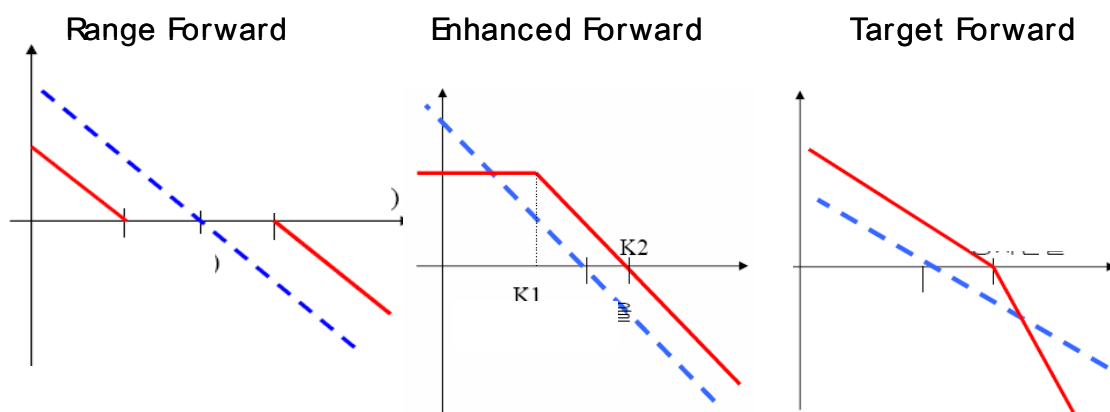
Another good example of the adverse impact caused by a new financial product in Korea would be the Window Knock-in and Knock-out currency derivatives.

Foreign exchange rate risk exposure is common to virtually all who conduct international business and/or trading. The buying and/or selling of goods or services denominated in foreign currencies can immediately expose you to such risk. For a price quoted in advance using a foreign exchange rate deemed appropriate at the time, the rate quote may not necessarily be appropriate when the actual agreement or performance of the contract is done. A foreign exchange hedge can help to manage this risk by offsetting all, or part, of any currency fluctuation on an underlying transaction.

As the won strengthened against the dollar after 2003, small and medium-size exporters became interested in foreign exchange risk management to protect their business from exchange fluctuations. Hedging is generally achieved through the use of derivatives such as forwards, futures, options and swaps. Initially, simple outright forward contracts were the most common type of foreign currency hedging vehicle used by Korean companies. It is a contract to buy or sell a certain amount of foreign currency at a fixed rate for delivery on a specified future date or period. If the date of the foreign currency payment and the last trading date of the foreign currency forward contract are matched, the companies have, in effect, "locked in" the exchange rate.

As the Korean currency got stronger and forward rates became unfavorable, companies turned to other ways to enhance forward rates. A typical method is using a structured forward that incorporates the outlook for the underlying exchange rate. Before the Window KIKO forward came into market, there were many popular structures to choose from, including the range forward, enhanced forward, target forward, and structured forward products embedding exotic options

Examples of Structured Forwards



$$[\text{Call with } K2 - \text{Put with } K1] \quad [\text{Put with } K2 - \text{Put with } K1] \quad [\text{Put with } K2 - a\text{Call} \\ (K2 > K1) \quad \quad \quad - \text{Call with } K2] \quad \quad \quad \text{with } K2] \quad (a > 1)$$

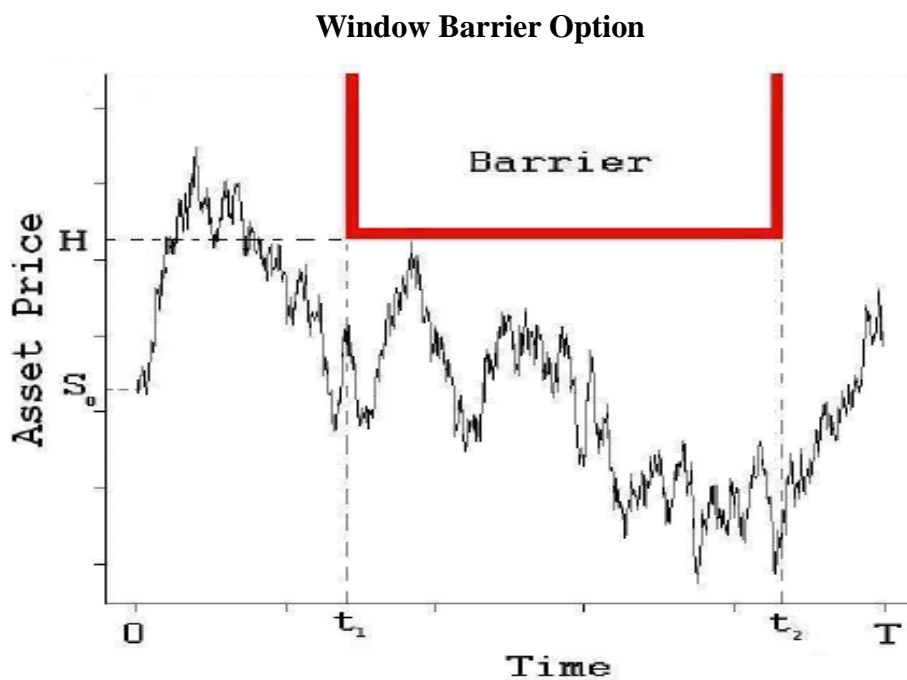
Options that depend on the behavior of the price process during their lifetimes before maturity are known as exotic options.¹ They differ from standard vanilla options in that the final payoff price varies according to the option's path over prior points in time. Exotic options are traded over the counter (OTC) and in most cases offer cheaper premiums than standard vanilla options. Barrier options are the oldest of all exotic options and have been traded in markets since the late 1960's. As the name suggests, vanilla barrier options (a.k.a standard barrier options) are vanilla options restricted by the condition that the underlying asset must touch or not touch some barrier H for the time interval 0 to maturity T.

Vanilla barrier options come in four different types for both call and put options. We must also distinguish whether the strike price K will be greater than or less than the barrier level H. Kick-in barrier options may result in a payoff only if the barrier H is touched during the lifetime of the option, otherwise the price will be zero. The kick-out barrier results in a payoff only if the barrier H is not touched during the lifetime of the option, otherwise the price will be zero. For simplicity we use "in" for kick-in barrier options and "out" for kick-out barrier options. An up barrier option is in the money as soon as the underlying price hits the barrier level from below, while a down barrier option becomes active as soon as the underlying price hits the barrier level from above.

Barriers need not be active for the entire lifetime of the option. Options where the

¹ See Stoklosa(2007), "Studies of Barrier Options and Their Sensitivities," University of Melbourne

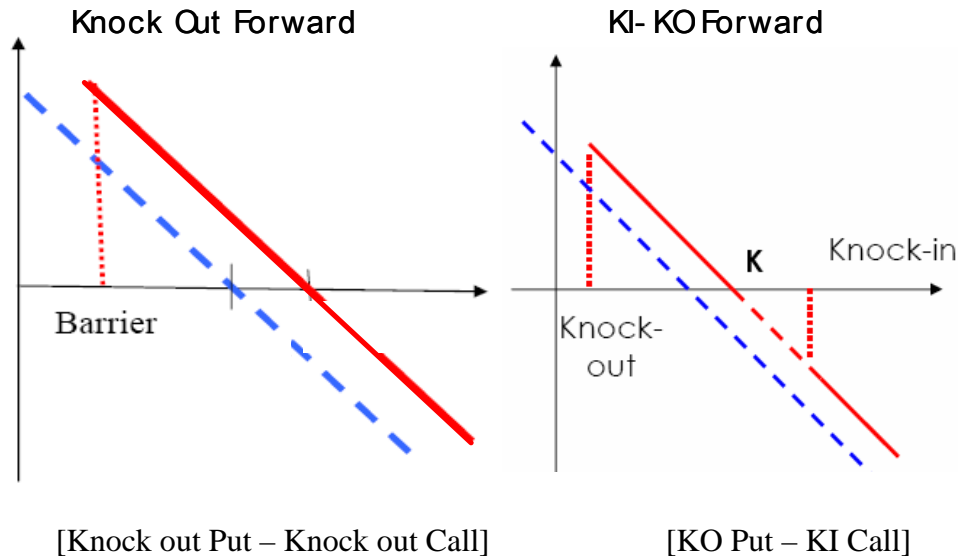
barrier H is only considered for some fraction of the option's lifetime are referred to as partial-time barrier options. Window Barrier Options (a.k.a limited-time barrier options) are European Plain Vanilla or Binary Options with Barriers where the barriers are active during a period shorter than the whole lifetime of the option (for example, the first three months for a six month maturity option). That is, Window Options are special kinds of partial-time barrier options, where the barrier starts at some time $t_1 > 0$ and expires before exercise at time $t_2 < T$. We can illustrate this by the following figure, in which the barrier is not hit. One can specify arbitrary time ranges with piecewise constant barrier levels or even non-constant barriers.



Forward products with barrier options became popular because they are less expensive than vanilla contracts. In fact the closer the spot is to the barrier, the cheaper the barrier option. Any price between zero and the vanilla premium can be obtained by taking an

appropriate barrier level. Alternatively, the structured products can be designed so that they cost nothing, i.e., a zero cost strategy.

Examples of Structured Forwards with Barrier Options



Forward products are crafted for corporate treasurers as well as all companies with international business and cash flows. The real target group, however, is mid-size companies. Large global players usually have enough knowledge, infrastructure and staff to buy the components of the structures separately, whereas the mid-size corporate often prefers packaged solutions.²

For the private or institutional investor, forward products are only of limited use as they normally do not have foreign exchange cash flow behind their investments. For this group similar strategies can be used by omitting the basic forward contracts with worst case and then quanto the structures into the respective domestic currency with cash

² See Wystup(2006), *FX Options and Structured Products*, p.139.

settlement.

5-2. KIKO Structure

The Knock-In-Knock-Out forward is a structured forward with both a lower knock-out barrier and upper knock-in barrier. The regular type is a combination of buying a put option with a low barrier L and selling one or more call options with an upper barrier U. This allows the holder to sell dollars at a preset exchange rate (the option exercise price) when the exchange rate moves within the lower and upper barriers. Companies can customize the structure by choosing the barriers, strike price, the nominal amounts of put and call options and the expiration date.

The down-and-out put is knocked out and rendered worthless if the asset falls to the barrier, while if it does not, the holder receives the payoff of a vanilla put. Clearly, the vanilla put must be struck above, and preferably well above, the barrier: if it is struck below, the option does not pay out either at expiry or at the barrier. The holder has a good return if the asset stays above the barrier but finishes near to it. Thus the reward profile is rather like that of a butterfly spread, but with the ever-present risk of knock-out before expiry.

Therefore, the option is advantageous during times of falling exchange rates, but only until it hits the lower barrier. Beyond the barrier level, the knock-out option is activated and the put option becomes useless, exposing the holder to exchange rate risk and losses.

If the exchange rate surges to surpass the specified range, subscribers are forced to sell dollars worth two to three times more than the contracted amount of the put option at a preset rate that is lower than the market rate, thereby incurring huge losses.

A more popular type of KIKO is one with window barriers. In the regular type, if the barrier is hit anytime before the expiration date, the whole contract will be knocked out or kicked in. But in the window KIKO, it is monitored and settled usually month by month. It can be considered to be a portfolio of KIKO that expires every month.

5-3. Impact on the Market

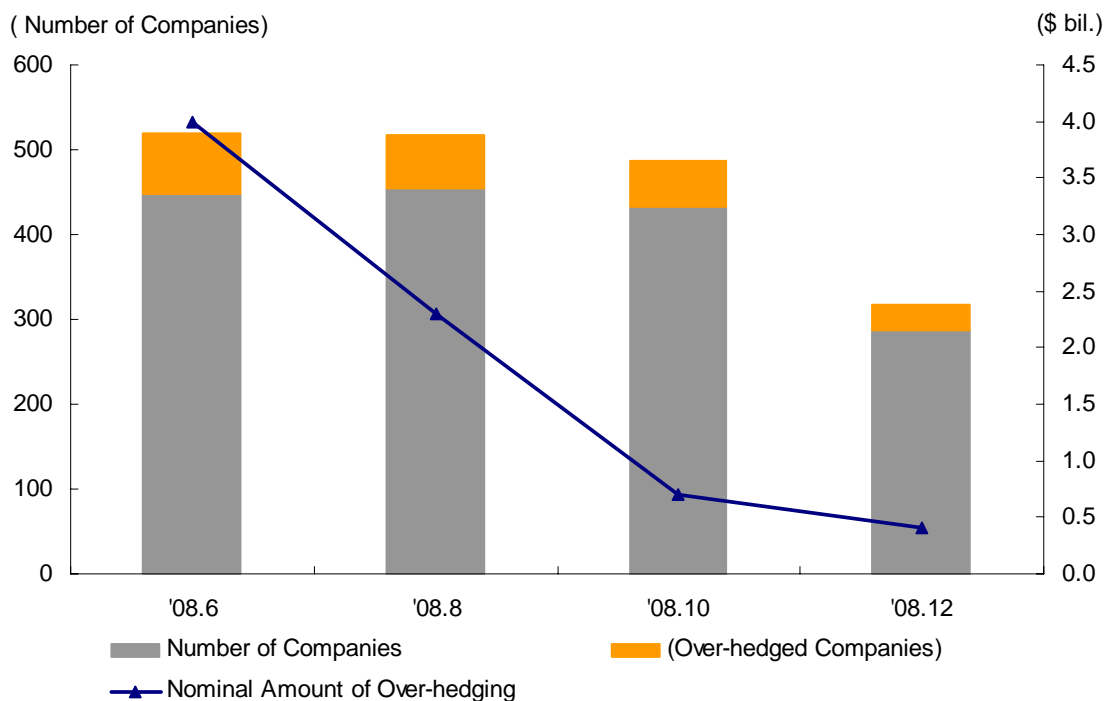
From late 2007, many local exporters rushed to engage in KIKO contracts to hedge against the strong won. This peaked in the October 2007 to January 2008 period. As of the end of June 2008, outstanding KIKO contracts totaled \$10.1 billion and were purchased by 519 companies. 480 of which were small and medium-sized local exporters and 39 of which were big companies.

The bearish movements of the won against the U.S. dollar since March 2008 have taken a heavy toll on local exporters, which had used the products for speculation, eventually taking on positions that surpassed their export volumes. When the call option knocks in, companies with overhedged positions have had to buy extra dollars from the spot market and sell them to the counterparty who exercised the call option at the predetermined strike price, which is below the market rate. There were 68 SMEs with overhedged positions totaling \$3.1 billion at the end of June 2008, leading to

accumulated realized losses of 149.2 billion won.

At the end of 2008, the total remaining balance of contracts shrunk to \$3.7 billion spread over 318 companies. The accumulated realized losses incurred from the KIKO contracts during the year of 2008 recorded 2.1 trillion won. Estimated losses for the remaining contract periods is 1.2 trillion won if the won-dollar rate remains at 1,259.5, the level at the end of 2008.

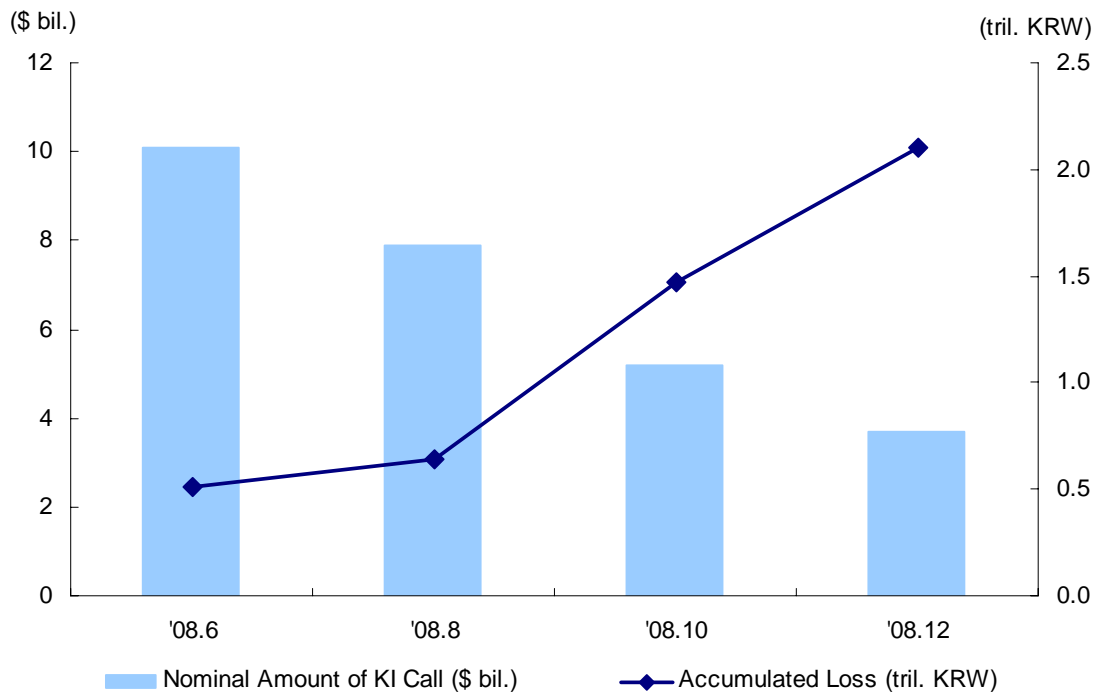
Hedgers vs Speculators



As losses from KIKO products rose in step with the surging won-dollar rate, and firms were driven to the verge of collapse in the wake of snowballing losses, many executives insisted that they were ill-informed of the potential risks of the KIKO contracts, calling

on the government to look into whether financial institutions have abided by the relevant laws.

Trend of KIKO contracts



Some SMEs are also suing banks that sold KIKO products because they believe that there was a possibility of unfair trading practices during the course of product development and sales, forcing SMEs into such deals by monopolizing information and by using their superior positions.

Then Finance Minister Kang Man Soo suggested that the government ban the sale of the KIKOs to protect small exporters from incurring further losses through currency options products. “Under the KIKO provision, small companies lose big when the won weakens

against the dollar, while banks do not incur any losses. It is absolutely unfair and absurd,” the minister noted.³

Meanwhile the Fair Trade Commission reviewed the contract terms and structures, and concluded that the KIKO contracts cannot be said to be problematic or unfair to one party or another in the light of the Regulation of Adhesion Contracts. This effectively brought an end to the controversy over the fairness of the KIKO structure. The FSC also conducted onsite inspections at banks beginning in mid-August to determine whether they gave adequate information when signing contracts with SMEs, or whether they engaged in mis-selling. So far the FSC has not found any illicit activities involving derivatives trading though it revised the Capital Market Consolidation Act to bolster regulation and supervision of the sale of financial derivatives.

In recent times, the derivatives market has grown exponentially in Korea. Korea lags far behind advanced countries in many aspects, however, including variety of products. The KIKO fiasco also stems from a lack of understanding of derivatives products. As such, banks, as well as regulatory authorities, must broaden their understanding about these products, including currency hedging, while also utilizing lessons learned. Accordingly, they must still pursue the sound development and expansion of the derivatives market.

³ See Financial News (2008.8.4), “KIKO fiasco must serve as watershed for derivatives market development,”

III. Implications and Policy Recommendations

1. Implications

The Capital Market Consolidation Act is expected to facilitate the introduction of new financial products, but it also strengthens investor protections. Hence, new financial instruments are likely to increase in the future, but financial institutions will have to pay extra costs due to the strengthened protections. Since the Act was enacted in early February 2009, it is still unknown-and a matter of much interest- how it will affect the financial markets growing forward.

CMA accounts have become popular in Korea as the Act added payment and settlement capabilities for them. As CMA accounts have increased, banks are suffering from the outflow of deposits to CMA accounts. Banks were compelled to issue CDs and bank debentures, increasing funding costs. Due to the shift in money, banks' net interest margins decreased, which in turn worsen banks' profits and their soundness index. Thus, when a new policy is adopted, it is necessary to analyze its ripple effects.

Much effort has been put into making SME financing through the capital markets easy in Korea. Though not so in the U.S., where a vibrant junk bond market has developed, companies with poor credit ratings have difficulty issuing corporate bonds in most countries. Unless the high-yield bond market is well-developed, it is hard to find investors in high-yield bonds. Companies with poor credit ratings were able to issue corporate bonds after the introduction of the P-CBO program in Korea. P-CBOs made

these instruments attractive to investors because the overall risk of default decreases when P-CBOs pool bonds with different levels of risk.

The tax exemption on foreign equity investment funds was originally designed to mitigate the strong Korean won, so that it would help exports increase. Fund managers' hedging positions against exchange rate risk, however, meant the won did not weaken. With the global financial market persistently unstable and with a current account deficit in 2008, the won/dollar exchange rate skyrocketed. Ironically, the overly weak won became the problem. Since the foreign invested funds had been hedged, investors could not gain from the increase in the exchange rate. This example shows that the government should take all the possible market movements and hedging practices into consideration when making such a policy

The supervisory system should build information gathering tools that allow it to be aware of the size and potential risks of new financial products. For example, a KIKO option is a mixed product consisting of long put and short call positions. Financial institutions did not have to report the volume of KIKO option transactions because they decomposed the product into call and put options and only the decomposed positions are reported to the FSS. Hence, the supervisory authority was not aware of the potential risks involved in KIKO options until big losses were realized by SMEs. Recently, the Korean government has tried to construct a new information gathering system related to new financial products. Financial institutions are supposed to report when they sell brand-new financial products.

2. Policy Recommendations

As investor needs become more refined, demand for new financial products will increase. Such products can provide investors with further access channels to the capital market. Investors are, as a result, able to focus on more tailored goals, such as pursuing high returns or hedging the risks they are facing. On the contrary, the very same products can magnify the possibility of systemic risk when used without understanding the risks involved in them. It is not easy for investors to be fully aware of these risks and doing so takes time. Often, investors realize these risks only after the financial market has entered a bad cycle. By this time, the lack of liquidity has intensified and the market gets in a vicious circle of forced selling, increased volatility, and higher haircuts and margin calls. As we can see from the ongoing financial market turmoil, new financial products, such as CDSs and CDOs, may bring about new types of risk.

Considering this, building a sound legal and supervisory infrastructure is critical. If the financial market is efficient, risk will be distributed to investors who are fully aware of and are willing to take this risk. Such investors possess adequate sophistication and tools to take on and deal with risk, and thus a bad event will not cause a big problem in the financial market. If the market is not that efficient, however, risk will be scattered across market participants. The main problem lies in the information asymmetry between them. The role of the financial market infrastructure is to distribute risk to the appropriate investors by minimizing information asymmetry. There is a concern that a strong supervisory system would kill the financial market if we over-emphasize the risk aspects of financial products and disregard their merits. Nevertheless, the current

worldwide reform in the regulatory framework should strengthen the financial stability framework without compromising market efficiency and market innovation.

The current financial market crisis has been partly caused by a lack of transparency in the market. The complex derivatives instruments, sometimes exotic and illiquid, that are being introduced are hard to value and price. In addition, there is little information and disclosure on such instruments especially when traded over-the-counter. When investors cannot appropriately price complex new products, when they cannot measure the total losses by financial institutions, and when they don't know who holds such instruments, uncertainty in the market increases. As a result, investors' risk aversion increases, and confidence in counterparties decreases, eventually leading to an illiquid market. Hence, reporting and disclosure to market participants as well as to regulators and supervisors, are necessary to enhance market transparency. In addition, supervisors should have appropriate information gathering and analyzing capabilities in order to measure market transparency.

Credit rating agencies are supposed to relieve information asymmetry in the capital market. Yet with a large fraction of revenues and profits coming from the rating of complex structured finance products and from providing consulting and modeling services to the issuers of those products, credit rating agencies' conflicts of interest have grown. Regulations to address this are needed in order to prevent agencies from mis-rating new and exotic financial instruments.

Over-reliance on market discipline may result in a situation where agency problems lead

to poor monitoring and where credit risk is transferred to those least able to understand it and manage it. One of the arguments in favor of the market discipline approach is that financial innovation is always several steps ahead of regulation, hence we should not purely rely on rules that are easily gotten around via financial innovation. Even though reliance on market discipline is useful to deal with financial innovation and regulatory arbitrage, we need to set up clear rules and regulations that adhere to principle-based regulation and supervision.

New complex financial instruments are more liquid and easier to price when such instruments are more standardized and traded in clearing house-based exchange rather than over-the-counter. The instruments traded in clearing house-based exchanges lower counterparty risk because they are subject to appropriate margin requirements and are appropriately marked-to-market on a daily basis. Due to standardization, operational risk should also decrease. In acknowledgment of their merits, much effort has been spent to build clearing house-based exchanges for credit default swaps (CDS) in the U.S. and Europe.

The government should in particular try to protect general investors by mitigating information asymmetry. Sophisticated investors are usually aware of potential risks from new financial products, but general investors often do not have enough information on the risks generated by new products. When financial institutions sell these products to general investors, such risks should be disclosed. If the risk notification is not well explained, costly legal disputes between the two parties may arise if losses are realized.

New financial instruments can affect the whole macro economy as they grow popular and as global players become increasingly involved in the global market including emerging markets. As the current crisis shows, the need for controlling systemic risk is increasing. Strengthening macro-prudential supervision, which concentrates on the systemic components of financial markets, is now being stressed in many countries. Without a comprehensive perspective, the contagious nature of a crisis can be underestimated even in countries where financial institutions are thought to be sound. New financial products have made it much easier to transfer risk across the financial system, and they are thus capable of intensifying the contagion effect in a crisis period. Hence, the development of early warning systems about the emergence of risks and vulnerabilities in the financial system, the conduct of macro-stress testing to verify the degree of resilience of the financial sector to shocks and propagation mechanisms with cross-border and cross-sector dimensions, and other macro-prudential regulations on leverage, risk concentration and maturity mismatches are necessary. Macro-prudential supervision should closely complement micro-prudential supervision, which puts more emphasis on the losses incurred by individual financial institutions. For this purpose, information exchange is crucial. The macro-prudential authority must have access to micro-prudential information, and vice versa.

Reforms of financial regulation and supervision should be done at the international level. Regulatory arbitrage may lead financial intermediation to move to jurisdictions with lighter regulations. As the world has become financially globalized, international coordination of financial policies is necessary to avoid unbalanced regulations between countries.