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2013 Modularization of Korea's Development Experience:

Institutions and Policy Measures for the Development of Korea's Asset Management Industry

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KDI School of Public Policy and Management

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Institutions and Policy Measures for the Development of Korea's Asset Management Industry

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Institutions and Policy Measures for the Development of Korea's Asset Management Industry

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The study of Korea's economic and social transformation offers a unique window of opportunity to better understand the factors that drive development. Within one generation, Korea had transformed itself from a poor agrarian society to a modern industrial nation, a feat never seen before. What makes Korea's experience unique is that its rapid economic development was relatively broad-based, meaning that the fruits of Korea's rapid growth were shared by many. The challenge of course is unlocking the secrets behind Korea's rapid and broad-based development, which can offer invaluable insights, lessons and knowledge that can be shared with the rest of the international community.

Recognizing this, the Korean Ministry of Strategy and Finance (MOSF) and the Korea Development Institute (KDI) launched the Knowledge Sharing Program (KSP) in 2004 to share Korea's development experience and to assist its developing country partners. The body of work presented in this volume is part of a greater initiative launched in 2007 to systematically research and document Korea's development experience and to deliver standardized content as case studies. The goal of this undertaking is to offer a deeper and wider understanding of Korea's development experience in hopes that Korea's past can offer lessons for developing countries in search of sustainable and broad-based development. In furtherance of the plan to modularize 100 cases by 2012, this year's effort builds on the 20 case studies completed in 2010, 40 cases in 2011, and 41 cases in 2012. Building on the past three year's endeavor that saw publication of 101 reports, here we present 18 new studies that explore various development-oriented themes such as industrialization, energy, human capital development, government administration, Information and Communication Technology (ICT), agricultural development, and land development and environment.

In presenting these new studies, I would like to express my gratitude to all those involved in this great undertaking. It was their hard work and commitment that made this possible. Foremost, I would like to thank the Ministry of Strategy and Finance for their encouragement and full support of this project. I especially would like to thank KSP Executive Committee, composed of related ministries/departments, and the various Korean research institutes, for their involvement and the invaluable role they played in bringing this project together. I would also like to thank all the former public officials and senior practitioners for lending their time and keen insights and expertise in preparation of the case studies.

Indeed, the successful completion of the case studies was made possible by the dedicated efforts of the researchers from the public sector and academia involved in conducting the studies, which I believe will go a long way in advancing knowledge on not only Korea's own development but also development in general. Lastly, I would like to express my gratitude to Professors Kye Woo Lee, Jinsoo Lee, Taejong Kim and Changyong Choi for their stewardship of this enterprise, and to the Development Research Team for their hard work and dedication in successfully managing and completing this project.

As always, the views and opinions expressed by the authors in the body of work presented here do not necessary represent those of the KDI School of Public Policy and Management.

April 2014

Joon-Kyung Kim

President

KDI School of Public Policy and Management

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Summary

The asset management industry is a service industry where professionals run assets provided by individual investors. Korea's asset management industry started to develop with the purpose to foster the capital market so that funds could be directed for Korean economic development.

In this report, we examine the historical development and growth of Korean asset management industry and take a detailed look at the growth of Korea's pension market which has provided the fertile soil for the development of Korean asset management industry. Pensions can promote the development of the capital market and asset management industry in three aspects. First, since a pension plan is developed as a long-term contract, the asset management based on the pension can also be developed on a long-term basis. Asset management based on the pension can be less affected by the short-term movement of the asset market, and thus the investment in long-term assets and high-risk assets can be promoted. Second, since the assets based on pension plans managed are mainly by institutional investors, the role of institutional investors in the financial market becomes more significant as the pension market grows. Since institutional investors have more expertise and greater accessibility to information than individual investors, they can make investments in riskier and more complex financial products. Third, as pension management institutions face risks such as longevity and inflation risks, the demand for financial products to manage such risks increases and the increase in such demand can lead to the development of the capital market. In general, existing empirical analyses of the relationship between pensions and capital markets indicate that the development of pensions leads to the development of capital markets. For Korea, existing research also reports that the growth of Korean pensions have contributed to the development of Korean capital markets.

Next, we report the growth of fund markets in Korea. Korea's first fund was a stock investment trust set up with one million Won by the Korean Investment Development Corporation in May, 1970. Since then, the Korean fund market has shown tremendous growth. The number of funds in the Korean asset management industry as of the end of March 2013 was 9,992 with total deposits of 336 trillion Won. According to the Investment Company Institute that provides the statistics for global mutual fund markets, net assets of Korea's mutual funds as of the end of 2013 was $285 billion, which was the 13th largest in the world, and the number of Korea's mutual funds was 9,876, which was the largest in the world. We report a detailed analysis of the private equity funds in Korea.

Lastly, we study the 「Capital Market and Financial Investment Business Act」 which was enacted in August, 2007 and was brought into effect as of February, 2009. The purposes of the Capital Market Act are to strengthen financial intermediation, to provide better investor protection, to promote competition and to encourage innovation in the capital market and related financial industries. The main points of the Capital Market Act are as follows. First, the negative system for financial products has been introduced. It strives to induce financial innovation by broadly defining financial products so that financial investment companies could develop and sell any financial products that meet the definition. Second, the functional regulatory system has been adopted more extensively in the financial sector. Third, the scope of business by financial companies has expanded. A large-scale of financial institutions providing comprehensive financial services had been difficult to emerge due to the specialized system where financial companies perform only one type of business among the securities business, asset management business and futures business. Under the new law, financial companies could conduct multiple lines of business with permission from the government. Fourth, a new system to protect investors has been introduced. Protection for general investors has been significantly strengthened while protection for professional investors has been relaxed because general and professional investors have different skill levels and information about investments.

Chapter 1

Introduction

Introduction

The asset management industry is a service industry where professionals run assets provided by individual investors. Korea's asset management industry started to develop with the purpose to foster the capital market so that funds could be directed for Korean economic development. In order to foster the Korean capital market in the late 1960s, the 「Securities Investment Trust Business Act」 was legislated on August 4, 1969.

With the legislation of the Securities Investment Trust Business Act, the Korea Investment Development Corporation launched a securities investment trust business by setting up an equity investment trust with 100 million Won in May, 1970. In August, 1974, five commercial banks and 27 securities companies jointly invested to establish the Korea Investment Development Corporation, which was the first investment trust company in Korea. In September, 1974, the Korea Investment Development Corporation created a bond-type investment trust fund of one billion Won for the first time, and also set up an equity-type fund of 3.6 billion Won and a bond-type fund of 8.3 billion Won in 1975.

In January, 1977, five banks including Korea Development Bank and seven securities companies including Sambo Securities Company, established the Daehan Investment Trust Company as a joint venture. In addition, as merchant banks established under the 「Merchant Banking Corporation Act」 enacted in December, 1975 were allowed to engage in the investment trust business of public bonds and corporate debentures, the Korea Merchant Banking Corporation created a fund for short-term public bonds and corporate debentures in November, 1976.

During the Korean stock market boom of the mid-1980s, securities investment trust grew quickly. For example, the number of the investors in beneficiary certificates increased from 1.13 million people at the end of 1985 to 3.06 million people by the end of 1988. However,

as the Korean stock market declined from 1989, the Korean asset management industry began to stagger.

With the advancement and the liberalization of the Korean financial markets since the late 1980s, the 「Securities Investment Trust Business Act」 was amended in 1996. Under the revised Act, the management and sales of funds were separated, and also the number of asset management companies established by securities companies, banks and insurance companies increased significantly. In 1998,「Securities Investment Trust Business Act」 was re-amended, allowing banks to sell funds in addition to the existing securities companies. Furthermore, the 「Securities Investment Company Act」 was enacted in the same year and the mutual fund, which is a company-type securities investment fund, was introduced.

In October, 2003, the 「Indirect Investment Asset Management Act」 was introduced and enacted in 2004, merging the existing 「Securities Investment Trust Business Act」 and 「Securities Investment Company Act」. The goal was to strengthen protective measures for investors and also introduced a functional regulation system that applied the same rules of regulation to financial products with the same function. In addition, the Act permitted the sales of funds to insurance companies in order to promote competition, and expanded the scope of investment by asset management companies from securities to real estate, real commodities, and over-the-counter derivatives.

In 2003, the Korean government announced a plan to enact a new law which would govern the whole financial industry. At that time, many separate laws existed for different types of financial industries. Therefore, in May, 2005, the government organized a task force to integrate capital market related laws. As a result, the 「Capital Market and Financial Investment Business Act」 (hereinafter referred to as the 「Capital Market Act」) was enacted in August 2007 and was brought into effect as of February 2009.

The main points of the Capital Market Act are as follows. First, the negative system for financial products has been introduced. The goal is to induce financial innovation by broadly defining financial products so that financial investment companies could develop and sell any financial products that meet the definition. Second, the functional regulatory system has been adopted more extensively in the financial sector. Third, the scope of business by financial companies has expanded. A large-scale of financial institutions that provided comprehensive financial services experienced difficulties to emerge due to the specialized system where financial companies perform only one type of business among the securities business, asset management business and futures business. Under the new law, financial companies could conduct multiple lines of businesses if they had the permission from the government. Fourth, a new system for the protection of investors has been introduced. Protection for general investors has been significantly strengthened while protection for

professional investors has been relaxed because general and professional investors have different skill levels and information about investments.[1]

In the following chapters, we will examine the historical development and growth of Korean asset management industry and will report the growth of the Korean pension market which provided the fertile soil for the development of Korea's asset management industry. Then, we will examine the development of the Korean fund market. Lastly, we will introduce the Capital Market Act which was a turning point in the development of Korea's asset management industry.

1. Korea Financial Investment Association, The Sixty-year's History of the Korea Financial Investment Association, 2013

Chapter 2

The Asset Management Industry in Korea

1. Development of the Asset Management Industry: Institutional Perspectives

2. Growth of the Asset Management Industry

The Asset Management Industry in Korea

1. Development of the Asset Management Industry: Institutional Perspectives

1.1. Asset Management as Pseudo-banking until 1995

The legal foundation for Korea's asset management industry was established by enacting the 「Securities Investment Trust Law」 in 1969. The Korea Investment Corporation was established and created the first investment issuing beneficiary certificates in 1970. Later in 1974, the Korea Securities Investment Trust Corporation was established as the first financial institution specializing in managing securities investment trusts. In addition, in 1977, the Korea Investment Corporation was reorganized to become Daehan Securities Investment Trust Corporation and in 1982, Kookmin Securities Investment Trust Corporation entered the market to complete the "triarchy system in the asset management industry".This oligopolistic structure was maintained until 1996 when new entrants were allowed. The financial supervisor of Korea took partial measure to enhance a competitive environment in the asset management industry by licensing five regional securities investment trust companies in 1989 but the dominance of the three big players continued until market liberalization in 1996.

In discussing Korea's asset management industry, it is very important to take trust into consideration mainly because of its affinity to securities investment trust in terms of economic function as well as legal structure. The Trust Law was enacted in 1961 before the Securities Investment Trust Law was passed in 1969. Initially, five commercial banks started to deal in trust products. In 1968, the Ministry of Finance reversed the policy direction and prohibited commercial banks from selling trust products. Instead, a specialized bank,

the Korea Trust Bank, was established to exclusively deal with trusts. Later, the Korea Trust Bank experienced financial difficulties and merged with Seoul Bank. The merger resulted in the Seoul Trust Bank that was sanctioned to provide trust products as well as its regular banking services. A drastic policy change occurred in 1983 allowing all commercial banks to deal with trusts. Still, other financial institutions than commercial banks were not able to provide trust products due to prohibition by law. Since financial trusts utilized various forms of securities as the main device of asset management constituted the majority of trust business, most investors were unable to tell the difference between trusts and securities investment trusts except for the fact that different kinds of financial institutions were involved. In particular, most trusts managed by commercial banks were unspecified financial trusts for which investors did not specify how trust assets should be managed. One of the fundamental doctrines in management of trust assets is that each trust should maintain its independence in managing assets under trust contract. In spite of the independence principle, trustees of unspecified financial trusts were allowed to pool all assets of multiple trusts with similar investment purposes and manage them as a unit of investment funds like securities investment trusts. Therefore, from the investors' perspectives, unspecified financial trusts managed by commercial banks were practically indistinguishable from securities investment trusts. The regulatory barrier that allowed commercial banks to deal with trusts exclusively was abolished when securities companies and insurance companies were allowed to enter the market in 2005.

Prior to 1995, both securities investment trusts and banks' financial trusts were allowed to offer guaranteed and unguaranteed returns for the assets entrusted to them. The former promised investors to returns both the principal and fixed amount of investment income while the latter attributed both losses and gains of asset management to investors. In reality, guaranteed products dominated the market and securities investment trusts and financial trusts were regarded as vehicles for saving rather than investment. Of course, differences existed in that the main targets of asset management were not loans but marketable securities but, from the investors' perspectives the difference was minor as long as the returns were guaranteed. Until the Securities Investment Trust Law was amended in 1995 to prohibit asset management companies from promising fixed amount of returns to the owners of beneficiary certificates, securities investment trusts and financial trusts had achieved steady growth as pseudo-banks providing consumers another savings vehicle.

One important reason that securities investment trusts have been treated no differently than saving products was that in order to mobilize large amounts of capital required in the process of government-led economic development, policy makers had to provide enough incentives to induce more savings. Guaranteeing minimum returns for investment products such as beneficiary certificates was equivalent to eliminate the downside risk of

investment that higher rate of returns induced more savings. The primary goal of financial policy was to mobilize capital necessary to propel the economic development plan and policy direction for the asset management industry was also geared toward fulfilling higher level goals of financial policy. For instance, Article 1 of the Securities Investment Trust Law of 1969 clearly stated the purpose of the law was to contribute to raising funds for economic development. In reality, the introduction of securities investment trust constituted an important element of efforts by the Korean government to stimulate capital mobilization from the capital market for economic development.

One noticeable characteristic of the regulatory framework before 1995 was the relatively loose regulatory stance on the issue of investor protection to alleviate various problems stemming from conflict of interests between investors and asset managers. The unsatisfactory states of the regulatory framework for investor protection can be understood in the context that the possibility of conflict of interests was minimized by the way securities investment trusts were operated. First, beneficiary certificates issued by securities investment trusts were a form of debt instruments that promised repayment of the principal and fixed amount of interests that the possibility of conflict of interests was minimized. Second, all securities investment trust companies were in fact controlled by the government and the promise to repay a guaranteed amount of return was never been broken. Investors had little reason to doubt whether the promise would be kept. Consequently, the regulatory framework for asset management in Korea lacked several important measures to protect investors from conflict of interests that are typically found in other countries with mature capital markets. Valuation of assets managed by investment trusts was done on a book value basis rather than more a objective market value basis. There was no regulatory requirement on disclosure of important aspects of activities by asset managers and monitoring by the third party did not work. The trustees were entrusted with the right to examine whether asset managers fulfilled their duties as the prudent guardians of investors' property but had never taken measures to exercise the right.

1.2. Asset Management as a "True" Investment Vehicle: 1995~2003

With the abolition of the guarantee of returns on beneficiary certificates issued by bond-type investment trusts in 1990, securities investment trusts started to transform into true investment vehicles for which the return was determined by performance of investment activities from a de facto saving instrument. There were some products with return guarantees in case of stock-type investment trusts even in 1994. The revision of the Securities Investment Trust Law in 1995 banned to promise fixed dividends on all beneficiary certificates. Meanwhile, the strict restriction of entry into securities investment trusts market

was relaxed in 1995 as the "Securities Market Reorganization Program" allowed banks and securities firms to establish securities investment trusts and issue beneficiary certificates. Between 1996 and 1997, 21 new securities investment trust companies were established.

New entrants were not limited to banks and securities firms but established as subsidiaries of large industrial capitals known as Chaebols. They had already secured significant footholds in securities dealing and brokerage even before entering the asset management industry through expanding business areas of affiliated securities firms or acquiring existing securities investment trust companies. With the active entry of industrial capital into the market, by the end of 2002, market share of securities investment trust companies under the control of the Chaebols in terms of net establishment value [2] of investment trusts reached 45%.

In 1998, a major change occurred in the structure of the asset management industry. A new form of investment vehicle, the securities investment company, was introduced by the enactment of the Securities Investment Company Law. The Securities investment company, commonly called the mutual fund, is a paper company whose sole purpose is to hold stocks of other companies for investment purposes. With the introduction of securities investment companies, a situation arose where three economically similar investment vehicles such as securities investment trusts, trusts, and securities investment companies were being regulated by different laws and regulatory framework. Differential legal and regulatory treatment on the separate entities serving the same economic functions created an environment in which the rational economic agents subject to discriminatory regulatory frameworks prompted them to pursue regulatory arbitrage. In addition, the practice provided the ground for unfair competition among various forms of collective investment vehicles.

The most important change that occurred in the asset management industry during this period is that collective investment vehicles were transformed into investment product from means of savings with the abolishment of guaranteed dividends. This led to frequent changes in legal and regulatory frameworks in order to cope with the changing circumstances. For example, the Securities Investment Trust Law was revised 14 times between its enactment in 1969 and abolishment in 2004 and 11 of the revisions happened during this era. Frequent revisions of legal foundations regulating the asset management industry could be seen as efforts to maintain efficiency and effectiveness of regulatory frameworks in response to the constantly changing environment. In particular, the revision of the Securities Investment Trust Law in 1995 clearly stated that the purpose of the enactment is to protect the owners of beneficiary certificates rather than mobilization of savings to facilitate economic development. The major challenge for better investor protection was to institute several

2. The net establishment value is defined as the difference between total contribution to the trust and redeemed amount.

important measures to alleviate the conflict of interests between investors and asset managers. The fundamental shift of the regulatory framework toward better investor protection lifted Korea's asset management industry to a higher level closer to the global standard. Important changes included solidification of institutional arrangements to cope with asymmetric information, strengthening of governance structure of collective investment schemes such as securities investment trusts and securities investment companies, and institutionalization of various measures to protect investors from conflict of interests. Particular attention should be paid to the introduction of new regulatory measures or re-adjustment of existing ones to enhance the efficiency of resource allocation through alleviation of information asymmetry. Also, the regulatory measures related to information disclosure were strengthened. Provisions of the prospectus of securities investment trusts and reports on management results of trusted assets became mandatory and the Korea Association of Asset Management Companies, the official self-regulatory organization of the asset management industry was required to publish periodic reports on performance comparison of existing collective investment schemes. A particularly important development was the introduction of the valuation system requiring all collective investment schemes to calculate the market value of assets under management on a daily basis, which in general is regarded as the indispensable weapon to combat problems from conflict of interests. While the law granted the trustee the right to monitor asset managers and to instruct how to take corrective measures, it was rarely exercised, making a third party monitoring system ineffective. In order to secure the effectiveness of the monitoring by a third party, an amendment was introduced for the trustee the duty to demand the withdrawal of inappropriate instruction by asset management companies. In addition, a new regulatory measure was introduced to oblige asset managers to respond immediately should the trustee request ledgers and documents in order to call off improper instructions by asset managers.

In order to counter the increased possibility of conflict of interests caused by the easing of entry barriers, several important legislative measures were taken. Measures were introduced to prevent conflict of interests between investors and securities companies or Chaebols controlling the securities investment trust companies that managed the investment funds. For example, a monthly ceiling on the number of transactions by securities investment trust companies affiliated to securities companies was placed to prevent asset managers from excessive transactions to increase commission fees of the securities companies at the sacrifice of investors. Also, securities investment trust companies controlled by Chaebols were prohibited from buying more than a certain amount of securities issued by entities to which the securities investment trust companies were affiliated.

1.3. Establishment of the Integrated Regulatory System: the Collective Investment Schemes Act of 2003 and the Capital Market and Financial Investment Companies Act of 2007

In 2003, the Collective Investment Schemes Act was enacted as the fundamental device that laid the foundation for the integrated regulatory framework for all forms of collective investment schemes that had once existed in fragmented ways. It was a groundbreaking event that brought structural change to the asset management industry of Korea. Prior to the enactment of the Collective Investment Schemes Act, different collective investment schemes were regulated by different laws and regulations; securities investment trusts by the 「Securities Investment Trust Law」, investment companies by the 「Investment Company Law」, unspecified financial trust by the 「Trust Law」. The practice was based on the traditional approach to financial regulation called the institutional regulation. It recognized individual financial institutions as the basic unit of regulation and a single regulatory entity possessed the power to regulate all activities of an individual financial institution. Undesirable consequences of the institutional regulation were pursuit of regulatory arbitrage by regulated financial companies and the formation of grounds for unfair competition, which ultimately led to inefficient allocation of scarce resources. In addition, there was criticism about the traditional framework of institutional regulations in that it might act as an obstacle to financial innovation that would be beneficial to society as well as the industry. Under the traditional regulatory regime, financial institutions had to be granted permission from the regulatory authority before they could sell new products. The conservative nature of financial regulators had the tendency to delay permission. The 「Collective Investment Schemes Act」 of 2003 adopted a new regulatory principle called the functional regulation that applied the same regulatory measures to the activities with identical economic functions even though the activities were performed by different financial institutions. The new law took a practical approach to reference the 「Securities Investment Trust Law」 and subjected to it all collective investment schemes no matter who managed the assets investors entrusted. The regulatory framework for investor protection was significantly enhanced to regain trust on the strength of the capital market and a strict regulatory grip on the asset management industry was also relaxed to stimulate development of the industry.

First, the shift of the regulatory principle from institutional to functional regulation was expected to play an instrumental role in improving effectiveness and fairness of the financial regulation. Under the old regulatory regime, individual financial institutions or products were taken as the basic unit of regulation and regulated by different laws. However, not only have the old principles caused fairness issues in financial regulation in that activities equivalent in their economic function are regulated by different regulatory legislation, but it was also very difficult to embrace new and innovative financial products and services

into the existing regulatory framework that the old regime used to be harshly criticized as a serious obstacle to provide better services to investors especially by market participants. In most cases, active legislative measures such as amendments of existing laws or enactment of new ones were required to accommodate new products or services, which had to go through long and slow debates and negotiations during the parliamentary process. The 「Collective Investment Schemes Act」 of 2003 was the result of legislative efforts to provide an integrated regulatory framework encompassing all asset management vehicles and related services. The law adopted a new regulatory principle called functional regulation. Under the new regime, financial products and services were regarded as the basic units of regulation and all financial products and services were regulated by the same standard as long as they performed the same economic function. It was believed that the new legislation would enhance the effectiveness and fairness of regulation and laid the foundation to increase investors' welfare by actively embracing new innovations. The change in the regulatory principle was in accord with the global trend. The 「Financial Services and Markets Act 2000」 in the U.K. and the 「Investment Trusts and Investment Companies Act」 in Japan are examples of legislative efforts to integrate fragmented regulatory systems under the unified principle of functional regulation.

Second, many restrictions on the activities of asset managers were lifted. In particular, the scope of assets that collective investment schemes could make investment was expanded and sales channels of beneficiary certificates or shares of investment companies were broadened The old regulatory system restricted managers of collective investment schemes to make investment on securities with high marketability and liquidity. It posed serious limitations to development of new products that could accommodate diverse demand from investors. The new regime allowed collective investment schemes to make investment on a broader range of assets including derivative, exchange traded or over-the-counter, real estate, commodities and other marketable assets specified by rules and regulations. In addition, in order to promote competition in the asset management industry, banks and insurance companies were allowed to manage collective investment schemes as long as they had adequate financial and human resources required by the regulatory authority. The sales channel for securities issued by collective investment schemes was further expanded to include insurance companies and asset management companies in addition to banks and securities firms. Also, to provide the foundation to build the basis of effective asset management, in-kind capital payment and partial acquisition of unsold beneficiary certificates were permitted and future price system was introduced. Moreover, asset managers were permitted to charge various forms of fees for asset management services and the condition and procedure delayed redemption of beneficiary certificates was explicitly specified to provide better business environment for asset management companies.

Third, various measures were taken to solidify the regulatory framework for investor protection. The duty of the trustees to monitor illegal activities of asset managers was strengthened and a general meeting of holders of beneficiary certificates was institutionalized. The new law specified articles related to separated registration of collective investment schemes, improved disclosure system of prospectus and fund performance reports, and enhanced roles of external auditors. Moreover, measures were taken to impose more effective regulations on owl disclosure, to require submissions of trustee reports on a regular basis and to provide the guiding principle for sales of securities issued by collective investment schemes.

The socio-economic background of the enactment of the 「Collective Investment Schemes Act」 was the aging process progressing in unprecedented manners. Korea entered an aging population in 2006 with people over the age of 65 occupying 7% of the total population and was expected to shift to an aged society and super-aged society [3] in 2018 and 2026, respectively. With fast graying population, it became an important policy agenda to provide effective and stable long-term investment instruments that could enable retirees to secure adequate cash flow during their retirement years. In coping with the societal demand for effective long-term investment vehicles, policy makers made it a top priority to build efficient and robust capital market and to foster a reliable asset management industry, which led to the enactment of the 「Collective Investment Schemes Act」.

The efforts to establish an integrated regulatory framework resulted in significant achievements in the asset management industry but did not stop there. Policy makers continued to make efforts to build an efficient and consistent regulatory system throughout the capital market. In 2005, the financial regulatory authority in Korea announced the plan to launch a series of efforts to revise the legal and regulatory frameworks to introduce the integrated regulatory system for the capital market. Two years later, the 「Capital Markets and Financial Investment Companies Bill」 passed in the National Assembly to become the Act that provided the unified regulatory framework for all activities related to the capital market. The Act replaced five important laws that had regulated different areas of Korea's capital market; the 「Securities and Exchange Act」, the 「Futures Trading Act」, the 「Collective Investment Schemes Act」, the 「Trust Law」, and the 「Merchant Bank Act」. The force behind the establishment of the Capital Markets and Financial Investment Companies Act could be attributed to the promotion of financial innovation through harmonizing the regulatory system and market development, enhancement of coherency and efficiency in financial regulatory system, and fostering financial industries related to the capital market.

3. The United Nations measured the degree of aging by the proportion of people who are 65 or over out of the total population. A group of people would be called as aged and super-aged societies when the proportion exceeding 14% and 20%, respectively.

Information asymmetry prevalent in financial market results in inefficient resource allocation and welfare loss to society. The government tried to correct the market failure due to asymmetric information and improve efficiency in resource allocation by intervening in the market though financial regulation. Systemic risk and consumer protection are two important areas on which information asymmetry may have negative impacts. Thus, two important objectives of financial regulation were prevention of systemic risk and protection of financial consumers. Meanwhile, the environment surrounding the financial market constantly changed and the details of the financial regulatory system was revised to accommodate the changing environment. Since financial regulation played a pivotal role in shaping decision making of regulated agents, frequent changes of regulatory framework could result in unintended side effects of damaging market stability. Therefore, there was constant tension between the regulatory system and constantly changing environment. If the discrepancy reached a certain threshold, serious adverse effects could occur such as the deterioration of allocative efficiency, increased instability in financial markets, and extended regulatory neglect of consumer protection.

Prior to the enactment of the 「Capital Markets and Financial Investment Companies Act」 in 2007, the financial regulatory system in Korea was basically a modification of the regulatory regime established in the United States after the Great Depression in the early 1930's, which was based on the strict separation of commercial banks and securities firms. It is believed that the old regulatory regime had been carrying out its role without causing significant problems at least up to the late 1990's when the liberalization of financial market started to take effect. In the early stages of economic development, the Korean government chose the strategy to pursue fast economic growth relying on foreign capital on as well as domestic savings intermediated by commercial banks. As the economy proceeded to a more mature stage, many commentators argued that it was time to turn the attention to the capital market as an important source of capital. In response to the call for promotion of the capital market, the regulatory framework on capital markets was carefully examined and several important policy actions to support financing from capital market were taken. In spite of various efforts to foster the capital market, the significant imbalance between indirect and direct financial markets had been a major problem in the Korean financial sector until the 1980's when measures to liberalize financial market were gradually executed. The foreign exchange crisis in 1997 sped up the liberalization of financial market due to sweeping regulatory reform across all sectors of the economy. Foreign capital freely flowed into the domestic financial market and concerns were raised on the implication of massive inflow of foreign capital on the stability of financial market in case of sudden reversal of capital flow. Experts and market participants agreed that the old regulatory system based on interventionist paradigm had become a serious hindrance not only to financial market

development under the new environment but also to the accomplishment of regulatory objectives. This led to demand for a fundamental reform of the regulatory system.

The steadily widening gap between market practices and the regulatory system also prompted a call for regulatory reforms in the international financial market. Financial innovations progressed on a global scale since the 1980's drove new trends in the financial industry; integration, conglomeration, and securitization. The new trends brought on severe competition for survival and that in turn stimulated more innovation and market participants demanded deregulation of the financial market. Indeed, discord between market practices and the regulatory system was not a problem limited to the capital market but it was where the negative impacts became most conspicuous. The legislation of the「Capital Markets and Financial Investment Companies Act」can be regarded as an effort to fill the gap between market practices and the regulatory framework and Korea's asset management industry underwent significant changes.

The regulatory regime before the enactment of the「Capital Markets and Financial Investment Companies Act」was based on the interventionist paradigm. Three important financial services related to the capital market, securities trading, futures trading, and asset management, were strictly separated and financial companies were allowed to deal with products or services only if they were explicitly listed in laws or regulations. Consequently, competition across different areas of the financial industry was fundamentally limited. Paying attention to high value added produced by the financial industry, policymakers in Korea often expressed the intention to promote the financial industry as the engine of economic growth. With little demand from the market, they took the strategy to provide enough breathing room for the young industry by promising exclusive territory. To cope with possible adverse effects of the policy to promote industries with weak market foundations, the policymakers established a regulatory system that held a tight grip on the behavior of financial institutions. The regulatory system based on the interventionist paradigm functioned without any serious problem as long as the market size was still small and the scope of market participants was limited. With the changing environment, signs of malfunction such as regressing financial intermediation, larger opportunity for regulatory arbitrage, and hampered financial innovation appeared. There was a widespread agreement among market participants as well as policymakers that could hardly expect the financial industry to achieve fast development as long as the old regulatory framework was replaced by new one that would abolish restrictions on financial products and activities of financial institutions. The「Capital Markets and Financial Investment Companies Act」was the result of various efforts to cope with the changing environment and provide the institutional foundation for development of the capital market.

Since 2003, the Korean government made efforts to establish Seoul as a financial hub of Northeast Asian area, with the inauguration of the new administration. It attracted support from a wide range of experts from the securities industry, and decided that the asset management industry should play a key role in building the financial hub. It emerged as a top priority to realign the regulatory system to reflect the changing environment. The enactment of the 「Capital Markets and Financial Investment Companies Act」 was one of the milestones for building a new regulatory system. On many occasions, policymakers strongly expressed intentions to foster large investment banks that could compete in the global financial market and openly showed expectation on the emergence of a Korean version Goldman Sachs. The legislation of the 「Capital Markets and Financial Investment Companies Act」 started from the observation that it was neither feasible nor desirable for the government to drive growth of the financial industry. It is somewhat paradoxical that policymakers played the pivotal role in drafting the new bill but were unable to free themselves from traditional industrial policy. The legislation could be understood as the result of struggles to overcome the reality that the financial sector fell out of step with the real sector and the financing structure heavily dependent on indirect financing could cause such considerable costs.

Important measures taken by the new law especially for the asset management industry were the introduction of functional regulation, abolition of strict separation of financial services, and strengthening of investor protection.

First, financial products or activities rather than financial institutions were chosen as the basic unit of regulation and the regulatory system was realigned following the new principle of functional regulation under which the same financial activities in their nature were treated equally. The law categorized all financial activities related to capital market services into six groups; dealing, brokerage, collective investment scheme, trusts, discretionary investment management, and investment advice. It is financial activity not financial institution that was the basic unit of regulation, which led to the prevention of regulatory arbitrage and unfair competition.

Second, giving up the strict separation of different financial services related to the capital market, the new law allowed all financial institutions to provide all or part of six financial services as long as they satisfied the conditions the regulatory authority required. Everyone who obtained licenses to provide regulated activities could freely deal in any activities other than six regulated activities by simply notifying the regulatory authority unless they were closely related to prudentiality and investor protection. Lower entry barriers led to a more competitive market environment and a better institutional foundation on which financial service providers would offer better products and services.

Third, from the perspective of investors, the significance of the new legislation was that the framework for investor protection in capital market was fundamentally reformulated. The introduction of new regulatory framework based on the negative system prompted the coverage of services by financial companies to expand. However, it became clear that the old regulatory system based on the positive listing principle was inadequate to accommodate the changing environment and could cause large holes in investor protection. The investor protection under the new system started with classifying investors into two groups, qualified investors and general investors, according to financial knowledge or experience and the ability to take risks. When financial investment companies were involved in transactions with a qualified investor, they were exempt from most of conducts of business regulations to protect investors to respect autonomy of contracting parties. In contrast, they were subject to much a stronger regulatory framework in transaction with general investors. For instance, financial investment companies were required to observe the duties of know-your-customers, suitability, and proper and sufficient explanations. Know-your-customer regulation imposed obligations for financial investment companies to apprehend investment purposes, experience in financial transactions, and the wealth of investors. Suitability principle required that financial investment companies could not recommend financial products that were not thought to be appropriate considering the characteristics of investors. The principle of proper and sufficient explanation meant that financial investment companies should explain the specifics and details of financial products in the manner that inexperienced general investors were able to understand. It also required that financial investment companies should always be able to present proof confirming that investors understand what was explained to them. The duty of proper and sufficient explanation was particularly important in securing effectiveness of investor protection regulation since the violation of the regulation could lead to sanctions from the regulatory authority.

It was unanimous that a strong and effective investor protection system was crucial in securing efficiency and equity in the financial market but hot debates were still under way on the strength and method of the regulation. The minimalist approach argued that it was sufficient for the regulatory authority to fill information gaps between contracting parties since the source of the problem was asymmetric information. Advocates of the activist approach argued that even in the absence of information asymmetry investors did not have to ability to gather and analyze complicated information on financial products and contracts, let alone understand it. They also argued that to protect investors and induce smooth flow of funds into the capital market a strong regulatory system is required, one that goes beyond measures the minimalist approach pursued. The old regulatory regime on investor protection was based on the minimalist approach and to put much emphasis on the principle of proper and sufficient explanation as the core device to achieve regulatory objectives. But the 「Capital Market and Financial Investment Companies Act」 acknowledged that rationality

of investors was limited and accommodated more stringent measures for investor protection such as the principles of suitability and know-your-customer.

1.4. Introduction of the Private Equity Investment Fund and Korean Style Hedge Fund

A private equity fund is generally defined as a collective investment scheme that raises funds from a small number of investors in the form of private placement and manages the funds on equity mainly not listed on the exchange. Private equity funds can be classified in various ways according to investment strategies or target assets. Three important varieties of private equity funds the legal system in Korea recognizes are the privately placed collective investment scheme, hedge fund, and private equity investment fund [4] and all of these are often referred to as private equity funds. Private collective investment schemes are not different from ordinary collective investment schemes in that they seek investment returns by constructing a diversified portfolio of relatively liquid assets such as listed equities and investment grade bonds with high credit ratings. However, unlike traditional collective investment schemes that raise funds from the general public, invitations are issued to a small number [5] of large investors such as institutional investors and qualified individual investors to establish funds. Hedge funds seek short-term investment returns by actively utilizing leverage and arbitrage opportunities. Private equity investment funds make equity investment on unlisted private companies to acquire control rights. They enhance the value of target firms by providing growth capital and managerial restructuring and realize investment returns though initial public offering or sales of the target firms.

Private equity investment funds were integrated into the financial regulatory framework by the revision of the 「Collective Investment Schemes Act」 in 2003. The law permitted extensive autonomy in establishment and investment activities by exemptions from most regulatory restrictions to facilitate smooth funding and flexible asset management. For example, unlike the collective investment scheme that should be managed by asset management companies licensed by the financial regulatory authority, anybody can establish and manage private equity investment funds by registering at the regulatory authority with proper documentation. The introduction of private equity investment funds in 2003 was motivated by changes in the environment surrounding the financial industry that policymakers felt strong pressure to foster domestic players to compete against foreign

4. Strictly speaking, hedge funds are recognized as a variety of private equity investment funds by the Capital Market and Investment Companies Act. Other forms of private equity funds such as venture capital funds or distress funds are based on separate laws. Refer to the next section further discussion on the issue.

5. The law allows a private collective scheme to solicit funds from no more than 50 investors.

investors that took a leading role in Korea's capital market since the complete current account liberalization after the foreign exchange crisis in 1997. Evaluation on the roles of foreign investors in Korea's capital market was mixed. Some argued that foreign investors contributed to the development of Korea's capital market by providing inexpensive capital and modernizing various practices in the capital market. Others emphasized negative aspects of foreign capital such as demand for excessive dividends and concerns on foreign control of large financial institutions and companies with strong implications on national interests. However, the fundamental motivation was the criticism that while domestic investors were subject to a very restrictive regulatory framework, foreign investors were, in fact, able to adopt flexible investment strategies free from most of restrictive regulatory measures. Policymakers tried to solve the problem of reverse discrimination against domestic investors by introducing a new form of collective investment scheme that was not subject to the traditional restrictive regulatory framework for asset management. The effort culminated in revisions to the 「Collective Investment Schemes Act」 in 2003 to introduce private equity investment funds. It was expected that the introduction of private equity investment funds would bring in some important benefits. First, relaxed monetary policy and prolonged low interest rates resulted in ample liquidity in the financial market and private equity investment funds were expected to induce short term liquidity into long term investments that could contribute to the formation of physical assets. Second, private equity investment funds were also expected to facilitate selling off the restructured companies owned by commercial banks and the privatization of nationalized commercial banks after the foreign exchange crisis in 1997. Severe depression following the foreign exchange crisis made many companies insolvent and acquired by commercial banks through a debt equity swap. Commercial banks tried hard to dispose of the acquired companies but had difficulties in attracting buyers. In addition, most commercial banks were nationalized to avoid bankruptcy after the foreign exchange crisis in 1997 and the Korea Deposit Insurance Corporation was under constant pressure from the National Assembly as well as the market to re-privatize them. However, the strict separation of commercial banks from industrial capital made it almost impossible to find buyers with the ability to mobilize enough capital to pay for large commercial banks. Focusing on their ability of efficient fund raising, policymakers regarded private equity investment funds as effective buyers in the mergers and acquisition market. Third, it was expected that private equity investment funds could provide small and medium enterprises with good growth prospects with equity capital necessary to take off for the next stage in the life cycle of firms.

In June 2004, the Korean government announced plans to introduce private equity investment funds and the amendment of the 「Collective Investment Schemes Act」 passed in the National Assembly in September after intense debates among policymakers, experts, and market participants. Unlike most countries where privately placed funds including

private equity funds are established and managed with great flexibility based on autonomous contracts between investors and asset managers, the regulatory system in Korean treated privately placed and public offering funds almost equally. It was a natural choice to introduce a new form of privately placed collective investment schemes by amending the law. However, some critics argued that the legal approach might lead to sullying the true intent of private equity investment funds by imposing strict restrictions on establishment and management. But policymakers paid attention to the practical aspect that rapid change in regulatory framework on privately place funds could cause unnecessary confusion in the market. A balance was determined by allowing a new form of privately placed funds where much less restrictive regulations were imposed but demanding to satisfy minimum requirements for establishment and management of the funds. The first private equity investment fund was registered in 2005 and subsequent growth was remarkable. By the end of 2012, 237 funds were being operated with committed capital of 44 trillion Korean Won and among them 28.1 trillion Korean Won were called.

A universal definition of the term hedge fund does not exist[6] but various attempts to explain hedge fund focuses on the features from the perspectives of legal status, style of asset management, and investment strategies. The attributes of hedge funds can be easily understood by comparing them to public collective investment schemes, often called mutual funds. The difference between mutual funds and hedge funds can be seen in attitudes toward risk and investment strategies. The risks embedded in financial investment can be decomposed into two factors: market risk and idiosyncratic risk. Hedge funds and mutual funds have opposite views on two kinds of investment risks. Mutual funds try to minimize idiosyncratic risk by constructing well diversified portfolios of large numbers of assets while bearing market risk. On the other hand, hedge funds take the strategy to minimize market risk by taking a neutral position. Instead, hedge funds pursue returns from mispricing by actively exposing themselves on idiosyncratic risks.

Hedge funds emerged in the early 1950's in several countries with developed capital market like the United States. But it wasn't until the late 1990's that rapid growth started to set in thanks to the financial deregulation that had progressed in the late 1980's. The size of the hedge fund market experienced explosive growth in the 2000's. Accurate statistics on hedge funds are not available but rough estimates indicate that the amount of assets under management of hedge funds has grown to reach $1.9 trillion US dollars in 2010 from a mere $25 billion US dollars in 1990. The remarkable growth of hedge funds is thought to be attributed to the fact that they are able to provide new opportunities for higher returns and better risk diversification by aggressively including more assets into portfolios. While the existing indirect investment vehicles such as mutual funds construct their investment

6. Refer to IOSCO(2006) for detailed discussion on the difficulties in defining hedge fund.

portfolios with traditional assets like stocks and bonds, hedge funds took the strategy to actively accommodate new forms of assets like derivative products or real assets in addition to the traditional assets, which extended efficient frontier in a significant degree. On the other hand, hedge funds provide the opportunity to pursue absolute returns by taking idiosyncratic risks while traditional mutual funds seek relative returns from taking market risks by constructing diversified portfolios.

Some argue that in addition to better investment opportunities for investors, hedge funds bring beneficial effects on the financial market. First of all, since most hedge funds pursue the strategy to seek returns by taking advantage of pricing errors, frequent transactions by hedge funds expedite the price discovery process in market and enhance the efficiency of resource allocation. In addition, provision of liquidity by hedge funds play an important role in securing the stability in financial markets and active exercise of shareholders' rights improve the value of companies on which hedge funds make investments. Despite the fact that hedge funds hold many advantages over traditional products, they are very difficult to handle from the perspective of risk management and several countries that maintained the stance to impose a minimal set of regulations on hedge funds have started placing stronger regulations to improve investor protection and market stability. A reshuffle of the current regulatory system should be seriously considered to strengthen investor protection since risks involved in investment on hedge funds are large and unconventional. Unlike the traditional collective investment schemes such as mutual funds seeking to minimize idiosyncratic risks, the target of risk management in hedge funds is the total risk that is the sum of market risk and idiosyncratic risk. It is not necessarily true that returns volatility of hedge funds are larger than that of mutual funds. It is always possible for hedge funds to possess smaller amount of risks than mutual funds as there are various target assets and investment strategies utilized by hedge funds. Nevertheless, it is still contested whether hedge funds can create absolute returns by taking a market neutral position and allowing exposure on idiosyncratic risks. Some argue that hedge funds are much riskier than traditional products in the sense that achieving the announced investment goal may not be feasible.[7] Furthermore, hedge funds usually take more leverages compared to mutual funds and are therefore prone to liquidity risks. When market liquidity shrinks due to external shocks, hedge funds may face calls for additional collateral or premature termination of loan contracts. If hedge funds are unable to meet requirements from creditors, they are forced to close the short positions even

7. For example, long position and short position of a typical long-short fund, the most popular type of hedge funds, is asymmetric return structure. While the maximum loss from a long position in stock is limited to the purchasing price, the loss from a short position is theoretically unbounded. Therefore, the risk of loss from short position is much larger than that from long position. Considering the risks from asymmetric loss structure, most long-short funds take positive positions rather than completely neutral position. In other words, most hedge funds committing to pursue absolute returns are not completely immune to market risk.

before attaining target rate of returns or planned maturity date. In addition, hedge funds are particularly prone to operational risks arising from asymmetric information due to lack of transparency, which provides another foundation to advocate a certain degree of regulations on hedge funds. Also, a strong argument for more strict regulations on hedge funds attracted wide support especially after the global financial crisis in 2008 for hedge funds could spread system risks across financial markets. Not only do hedge funds constitute the major part of shadow banking system as the key channel through which system risks spread, but also the size of hedge funds has grown to the point where liquidity problem of some hedged funds can be disseminated into the entire financial market. Taking the importance of hedge funds into account, many argue that hedge funds should be subject to stronger regulations to secure stability in financial markets.

Announcing plans to introduce hedge funds in 2011, policymakers clear stated the policy goals to realign the institutional scheme of the capital market. Hedge funds were regarded as the darling of modern financial industry that combined cutting edge expertise and systems and expected to play crucial roles in promoting financial market development and establishing a new growth engine for the financial industry. Meanwhile, it was also stressed that the odd situation under which domestic investors were discriminated should be resolved. While domestic investors were heavily regulated under the existing regulatory framework, foreign investors including hedge funds were free to operate outside the strict regulatory scheme. According to a press release [8] issued by the Financial Services Commission, Korea's highest authority in financial policy and regulation, policymakers did not conceal the expectation that hedge funds would invigorate the economy by facilitating the capital flow into high risk investments. It was an example of a long tradition among policymakers in Korea that concerns on industrial policy would be intricately interwoven with the design of a regulatory system. However, the turmoil in the financial market after the 2008 global financial crisis caused regulatory authorities to make efforts to establish a tighter regulatory grip on hedge funds especially in terms of system stability and investor protection. Therefore, policymakers had to respond to challenges from two different sides; promotion of the finance industry and prevention of various risks from hedge fund investment. A unique product dubbed as Korean style hedge funds was created as a result of efforts to design a regulatory system that did not obstruct the realization of intended benefits while minimizing the possibility of negative impacts. The regulatory system on the new product is a combination of the traditional and revisionist views.

The legal foundation for Korean style hedge funds was established in 2011 by revising the rules of the 「Capital Market and Financial Investment Companies Act」. Hedge funds were recognized as a special form of private equity investment funds that already existed

8. Refer to FSC (2011).

under the Act. The characteristics of Korean style hedge funds can be summarized as follows. First, the option to invest on hedge funds was limited to qualified investors with a certain level of expertise in financial transactions and sufficient financial resources. More specifically, individual investors with assets no less than 500 million Korean Won in addition to institutional investors were regarded as qualified investors. Second, management of hedge funds were limited to financial investment companies licensed under the 「Capital Market and Financial Investment Companies Act」. They included dealers, brokers, investment advisors, and asset management companies. Additional qualifications are required in terms of experience and financial ability as asset managers. This measure was thought to be the device to secure accountability and transparency of hedge fund managers. Third, hedge funds were subject to much lax regulations compared to other forms of collective investment schemes such as mutual funds. Hedge funds were allowed to be established as a mixed type fund for which target assets were not limited. In addition, they were also allowed to take leverage up to 400%. That provided hedge fund managers with significant flexibility considering the fact that the ceiling on leverage for the traditional funds was only 100%. Fourth, hedge fund managers were required to report major aspects of funds they managed so that the regulatory authority could check the market on a regular basis. Items to be reported included leverage, derivative transactions, collateral provision, important investment strategies, types of target assets, and risk management. Fifth, prime brokers [9]were explicitly inducted to the regulatory system. Services of prime brokers were defined as a regulated activity and anybody who wanted to provide services had to satisfy the qualifications in terms of capital and expertise. It was also required to build a Chinese wall to prevent any conflicts of interests. Credit provision and other fund management activities were also subject to the regulation.

Many experts and market participants criticized that strict regulation on hedge funds could do much damage on flexibility of decision making on investment strategy based on private contracts between investors and fund managers. In particular, licensed financial investment companies of considerable size were only allowed to establish and manage hedge funds, which greatly differed from other countries where minimum capital and management strategies constituted qualification for registration. Moreover, hedge funds were legally recognized as a form of collective investment schemes that both were regulated under the same system. Also, this was fundamentally different from the cases in other countries that regulated two investment vehicles in a separate manner.

9. Prime brokers provide various services to hedge funds. They include stock loan for short selling, financing, custody and management of assets managed by hedge funds, clearing and settlement for transactions by hedge funds, and reporting to investors.

Hedge funds were institutionalized in September 2011 and have recorded remarkable growth since then. It was reported that 19 hedge funds managed assets worth 720 billion Korean Won in July 2012.

2. Growth of the Asset Management Industry

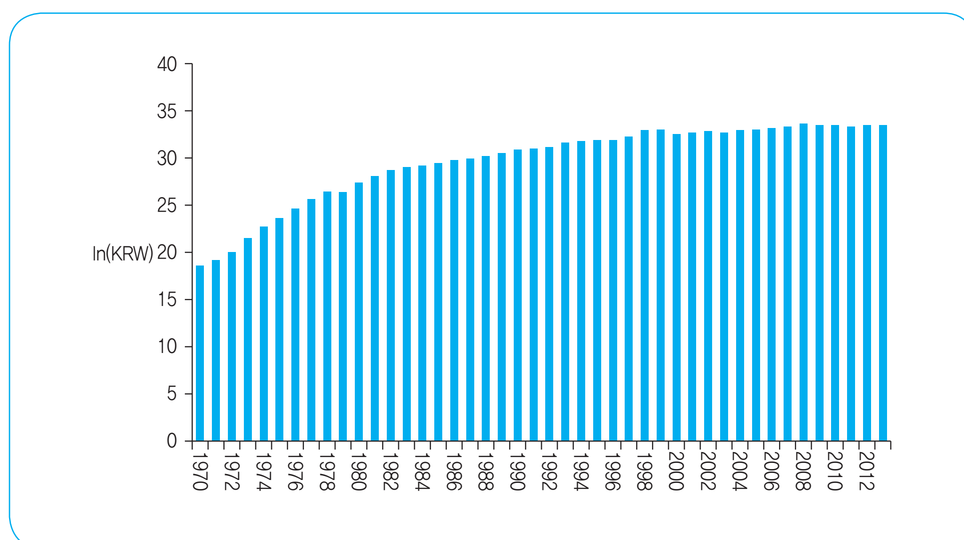
The 「Capital Market and Financial Investment Companies Act」 acknowledged various investment vehicles related to the asset management industry. For the present, three of them are under operation, including: investment trusts, investment companies, and private equity investment funds. The growth of the asset management industry in Korea focusing on investment trusts and investment companies will be examined.

Outstanding Book Value (OBV) of assets under management is calculated as the difference between total assets invested and redemption and regarded as the main indicator for the size of collective investment schemes such as investment trusts and investment companies. Collective investment schemes in Korea showed rapid growth during two decades after being introduced in 1969. OBV started with 100 million Korean Won in 1970 and increased to 19 billion in 1975, and 665.9 billion in 1980, respectively. It exceeded 1 trillion Korean Won in 1981 and constantly increased until the outbreak of the foreign exchange crisis in 1997 with OBV over 90 trillion Korean Won. The high interest policy to stop massive capital outflow resulted in huge cash inflow to bond investment and OBV of collective investment schemes significantly increased to 193.7 trillion Korean Won in 1998. Low interest rates in the subsequent years caused a reversal of cash flow and OBV dropped to 124.9 trillion in 2000. Collective investment schemes secured a firm legal foundation as important investment vehicles along with the enactment of the 「Collective Investment Schemes Act」 in 2003. OBV exceeded 2 trillion Korean Won in 2005 and reached 359.5 trillion in 2008. The asset management industry was affected by the global financial crisis. OBV slightly decreased in subsequent years but rebounded to recovering pre-crisis levels of 334.8 trillion Korean Won in 2013. The composition of OBV by the types of collective investment schemes quickly responded to changes in the financial market environment. While the share of stock type collective investment schemes have stayed at the ranges between 20% and 30%, that of bond type collective investment schemes constantly decreased. The gap left by decreasing share of bond type has been filled by new types such as short term instruments, fund of funds, and derivatives.

In the following, we will examine the development of asset management industry after 2004 when detailed statistics are available. According to <Table 2-2>, OBV of the collective investment schemes recorded 187 trillion Korean Won in 2004 and reached 334.9 trillion Korean Won in 2013. The average annual growth rate was 9.5% during the period.

On the other hand, the number of collective investment schemes increased from 6,492 in 2004 to 10,807 in 2013, which implied that the average size of individual fund grew. Investment trusts have a long history since its introduction in 1969 and occupy a dominant share accounting for more than 95% of total OVB of collective investment schemes. Public collective investment schemes raising funds from the general public take up a larger portion with 60% share than privately placed collective investment schemes.

Figure 2-1 | The Growth of Collective Investment Schemes in Korea



Note: The vertical axis is illustrated in terms of the natural log of OBV in Korean Won.
Source: Korea Financial Investment Association

Table 2-1 | The Growth of Collective Investment Schemes in Korea by Investment Type

(Unit: billion Korean Won)

Year	Stock Type	Bond Type	Short Term Instruments Type	Fund of Funds Type	Others	Total
1970	0	0				0.1
1975	5	14				19
1980	43	623				666
1985	900	4,924				5,824
1990	9,977	13,272				23,249
1995	15,224	50,223				65,446

Year	Stock Type	Bond Type	Short Term Instruments Type	Fund of Funds Type	Others	Total
2000	29,091	82,399	13,443			124,932
2005	34,512	85,442	64,846	3,447	16,072	204,319
2010	113,264	73,061	66,918	13,028	48,912	315,183
2011	116,175	63,069	53,127	7,527	58,582	298,480
2012	104,596	66,069	63,138	8,750	74,721	317,273
2013	95,368	78,785	66,401	10,427	83,913	334,894

Note: 1) The classification is based on the composition of assets in funds.

2) Stock type and bond type include mixed type with larger share of stocks and bonds, respectively.

3) Others include derivative type, real estate type, special asset type, and real asset type collective investment schemes.

Source: Korea Financial Investment Association.

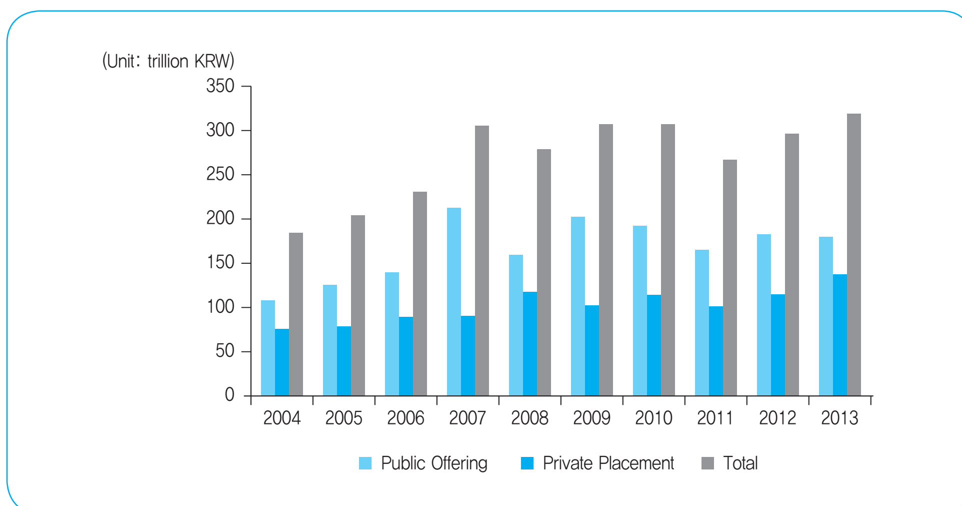
Table 2-2 | The Growth of Collective Investment Schemes in Korea by Legal Type

(Unit: billion Korean Won, funds)

	OVB			Number of Funds		
	Total	Investment Trusts	Investment Companies	Total	Investment Trusts	Investment Companies
2004	186,993	180,305	6,688	6,492		
2005	204,346	193,264	11,081	7,319	6,947	372
2006	234,615	222,149	12,466	8,137	7,670	467
2007	296,460	283,146	13,315	8,907	8,430	477
2008	359,487	346,300	13,187	9,678	9,268	410
2009	331,880	319,078	12,802	9,005	8,651	354
2010	315,183	302,781	12,401	9,159	8,854	305
2011	298,480	286,390	12,090	9,735	9,479	256
2012	317,273	304,941	12,332	9,864	9,699	165
2013	334,896	323,531	11,365	10,807	10,652	155

Source: Korea Financial Investment Association.

Figure 2-2 | The Growth of Collective Investment Schemes by Fund Raising Method



Source: Korea Financial Investment Association.

Collective investment vehicles in Korea have been generally operated on a small scale. According to <Table 2-3>, the average OBV was 28.7 billion Korean Won in 2004 and increased to 37.2 billion Korean Won in 2008 at its peak. Since then, the size of collective investment schemes has decreased to 31 billion Korean Won in 2013. While the average size of public collective investment schemes constantly increased, privately placed collective investment schemes decreased. The same trend can be confirmed by <Table 2-4> that reports the distribution of the collective investment schemes by OBV. The number of very small funds with OBV of less than 1 billion Korean Won decreased to 888 in 2013 from 1,620 in 2004. The number of privately placed collective investment schemes increased from 110 to 2,534 during the same period. Another characteristic feature of collective investment schemes in Korea is the fact that the life expectancy of funds is very short. [Figure 2-3] illustrates that the proportion of funds with the age of five years and more is hovering around 20%.

Table 2-3 | The Average Fund Size of Collective Investment Schemes in Korea: OBV

(Unit: billion Korean Won)

Year	Public Offering	Private Placement	Total
2004	27.1	31	28.7
2005	30.5	24.7	27.9
2006	36.2	21.8	28.8
2007	47.6	20.1	33.3
2008	48	26.2	37.2
2009	56.2	21.5	36.9
2010	53.3	21.6	34.4
2011	54.3	17.6	30.7
2012	59.8	18.5	32.2
2013	57.5	19.3	31

Source: Korea Financial Investment Association.

Table 2-4 | The Distribution of Collective Investment Scheme: OBV

(Unit: funds)

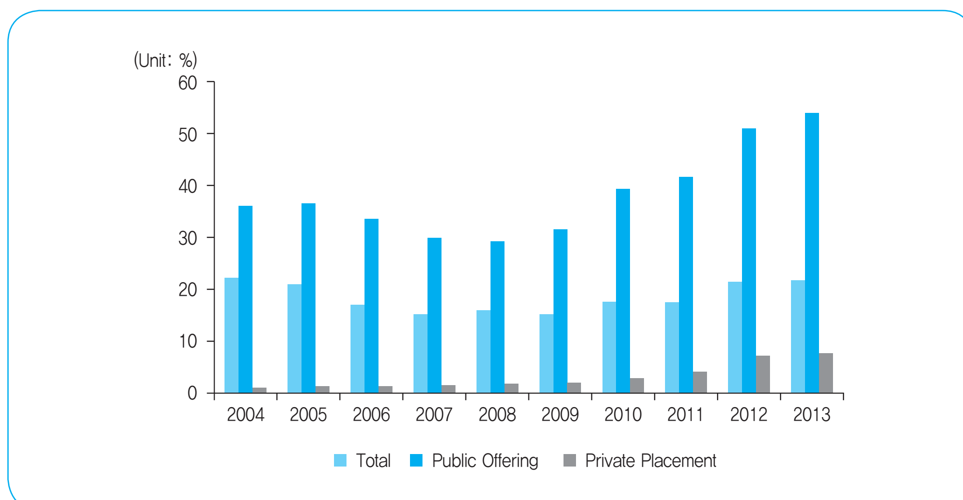
Year	Type	S<1	1<S<10	10<S<50	50<S<100	S>100	Total
2004	P. O.	1,620	1,333	642	125	187	3,907
	P. P.	110	854	1,090	323	172	2,549
	Total	1,730	2,187	1,732	448	359	6,456
2005	P. O.	1,490	1,311	924	128	203	4,056
	P. P.	109	1,243	1,413	323	175	3,263
	Total	1,599	2,554	2,337	451	378	7,319
2006	P. O.	1,324	1,242	954	159	238	3,917
	P. P.	112	1,690	1,859	352	176	4,189
	Total	1,436	2,932	2,813	511	414	8,106
2007	P. O.	1,373	1,471	910	181	320	4,255
	P. P.	191	2,101	1,866	318	164	4,640
	Total	1,564	3,572	2,776	499	484	8,895
2008	P. O.	1,562	1,816	965	168	339	4,850
	P. P.	449	2,354	1,556	305	159	4,823
	Total	2,011	4,170	2,521	473	498	9,673

Year	Type	S<1	1<S<10	10<S<50	50<S<100	S>100	Total
2009	P. O.	1,233	1,479	768	182	337	3,999
	P. P.	449	2,354	1,556	305	159	4,823
	Total	1,682	3,833	2,324	487	496	8,822
2010	P. O.	1,186	1,325	699	166	332	3,708
	P. P.	984	2,467	1,349	414	239	5,453
	Total	2,170	3,792	2,048	580	571	9,161
2011	P. O.	918	1,350	705	171	323	3,467
	P. P.	1,618	2,715	1,260	456	220	6,269
	Total	2,536	4,065	1,965	627	543	9,736
2012	P. O.	797	1,239	718	181	328	3,263
	P. P.	2,170	2,471	1,148	538	277	6,604
	Total	2,967	3,710	1,866	719	605	9,867
2013	P. O.	888	1,205	717	186	315	3,311
	P. P.	2,534	2,716	1,259	626	363	7,498
	Total	3,422	3,921	1,976	812	678	10,809

Note: P.O. stands for public offering and P.P. for private placement.

Source: Korea Financial Investment Association.

Figure 2-3 | The Proportion of 5-year-and-older Funds



Source: Korea Financial Investment Association.

Chapter 3

Pensions and the Asset Management Industry

1. Introduction
2. Public Pensions and the Asset Management Industry
3. Personal Pensions and the Asset Management Industry
4. Retirement Pensions and the Asset Management Industry

Pensions and the Asset Management Industry

1. Introduction

1.1. Growth of Pensions, Capital Markets and Development of the Asset Management Industry

Pensions can promote the development of the capital market and asset management industry in three aspects. First, since a pension plan is made under a long-term contract, the asset management based on the pension can also be made on a long-term basis. Accordingly, the asset management based on the pension can be less affected by the short-term movement of the asset market, and thus the investment in long-term assets and high-risk assets can be promoted.[10] Second, as the assets based on pension plans managed mainly by institutional investors, the role of institutional investors in the financial market becomes more significant as pension market grows. Since institutional investors have higher expertise and better accessibility to information than individual investors, they can make investments in riskier and more complex financial products.[11] Third, as pension management institutions face risks such as longevity and inflation risks, the demand for financial products to manage such risks increases and the increase in such demand can lead to the development of the capital market. [12] In general, existing empirical analyses about the relationship between pensions and capital markets indicate that the development of pensions leads to the development of

10. World Bank (1994), Davis (1995), Catalan, Impavido, and Musalem (2000), Impavido and Musalem (2000), Kim (2013).

11. World Bank (1994), Kim(2013).

12. World Bank (1994), Bodie (1990), Davis (1995), Kim (2013).

capital markets.[13] For Korea, Catalan, Impavido, and Musalem (2000), Park and Yu (2006), and Kim (2008) also report that the growth of Korean pensions have contributed to the development of Korean capital markets.

This chapter will examine the Korean pension system which includes public pensions, retirement pensions, and personal pensions. We will report tax policies such as tax reduction and exemption policy for pensions, which aim to promote pension plans.

1.2. Korea's Pension Plans

The public pension plan is a type of social security in order to prepare for the interruption and reduction in earnings. Korea's public pension plans have gradually expanded their scope since its inception in 1988. When public pension plans were first introduced in 1988, the public pension plans were available only for employees of businesses with 10 or more employees. The scope of the public pensions expanded to employees of businesses with five to nine employees in 1992, to farmers, fishermen and self-employed people in rural areas in 1995, to self-employed people in urban areas in 1999, and to employees of businesses with fewer than five employees in 2003. The number of subscribers of the national pension, government employee pension, and teachers' pension as of 2008 is 19.6 million, which accounted for 40.4% of total population and 81.6% of the economically active population.

The retirement pension plan is a pension system where companies save up financial resources during their employees' tenure of employment in order to issue retirement payments when employees retire and financial institutions manage these financial resources in accordance with the employer's or employees' instructions. Prior to December 2005, the 「Labor Standards Act」 required that the retirement payment would be paid in a lump sum basis when employees retired. In December 2005, the 「Employee Retirement Benefits Security Act」 was newly enacted to introduce retirement pension plans. However, unlike the statutory retirement payment, a retirement pension plan is a voluntarily scheme under a labor-management agreement. Therefore, the existing retirement payment system could maintained and it is not required to switch to the retirement pension system.

The Korean government also introduced the personal pension plan with tax benefits in June, 1994.

13. Catalan, Impavido, and Musalem (2000), Impavido and Musalem (2000), Niggemann and Rocholl (2010), Walker and Lefort (2002).

Table 3-1 | The Number of Korea's Public Pension Subscribers

(Unit: thousand people)

Year	Total Population (A)	Economically Active Population (B)	Pension Subscribers				Subscription Ratio (%)	
			Total (C)	National Pension	Government Employee Pension	Teachers' Pension	Compared to the Total Population (C/A)	Compared to the Economically Active Population (C/B)
1988	42,031	17,305	5,341	4,433	767	141	12.7	30.9
1992	43,748	19,499	6,109	5,021	922	165	14.0	31.3
1995	45,093	20,845	8,636	7,497	958	181	19.2	41.4
1999	46,617	21,813	17,383	16,262	914	208	37.3	79.7
2000	47,008	22,134	17,330	16,210	909	211	36.9	78.3
2006	48,297	23,978	18,995	17,740	1,009	246	39.3	79.2
2007	48,456	24,216	19,539	18,267	1,022	251	40.3	80.7
2008	48,607	24,032	19,616	18,335	1,030	251	40.4	81.6

Source: Compilation Committee of the Six Decades of Korean Economic History (2010).

The developments in Korea's public pension, retirement pension, and personal pension plans are summarized in <Table 3-2>.

Table 3-2 | The Development in Korea's Pension System

Period	Public Pension Plan	Corporate Pension Plan	Personal Pension Plan
1954. 4		Retirement Payment (voluntary system)	
1960. 1	Government Employee Pension (government employees · soldiers)		
1963. 1	Separation of Military Pension from Government Employee Pension	Statutory Retirement Payment (businesses with 30 or more employees)	
1974. 1	Teachers' Pension		
1987. 1	Establishment of 「National Pension Welfare Act」	Statutory Retirement Payment (businesses with 10 or more employees)	

Period	Public Pension Plan	Corporate Pension Plan	Personal Pension Plan
1988. 1	National Pension (businesses with 10 or more employees)		
1989. 1		Statutory Retirement Payment (businesses with five or more employees)	
1992. 1	National Pension (Businesses with five or more employees)		
1994. 6			Personal Pension
1995. 7	National Pension (farmers and fishermen/ rural areas)		
1999. 4	National Pension (urban areas)		
2001. 1			New Personal Pension Savings
2003. 7	National Pension (all businesses)		
2005. 6	Public Housing Pension		
2005.12		Retirement Pension Plans	
2010		Statutory Retirement Payment (all businesses)	

Source: Compilation Committee of the Six Decades of Korean Economic History (2010).

The reserves by pension plans as of the end of 2012 were 392 trillion Won for the national pension, 69.2 trillion Won for retirement pension, and 216 trillion Won for personal pension, totaling 677.2 trillion Won. The percentages of the pension plans in the total reserves were 57.9% for the national pension, 10.2% for retirement pension, and 31.9% for personal pension.

Table 3-3 | The Reserves by Pension Plan in Korea (as of the end of 2012)

Division	National Pension	Retirement Pension	Personal Pension			Total
			Subtotal	Pension Savings	Pension Insurance	
Reserves (trillion Won)	392.0	69.2	216.0	78.8	137.2	677.2
Percentage (%)	57.9	10.2	31.9	11.6	20.3	100.0

Source: Financial Services Commission.

For the authorities that are responsible for pensions, the Ministry of Health and Welfare is responsible for the national pension as part of the social security system. The Ministry of Security and Public Administration, the Ministry of Education, and the Ministry of National Defense are responsible for the government employee pension, teachers' pension, and military pension, respectively. The Ministry of Employment and Labor is in charge of the retirement pensions for employees and Financial Services Commission and the Financial Supervisory Service are responsible for the supervision of the retirement pension providers. The Ministry of Strategy and Finance provides tax benefits for personal pension. In addition, Financial Services Commission and Financial Supervisory Service are responsible for the supervision of retirement pension providers.

Table 3-4 | The Authorities Responsible for Korean Pensions

<table>
<tr><th>Category</th><th>Main Agent</th><th>Name of Pension</th><th>Responsible Authorities</th></tr>
<tr><td rowspan="2">Public Pension</td><td rowspan="2">Government</td><td>National Pension</td><td>Ministry of Health and Welfare</td></tr>
<tr><td>Government Employee Pension, Teachers' Pension, Military Pension</td><td>Ministry of Security and Public Administration, Ministry of Education, Ministry of National Defense</td></tr>
<tr><td rowspan="2">Private Pension</td><td>Company</td><td>Retirement Payment, Retirement Pensions</td><td>Ministry of Employment and Labor, Financial Services Commission, Financial Supervisory Service</td></tr>
<tr><td>Individual</td><td>Personal Pension</td><td>Ministry of Strategy and Finance, Financial Services Commission, Financial Supervisory Service</td></tr>
</table>

Source: Financial Services Commission.

2. Public Pensions and the Asset Management Industry

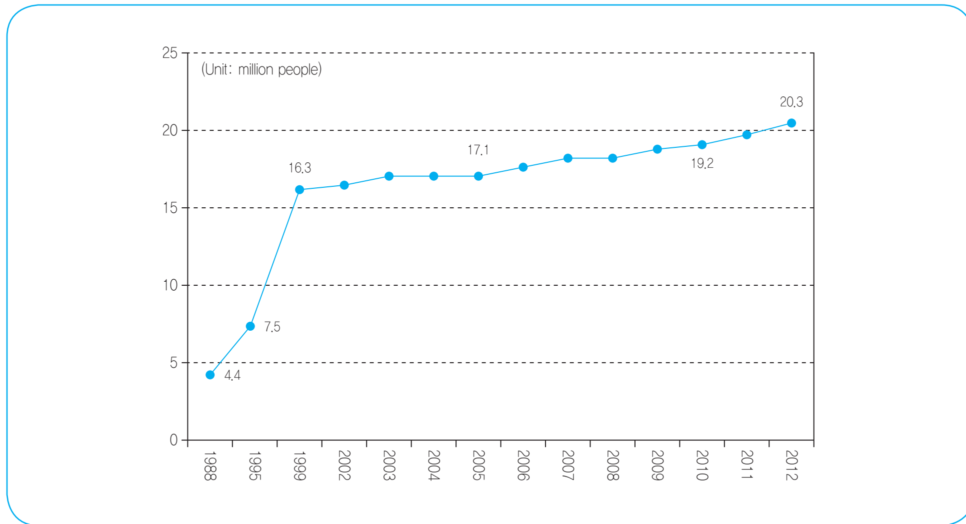
2.1. The Development of the Korean National Pension System

The national pension system, as social insurance, requires compulsory subscription with a purpose to maintain minimum living standards.

First, it adopts a social insurance scheme where people pay premiums and receive guarantees against social risks. The primary role of the national pension system is to provide a proactive social safety net that prevents people from the risks of falling into poverty. Second, benefits are provided based on the defined benefit plans and are prescribed by law. The level of benefits are determined by the benefit calculation formula, which considers insurance subscription period, age, and income status of the insurance subscriber. Third, the benefit calculation formula for the national pension is designed to ensure the redistribution of income. The benefit calculation formula for the basic benefits of the national pension determines the benefit level, taking into account the income of the pension subscriber and the income of all subscribers, leading to the redistribution between the low-income bracket and high-income bracket. In addition, as the pension subscribers can receive family support as additional benefit, there is redistribution between subscribes with and without families. Also, the lifetime redistribution is made in the national pension system because pension subscribers pay premiums when they can perform economic activities and receive pension benefits when they retire. Fourth, the funding system adopted in Korea's national pension plan is a modified saving method. The funding system of social insurance is categorized into the saving method and imposition method. In the saving method, subscribers pay premiums which will be the sources of the pension payments for themselves. In the imposition method, premiums paid by young generation are used as source of pension payments for the older generation. Their own pension payment will be funded by future generation.

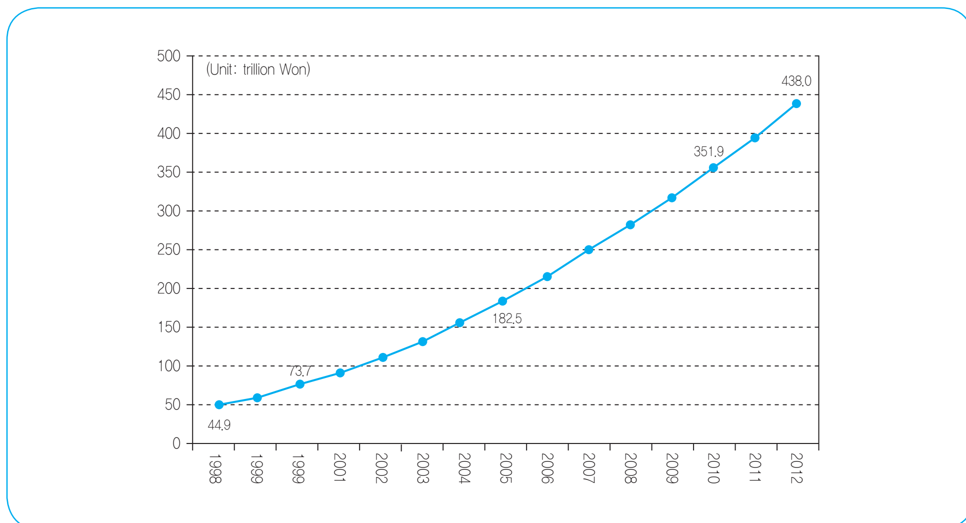
The number of the national pension subscribers was only 4.4 million at the time of its establishment in 1988. It increased to 7.5 million in 1995, 16.3 million in 1999, 17.1 million in 2005, 19.2 million in 2010, and 20.3 million in 2012. The fund size of the Korean national pension has also significantly increased to 44.9 trillion Won (9.0% compared to GDP) in 1998, 73.7 trillion Won (12.2% compared to GDP) in 2000, 182.5 trillion Won (21.1% compared to GDP) in 2005, 351.9 trillion Won (30.0% compared to GDP) in 2010, and 43.8 trillion Won (34.4% compared to GDP) in 2012. The asset size of the national pension as of the end of 2012 is the fourth largest in the world only after Japan's government pension, Norway's government pension, and the Netherlands' government pension.

Figure 3-1 | The Number of Korean National Pension Subscribers



Source: National Pension Service.

Figure 3-2 | Size of the Korean National Pension Fund



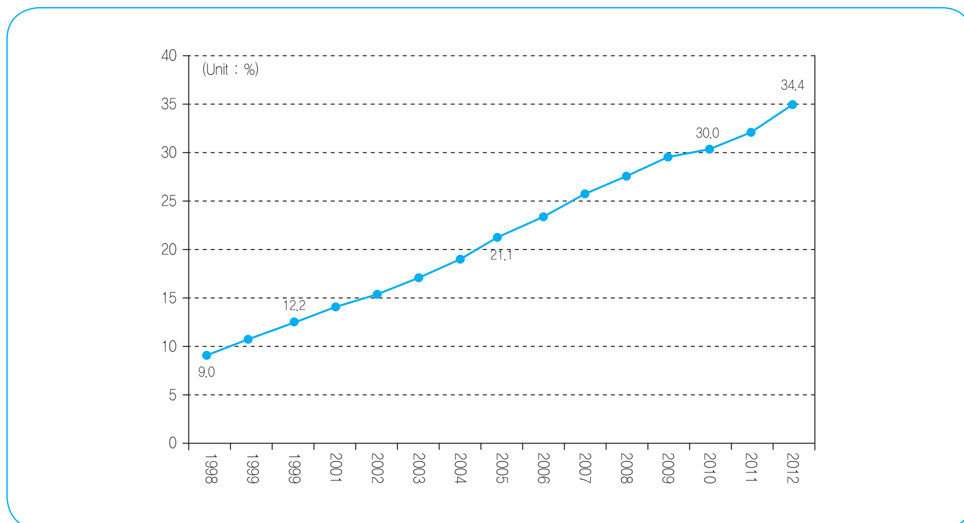
Source: National Pension Service.

Table 3-5 | The World's 10 Largest Pension Funds

Ranking	Fund Name	Country	Size of Total Assets (million dollars)
1	Government Pension Investment	Japan	$1,292,003
2	Government Pension Fund	Norway	$712,606
3	ABP	Netherlands	$372,860
4	**National Pension**	**Korea**	**$368,450**
5	Federal Retirement Thrift	U.S.	$325,682
6	California Public Employees	U.S.	$244,754
7	Local Government Officials	Japan	$201,443
8	Central Provident Fund	Singapore	$188,430
9	Canada Pension	Canada	$184,425
10	National Social Security	China	$177,486

Source: Towers Watsons (2013).

Figure 3-3 | Size of the Korean National Pension Fund (% of GDP)



Source: Calculated by the authors using the data of the National Pension Service (Size of National Pension Fund) and the Bank of Korea (Nominal GDP).

2.2. Asset Management of the Korean National Pension Fund

The National Pension Fund was set up in accordance with the National Pension Act in 1988. The Minister of Health and Welfare is responsible for the management of the National Fund. The National Fund Management Committee, which consists of representatives of employers and employees, representatives of local subscribers and experts, determines the main issues of the national pension fund.

As the organization responsible for the management of the fund, the National Pension Service invests the funds in various assets. The management system of the National Pension Fund is stipulated in the National Pension Act. The Minister of Health and Welfare develops the fund management plan and reports it to the National Assembly every year.

The National Fund Management Committee, which is the highest decision-making body in fund management, is established under the National Pension Act and makes decisions on important issues for fund management. The Chairman of the Committee is the Minister of Health and Welfare. The National Fund Management Committee holds meetings at least four times a year to approve fund management guidelines, long-term asset allocation, and the annual fund management plan. The committee has two subsidiary organizations including the Practice Evaluation Committee which reviews the agenda proposed by the Fund Management Committee in advance.

The National Pension Fund is managed based on the principles of profitability, stability, publicity, liquidity, and management independence. The principle of profitability is a principle that returns should be pursued as long as the long-term stability of the fund is maintained. The principle of stability is a principle that the volatility of return and risk of loss should be managed within the predetermined range. The principle of liquidity is a principle that the pension fund should be managed to have enough liquidity to pay pension benefits. The principle of publicity is a principle that it should be managed in the consideration of its effect on the national economy and financial market. The principle of management independence is a principle that the National Pension Fund should be independently managed only in accordance with the principles of profitability, stability, publicity, and liquidity.

The main sources of revenue for the National Pension Fund are pension premiums and income from fund management. The funds are managed after deducting expenditures such as pension benefit payments and management expenses. The funds are divided into the financial sector, welfare sector, and other sectors in accordance with the management plan authorized by the National Pension Fund Management Committee. The funds for the financial sector are invested in stocks, bonds, and alternative investment assets. The National Pension Fund Management Committee sets the goal of asset allocation for the future five

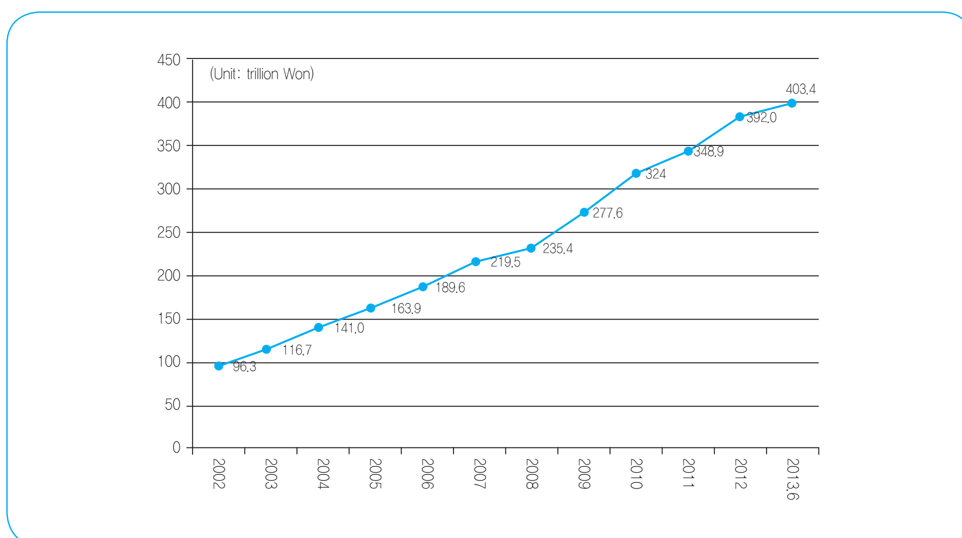
years each year and establishes the annual fund management plan in the consideration of the market prospect and schedules in the future pension payments. According to the National Pension Fund, as of the year 2013, the target proportions in the mid-term asset allocation of 2013-2017 were set as domestic stocks of 20%, foreign stocks of 9.3%, domestic bonds of 56.1%, foreign bonds of 4.0%, and alternative investment of 10.6%.

The size of asset management in the National Pension Fund was only 96.3 trillion Won in 2002. However, it rapidly increased to 403.4 trillion Won as of the end of June 2013.

As of the end of June 2013, 402.7 trillion Won (99.8% of the total reserves) was invested in financial sector, while 1,315 million Won (0.03% of the total reserves) and 4,851 million Won (0.1% of the total reserves) were used in the welfare sector and other sectors, respectively. In the financial sector, investment in domestic bonds accounted for 59.1% (238.2 trillion Won), while domestic stocks accounted for 17.7% (71.4 trillion Won), foreign stocks accounted for 9.2%, domestic and foreign alternative investment accounted for 9.1%, and foreign bonds accounted for 4.8%.

The size of financial investment of the National Pension Fund, 402.7 trillion Won, as of the end of June 2013, was the level of 31.6% of GDP. Also, its investment in domestic stocks was 6.0% of total market capitalization of domestic stocks and its investment in domestic bonds accounted for 14.0% of the balance of domestic bonds.

Figure 3-4 | Size of the Asset Management in the Korean National Pension Fund



Source: National Pension Service.

Table 3-6 | The Korean National Pension Fund's Portfolio

(Unit: hundred million Won, %)

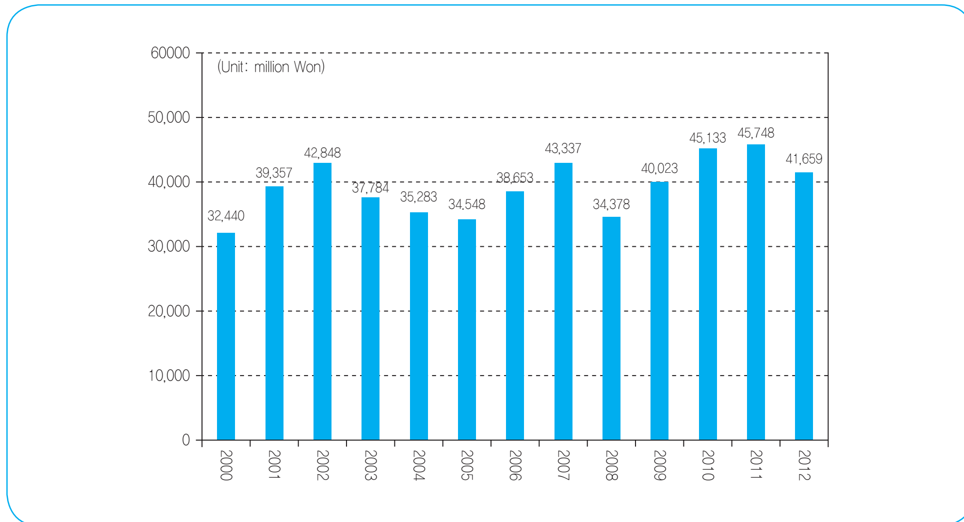
	2012		June 2013	
	Amount	Proportion	Amount	Proportion
Total Fund	3,919,677	100.0	4,033,622	100.0
Financial Sector	3,915,683	99.9	4,027,465	99.8
Stocks	1,046,367	26.7	1,083,075	26.9
Domestic Stocks	733,165	18.7	713,936	17.7
Foreign Stocks	313,202	8.0	369,138	9.2
Bonds	2,539,386	64.8	2,575,648	63.9
Domestics Bonds	2,358,627	60.2	2,382,234	59.1
Foreign Bonds	180,759	4.6	193,413	4.8
Alternative Investments	329,930	8.4	368,743	9.1
Domestic Alternative Investments	183,243	4.7	196,011	4.9
Foreign Alternative Investments	146,687	3.7	172,732	4.3
Welfare Sector	1,271	0.03	1,315	0.03
Other Sectors	2,723	0.1	4,851	0.1

Source: National Pension Service.

2.3. Asset Management of Government Employees Pension and Teachers Pension Fund

The Korean Government Employees Pension Fund was set up in 1960 and is currently managed by the Government Employees Pension Service. The amount of asset management in the Government Employees Pension was 3.2 trillion Won in 2000, and increased to 4.2 trillion at the end of 2012.

Figure 3-5 | Size of the Korean Government Employees Pension Fund's Financial Assets



Source: Korea Teachers Pension (requoted from Song et. al. (2013)).

The majority of the Government Employees Pension Fund is invested in bonds, but the proportion of bond investments tends to decrease. On the other hand, its investment in stocks and alternative assets tend to increase. As of 2012, bonds accounted for 54.1%, stocks accounted for 24.9% and alternative assets accounted 13.0% of its investment.

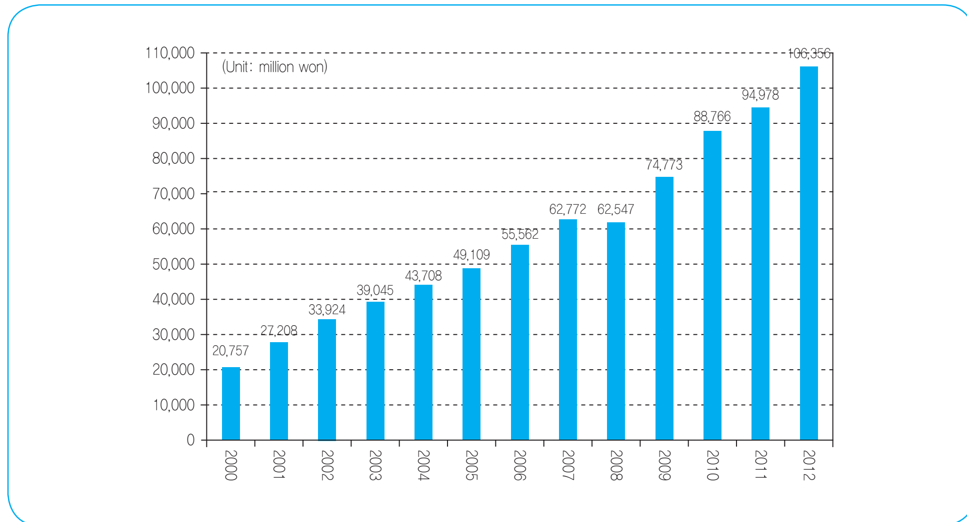
Table 3-7 | The Asset Allocation of Korean Government Employees' Pension Fund

(Unit: %)

	Bond	Stock	Alternative Investment	Reserve Funds
2003	88.3	8.2	0.8	2.7
2004	80.2	8.9	6.1	4.8
2005	68.1	12.8	12.3	6.8
2006	65.2	13.4	15.7	5.7
2007	55.2	19.9	20.4	4.5
2008	65.0	5.5	25.1	4.4
2009	64.1	15.6	17.7	2.6
2010	59.9	19.1	15.9	5.1
2011	55.5	22.0	15.1	7.4
2012	54.1	24.9	13.0	8.0

Source: Korea Teachers Pension (requoted from Song et. al. (2013)).

Figure 3-6 | Size of the Korean Teachers Pension Fund's Financial Assets



Source: Korea Teachers Pension (requoted from Song et. al. (2013)).

Korea's Teachers Pension Fund, which was set up in 1975, is managed by the Korea Teachers Pension. The size of asset management in Teachers Pension Fund was 257 million Won in 2000, and increased to 10.6 trillion at the end of 2012.

The management size of the financial assets of the Teachers Pension Fund was 2 trillion Won in 2000, and then continued to increase to 10.6 trillion Won as of the end of 2012.

The proportion of its investment in stocks and alternative investment has increased, while the proportion of its investment in bonds has decreased. For example, the portfolio of Teachers Pension Fund was comprised of bonds of 83.2%, stocks of 16.3% at the end of 2000, while the portfolio changed to bonds of 61.1%, stocks of 23.2%, alternative investment of 13.7%, and cashable assets of 2.1% as of the end of 2012. The Teachers Pension Fund plans to decrease the proportion of the investment in bonds and further increase the proportion of the alternative investment. According to the long-term asset allocation plan of the Teachers Pension Fund, its portfolio would be bonds of 41.2%, stocks of 36.6%, alternative investment of 20.1%, and cashable assets of 2.1% in 2017.

Table 3-8 | The Korean Teachers Pension Fund's Portfolio

(Unit: one hundred billion Won)

	Bond					Stock			Alternative Investment	Cashable Asset	Total
	Domestic Direct	Domestic Indirect	Foreign Direct	Foreign Indirect	Financial Product	Domestic Direct	Domestic Indirect	Foreign Indirect			
2000	12.8	3.0			1.5	0.9	2.5				20.8
2001	16.1	4.6			4.4	0.7	1.4				27.2
2002	23.9	5.4			2.6	0.9	1.1				33.9
2003	25.8	7.8			1.2	2.0	2.3				39.0
2004	27.0	11.0			1.7	1.3	2.7				43.7
2005	25.0	15.0			2.0	2.8	4.3				49.1
2006	27.5	16.4			2.3	2.7	3.5		3.2		55.6
2007	22.5	18.9			2.4	5.2	5.7		8.0		62.8
2008	23.3	11.4	1.4	2.9	1.4	3.6	4.4	1.2	11.4	1.6	62.5
2009	35.8	8.8	3.1	0.9	1.7	5.4	7.1	1.7	9.5	0.8	74.8
2010	43.4	7.0	3.0	0.7	1.5	7.4	9.6	2.5	12.6	1.1	88.8
2011	47.1	7.4	3.4	0.4	1.2	7.1	10.6	2.1	14.5	1.2	95.0
2012	52.5	8.5	2.3	0.5	1.2	8.4	14.2	2.1	14.6	2.2	106.4

Source: Korea Teachers Pension (requoted from Song et. al. (2013)).

Table 3-9 | Asset Allocation of the Teachers Pension Fund

(Unit : %)

	Bond	Stock	Alternative Investment	Cashable Asset
2000	83.2	16.3		
2001	92.3	7.7		
2002	94.1	5.9		
2003	89.2	11.0		
2004	90.8	9.2		
2005	85.5	14.5		
2006	83.1	11.2	5.8	
2007	69.7	17.4	12.7	
2008	64.6	14.7	18.2	2.6
2009	67.2	19.0	12.7	1.1

	Bond	Stock	Alternative Investment	Cashable Asset
2010	62.6	22.0	14.2	1.2
2011	62.6	20.8	15.3	1.3
2012	61.1	23.2	13.7	2.1

Source: Korea Teachers Pension (requoted from Song et. al. (2013)).

Table 3-10 | The Plan for Asset Allocation of the Teachers Pension Fund

(Unit : %)

	Bond	Stock	Alternative Investment	Cashable Asset
2013	56.0	26.7	15.2	2.1
2014	51.3	29.6	17.0	2.1
2015	46.2	33.1	18.6	2.1
2016	41.2	36.6	20.1	2.1
2017	41.2	36.6	20.1	2.1

Source: Korea Teachers Pension.

3. Personal Pensions and the Asset Management Industry

All Koreans over the age of 18 including the public pension subscribers are eligible for a personal pension, and the period of savings should be at least 10 years. The pension is paid on a monthly basis over the period of more than five years from the age of 55, but can be paid every three months, six months, nine months, and 12 months upon the request of subscribers.

Subscribers in personal pensions can pay premiums up to one million Won per month and they receive a 40% income deduction on premiums up to 720,000 Won per year. Also the interest income on the premiums is tax-exempt.

The personal pension is categorized into pension savings eligible for income tax deductions and pension products ineligible for income tax deductions. Pension savings, which are dealt in by most financial companies such as banks, securities companies and insurance companies, are granted income deductions at the time of savings, tax-exemption on interest and dividend income, and separate and low pension income tax rate at the receipt of pension benefits. The products ineligible for income tax deduction include general pension insurance and variable pension insurance provided by insurance companies. Although these

products are not granted income tax deductions, the earnings from the premiums are non-taxable if the insurance is maintained for more than 10 years. Pension insurance products are available only from life insurance companies.

As of the end of 2011, the number of personal pension subscribers was estimated to be about 8.5 million, including about 4 million subscribers of pension savings and about 5.5 million subscribers of pension insurance. About one million people were subscribers to both products. The reserves of the personal pension were approximately 216 trillion Won as of the end of 2012, which was about 1/3 of the total reserves of public and private pensions.

Table 3-11 | Comparisons between Pension Savings and Pension Insurance

		Pension Savings	Pension Insurance
Sales Institution		- Banks, insurance companies, securities companies, asset management companies	- Life insurance companies
Product		- Banks: pension trust - Insurance companies: pension savings insurance - Securities/ asset management companies: pension funds	- General pension insurance - Variable pension insurance
Possibility of Asset Portfolio		- The pension savings fund subscribers can freely adjust the asset ratio by setting up and repurchasing the pension savings fund	- The variable insurance subscribers can select and change the input ratio of each fund (12 times a year)
Tax Benefit	Stage of Payment	- Income deduction (4 million Won per year together the additional payments for retirement pensions)	- No deduction
	Stage of Receiving Pension Benefits	- Separate taxation for pension income of 12 million Won (taxation of composite income tax for the excess income)	- Profits derived from the management of reserves are not taxable if the pension is maintained for more than 10 years

4. Retirement Pensions and the Asset Management Industry

4.1. Retirement Pension Plans

Retirement pension plans are divided into the Defined Benefit (DB) pension plan and the Defined Contribution (DC) pension plan. The retirement pension plan can be chosen by consultation between labor and management of each business. The defined benefit pension plan is a system where pension benefits for the employees are defined in advance and the employer contributions vary depending on the results of the management of the reserve funds. Thus, the company bears the risk due to changes in prices and interest rates. The defined contribution pension plan is a system where employer contributions are defined in advance and the pension benefits for employees vary depending on the results of the management of the reserve funds. Thus, employees bear the risk due to changes in prices and interest rates.

Table 3-12 | Comparisons between the Defined Benefit Pension Plan and the Defined Contribution Pension Plan

Category	Defined Benefit	Defined Contribution
Concept	- Labor and management agree on the level and content of benefits in advance - Benefits are paid according to the agreement when the employee reaches a certain age	- Labor and management define the contributions to be borne in advance - Employees operate the reserves under their own responsibility - Benefits are paid based on the results of the management when the employee reaches a certain age
Contributions	- Varied when actuarial assumption (management profit rate, etc.) changes	- Defined
Benefits	- Defined	- Depending on the operating performance
Responsibility for Risks	- Companies bear the risk of the changes in prices and interest rate	- Employees bear the risk of the changes in prices and interest rate

Source: Ministry of Employment and Labor.

The Individual Retirement Account (IRA), which is a savings account set up for those who receive a lump sum payment as a retirement benefit in order to save and manage the payment up to their retirement. If the lump sum payment is saved in the individual retirement account, taxation is deferred until pension benefits are received.

The IRA is set up and operated in the following way. Employees who receive a lump sum payment as a retirement benefit can subscribe to the individual retirement account at their own discretion. Subscribers to an IRA can defer the income tax until they receive the retirement benefits. The management of the reserves of an IRA is conducted by subscribers themselves. The management method can change at least once every six months. The retirement pension providers must propose at least three management methods for the reserves. Subscribers can receive retirement benefits from the IRA only after the age of 55 in order to ensure that the benefits are used as retirement income.

Businesses with 10 or fewer employees can select a retirement benefits plan (corporate IRA), which is similar to the retirement pension. For businesses with 10 or fewer employees, if all employees subscribe to the individual retirement account, it is regarded as the businesses already adopted either a system of scheme retirement payment or retirement pension plans. The corporate IRA system is similar to defined contribution retirement pension. Employer contributions are the same as a defined contribution. Like the defined contribution, employees are allowed to make contributions in addition to employer contributions. Although there is no limit to additional contributions, income tax deductions for additional contributions by employees allows up to three million Won per year.

The procedure for subscribing to the retirement pensions is as follows. Employers should select at least one system among the current retirement pay systems such as the defined benefit, defined contribution, and individual retirement pension plans. At this time, more than half of the employees should agree to adopt a system. If retirement pension plans have been selected, employers should prepare the covenant with the consent of their employees' representatives and report the covenant to the Minister of Employment and Labor (local labor office). However, if the individual retirement pension is selected by businesses with 10 or fewer employees, the obligation to prepare the retirement pension covenant is exempted. After the covenant is approved by the Minister of Employment and Labor, employers enter into a contract with retirement pension providers who perform asset management service. The employers may enter into a contract on asset management with a single financial institution. If multiple retirement pension plans are adopted, several retirement pension providers can be selected for each plan.

4.2. Retirement Pension Providers

Companies should assign retirement pension providers with certain requirements to perform services related to the management of retirement pension plans. In the 「Employee Retirement Benefits Security Act」, it is required that the provision of retirement pension service is limited only to financially stable banks, insurance companies, securities companies, and asset management companies with appropriate expertise in order to protect employees' pension rights. Financial institutions which purport to provide pension services should register with the financial supervisory authorities. Such financial institutions should fulfill the requirements of financial soundness, human and physical requirements. For the requirement of financial soundness, financial institutions must meet the requirements of capital adequacy ratio such as BIS ratio of 8% for banks, net capital ratio of 150% for securities companies, risk based capital of 100% for insurance companies, and capital adequacy ratio of 150% for pension management companies.

There are a total of 54 retirement pension providers including 16 banks, 16 securities companies, 14 insurance companies, seven property companies, and the Korea Workers' Compensation and Welfare Service, which register with the Financial Services Commission. The list of 54 providers is given in <Table 3-13>.

Table 3-13 | Retirement Pension Providers in Korea

Category	Name of Provider
Banks (16)	Kyongnam Bank, Kwangju Bank, Kookmin Bank, Daegu Bank, Busan Bank, Shinhan Bank, Woori Bank, JB Bank, Jeju Bank, Hana Bank, Standard Chartered Bank of Korea, Korea Exchange Bank, NH Bank, National Federation of Fisheries Cooperatives, Industrial Bank of Korea, Korea Development Bank
Securities Companies (16)	Dongbu Securities, HMC Investment Securities, Kyobo Securities, Daishin Securities, Daewoo Securities, Tongyang Securities, Mirae Asset Securities, Samsung Securities, Shin Young Securities, Shinhan Investment Corp., Woori Investment & Securities, Hana Daetoo Securities, HI Investment & Securities, Korea Investment & Securities, Hanwha Securities, Hyundai Securities
Life Insurance Companies (14)	IBK Pension Insurance, ING Life Insurance, KDB Life Insurance, Kyobo Life Insurance, Dongbu Life Insurance, MetLife Insurance, Mirae Asset Life Insurance and Samsung Life Insurance, Life Insurance, Shinhan Life Insurance, Hana Life Insurance, Hanhwa Life Insurance, Hyundai Life Insurance, Heungkuk Life Insurance
Property Insurance Companies (7)	MG Non-life Insurance, Dongbu Insurance, Lotte Insurance, Samsung Fire & Marine Insurance, LIG Insurance, Hanwha General Insurance, Hyundai Marine & Fire Insurance
Others (1)	Korea Workers' Compensation and Welfare Service

Source: Financial Supervisory Commission.

The retirement pension providers perform operational management and asset management services. The retirement pension providers performing these services are referred to as operational management providers and asset management providers, respectively.

The roles of operational management providers are to provide employers or pension holders with methods of managing reserves and information on each management method, to design a pension plan and conducting pension accounting (in case of defined benefit pension plan), to record the current state of managing reserves, preserving the record, and notifying it, and to inform a retirement pension trustee carrying out asset management services of the management method chosen by the employer or pension holders.

The roles of asset management providers are to set up and manage an account, to receive contributions, to keep and manage reserves, to implement instructions related to the management of reserves which are given by a retirement pension trustee carrying out operational management services, and to pay benefits.

Table 3-14 | The Main Services of Retirement Pension Providers

Category	Details of Main Services
Operational Management Providers	- Consulting & design services for retirement pension plans - Calculation of employer's contributions (pension actuarial service) - Proposal for the management method of reserves - Delivery of the detailed management instruction of reserves - Records management of various data - Training for subscribers
Asset Management Providers	- Keeping and management of the reserves for retirement pensions - Implementation of the operational management as instructed - Payment of benefits

Source: Financial Supervisory Commission.

4.3. Supervisory System of Retirement Pension Plans

The Minister of Employment and Labor is mainly responsible for the supervision of retirement pension plans. After employers select retirement pension plans and prepare the covenant with the consent of more than half of their employees, they report the covenant to the Minister of Employment and Labor.

Financial supervisory authorities supervise and monitor financial institutions that have been registered as retirement pension providers. Financial supervisory authorities provide guidelines on how to perform operational management and asset management services and establish detailed criteria for the management of the reserves. Since the reserves are

financial resources of retirement benefits, the guidelines and criteria have been set to ensure both the stability and profitability of the reserves including the limits of investment in asset whose price volatility is relatively high and the limits of investment in assets with high risks.

4.4. Investment Management of Retirement Pensions

To maintain a certain level of stability and marketability, the products in which the reserves are allowed to be invested are limited to deposit, installment savings, insurance contracts such as interest rate guarantee type insurance, other securities such as national bonds, municipal bonds, domestic and foreign investment grade bonds, listed stocks in domestic and foreign exchanges, domestic listed depositary receipts, beneficiary certificates issued by domestic and foreign (sold domestically) asset management companies, commercial papers, mortgage-backed securities, student loan-backed securities, Derivative-Linked Securities (ELS and DLS), Repurchase Agreements (RP), exchange traded derivatives and over-the-counter derivatives (for the purpose of hedge).

Since employees are responsible for the management of reserves in the case of the defined contribution pension plan and individual retirement pensions, operational management providers are required to include at least one operational management method of guaranteeing the principal and interest to ensure more stable asset management for employees. These financial products include (i) treasury bonds, monetary stabilization bonds, and government-guaranteed bonds for which the principal and interest are guaranteed by the government or public institutions and (ii) other financial products for which the principal and interest are guaranteed by stable financial institutions. Stable financial institutions refer to financial institutions that have received investment grades from credit rating agencies and have met the capital adequacy ratio such as BIS ratio of higher than 8% for banks, net capital ratio of higher than 150% for securities companies, risk based capital of higher than 100% for insurance companies, and capital adequacy ratio of higher than 150% for pension management companies.

The investment limit has been set up for both defined benefit pension plans and defined contribution pension plans so as to prevent heavy losses that may occur when reserves are invested in a risky way. Regarding the specific limit for investment, in the case of the defined benefit pension plan, the limit of direct investment for domestic and foreign stocks, convertible bonds, and foreign bonds is 30%, the limit of indirect investment for equity funds is 50%, the limit of indirect investment for mixed funds and fund of funds is 50%, and the total limit for risky assets is 70% of reserve funds.

For defined contribution pension plans and individual retirement pensions, it is prohibited to directly invest in stocks, derivatives funds, real estate funds, real assets funds, and funds which invest more than 30% of their asset in non-investment grade bonds. The limit of indirect investment in equity funds is 40% and the limit of investment in foreign securities is 30%. However, there is no investment limit in deposits, installment savings, principal and interest-guaranteed insurance, government bonds, monetary stabilization bonds, and government-guaranteed bonds.

Table 3-15 | Investment Limit for Risky Assets (Defined Benefit Retirement Plan)

Risky Assets		Investment Limit
Individual Investment	I. Direct investment in stocks ① Domestic and foreign listed stocks (including foreign corporations), Entrusted securities ② Equity-related corporate bonds (convertible bonds, bonds with warrant, etc.), subordinated bonds ③ Derivative-linked securities (maxim loss range: 10%~40% of principal) ④ Foreign investment grade bonds	30%
	II. Indirect investment in equity funds ① Equity (stock position of at least 60%) funds ② Derivatives, real estate, real assets, special funds	50%
	III. Indirect investment in mixed funds ① Mixed (stock position of 40%~60%) funds ② Funds that invest more than 30% in bonds other than investment grade bonds ③ Funds that invest more than 50% in foreign investment grade bonds ④ Fund of funds that invest more than 50% in risky assets of II and III (①~③)	50%
Total Investment	The total investment limit for risky assets of I, II, and III	70%
Concentrated Investment	Securities issued by the same company	10% of the issued stocks
	Securities issued by the company of the same affiliate group	15% of the issued stocks
	If asset management contract is a trust one, principal and interest-guaranteed products issued by the asset management company (not applicable if total reserves are less than one billion Won)	50%
Conflicts of Interest	Securities issued by companies which have affiliation with employers	5% of the issued stocks

Source: Financial Supervisory Commission.

Table 3-16 | Investment Limit for Risky Assets (Defined Contribution Retirement Pensions and Individual Retirement Pensions)

Risky Assets		Investment Limit
Individual Investment	I. Direct investment in stocks ① Domestic and foreign listed stocks (including foreign corporations), Entrusted securities ② Equity-related corporate bonds (convertible bonds, bonds with warrant, etc.), subordinated bonds ③ Derivative-linked securities (maxim loss range: 10%~40% of principal)	Investment Prohibited
	II. Indirect investment in funds ① Derivatives, real estate funds, real funds, special asset funds ② Funds that invest more than 30% in the bonds other than investment grade bonds ③ Fund of funds that invest more than 50% in risky assets of ①~②	Investment Prohibited
	III. Indirect investment in equity funds. ① Equity funds and·mixed-type funds ② Real Estate funds ③ Fund of funds that invest more than 50% in risky assets of ①~②	40%
	IV. Investment in the foreign securities ① Foreign investment grade bonds ② Funds that invest more than 50% in foreign investment grade bonds ③ Fund of funds that invest more than 50% in risky assets of ②	30%
Total Investment	The total investment limit when investing in risky assets of category II above	40%
Concentrated Investment	Securities issued by the same company	30%
	Securities issued by the same affiliate group	40%
	If asset management contract is a trust one, principal and interest-guaranteed products issued by the asset management company (not applicable if total reserves are less than fifty million Won)	50%
Conflicts of Interest	Securities issued by companies which have affiliation with employers	10%

Source: Financial Supervisory Commission.

Table 3-17 | Exemption for Concentrated Investment Limit

Reasons	Investment Limit
I. If principal and interest are guaranteed by stable financial institutions (deposits and installment savings, principal and interest-guaranteed insurance)	100%
II. National bonds and public bonds, monetary stabilization securities, government-guaranteed bonds	100%
III. Municipal bonds or special bonds issued by the same institution	30%
IV. Exemption for exceeding of Limit The exceeding of investment limit caused by the following reasons is not deemed as violation of the limit. ① Changes in the market value (fair value) ② Reduction in the total amount of reserves due to unexpected expenses ③ Changes in the scope of affiliated companies ④ Corporate mergers and acquisitions ⑤ Stock retirement ⑥ Sale of assets for the payment of retirement benefits ⑦ Amendment in laws and supervisory regulations	Within six months (if operational management method can be changed)

Source: Financial Supervisory Commission.

4.5. Taxation for Retirement Pensions

The taxation for retirement pensions can be categorized into three stages: ① payment of contributions, ② revenues from the management of reserve funds, and ③ receipt of retirement benefits. Various pension taxation systems are possible depending on whether each stage is taxed or exempted. The E-E-T (Exempt-Exempt-Tax) type taxation, that defers tax at the stage of payment of contributions and the stage of revenues from management and then imposes tax at the stage of receiving retirement benefits, is common internationally. The E-E-T type taxation has the effect of saving taxes and lowering applied tax rate because it defers tax until the stage of receiving retirement benefits when income is relatively low.

Korea's retirement pension plans have also adopted the E-E-T type taxation that imposes tax only at the time of receipt of retirement benefits so as to provide tax support for subscribers.

Specifically, the taxation method for each stage is as follows. The retirement pension plans are set up and all employer contributions paid in the pertinent year are calculated as deductible expenses at the stage of payment of contributions. An income deduction is applied to contributions paid by employees and subscribers can have income deductions of up to four million Won per year. At the stage of revenue from the management of reserve funds, taxation is deferred for revenues such as interest and dividends derived from the

management of reserve funds. At the stage of receiving retirement benefits, taxes are imposed on composite income by adding up to other income. If the total amount of the received private pensions (retirement pension and personal pension) is less than 12 million Won, a separate taxation that withholds 3~5% of pension payments can be selected. If the pension is received as a lump sum payment, it is classified as retirement income and taxed. The calculation method of the tax amount for the receipt of a lump sum payment as retirement pension is computed as follows:

(Step 1) Calculation of retirement income amount: taxable lump sum payment = the amount received at the time of retirement according to the「Employee Retirement Benefit Security Act」

(Step 2) Calculation of retirement income deductions = ① + ②

Fixed percentage deduction = retirement income amount × 40%

Deduction due to the number of years retirees worked (working years)

Table 3-18 | Deduction of Income due to Working Years when Retirement Pension is Received as a Lump Sum Payment

Working Years	Amount Deducted
1~5 years	0.3 million Won x working years
6~10 years	1.5 million Won + 0.5 million Won x (working years - 5 years)
11~20 years	4 million Won + 0.8 million Won x (working years - 10 years
More than 21 years	12 million Won + 1.2 million Won x (working years - 20 years)

Source: Financial Supervisory Commission.

(Step 3) Calculation of tax base for retirement income: tax base for retirement income = retirement income amount - retirement income deductions

(Step 4) Calculation of tax amount: tax amount = [tax base × 5 × (1/working years) × basic tax rate × (1/5)] × working years

- Basic tax rate is the same as the composite income tax rate (6~38%).

When retirement pension is received as a pension, the calculation method of tax amount is computed as follows:

(Step 1) Calculation of the total amount of pension: total amount of national pension, retirement pension and personal pension. When the total amount of pension is calculated, the contributions in excess of the income deduction would be excluded because income tax has been already paid for the excess contributions.

(Step 2) Calculation of pension income = total pension amount - pension income deductions

Table 3-19 | Deduction of Income due to Working Years when Retirement Pension is Received as Installment Payments

Total Pension Amount	Pension Income Deductions
Less than 3.5 million Won	Total pension amount
3.5~7 million Won	3.5 million Won + (total pension amount - 3.5 million Won) x 40%
7 ~1.4 million Won	4.9 million Won + (total pension amount - 7 million Won) x 20%
More than 14 million Won	6.3 million Won + (total pension amount - 14 million Won) x 10%

Source: Financial Supervisory Commission.

(Step 3) Calculation of composite income amount: composite income = pension income amount + interest income + dividend income + business income + labor income + other income

(Step 4) Calculation of composite income tax base: composite income tax base = composite income amount - composite income deductions

- If there is no income other than pensions after retirement, 'human deduction' and 'standard deduction' are applied.

(Step 5) Calculation of tax amount: composite income tax amount = composite income tax base × basic tax rate

Table 3-20 | Tax Rate for the Retirement Pension Received as Installment Payments

Tax Base	Applicable Tax Rate
Less than 12 million Won	6%
12~46 million Won	0.72 million Won + (tax base - 12 million Won) x 15%
46~88 million Won	5.82 million Won + (tax base - 46 million Won) x 24%
88~300 million Won	15.9 million Won + (tax base - 88 million Won) x 35%
More than 300 million Won	91 million Won + (tax base - 300 million Won) x 38%

Source: Financial Supervisory Commission.

4.6. Number of Employees and Businesses Subscribing to Retirement Pensions[14]

The number of employees subscribing to retirement pensions in Korea was 4.6 million as of the end of September 2013, which was 45.6% of all regular employees. Among the subscribers, 3 million employees (65.1% of total subscribers) subscribed to defined benefit retirement pensions, 1.5 million employees (32.9% of total subscribers) to the defined contribution retirement pension, and 92,000 employees (2.0% of total subscribers) to corporate IRA plans.

The number of businesses that adopted retirement pensions was 235,716 as of the end of September 2013. Among them, 74,543 businesses (31.6% of total subscribing businesses) subscribed only to defined benefit retirement pensions, 123,650 businesses (52.5% of total subscribing businesses) only to the defined contribution retirement pension, 5,549 businesses (2.4% of total subscribing businesses) to both defined benefit and defined contribution retirement pensions, while 31,974 businesses (13.6% of total subscribing businesses) adopted corporate IRA plans.

4.7. Size of Retirement Pension Reserve Funds[15]

The size of retirement pension reserves was only 16.3 billion Won at the end of 2005 when retirement pension plans were introduced. Since then, it has significantly increased. At the end of September 2013, the size of retirement pension reserves reached 72 trillion Won.

14. The Ministry of Employment and Labor.

15. The Ministry of Employment and Labor.

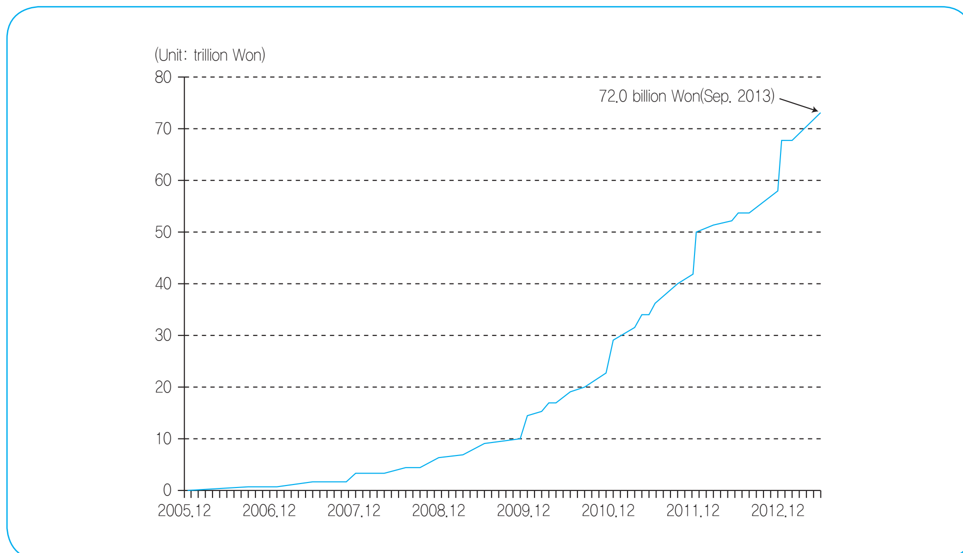
For the type of pensions, as of the end of September 2013, the size of defined benefit retirement pension was 50.6 trillion Won (70.3% of the total reserve fund), the size of defined contribution retirement pension was 15 trillion Won (20.8% of the total reserve fund), the size of corporate IRA was 0.7 trillion Won (0.9% of the total reserve fund), and the size of individual IRA was 5.8 trillion Won (8.0% of the total reserve fund).

For the business sector of pensions, as of the end of September 2013, pensions accounted for 51.7% (37.3 trillion Won), life insurance companies accounted for 23.7% (17.1 trillion Won), property insurance companies accounted for 7.3% (5.3 trillion Won), securities companies accounted for 17.0% (12.2 trillion) and Korea Workers' Compensation and Welfare Service accounted for 0.3% (0.2 trillion Won) of the total reserve fund.

4.8. Management Method of Retirement Pension[16]

For the management method of retirement pension, as of the end of September 2013, the percentage of principal and interest-guaranteed products was 92.9% (66.9 trillion Won) and the percentage of performance-based type products was only 6.1% (4.4 trillion Won). Of the principal and interest-guaranteed products, deposits, installment savings and insurance of interest rate type accounted for the largest portions.

Figure 3-7 | Size of the Retirement Pension Reserve Funds



Source: Ministry of Employment and Labor.

16. The Ministry of Employment and Labor.

Table 3-21 | Size of Retirement Pension Reserve Funds by Type and Business Sector

(Unit: hundred million Won, %)

Category		Total	Defined Benefit	Defined Contribution	Corporal IRA	Individual IRA
Reserve Funds (percentage)		720,284 (100)	506,156 (70.3)	149,601 (20.8)	6,711 (0.9)	57,816 (8.0)
Sector of Business	Bank	372,649 (51.7)	227,546	98,447	6,484	40,172
	Life Insurance	170,517 (23.7)	142,304	20,409	179	7,625
	Property Insurance	52,507 (7.3)	45,979	4,599	11	1,918
	Securities	122,488 (17.0)	90,328	24,052	22	8,087
	KCOMWEL*	2,123 (0.3)	-	2,093	15	14

Source: Ministry of Employment and Labor.

* Korea Workers' Compensation and Welfare Service.

Table 3-22 | Size of Retirement Pension Reserves by Type and Sector of Business

(Unit: hundred million Won, %)

Category		Defined Benefit		Defined Contribution		Corporate IRP		IRP		Total	
		Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Principal and Interest Guaranteed	Deposits, Installment Savings (bank)	257,396	50.9	90,805	60.7	5,858	87.3	36,362	62.9	390,421	54.2
	Deposits Installment Savings (post office)	67	0.0	35	0.0	0	0.0	13	0.0	115	0.0
	Interest-defined Insurance	176,500	34.9	15,241	10.2	130	1.9	7,333	12.7	199,204	27.7
	Interest-linked Insurance	18,279	3.6	4,944	3.3	55	0.8	1,365	2.4	24,643	3.4
	National Bond	491	0.1	1,111	0.7	0	0.0	1,497	2.6	3,099	0.4
	Monetary Stabilization Bond	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Government Guaranteed Bond	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Principal and Interest Guaranteed ELS	36,658	7.2	1,996	1.3	0	0.0	2,072	3.6	40,726	5.7

Category		Defined Benefit		Defined Contribution		Corporate IRP		IRP		Total	
		Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
	RP	8,158	1.6	1,852	1.2	2	0.0	799	1.4	10,810	1.5
	Drawn Bill and Cover Bill	0	0.0	150	0.1	0	0.0	40	0.1	190	0.0
	Others	0	0.0	1	0.0	0	0.0	5	0.0	7	0.0
Subtotal of the Guarantee of Principal and Interest		497,548	98.3	116,135	77.6	6,045	90.1	49,487	85.6	669,216	92.9
Performance-based Payment	Performance-based Dividend Type Insurance	166	0.0	1,536	1.0	9	0.1	352	0.6	2,064	0.3
	Equity Type Collective Investment Securities	780	0.2	38	0.0	0	0.0	30	0.1	849	0.1
	Hybrid Type Collective Investment Securities	698	0.1	7,968	5.3	14	0.2	1,096	1.9	9,776	1.4
	Bond type Collective Investment Securities	3,616	0.7	21,515	14.4	607	9.0	3,182	5.5	28,921	4.0
	Fund of Funds Type Collective Investment Securities	80	0.0	317	0.2	0	0.0	37	0.1	434	0.1
	Real Estate/ Real Assets/ Special Assets Collective Investment Securities	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Other Collective Investment Securities	1,105	0.2	0	0.0	0	0.0	0	0.0	1,105	0.2
	Subtotal of Collective Investment Securities	6,446	1.3	31,374	21.0	631	9.4	4,698	8.1	43,148	6.0
	Direct Investment	316	0.1	127	0.1	0	0.0	294	0.5	737	0.1
Subtotal of the Performance-based Payment		6,762	1.3	31,501	21.1	631	9.4	4,992	8.6	43,885	6.1
Standby Funds		1,845	0.4	1,964		36	0.5	3,338	5.8	7,183	1.0
Total		506,156	100.0	149,601	100.0	6,711	100.0	57,816	100.0	720,284	100.0

Source: Ministry of Employment and Labor.

Chapter 4

Funds Market and the Asset Management Industry

1. Introduction

2. Private Equity Funds in Korea

Funds Market and the Asset Management Industry

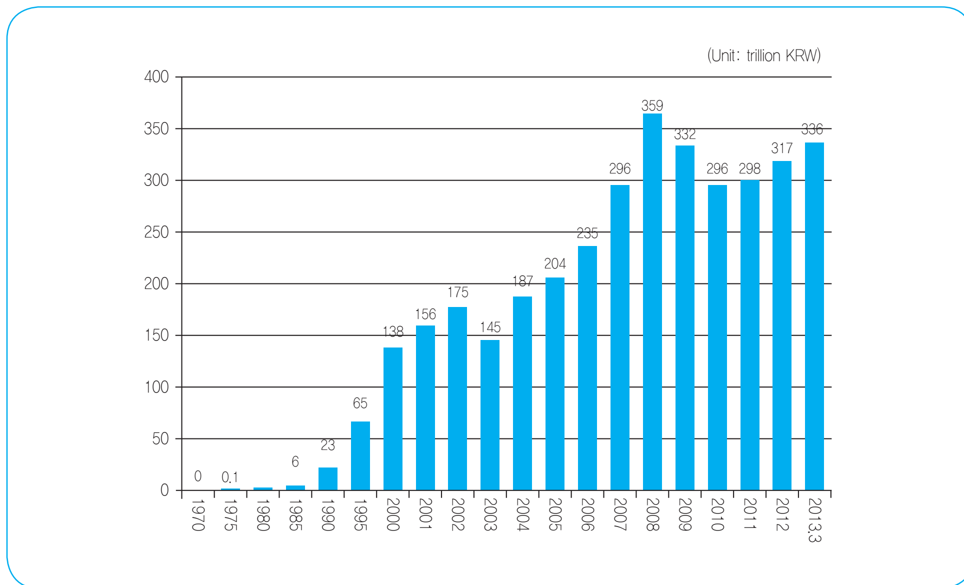
1. Introduction

Korea's first fund was a stock investment trust set up with the size of one million Won by the Korean Investment Development Corporation in May 1970. In August 1974, five commercial banks and 27 securities companies jointly invested to establish the Korea Investment Development Corporation, which was the first investment trust company in Korea. In September 1974, the Korea Investment Development Corporation set up a bond-type investment trust fund of one billion Won for the first time, and also set up an equity-type fund of 3.6 billion Won and a bond-type fund of 8.3 billion Won in 1975.

In January 1977, five banks including Korea Development Bank and seven securities companies established Daehan Investment Trust Company as a joint company. In addition, as merchant banks established under the 「Merchant Banking Corporation Act」 enacted in December 1975 were allowed to engage in the investment trust business of public bonds and corporate debentures, Korea Merchant Banking Corporation set up a fund for short-term public bonds and corporate debentures in November 1976.

As the Korean stock market boomed during the mid-1980s, securities investment trust grew at a fast pace. For example, the number of the investors in beneficiary certificates increased from 1.13 million people at the end of 1985 to 3.06 million people at the end of 1988. However, as the Korean stock market declined from 1989, the Korean asset management industry started to stagger.

Figure 4-1 | Size of Fund Deposits in Korea



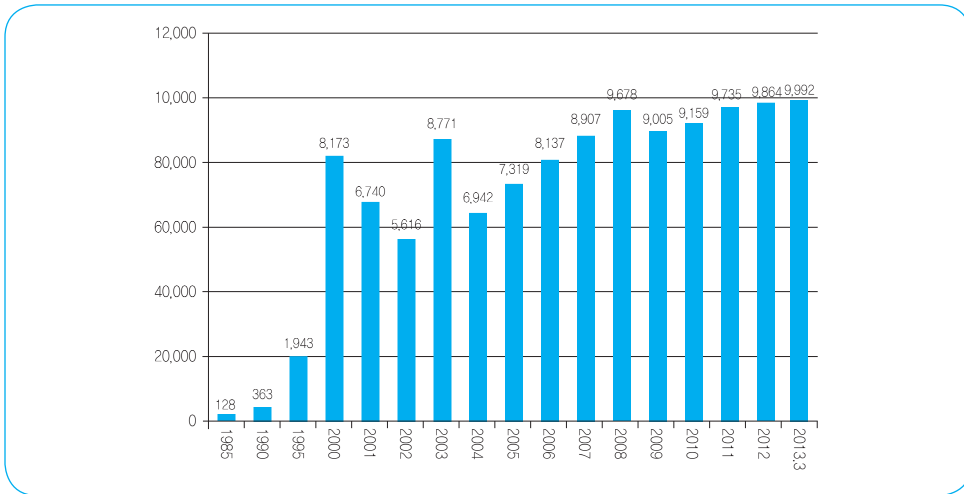
Source : Korea Financial Investment Association.

With the advancement and the liberalization of Korean financial markets since the late 1980s, the 「Securities Investment Trust Business Act」 was amended in 1996. Under the revised Act, the management and sales of funds were separated, and also the number of asset management companies established by securities companies, banks and insurance companies significantly increased. In 1998, the 「Securities Investment Trust Business Act」 was re-amended, allowing banks to sell funds in addition to the existing securities companies. Furthermore, the 「Securities Investment Company Act」 was enacted in the same year and the mutual fund, which is a company-type securities investment fund, was introduced.

Korea's fund system is currently regulated by the 「Capital Market Act」 in general, but funds for the support of specific industry are regulated by separate special laws. The private equity funds that include PEF, Exchange Traded Funds (ETF), and Funds of Funds (FOF) as well as the public offering funds are regulated by the 「Capital Market Act」, while special private equity funds such as ship investments are regulated by separate special laws.

The number of funds in the Korean asset management industry as of the end of March 2013 was 9,992 with total deposits of 336 trillion Won, showing that the Korean fund market has rapidly increased.

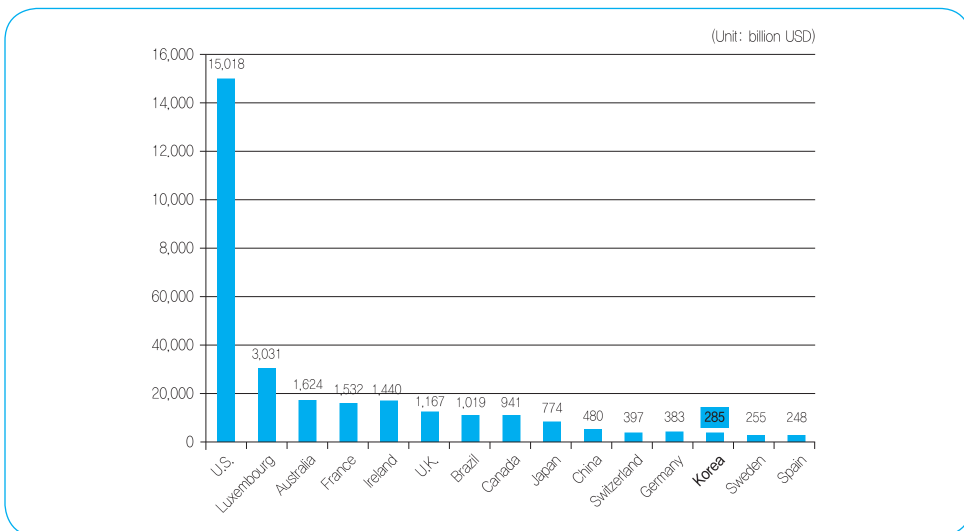
Figure 4-2 | Number of Funds in Korea



Source : Korea Financial Investment Association.

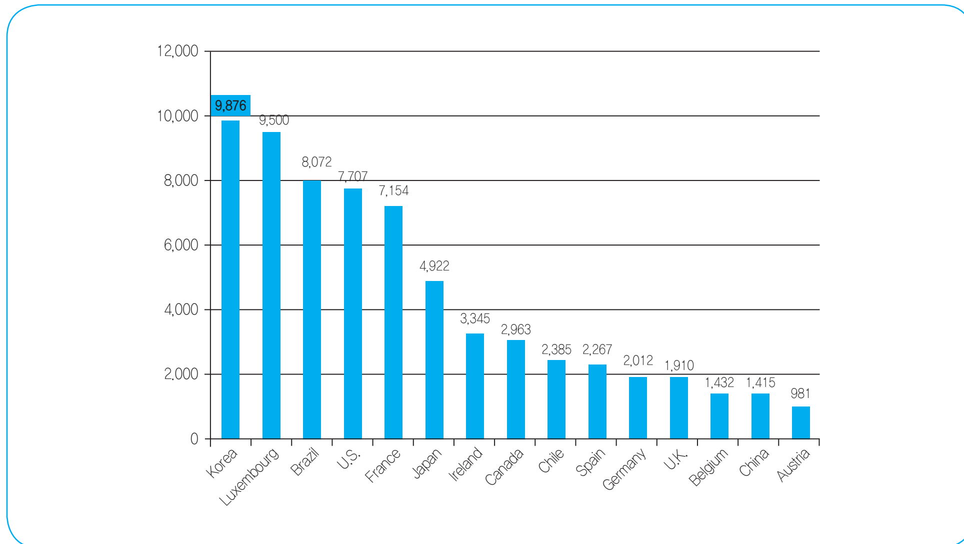
According to the Investment Company Institute, which provides statistics about global mutual fund markets, the net asset of Korea's mutual funds as of the end of 2013 was $285 billion dollars, which was the 13th largest in the world, and the number of Korea's mutual funds was 9,876, which was the largest in the world.

Figure 4-3 | Net Assets of Mutual Funds by Country (as of the end of 2013)



Source: Investment Company Institute.

Figure 4-4 | Number of Mutual Funds by Country (as of the end of 2013)



Source: Investment Company Institute.

Private Equity Funds (PEF) are collective investment scheme where less than 50 investors invest through private offerings and are categorized into four types such as general private equity funds, specialized private equity funds, companies specializing in private equity fund investment, and PEF for corporate financing stability. Unlike countries like the United States where there is little regulation on private equity funds, private equity funds are under strict regulation in Korea and the size and role of private equity funds are still in the early stages of development.

2. Private Equity Funds in Korea

2.1. Private Equity Funds: Definition and Classification

Private equity has a very broad and vaguely defined territory in financial nomenclature. There is no universally accepted definition for it. We consider two distinguished definitions of private equity fund on a practical basis. The first definition focuses the way fund is raised and it is useful in legal and regulatory purposes. We call the first approach as definition of private equity fund from a legal perspective. The second definition emphasizes the objects of investment private equity funds pursue and it is useful in understanding the investment behavior of private equity funds. We call the second approach as definition from an economic perspective.

Under the definition from the legal perspective, PEF refers to a fund that is raised through private placement instead of public offering and covers all forms of indirect investment vehicles other than the ones raised though public offering. Therefore, one can include various forms of investment vehicles such as venture capital funds, buyout funds, distress funds (vulture fund) and hedge funds. PEFs are generally exempt from various regulatory restrictions imposed on the traditional collective investment vehicles to protect the investors from agency problems. For example, traditional instruments for indirect investment such as mutual funds or unit investment trusts are required to register with the regulatory authority and to periodically reveal portfolio positions. Moreover, PEFs are largely free from those complicated registrations and disclosure regulations and have the flexibility in a legal relationship between fund managers and investors as well as investment activities. They are free to pursue whatever investment strategies they may think serve for investment objectives. They can buy and sell whatever assets or financial instruments they want, trade any kind of new financial products such as structured derivatives, engage in unrestricted short-selling, hold concentrated positions on any security without restriction, set redemption policies without restriction, and can adopt fee structure and compensation structure for management of the funds as long as that is acceptable to their investors. However, PEFs are not free from all kinds of regulations. Unless exemption is not granted in an explicit manner by law they are subject to general principles of laws regulating security markets and corporations. The rationale behind the laissez-faire approach to the regulation of private equity funds is simple. Investors responding to contract solicitation of private equity funds can be presumed to voluntarily choose not to enjoy the privilege of legal and regulatory protection offered to all investors. Respecting the explicit intention of investors, the public authority steps aside and monitoring of private equity funds are relegated to investors. In an economic context, agency problems are not regarded as a serious enough problem to call for public intervention in case of investment on PEFs since typical investors of PEFs are assumed to exercise proper amount of monitoring efforts to balance the benefit of lowered agency problems and the cost of more intensive monitoring. Private equity funds should satisfy qualifications required by law or regulation to be exempted from the restrictions and duties imposed on indirect investment vehicles.[17]

The alternative definition of private equity funds focuses on the "private equitiness" of investment targets and investment style rather than the way a fund is raised. PEF is defined as an investment vehicle specializing in investing on equities of non-listed companies rather

17. National Venture Capital Association (NVCA) Yearbook (2005) offers a classification of growth stages of a firm in conjunction with the roles played by venture capital funds. The classification consists of three main stages and six sub stages. The flow starts with Early Stages with three sub stages; seed, start-up, and other early stage. The next main stage is Expansion Stages, also called MID-Stages. The last is Last Stages with two sub stages; late and bridge.

than listed companies whose securities are traded in a formal exchange. The definition does not belittle the importance of fund raising. A more accurate description would be that PEF refers to any type of investment fund that has amassed its fund through private placement outside the securities exchange and primarily targets at investing in equities of non-listed companies. Under this definition, private equity is considered to be a subcategory of alternative investments in contrast to traditional investments such as bonds and stocks of listed companies. Therefore, alternative investments include virtually all sorts of investments other than traditional investments. Bance (2003) offers a handy and clear classification of alternative investments into four categories; private equity funds, hedge funds, real estate investments, and others.

Table 4-1 | Classification of Alternative Investments

Classification	Types
Private Equity Funds	Venture Capital Funds Buyout Funds Mezzanine Funds Distressed Funds
Hedge Funds	Global Macro Funds Arbitrage Funds Long-short Funds Event Driven Funds Others (emerging markets, funds of hedge funds, quantitative, etc)
Real Estate Investment	Office, Commercial Properties, Residential Properties, Real Estate Investment Trusts, etc.
Others	Commodities, Currency, Interest Rate, etc.

Source: Bance (2003).

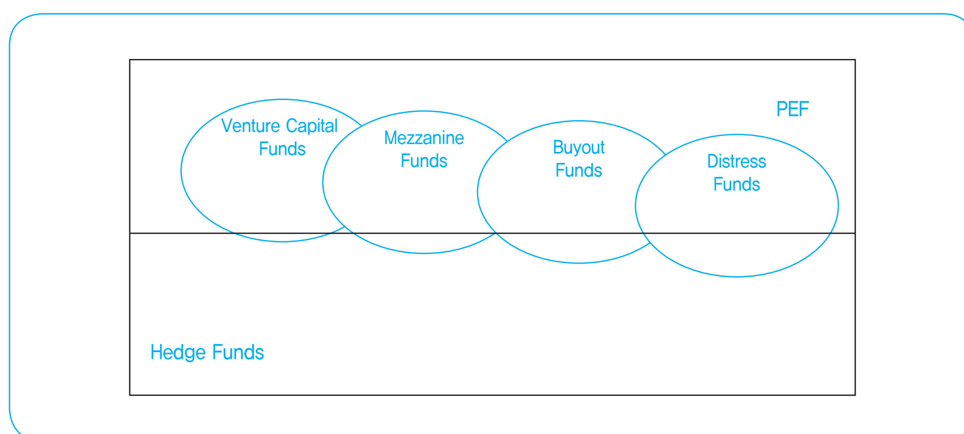
The classification in <Table 4-1> distinguishes hedge funds from PEFs. Although it shares many common features with private equity funds, hedge funds tend to invest in traditional securities traded in public markets rather than in alternative investments. Other than main investment instruments, there are two distinctive differences between PEFs and hedge funds; time horizon of investment, and liquidity of portfolio. Although we cannot exclude some exceptions to the general pattern, private equity funds are long-term investors and hedge funds are short-term traders.[18] Both strategies have the potential for

18. The distinction becomes clear when we consider hedge funds pursuing arbitrage strategy. Arbitrage funds pursue large return by taking advantage of small, sometimes miniscule, mis-pricings. Therefore, they are very active traders and willing to engage even in day trading depending on market conditions.

large returns but investment principles and skills sets are different. It is very difficult to find an exceptionally talented manager to excel in both areas. Therefore, investors regard them as two different financial products and expect different investment results. While PEFs invest in extremely illiquid assets, hedge funds can offer their investors faster access to their money and allow them to withdraw at least part of their investments on a quarterly or annual basis. It is possible because investment portfolios managed by hedge funds consist of assets with relatively high liquidity such as bonds and stocks of listed companies. One can easily see that time horizon and liquidity of investments are closely connected. If a fund has an investment strategy in illiquid assets, then it needs to lock up the investors for a considerable amount of time so that it does not have to liquidate investment before the profit opportunity matures in order to respond to investors' request for withdrawal.

Even with the clear conceptual distinction between PEFs and hedge funds, hedge funds have occasionally crossed over to realms of PEFs and it is sometimes quite difficult to see clear practical borders between them. For example, there are some hedge funds that invest in equity of distressed firms or seek buyout strategy, which are thought to be the main investment strategies of PEFs. Metrick (2006) offers [Figure 4-5] to illustrate the difference between PEFs and hedge funds along with the tendency of crossover among them.

Figure 4-5 | PEFs and Hedge Funds



Source: Metrick (2006).

As shown in [Figure 4-5], PEF encompass various types of investment vehicles and we will briefly discuss important features of venture capital funds, mezzanine funds, buyout funds, and distress funds. Venture capital funds refer to investment vehicles to invest in private equities or equity-linked securities of firms in early or expansion stages of

growth. They are financial intermediaries that take capital from a small group of investors and invest directly in portfolio companies with distinctive characteristics of 3-H's; high growth potential, high tech, and high risk. The primary goal of venture capital funds is to maximize investment return by selling or initial public offering of private equities of investment targets. They play a very active role in monitoring and consulting companies in the investment portfolio to enhance the value of investment portfolio.

A mezzanine fund is an investment vehicle that pursues return by investing in equities or debt instruments issued by companies in later stages in a life cycle. Those companies have a relatively stable source of income. The investment is typically in the form of subordinate debts junior to bank loans with additional acquisition of equity-linked securities such as options, warrants, and convertible bonds. There is another important form of mezzanine investment under which investors participate with purchase of subordinate debts along with some equity and related instruments to provide a layer of debt financing for highly leveraged buyouts.

Buyout funds target at both listed and non-listed companies in acquiring equities and related assets. For private equities, buyout funds typically focus on the companies in status between post-expansion and pre-IPO stages. In both cases, companies under pressure due to managerial inefficiencies in spite of high potential for growth are the main targets. Buyout funds utilize various investment strategies, but the most important and popular strategy adopted by most buyout funds is to acquire a majority share of the target companies and take the control of them. Great efforts to drive off inefficiencies and enhance the value of target companies follow. Hence, it is called a buy-and-build strategy. Buyout funds realize the investment return by selling the shares or core assets of acquired firms. However, small minority of buyout funds do not seek control of target companies. Instead, they pursue the strategy to leave the incumbent to maintain the control power but to retain enough power to influence the decision of incumbent executives, if they want. A buyout fund is the largest category of private equity funds in terms of total assets under management. In most large buyout investments, the investors put up the equity stakes, which are typically less than half of total purchase price and take leverage by borrowing the rest from banks and public capital market and mezzanine investors.

While buyout funds and mezzanine funds focus on investment in companies that cannot realize its growth potential for managerial inefficiency or show signs of impending trouble, distress funds, also called special situations funds, concentrate on investment in companies already under distress. They acquire control of distressed companies through equity investment or purchase of distressed bonds and try to revive the distress companies by pursuing aggressive restructuring or strengthening its financial structure. They realize very high return on their investment through capital gains.

2.2. Development of Private Equity Funds in Korea

Among the diverse types of PEFs discussed in the previous section, three showed noticeable activities; venture capital funds, distress funds, and buyout funds.

Venture capital funds in Korea are established based on two special laws; the 「SME Creation Promotion Act」 and the 「Finance Companies Act」. The 「SME Creation Promotion Act」 was enacted in 1986 and provided the legal foundation for two types of venture capital investment vehicles: the venture investment fund and the venture investment company. Amendments to the 「Finance Companies Act」 in 1998 provided another form of legal foundation for venture capital funds called the New Technology Investment Finance Company. Venture capital funds had not shown noticeable activities until 1999 when the Korean Government started to concentrate on policies to stimulate creation of technology intensive SMEs and the boom in the KOSDAQ (Korea Stock Dealers Association Quotes) market hit its highest point. The size of venture capital investment once exceeded 2 trillion Korean Won but bust of the venture bubble in 2000 brought an abrupt contraction of capital inflow to the sector, 889 billion Korean Won in 2001 and 564 billion Korean Won in 2004. The Korean government announced a new policy to revitalize the slumping technology intensive SMEs and established a fund of funds, Korea Venture Fund (KVF), by committing 1 trillion Korean Won for the capital base of the fund. As the capital injection by KVF into venture capital market kicked into high gear, venture capital investment started to rebound from 2005 and the trend continued. Nonetheless, venture capital investment fell far short of the level recorded before the bust of the venture bubble. It was 1.3 trillion Korean Won in 2012, which was just half of the amount invested just before the bust of the venture bubble. Moreover, more than half of total investments by venture capital funds depends on capital provided by KVF. The venture capital market is crucially dependent on government support.

Table 4-2 | Outstanding Balance and New Investment of Venture Capital Funds in Korea

(Unit: billion KRW)

Year	Outstanding Balance					New Investment				
	VCIC	VCIF	Sub Total	KVF	Total	VCIC	VCIF	Sub Total	KVF	Total
2000	1,868	1,001	2,869	-	2,869	2,008		2,008	-	2,008
2001	1,617	1,419	3,036	16	3,052	889		889	2	891
2002	1,413	1,619	3,032	13	3,045	157	460	617	1	618
2003	1,118	1,619	2,737	26	2,763	132	479	612	19	631
2004	901	1,662	2563	64	2,627	84	480	564	41	605
2005	651	1,490	2,141	126	2,267	123	542	665	92	757
2006	615	1,391	2,006	190	2.196	114	514	628	106	734
2007	638	1,466	2,104	374	2.478	128	620	748	243	991
2008	639	1,568	2,207	454	2.661	91	496	587	137	724
2009	585	1,520	2105	658	2.763	64	493	557	310	867
2010	544	1,610	2,154	947	3.101	58	600	658	434	1,092
2011	483	1,757	2,240	1,351	3.591	49	632	681	580	1,261
2012	445	1,833	2,278	1,675	3,953	38	620	658	575	1,233

Source: Venture Capital Information Center.

<Table 4-2> illustrates that Venture Capital Investment Fund (VCIF) has taken a leading role in the private venture capital market in Korea replacing the Venture Capital Investment Company (VCIC). The uneven regulatory requirements seem to bring on the change. Strict regulations on minimum capital requirements and qualifications of asset managers are imposed on VCIC while VCIF is relatively free from these regulations. VCIC is an incorporated company registered at the Small and Medium Business Administration. It makes direct investment on the venture companies of their own choice or participates in VCIFs as a general partner. The Law imposes complex and detailed restrictions on activities of VCICs and VCIFs so that they are in fact equivalent to the collective investment schemes raising funds from the general public, except for the fact that the target assets are limited to equities of technology intensive SMEs. Restrictive regulatory approach to venture capital

funds in Korea could be the result of efforts to induce investors by decreasing asymmetric information in the early stage of market development.[19]

Distress funds were first introduced to Korea in 1998 when the 「Securities Investment Companies Act」 was amended to align the institutional arrangement to assist in efficient restructuring of financially distressed enterprises. The Act recognized the Corporate Restructuring Investment Fund (CRIF) as a form of securities investment companies. CRIF is a paper company established to make investments on new securities issued by distressed SMEs with good prospects of revival or securities acquired through debt equity swap by financial institutions. Since CRIF is a form of securities investment companies, it should satisfy the same requirements as ordinary securities investment companies for establishment. Tax benefits such as exemption of dividend income tax were granted to encourage capital inflow into CRIFs. But CRIFs did not show satisfactory performance until the abolition of the 「Securities Investment Companies Act」 in 2008.[20]

Table 4-3 | Performance of Corporate Restructuring Companies and Corporate Restructuring Funds

(Unit: billion KRW)

	New Investment			Accumulated Investment		
	CRC	CRF	Total	CRC	CRF	Total
1999	162	123	285	162	123	285
2000	498	296	793	660	418	1,078
2001	1,391	272	1,663	2,051	690	2,741
2002	679	523	1,203	2,730	1,213	3,944
2003	249	323	572	2,979	536	3,516
2004	223	559	782	3,022	2,096	5,117
2005	276	684	960	3,478	2,779	6,257
2006	295	411	706	3,773	3,190	6,963
2007	294	808	1,101	4,067	3,997	8,064
2008	176	216	392	4,242	4,214	8,456

Source: Ministry of Knowledge Economy.

19. For further discussion on the role of venture capital and policies to promote venture capital market, see Chung (2003).

20. In fact, the Securities Investment Companies Act was replace by the Capital Market and Financial Investment Companies Act and securities investment companies were recognized as a form of collective investment schemes by the new law. However, CRFs were not explicitly recognized as a separate form of collective investment schemes under the Securities Investment Companies Act. However, it is still possible to establish securities investment companies and manage them as distress funds but tax benefits are no longer granted.

The「Industry Development Act」passed in the National Assembly in 1999 to support fast and efficient corporate restructuring in the private sector and two forms of distress funds, Corporate Restructuring Company (CRC) and corporate restructuring fund (CRF) were introduced by the law. CRC like VCC is an incorporated company and directly provides capital for financially distressed firms or makes investments on equities of distressed firms to acquire control rights. CRCs also participate in corporate structuring by leading the establishment of CRFs as the general partner. Both CRCs and CRFs acquire control rights of target firms through equity investment or debt equity swaps. They utilize various measures such as mergers, divesture, business transfers, and asset transfers to execute restructuring procedures in a fast and efficient manner. Both CRC and CRF were abolished in 2009 by the sunset clause in the「Industry Development Act」and replaced by corporate restructuring private equity investment fund regulated by the「Capital Market and Financial Investment Companies Act」as a special form of private equity investment funds. The CRC and CRF operated for a decade and injected equity capital worth 8.5 trillion Korean Won into financially distressed firms to contribute to restructuring the troubled corporate sector. They showed the best performance among various vehicles [21] for corporate restructuring up to the early 2000s. The good performance of CRCs and CRFs can be attributable to the fact that CRCs were allowed to acquire control rights of target firms and regulations on financial holding companies and bond issuance were relaxed to support activities of CRCs and CRFs.

Table 4-4 | Fund Raising by PEIFs

(Unit: trillion KRW, funds)

Year	Capital Committed	Capital Called	Number of Funds
2005	4.7	0.4	15
2006	6.2	2.5	25
2007	9.0	4.3	44
2008	14.6	8.3	76
2009	20.0	9.5	110
2010	26.6	11.2	148
2011	31.8	16.7	181
2012	40.0	21.1	226
2013	44.0	28.1	237

Source: Financial Supervisory Services.

21. In addition to CRIF, CRC, and CRF, they include corporate restructuring vehicle and privately placed M&A fund.

The Private Equity Investment Fund (PEIF) was first introduced into the Korean capital market with the revision of the「Collective Investment Schemes Act」in 2004. The Act defines PEIF as a limited company that acquires equities of unlisted private firms and enhances values of the target firms by improving business or governance structures. It is obvious from the legal definition that PEIF is a form of buyout funds. It was expected that PEIFs would facilitate merger and acquisition markets for private firms, which leads to improvement in efficiency and competitiveness of target firms. It was also expected that PEIFs would play an instrumental role in expediting corporate restructuring and stimulating growth of SMEs by providing equity capital. The important expected benefit to which policymakers paid attention was that PEIFs could be good buyers in privatization of commercial banks nationalized after the foreign exchange crisis in 1997. In order to help achieve the intended benefits, the regulatory authority imposed much weaker regulations on PEIFs than on the traditional collective investment schemes. Within six months from its establishment, every PEIF should acquire equities no less than 10% of total shares or enough to secure control rights of target firms. Demanding PEIFs to carry out the roles as buyout funds, the law offered a new regulatory environment under which PEIFs would be able to conduct their business much easily. All that meet minimum qualifications required by the rules and regulations are allowed to become a general partner in a PEIF and most strict restrictions on disclosure and asset management are lifted to provide a flexible investment environment with PEIFs. PEIFs have shown remarkable growth since their inception in 2005. By the end of 2013, 237 PEIFs with called capital worth 28.1 trillion Korean Won were active participants.

2.3. Regulation of Private Equity Funds in Korea

The differential regulatory treatment of public funds and private equity funds is based on the presumption that the investors who voluntarily participate in formation of PEFs have the ability to bear the risks involved in the transactions and expertise to handle complex financial contracts and the government should let them make their own decisions without outside intervention and bear the full consequences and cost of them. In spite of the general principle on the regulation of PEFs, many still argue that regulatory authorities should put much stronger grips on PEFs. A new wave of debates on PEF regulation was sparked by growing concerns about unregulated activities of PEFs in the global financial market especially after the global financial crisis in 2008.

The current debates focus on two important implications of unregulated activities of PEFs on system stability and investor protection. First, those funds outside the reign of regulatory authorities may erode the stability of financial system and even cause a system crisis. Advocates for stronger regulations on currently unregulated funds argue that we have

seen enough evidence of the danger of activities of unregulated investment vehicles. They argue that LTCM crisis and global financial crisis in 2008 are two well-known examples demonstrating the risk of unfettered activities by hedge funds and PEFs. However, critics against stronger regulations on currently unregulated investment funds argue that the financial market is flexible enough to accommodate shocks and irregularities created by those unregulated entities even under the existing regulatory settings. They admit that the sporadic events such as the LTCM crisis and the global financial crisis in 2008 did reveal a fundamental weakness embedded in the current financial system. In particular, high leverage taken by unregulated or improperly regulated financial institutions could pose serious risks to system stability. However, that did not justify attempts to impose strict regulations on PEFs as well as hedge funds and the costs may outweigh the benefits. They argue that we should not over-react based on the concern about the remote possibility of a system-wide crisis. They recommend regulatory authorities to turn their attention to alternative measures such as building a stronger surveillance system rather than to resort to easier but more expensive solutions. Second, the recent innovations in the capital market eroded the effectiveness of the current regulatory framework for investor protection. Even naive investors had easier access to complex and risky financial products that had been traditionally reserved for large and professional investors, which left a large hole in the regulatory framework for investor protection. Many experts called for a reshuffle of the current regulatory system for investor protection to incorporate the recent changes occurred in the industry and markets. However, there was a large group of experts who opposed strengthening regulations for investor protection. They argued that even though recent financial innovations raised legitimate concerns on the effectiveness of the current regulatory framework for investor protection, it was socially beneficial to expand the availability of new and alternative investment devices to a broader audience of investors as long as the risks associated with the new products were likely to be no greater than those associated with most of the current investment products. They argued that it was sufficient to provide investors with accurate and timely information on important aspects of new financial products or services.

The most noticeable feature of the current regulatory framework in Korea is that PEFs are already subject to strong regulations. Therefore, the recent debates on the redesign of regulatory framework are in some sense not worthwhile at least in the Korean context. Most of the new regulatory measures on PEFs as well as hedge funds suggested during the recent debates are already put in force. For example, assets venture capital funds and private equity investment funds are allowed to acquire are restricted by law to the ones that are regarded as necessary to achieve the investment goals of those funds. In addition, the leverage private equity investment funds can take is restricted to 100% of total paid in capital, which is rather unusual considering the fact that they are supposed to pursue a buyout investment strategy. Therefore, the leverage buyout strategy is not an option to

private equity investment funds in Korea even if it is one of the most popular investment strategies in the global market. The possibility that high leverages by PEIFs pose serious threats to system stability is not high in Korea.

Another noticeable feature of the regulatory framework on PEFs in Korea is that each type of PEFs was explicitly introduced through legislation; venture capital investment fund by the 「SME Creation Promotion Act」, the corporate restructuring fund by the 「Industry Development Act」, and private equity investment fund by the 「Collective investment Schemes Act」. The practice is in stark contrast with that in other countries with mature capital markets in which PEFs are classified by market practices. One of the long revered traditions in Korean legal system regulating financial market is the positive listing system under which the law explicitly specifies the list of financial products or services that are allowed to be transacted.

The current financial regulatory system in Korea imposes stronger regulations than other countries with mature capital markets. Some critics argue that the rigid regulatory system can stifle creativity and flexibility, which important flair investors expect from PEFs. However, the current system should be understood as the result of the efforts to achieve a balance between financial market development and stability of the financial system.

Chapter 5

The Introduction of the Capital Market Act

1. Introduction
2. Main Contents of the Capital Market Act

The Introduction of the Capital Market Act

1. Introduction

The role of regulation in financial markets is very important. Financial regulation, a group of policies taken by the government to intervene in the market purports to improve the efficiency of the resource allocation by correcting market failures due to the information asymmetry problem. The inefficiency in the resource allocation in financial markets due to asymmetric information results in the occurrence of a systematic crisis or in the loss of financial consumers who have little financial information. Thus, the main purpose of the financial regulatory framework is to prevent the occurrence of systematic crisis and to protect general financial consumers. As environments in the financial market change constantly, the specific content and form of financial regulation also need to be adjusted accordingly. Since financial regulations can cause fundamental changes in economic behavior, if the regulatory framework changes too frequently, it may destroy the stability of the financial market. Thus, there is always tension between the ever-changing financial environment and the financial system which requires a certain level of stability. If the gap between the two exceed a certain level, there can be some side effects such as instability of the financial system, failure in the protection of financial consumers and opportunistic behavior of seeking regulatory arbitrage.

Before the legislation of the 「Capital Market and Financial Investment Business Act (hereinafter referred to as the 'Capital Market Act')」, the regulatory framework was based on the system of specialized financial institutions. The regulatory framework for the Korean financial sector began with the legislation of the 「Trust Business Act」 in 1961. Following the 「Trust Business Act」, several laws on the financial regulation were enacted such as 「Securities and Exchange Act」 in 1962, 「Securities Investment Trust Business Act」 in 1969,

the 「Merchant Banks Act」 in 1976, the 「Futures Trading Act」 in 1995 and the 「Securities Investment Company Act」 in 1998. In addition, the 「Indirect Investment Asset Management Business Act」 replaced the 「Securities Investment Trust Business Act」 and the 「Securities Investment Company Act」 in 2003.

The Capital Market Act was passed in the National Assembly on July 3, 2007 and was promulgated on August 3 of the same year. The Capital Market Act has been fully implemented since February 4, 2009. The Capital Market Act replaced six acts such as 「Securities and Exchange Act」, 「Futures Trading Act」, 「Indirect Investment Asset Management Business Act」, 「Trust Business Act」, 「Merchant Banks Act」, and 「Korea Securities and Futures Exchange Act」 which regulated the Korean capital market and related industries. The Capital Market Act is also called 「Capital Market Consolidation Act」 in that it is the single law that solely defines the regulatory framework of capital markets.

The purposes of the Capital Market Act are to strengthen financial intermediation, to provide better investor protection, and to promote competition and to encourage innovation in capital markets and related financial industries. In terms of content, the Capital Market Act has switched the regulatory principle from a positive system to negative system, has established the principle of functional regulation that imposes the same rules on the same financial functions, and has broken down the barriers between sectors in the capital market.

The introduction of the Capital Market Act was a significant event in that it is a single law that regulates the capital markets. In addition, it was a significant event because it changed the principle and methods of regulations.

2. Main Contents of the Capital Market Act

2.1. The Purpose of the Capital Market Act

According to Article 1 of the Capital Market Act, the goal of the Capital Market Act is to contribute to the development of the national economy by facilitating financial innovation and fair competition in the capital market, protecting investors, fostering the development of the financial investment business, and heightening the fairness, reliability, and efficiency of the capital market. The purpose of the Capital Market Act consists of three layered structures. First, the contribution to the development of the national economy is presented as the ultimate goal of legislation. Then, it presents its intermediate goal that increases fairness, reliability, and efficiency of capital markets for the development of the national economy and the intermediated goal can be considered as the direct motive for the legislation of the Capital Market Act. As the last phase, the instrumental goals to accomplish the intermediate

goals are presented. The instrumental goals include the promotion of financial innovation and fair competition, protection of investors, and development of financial investment.

2.2. Definitions of the Financial Investment Products Based on the Negative System

Under the prior regulatory framework that regulated the capital market, individual laws took listed financial products one by one that financial companies could deal with. For example, the Securities and Exchange Act (Article 2) and its enforcement ordinance (3 of Article 2) listed 21 financial products which securities companies could make transactions such as national bonds, special bonds, stocks, investment certificates, beneficiary certificates, equity-linked securities, currency derivatives, securities derivatives, and credit derivatives. While such a positive system can provide a stable trading environment to market participants, the positive system may hinder financial innovation.

In order to promote financial innovation, a negative system was introduced in the Capital Market Act. In the Capital Market Act, "financial investment instrument" is defined as a right acquired by an agreement to pay, at a specific time in the present or in the future, money or any other valuable thing, with the intention to earn a profit or avoid a loss, where there is a risk that the total amount of such money or similar, paid or payable, for the purpose of acquiring such rights may exceed the total amount of money or similar already recovered or recoverable from the right. In other words, the Capital Market Act defines the financial investment instrument based on profitability and on the potential loss of the principal. The premise of defining financial investment products in this way is that the regulatory framework of financial products without the possibility of loss of the principle such as savings accounts and insurance should be different from the regulatory framework of financial products with the possibility the loss of the principle such as stocks or derivatives.

Besides taking the approach of the negative system that abstractly describes the economic function of financial investment products, the Capital Market Act explicitly lists six representative products that have already been standardized and are traded in the market in order to minimize the uncertainty that may be caused by the negative system. The six representative products are debt securities, equity securities, beneficiary certificate, investment contract securities, derivative-linked securities, and entrusted depositary receipt. Debt security in the Act means state bonds, local government bonds, special bonds, corporate bonds, corporate commercial papers, and other similar instruments, which bear the indication of a right to claim the payment. Equity security in the Act means stock certificates, instruments representing a preemptive right, investment securities issued by a corporation established by direct operation of an Act, equity shares in contribution to a

limited partnership company, limited liability company, or undisclosed association under the Commercial Act, equity shares in contribution to an association under the Civil Act, and other similar instruments, which bear the indication of equity shares in contribution. Beneficiary certificate in the Act means the beneficiary certificate and other similar instrument, which bears the indication of a beneficial interest in a trust. The investment contract security in the Act refers to instruments bearing the indication of a contractual right under which a specific investor is entitled to the profits earned, or liable for losses sustained, depending upon the results of a joint venture in which the investor makes an investment jointly with another person and which is to be run mainly by the other person. Derivatives-linked security in the Act means instruments bearing the indication of a right under which the amount payable or recoverable shall be determined according to a predetermined formula tied to fluctuations in the price of any underlying assets such as interest rate, indicator or index. Entrusted depositary receipt in the Act means instruments issued by a person with whom securities are deposited in a country other than the country where such underlying securities were issued, which bears the indication of the relevant right on the deposited underlying securities.

2.3. The Principle of Functional Regulation for Financial Investment Business

The Capital Market Act established the regulatory framework based on the principle of functional regulation that imposes the same regulation for the same economic substance by setting the basic unit of regulation as the financial services themselves, not as the subjects that perform the financial services. The financial business areas are classified into six categories such as investment sales business, investment brokerage business, collective investment business, trust business, entrusted investment business, and investment advisory business. For example, the Capital Market Act makes it clear that if banks or insurance companies sell collective investment securities or investment savings and insurance or sell and buy or related derivatives, they are considered to perform financial investment business and have the same regulation as specialized financial investment business does.

2.4. Universal Banking and Expansion of Business Scope

Under the prior regulatory framework, it was strictly prohibited for a single institution to conduct securities business, futures business, and asset management business simultaneously. However, in the Capital Market Act, as long as a financial institution meets certain eligibility requirements, the institution is allowed to provide any of the six financial investment services. Also, as long as there are no problems in the soundness of the institution and investor protection, the institution is allowed to freely engage in any ancillary business that is incidental to financial investment business.

2.5. New System of Investor Protection

In the Capital Market Act, investors are categorized into professional investors and general investors based on their knowledge on financial products and their risk-taking ability. When financial investment business entities trade with professional investors, many of the compliance obligations are exempted so as to guarantee the freedom of trading as much as possible. When financial investment business entities trade with general investors, strict investor protection measures are applied. For example, when financial investment business entities sell financial investment products to general investors, the entities should provide product guidance on important issues such as details and risks of the product in a way that general investors can understand them. In order to ensure the effectiveness of the obligatory regulation, financial investment business entities should be liable for any loss of investors if the entities fail to perform the product guidance. However, the product guidance for professional investors is exempted.

Chapter 6

Implications for Developing Countries

1. The Development of Pension Systems and the Asset Management Industry·

2. The Introduction of the Integrated Financial Regulatory Framework

Implications for Developing Countries

1. The Development of Pension Systems and the Asset Management Industry

The growth of pensions in Korea has promoted the development of capital markets and asset management industry in three aspects. First, a pension plan is made under a long-term contract and the asset management based on the pension is made on a long-term basis. Thus the investment in the long-term assets and high-risk assets is promoted. Second, as the assets based on pension plans managed mainly by institutional investors, the role of institutional investors in the financial market becomes more significant as the pension market grows. Third, as pension management institutions face risks such as longevity and inflation risks, the demand for financial products to manage such risks increases and the increase in such demand leads to the development of the capital market. In particular, public pensions such as the national pension may play a big role for the development of capital markets in the early stages when capital markets are not fully developed. In this case, the management of public pensions should not be based on the government's political considerations.

Once capital markets have developed to some extent, the role of private pensions such as retirement pensions and personal pensions may be gradually increased, and the government's policy efforts such as tax reduction and exemption may be necessary to promote these private pensions.

2. The Introduction of the Integrated Financial Regulatory Framework

Financial regulation, a group of policies taken by the government to intervene in the market purports to improve the efficiency of the resource allocation by correcting market failures due to the information asymmetry problem. The inefficiency in resource allocation in financial markets due to asymmetric information results in the occurrence of a systematic crisis or in the loss of financial consumers who have little financial information.

As the economy grows, there comes a stage where a regulatory framework based on the government's strong intervention in capital markets should be changed to a regulatory framework which can contribute to the economy through financial innovation in a freer business environment. The negative system for financial products, changeover to the functional regulatory framework, expansion of financial companies' business scope, and establishment of appropriate investor protection system were introduced in the Capital Market Act for this purpose. The introduction of such a system can be an appropriate policy means which can be considered by developing countries when they make attempts to change a government-led financial structure to a financial structure led by private sector.

[Korean]

Compilation Committee of the Six Decades of Korean Economic History, Sixty-year history of the Korean Economy, 2010.

Kim, Kyung-ah, An analysis of the ripple effect of national pension funds on capital markets. National Pension Research Institute, 2008.

Kim, Jae-chil, The prerequisite of retirement pensions for promoting the development of capital markets. Capital Market Perspective, Vol. 5 No. 3, 2013.

Korea Financial Investment Association, The Financial Investment Fact Book of 2013, 2013.

Korea Financial Investment Association, The Sixty-year's History of the Korea Financial Investment Association, 2013.

Ministry of Knowledge and Economy, "White Paper: Corporate Restructuring Companies in Korea", 2010.

Park, Moo-hwan and Sang-dae Yu, The role of national pensions for the development of capital markets. National Pension Research Institute, 2006.

Song, Hong-seon, Jae-chil Kim, Jong-min Kim, , Jae-woo Nam, and Won-gu Hong, The future of the pension society and asset management industry: the vision and prospect of the asset management industry in 2020. Korea Capital Market Institute, 2013.

Shin, I., A Study on Regulations of Collective Investment Schemes, Research Monograph 2002-05, Korea Development Institute, 2002.

Won, S., "Hedge Funds in Korea: Past, Present and Future", mimeo, 2013.

[English]

Bance, A., "Why and How to Invest in Private Equity," An EVCA Investor Relations Committee Paper, 2003.

Bodie, Z., "Pension Funds and Financial Innovation", Financial Management, 1990.

Catalan, M., G. Impavido and A. Musalem, "Contractual Savings or Stock Markets Development: Which Leads?", World Bank Discussion Paper, 2000.

Chung, H., "Lessons from the Korean Venture Industry Development", mimeo, World Bank, 2003.

Davis, E. Philip, Pension Funds: Retirement Income Security and Capital Markets – An International Perspective, Oxford University Press, 1995.

Impavido, G. and A. Musalem, “Contractual Savings, Stock and Asset Markets”, World Bank Discussion Paper, 2000.

IOSCO, “The Regulatory Environment for Hedge Funds: A Survey and Comparison”, 2006.

Metrick, A., Venture Capital and the Finance of Innovation, Wiley, 2006.

Niggemann, T. and J. Rocholl, “Pension Funding and Capital Market Development”, Working Paper, 2010.

Park, C., and S. Hur, “Recent Trends in Regulations on Private Equity Funds in Korea”, mimeo, Korea Development Institute, 2007.

Towers Watson, “P&I/TW 300 analysis: Year end 2012”, 2013.

Walker, E. and F. Lefort, “Pension Reform and Capital Markets: Are There Any (Hard) Links?”, World Bank Discussion Paper, 2002.

World Bank, Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth, World Bank Policy Research Report, Oxford University Press, 1994.

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