

# **Policy Recommendations to Improve the Role of the Asset Management Industry in Aging Korea**

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# I. Introduction

As aging progresses, most countries adopt private and public pension systems. The accumulation of pension funds usually plays an important role in the development of capital markets and institutional investors.<sup>1</sup>

But this effect heavily depends on the soundness of capital markets and the existence of a competitive market mechanism in the asset management industry. Shin (2003) argues that given the infrastructure of capital markets and the ability of institutional investors in Korea, the positive effect of institutional investors on the capital market might not be realized.

Taking this concern seriously, this study conducts an empirical analysis on the performance and competitiveness of the asset management industry to check whether Korean asset management companies can provide quality services to investors that save for their retirement. Based on the analytical results, we propose policy directions to improve the role of the asset management industry in Korea.

A major consideration in the study is the fact that the Korean stock market has been rapidly institutionalized with the increased presence of foreign, mostly institutional, equity investors in the market. The current situation in Korea requires an improved role and ability on the part of domestic institutional investors such as pension funds, investment companies and insurance companies. While there are positive effects on the development of Korean capital markets from foreign institutional investors, abrupt money flows might cause additional volatility in the market. It is generally accepted that the existence of stable domestic institutional investors could mitigate this volatility. In addition, if domestic institutional investors cannot reach the advanced and sophisticated asset management abilities of foreign institutional investors, aging Korean households who need to build assets for their retirement might not be well served in the asset management market.

This study is organized as follows: Chapter 2 describes the role of institutional investors and the current status of institutional investors in both Korea and developed countries. Chapter 3 analyzes the competitiveness and asset managing ability of Korean investment companies. In addition, the past policy efforts of the Korean government to induce long-term fund inflows to the stock market is evaluated. Chapter 4 proposes policy recommendations regarding investment companies to improve the role of institutional investors in the Korean stock market, with the conclusion in Chapter 5.

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<sup>1</sup> See Impavido, Musalem, and Tressel (2000, 2003) and Davis and Steil (2001).

## II. Institutional Investors in Developed Countries and Korea

### 1. Institutional investors in Developed Countries

Pension funds, insurance companies, and investment companies are non-depository financial intermediaries, which pool the funds of market participants and use those funds to purchase a portfolio of financial assets. These institutional investors are mostly engaged in risk reduction via pooling and diversification and/or lowering costs of contracting and information processing.

Since the 1980s, institutional investors in developed countries have grown steadily and the pace of growth has been accelerated in the 1990s. As described in table 1, the asset size of institutional investors now significantly exceeds that of banks.

<Table 1> Asset Size under Management by Financial Institutions

	(\$ Billions)							
	1994	1995	1996	1997	1998	1999	2000	2001
<b>Institutional Investors</b>	<b>20,153</b>	<b>23,141</b>	<b>25,432</b>	<b>27,686</b>	<b>32,435</b>	<b>36,596</b>	<b>36,233</b>	<b>34,723</b>
Insurance Companies	7,822	8,980	9,369	9,702	11,010	11,960	11,519	11,146
Pension Funds	5,868	6,660	7,545	8,281	9,527	10,337	10,279	9,515
Investment Companies	4,478	5,309	6,200	7,293	9,201	11,168	11,293	11,091
Others	1,986	2,192	2,318	2,409	2,697	3,132	3,143	2,971
Hedge Funds	38	45	61	100	112	150	172	217
<b>Banks</b>	<b>4,798</b>	<b>5,453</b>	<b>5,613</b>	<b>6,074</b>	<b>5,301</b>	<b>5,699</b>	<b>5,917</b>	<b>6,192</b>

Note: IMF (2003)

As for OECD countries, the asset sizes of institutional investors relative to GDP levels rose significantly from 1993 to 2001 (see table 2). The ratios of the asset sizes of institutional investors to GDP levels are higher in countries known for their financial development such as the U.S., the U.K., and the Netherlands. Meanwhile, the ratio of the asset size of institutional investors to GDP levels was recorded at 77% in Korea, which is in the middle range of OECD countries.

<Table 2> Asset Size of Institutional Investors Relative to the Size of GDP

	(Unit: %)		
	1993	2001	Change
Switzerland	70	232.7	162.7
United States	136.3	191.0	54.7
United Kingdom	162.2	190.9	28.7
Netherlands	149.5	190.9	41.4

Sweden	102.4	153.6	51.2
France	73.9	131.8	57.9
Australia	82	129.7	47.7
Canada	79.4	115.8	36.4
Iceland	63.6	113.6	50
Belgium	57.3	109.0	51.7
Denmark	66.2	103.2	37
Japan	83	94.7	11.7
Italy	28.2	94.0	65.8
Finland	43.8	81.9	38.1
Germany	38.9	81.0	42.1
Korea	55.1	77.2	22.1
Austria	28.5	75.7	47.2
Spain	-	61.9	-
Portugal	27.6	51.9	24.3
Norway	42	46.5	4.5
Greece	6.7	27.5	20.8
Czech Republic	23.2	15.1	-8.1
Hungary	3.4	14.3	10.9
Mexico	7.3	11.7	4.4
Poland	0.6	9.7	9.1
Slovak Republic	-	7.2	-
Turkey	1.2	4.4	3.2

Note: Collected from the OECD (2003)

<Table 3> Portfolio Composition of Institutional Investors

(Unit: %)

	Bonds	Loans	Shares	Other
United Kingdom	15 (15)	1 (1)	65 (70)	19 (15)
Sweden	34 (60)	3 (8)	60 (31)	4 (1)
Australia	18 (31)	4 (6)	54 (41)	24 (22)
United States	35 (45)	9 (11)	44 (33)	11 (11)
Finland	48 (26)	8 (55)	43 (16)	2 (3)
France	47 (67)	3 (4)	43 (22)	7 (7)
Netherlands	31 (24)	15 (41)	43 (21)	11 (14)
Belgium	40 (54)	5 (11)	41 (20)	14 (16)
Switzerland	37	14	41	8

	(42)	(25)	(22)	(11)
Denmark	54 (60)	1 (2)	39 (29)	6 (9)
Norway	51 (50)	4 (23)	33 (14)	12 (12)
Greece	31 (52)	- (-)	26 (18)	43 (29)
Iceland	48 (39)	21 (45)	26 (2)	6 (14)
Canada	39 (45)	5 (13)	25 (23)	11 (9)
Germany	42 (43)	28 (40)	24 (12)	6 (5)
Spain	49 (-)	2 (-)	24 (-)	22 (-)
Italy	54 (76)	- (1)	18 (11)	27 (12)
Japan	56 (37)	21 (29)	16 (22)	7 (12)
Austria	48 (50)	6 (22)	14 (6)	32 (21)
Czech Republic	60 (-)	- (15)	14 (54)	26 (11)
Poland	73 (56)	1 (0)	14 (26)	11 (18)
Portugal	58 (78)	1 (-)	13 (3)	30 (19)
Slovak Republic	34 (-)	0.2 (-)	12 (-)	52 (-)
Hungary	76 (53)	0 (4)	8 (8)	15 (35)
Turkey	82 (78)	- (-)	7 (16)	11 (5)
Korea	55 (37)	16 (31)	6 (12)	23 (19)
Mexico	92 (77)	- (1)	6 (15)	2 (7)

Note: Figures in parenthesis are data for 1993. Cited from the OECD (2003)

Table 3 reports portfolio compositions of institutional investors in OECD countries. First, it is noteworthy that most institutional investors in OECD countries have increased the proportion of stock holdings in their portfolios from 1993 to 2001. For example, the proportions of stocks held in the portfolios of Finland, France and Germany were 16%, 22% and 12% respectively, in 1993. But those increased to 43%, 43% and 24% in 2002. In contrast, the proportion of stocks held in Korea declined from 12% to 6%, which is one of the lowest among OECD countries.

### 3. An Assessment of Institutional Investors In Korea

#### 1) Institutional Investors in Korea

Institutional investors in Korea are usually categorized into investment banks, insurance companies, investment trust companies, banks, and fund operators (pension and trust funds). This categorization is different from that of the OECD, which considers only pension funds, investment companies and insurance companies as institutional investors.

Since shares owned by institutional investors in the stock market have been on a declining trend since the financial crisis, we focus our analysis on the stock market. In 1996, the proportion of shares owned by institutional investors was over 30%. But this was reduced to 16.7% as of 2003. If we follow the OECD's definition of institutional investors, the proportion was lowered from 17.2% to 9.7%. In addition, the proportion of shares owned by individual investors also declined. This trend is the same when the net purchase and net sale of stocks by investor types is examined (see table 5). Among all investment types, only foreign investors have kept net purchases of Korean stocks and the proportion of shares owned by foreign investors rose from 13.0% to 40.1% during the 1996-2003 period.

<Table 4> Stock Ownership by Investor Types

(Unit: %)

Category		1996	1997	1998	1999	2000	2001	2002	2003
Government and Government Agency		10.9	10.9	19.7	16.4	14.4	8.1	5.7	4.5
Institutional Investors	Security Companies	2.0	2.2	1.3	0.7	1.4	0.7	0.7	0.7
	Insurance Companies	7.0	6.5	3.6	2.7	0.8	2.8	2.3	2.8
	Investment Trust Companies	5.3	3.0	2.4	8.5	7.5	4.6	6.0	4.6
	Banks	10.6	10.2	3.1	3.0	2.6	6.6	5.5	5.9
	Merchant Banking Corporation & Saving bank	0.9	1.0	0.7	1.0	2.4	0.6	0.7	0.3
	Pension Funds & Trust	4.9	3.4	2.5	1.1	1.1	0.5	0.7	2.4
	Sub Total	30.7	26.3	13.6	17.0	15.8	15.8	15.9	16.7
Corporations		14.7	19.6	19.8	19.1	19.6	17.2	20.2	19.0
Individuals		30.8	29.6	28.9	25.9	20.0	22.3	22.3	19.7
Foreign Investors		13.0	13.7	18.0	21.7	30.2	36.6	36.0	40.1
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Data: Korean Stock Exchange

<Table 5> Net Purchase of Stocks by Category of Investors

(100 thousand won)

	Investment Banks	Insurance Companies	Investment Trust Companies	Banks	Merchant Banking Corporation	Pension Fund	Households	Foreign Investors
1992	3,221	2,315	-3,308	2,769	-2	5,313	-22,305	15,081
1993	-10,390	1,961	-7,752	4,545	-404	791	-26,374	43,293
1994	-12,016	6,870	4,322	21,217	5,283	-13,419	-18,198	9,290
1995	-15,320	9,660	499	4,186	-20	886	-21,978	13,180
1996	-17,239	6,407	-6,750	-2,818	-697	1,181	-14,124	30,738
1997	-9,757	1,408	-18,921	-6,386	1,532	-169	26,083	4,240
1998	-7,641	-7,993	-6,897	-30,646	-1,607	-216	-1,703	57,234
1999	-29,078	-30,800	127,681	-40,257	-12,681	-7,239	-6,672	15,162
2000	-10,972	-6,517	-71,077	-4,496	-2,301	8,679	-38,049	113,872
2001	-9,638	-10,979	-12,992	-32	-1,160	7,000	-42,383	74,471
2002	-272	-5,055	18,523	-8,655	-3,793	8,158	8,643	-28,986
2003	-7,669	-7,735	-72,503	-6,668	-4,271	8,874	-58,770	137,689
Total	-126,771	-40,459	-49,174	-67,240	-20,122	19,839	-215,832	485,262

Note: Shaded cells indicate net sale of stocks

Data: Korean Stock Exchange

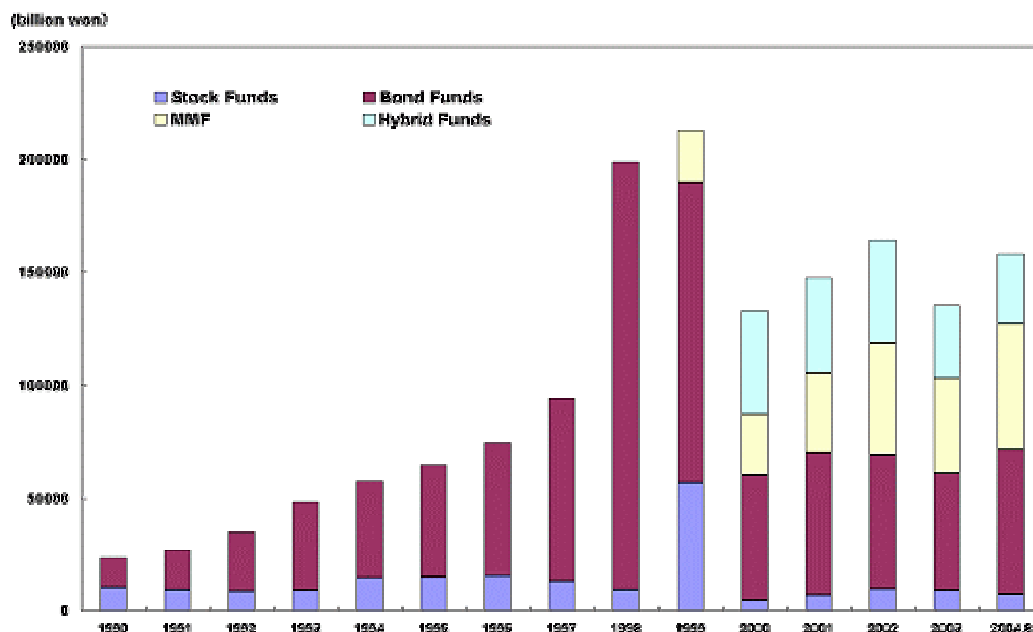
## 2) An Assessment of Institutional Investors in the Korean Stock Market

The declining proportion of shares owned by institutional investors is due to the following two factors. First banks, investment banks, and other financial institutions that manage their own assets became more conservative following the financial crisis and reduced the proportion of stock holdings in their portfolios. Second, equity holdings of investment trust companies and insurance companies that manage funds of individual investors declined reflecting lower confidence of individual investors on the Korean stock market and institutional investors. The trend of the ITC's assets shows the deteriorating investor's confidence on ITCs (See Figure 1). Between 1998 and 1999, the asset size of stock funds had grown at a rate of over 700% due to IT and the dot-com bubble. But there was serious misconduct, such as insider trading and price manipulation, in the market and the ITCs were criticized for the inappropriate sale of funds and improper fund management.<sup>23</sup> As the IT and dot-com bubble burst, individual investors lost money and the asset size of the ITC declined significantly. Following the stock market meltdown, the Korean government proposed a variety of policy measures to revitalize the asset management market but they have not been very successful. Until now, the asset sizes of ITCs, and stock funds in particular, have not been able to recover from their levels in the 1990s.

<sup>2</sup> There were numerous illegal activities in the KOSDAQ market and one former fund manager stated that more than 90% of stocks listed in the KOSDAQ went through price manipulations.

<sup>3</sup> See Shin and Kim (1999)

[Figure 1] Outstanding Amount of Investment Funds



Data : Asset Management Association of Korea

While the proportion of shares owned by domestic institutional investors and individual investors is declining, the proportion of shares owned by foreign investors has risen sharply due to a continuing net purchase of Korean stocks after the liberalization of capital markets. The question that comes to mind is what caused this difference in investment behavior between domestic and foreign investors.

As discussed in Shin (2001), most institutional investors in Korea have not successfully performed fiduciary duties for investors. Through the analysis of proxy voting of ITCs, Shin (2001) shows that most ITC fund managers in Korea tend to choose one of the following actions: discard voting, passive consent to the proposals of management, short-term trading strategies and holding minority shareholder positions in ITCs. These phenomena prevail due to ITCs' relationships with listed companies<sup>4</sup>.

<Table 6> Disclosure on Voting Activity of Korean ITCs

	2003	2004	Differences	Rate of Change
Number of Disclosure	397	530	133	33.5
Number of Matter	1,413	2,186	773	54.7
Contents	95.61	94.83	-0.78	-
Discontents	0.78	1.46	0.68	-

<sup>4</sup> Many listed companies whose shares are included in the portfolios of the ITCs are also customers of the ITCs.

Neutrals	1.84	2.79	0.95	-
Discards	1.77	0.92	-0.85	-

Note : year to year (1.2~3.3), Number of Disclosure on Voting Activity: 2000(133 cases), 2001(314 cases), 2002 (247 cases)

Data : Korea Stock Exchange

Currently the voting activity of ITC funds are guaranteed by “ACT ON BUSINESS OF OPERATING INDIRECT INVESTMENT AND ASSETS ” and it is required by law to disclose voting activity. The Korean Stock Exchange recently published a report on voting activity of the ITC using disclosure data. This reports confirms that fund managers still maintain past voting schemes as observed in Shin (2001).

It is well known that institutional investors, even in the U.S., did not actively mobilize until the 1990s. Several studies argue that fund managers usually followed “Wall Street Rules” rather than try to confront management. This phenomenon is related to the minority shareholder positions of institutional investors.<sup>5</sup>

Shareholder activism emerged in the U.S. as a few public pension funds initiated the usage of voting rights to monitor and check incumbent management. This activism was influential and public pension funds were able to act as a monitor of management to protect the interest of investors since the growing size of pension funds provided enough capital to hold a considerable share of stock in a target company.

If we apply the above scenario to the case of Korea, the difference between Korean investors and foreign institutional investors can be explained as follows. Institutional investors have not successfully provided effective monitoring of companies and protecting the interests of investors, thereby losing confidence amongst individual investors.<sup>6</sup> However, foreign institutional investors who were sure about the proper monitoring of companies held enough shares given the relatively cheaply valued Korean stocks. A report by the Korean Stock Exchange shows that there are now 130 cases where a single foreign investor owns more than 5% of shares of a listed company and such cases are increasing (see table 7). With this considerable amount of share ownership, foreign investors no longer hold the status of minority shareholders and can monitor management and effectively protect the interest of investors.<sup>7</sup>

<Table 7> Companies with More than 5% of Shares Owned by a Single Foreign Investor

	2002	2004. 2	Change	Rate of Change
Number of Companies	79	130	51	64.56
Number of Disclosures	101	163	62	61.39
Shares owned by Foreign Investors	374,962	542,031	167,069	44.56

Data: Korean Stock Exchange

<sup>5</sup> See Black (1990) and Black and Coffee (1994).

<sup>6</sup> Moreover, the sizes of most funds are too small to hold enough shares to influence or monitor management.

<sup>7</sup> Black and Coffee argues institutional investors in the U.K. were able to involve in management and monitoring more actively than those in the U.S. since the shares held by institutional investors in the U.K. were more concentrated and bigger than those held by institutional investors in the U.S.

Considering the recent situation of the Korean stock market, it is desirable to recover the confidence of individual investors by imposing more strict enforcement and to foster domestic institutional investors who may provide proper asset management services to individual investors.

### III. An assessment of the Korean Asset Management Market

#### 1. Asset Management in Korea

The asset management sector in Korea emerged as the Korean government established three investment trust companies (henceforth ITC) in the 1970s. These three companies maintained an oligopoly in the asset management market until the removal of entry barriers in 1996. Their combined market share exceeded 70%. In 1996, the Korean government initiated structural reforms to the securities industry and allowed securities companies and banks to enter into the asset management market. After the removal of entry barriers, 15 new players entered in the market and through active entry and exit, there are currently 45 ITCs in the Korean asset management market.

Before the financial crisis of 1997, ITCs were growing steadily by paying a little higher but *fixed* interest rates to investors. After the financial crisis, ITCs experienced rapid growth.<sup>8</sup> At first, the asset size of ITCs grew by a rapid increase of bond funds from banks and other financial institutions. Consequently, ITCs attracted significant funds from individual investors to stock funds. But this rapid growth in ITCs collapsed due to the Daewoo bond crisis, the IT & KOSDAQ bubble bursts in 2000. Consequently, the asset size of ITCs declined significantly.

Another noteworthy change in the asset management market following the crisis was the huge increase in corporate and financial institution funds to ITCs. That is, although ITCs were originally established to serve individual investors, they in fact serve corporate and financial institutions. Given that corporate and financial institutions usually have more information and bigger funds than individual investors, individual investors might not be properly treated by ITCs.

<Table 8> ITC Funds Ownership by Investors

(Unit: %)

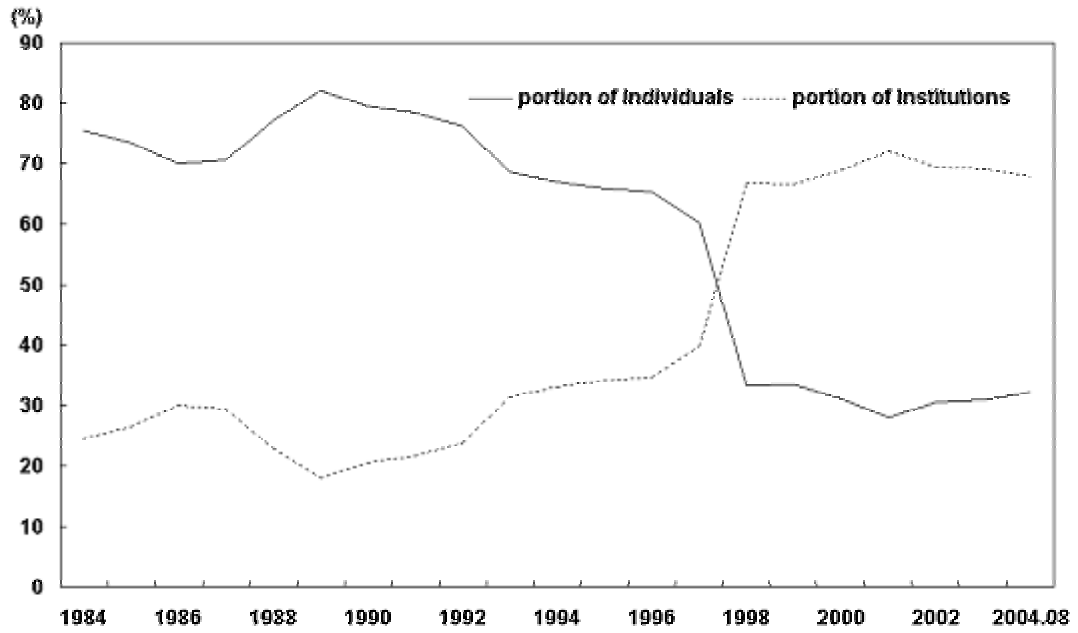
	Corporations	Financial Institutions	Institutions	Individuals
Stock	28	26	54	46
Stock and Bond	18	43	60	40
Bond	26	53	79	21
MMF	33	27	61	39
Total	27	41	68	32

Note : As of 2004. 8

Data : Asset Management Association of Korea(AMAK)

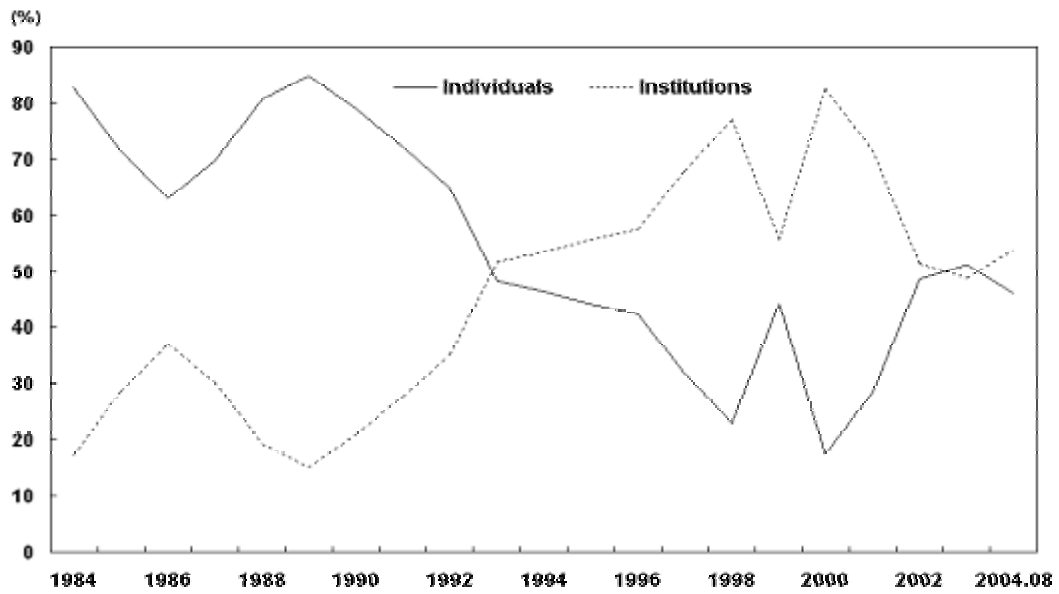
<sup>8</sup> See Shin and Kim (1999).

[Figure 2] Individual and institutional portion of total set amount of beneficiary certificates



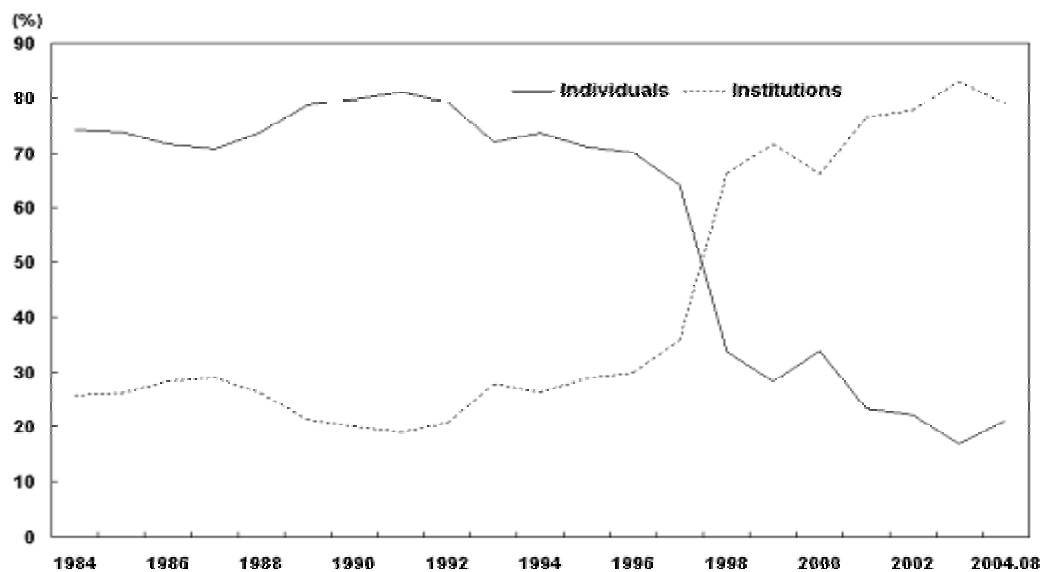
Data : Asset Management Association of Korea(AMAK)

[Figure 3] Equity Funds



Data : Asset Management Association of Korea(AMAK)

[Figure 4] Bond Funds



Data : Asset Management Association of Korea(AMAK)

## 2. Performance and Competition Mechanisms of Korean ITCs

This subsection analyzes past asset management performance and the competition mechanisms of Korean ITCs, which are expected to play a major role in managing of long-term contractual savings. This analysis aims to check whether Korean ITCs are capable of managing funds efficiently and if there exists a sound competition mechanism in the asset management market.

### 1) Related Literature

Existing literature on mutual fund performance shows that there is a clear and positive impact of both risk-adjusted as well as raw past performance on subsequent net inflows (see e.g. Ippolito [1992] and Gruber [1996]). In addition, Gruber (1996) showed that actively managed mutual funds have continuously under-performed benchmark returns. Despite this poor average performance, the mutual fund market has grown steadily. Gruber argues that the growth of mutual funds in the U.S. was possible since there was a history of past fund performance and many investors believed that they could pick winners (strong performers) among the various funds. Since Ippolito and Gruber's seminal work several studies have explored factors that could affect fund flows. Flows are related to fund visibility (see Sirri and Tufano [1998]), and funds advertising in financial magazines (see Jain and Wu [1999]) tend to attract larger flows. Moreover, fund inflows are found to be positively related to the performance of the fund family, measured for example as average performance within the family of funds (see e.g., Ivkovic [2000]). Barber, Odean, and Zheng (2001) find that fund flows are more sensitive to the salient fee such as loads and commissions than to operating expenses.

As for the case of Korea, Lee, Lee and Park (2000) analyzed the performance of ITC funds by utilizing various methodologies. Shin (2003) reported that there is a weak but positive relationship

between fund performance and fund flows by utilizing the methodology of Gruber (1996). Shin (2003) analyzed the performance of stock and bond funds in Korea and showed that there is a strong persistence for performance in the market.

## 2) Performances of Korean ITCs

### 1) Data

In this study we use a data set collected by the Asset Management Association of Korea (AMAK). Among various types of funds, we focus on equity funds of which more than 60% of assets are held in stocks. We also exclude data from funds with an asset size of less than 5 million won to avoid any possible distortion from small cap funds. The number of funds that satisfy these criteria are 161 for general stock funds and 42 for “Long Term Stock Saving Funds.”<sup>9</sup> The sample period is from December 1998 to October 2004 and we concentrate our analyses on monthly data of net asset values and returns for each fund.

Table 9 shows the operational distribution period (age of the fund). As discussed in previous literature, it shows the unique characteristics of Korean funds, which have had short periods of operation. About 50% of funds have ended operations in less than 1 year and there are only less than 10% of funds that exceed the minimum operational period (3 years) for evaluation in fund research companies such as Morning Star, Fitch, etc.

<Table 9> Distribution of Operation Period of Funds

Operation Period	Number of Funds
1 month	10 (6.2%)
Less than 2-3 months	5 (3.1)
Less than 3-12 months	66 (41.0)
1-2 years	41 (25.5)
2-3 years	25 (15.5)
3-4 years	13 (8.1)
More than 4 years	1 (0.6)
Total	161 (100)

Data: Asset Management Association of Korea (AMAK)

### 2) Empirical Analyses

As for the evaluation of past performance, we adopt methodology used in Gruber (1996).

$$er_{i,t} = r_{i,t} - KOSPI_t \dots \dots \dots (1)$$

<sup>9</sup> For the definition of “Long Term Stock Savings Fund” see subsection xx.

In equation (1),  $er_{i,t}$ ,  $r_{i,t}$  and  $KOSPI_t$  represent excess-return of a fund, return of a fund and return of the KOSPI index as respective benchmark. CAPM's  $\alpha_i$  is estimated by equation (2). In equation (2)  $r_M$  and  $r_f$  represent benchmark returns and risk free returns. In this study, we use interest rates of CDs as risk free rates since there are no short-term government securities in Korea.

$$r_{i,t} - r_t^f = \alpha_i + \beta_i(r_t^m - r_t^f) + e_{i,t} \dots\dots\dots(2)$$

Table 10 summarizes analytical results of past fund performance. In all cases, we cannot find any evidence of underperformance that was found in literature about mutual funds in the United States. Meanwhile, as the operational period becomes longer, fund performance increases. However, this should be interpreted with caution since it might be due to the survivorship bias.<sup>10</sup>

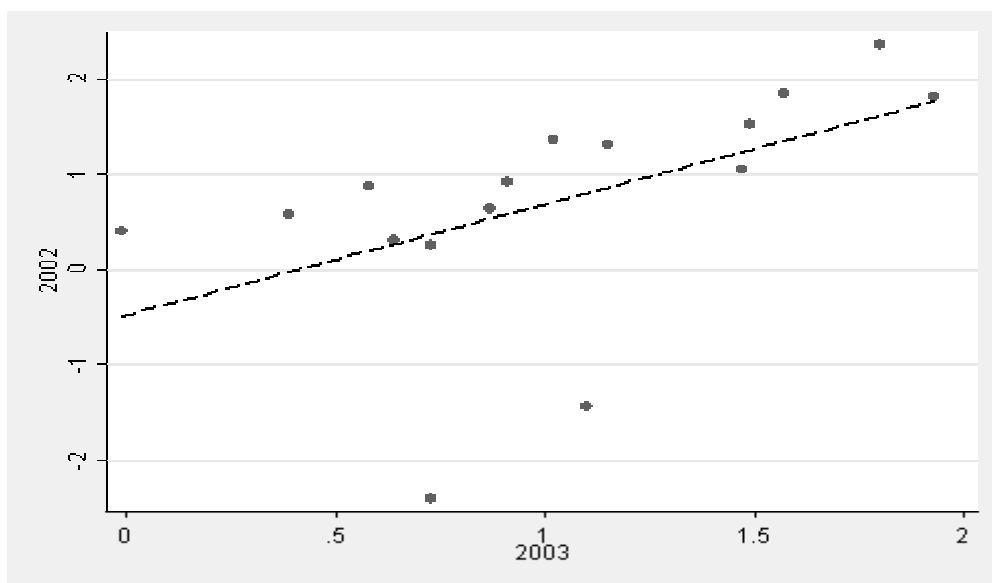
<Table 10> Average Monthly Performance

Operational Period	Excess Return	CAPM
More than 1 year (80)	0.32	0.42
More than 8 month (114)	0.19	0.30
More than (146)	0.09	N/A

Data: AMAK

Below, we check whether there exists a persistence of fund performance in Korea as noted in U.S. mutual funds. Shin (2003a) and Shin (2003b) already showed that there exists a persistence of fund performance in Korea. But we analyzed the persistency a second time since we restricted the sample to ensure a consistency of samples. The figure below shows a scatter plot of fund performance measured by CAPM in 2002 and 2003 and reveals a strong persistence in fund performance.

[Figure 5] Persistence of fund performance



<sup>10</sup> Poorly performing funds are more likely to be closed than funds with superior performance. This might cause a bias between the operational period and performance. This bias is called the 'survivorship bias.'

### 3) Determinants of Fund Inflow in Korean Asset Management Industry

Almost all studies referred in the previous section analyze flows with the following specification.

$$f_{i,t} = a_i + b_1 r_{i,t-1} + \dots + b_k r_{i,t-k} + c' x_{i,t-1} + u_{i,t} \dots \dots \dots (3)$$

In equation 3,  $f_{i,t}$  relative size of inflow to fund  $i$  is defined as  $(F_{i,t} - F_{i,t-1}) / F_{i,t-1}$  where  $F_{i,t}$  represents the net asset value of fund  $i$  at time  $t$ .  $r_{i,t-1}$  represent the performance measure of fund (previous literature considered absolute return, excess return, ranking of return etc.)  $x_{i,t-1}$  represents characteristics of fund such as age of fund, size of fund and media appearance etc. For  $r_{i,t-1}$  we use excess return relative to KOSPI index and include up to three month lagged excess returns.<sup>11</sup> As for fund characteristic we include age of fund and size of fund. To account for unobservable feature of each fund, the equation is estimated by fixed-effect panel structure.

Table 11 summarizes the regression results. Case I reports the results in all periods. In Case I, the excess return of a fund does not affect the fund's future net inflows. This result is similar to previous research on this issue. For example, Shin and Kim (1999) shows that net inflows to funds are mainly affected not by past performance but by advertisements such as the "Buy Korea Campaign,"<sup>12</sup> brand power of distribution channels, etc. However, the information flow of fund performance has been improved as fund raters (similar to Morning Star and Lipper, etc.) and the popular media started providing information on fund performance to investors after the collapse of stock markets in 2000. In Case II, we split our sample and only considered data after 2003, considering that information from fund raters had recently received significant attention.

<Table 11> Regression Results

	Case I: (1998.12 ~ 2004.10)	Case II: (After 2003)
	Dependent Var. : Net Inflow	Dependent Var. : Net Inflow
ln(NAV(t-1))	-4.226 (-5.80)***	-3.496 (-2.89)***
Fund age	-0.081 (-2.65)***	-0.015 (-0.21)
Excess Return (t-1)	0.079 (0.92)	0.238 (1.73)*
Excess Return (t-2)	0.050 (0.59)	0.058 (0.42)
Excess Return (t-3)	0.085 (1.04)	0.140 (0.99)
R <sup>2</sup>	0.02	0.01
No. of Obs.	1,934	1,112

Note: 1) \*, \*\*, \*\*\* : The null hypothesis is rejected at 10,5,1% significance level

<sup>11</sup> To check robustness of the results, we also include up to 6 month lagged returns but there were no qualitative differences.  
<sup>12</sup> In 1999, Hyundai Securities, an affiliate of Hyundai Group (one of the Korean "Chaebols") initiated a "Buy Korea Campaign" asking that Koreans purchase Korean stocks based on the patriotic duty of individual investors. This campaign caused a relentless buying spree from individual investors without proper caution and resulted in large losses to individual investors.

Case II shows that past performance started affecting future net inflows to the fund. This implies that competition, based on performance has been emerging in Korea.

Meanwhile, it is necessary to consider the unique market structure of the Korean asset management industry in the analyses since ITCs are not allowed to sell funds directly to investors and most ITCs are affiliated with one or more financial institution such as banks and investment banks. So the sales network and reputation of affiliated financial institutions could affect net inflows to funds. To control the effect of differences from affiliate structures, we divide our sample by ITC ownership structure: bank affiliated, investment bank affiliated and independent (neither bank nor investment bank affiliated).

Table 12 reports on the results of the analysis. Past performance does not affect future net inflows to funds in the case of funds managed by bank affiliates or investment banks, but it affects net inflows to funds in the case of funds managed by independent ITCs.

<Table 12> Fund net inflow by ownership type of ITCs (all sample period)

	Net Inflow (Investment bank)	Net Inflow (Bank)	Net Inflow (Independent)
ln(NAV(t-1))	-3.587 (-9.68)***	-7.225 (-2.44)**	-2.645 (-1.80)*
Fund age	-0.652 (-2.90)***	-1.924 (-1.07)	-1.566 (-1.12)
Excess Return (t-1)	0.031 (0.88)	-0.001 (-0.00)	0.394 (1.51)
Excess Return (t-2)	0.019 (0.54)	-0.169 (-0.57)	0.437 (1.72)*
Excess Return (t-3)	0.033 (1.01)	0.067 (0.23)	0.395 (1.56)
R <sup>2</sup>	0.02	0.05	0.002
No. of Obs.	1,211	434	421

Note: 1) \*, \*\*, \*\*\*: The null hypothesis is rejected at 10,5,1% significance level

2) Fund's duration is above 5 months in the object.

In addition, we divide the total sample period as before and conduct analysis with data after 2003. The result is reported in table 13. First, the relationship between past performance and net inflows in the case of funds managed by independent ITCs become more significant and we can find a similar relationship for funds managed by investment banks affiliated ITCs. But past performance does not affect net inflows to funds at all in the case of funds managed by bank affiliated ITCs. From this observation, we can make the following cautious conjecture. Banks have wider sales networks and stronger reputations compared to other financial institutions. So individual customers of banks might be less likely to search for the most appropriate fund when they are ready to invest.<sup>13</sup> On the contrary, investors who purchased funds managed by independent ITCs might have more thoroughly researched the market given that sales networks of independent ITCs are much more limited compared to other ITCs.<sup>14</sup>

13 There were several episodes that fund investors who purchased fund from banks complained about misleading explanations from bankers.

<sup>14</sup> The following two facts back up this inference: first, most funds are sold to individual investors in banks rather than to institutional investors; second, most funds sold in banks are funds managed by ITCs affiliated by themselves.

<Table 13> Fund net inflow by ownership type of ITCs (after 2003)

	Net Inflow (Investment bank)	Net Inflow (Bank)	Net Inflow (Independent)
ln(NAV(t-1))	-1.547 (-3.38) <sup>***</sup>	-26.19 (-5.57) <sup>***</sup>	4.034 (2.48) <sup>**</sup>
Fund age	-1.170 (-2.76) <sup>***</sup>	-14.32 (-2.81) <sup>***</sup>	4.886 (2.90) <sup>***</sup>
Excess Return (t-1)	0.085 (1.79) <sup>*</sup>	-0.136 (-0.30)	0.782 (3.08) <sup>***</sup>
Excess Return (t-2)	0.106 (2.19) <sup>**</sup>	-0.574 (-1.17)	0.410 (1.67) <sup>*</sup>
Excess Return (t-3)	0.061 (1.23)	-0.185 (-0.37)	0.483 (1.98) <sup>*</sup>
R <sup>2</sup>	0.02	0.09	0.001
No. of Obs.	628	267	291

Note: 1) \*, \*\*, \*\*\* : The null hypothesis is rejected at 10,5,1% significance level

2) Fund's duration is above 5 months in the object.

In sum, the relationship between past performance and fund inflows strengthened since the financial crisis. This phenomenon was mainly led by “independent” asset management companies, which are affiliated to neither commercial banks nor investment banks. Given these results, it is necessary to check whether fund selling institutions, especially banks, are abiding by required information provisions given that there seems to be no relationship between past performance and fund inflows in the case of bank-owned asset management companies.

The result of this subsection implies that the competition mechanism for the Korean asset management industry is moving towards performance competition, which is one of the key functions of the industry. Moreover, it is necessary to check whether fund selling institutions, especially banks, are abiding by required regulations given that there seems to be no relationship between past performance and fund inflows in the case of bank-owned asset management companies. In addition, it is necessary to allow ITCs to sell funds directly to investors as planned for fair competition.

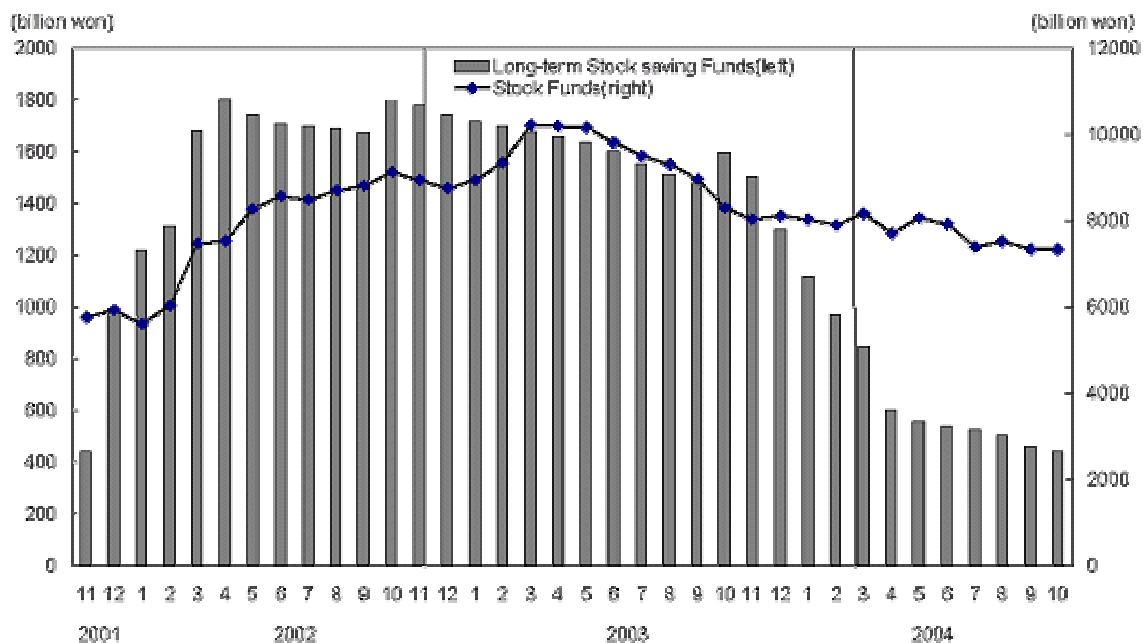
#### ***4) An Evaluation of Tax Incentive Policies in the Stock Market***

In the past, the Korean government laid out various policy measures to induce long-term investment into the stock market. This subsection tries to evaluate the “Long-term Stock Saving Program,” a recent policy measure, and to develop policy implications for future policy decisions.

In late 2000, the Korean stock market was sinking due to the dot-com meltdown and the subsequent 9/11 terror attacks in the United States. The Korean government announced the “Long-term Stock Saving Program,” a temporary tax incentive program in stock market investments, in November 2000. If an individual investor put money in the stock market either directly or through institutional investors and held stocks for a certain period, 5% and 7% of the investment could be tax deductible for the first and second year respectively. Since most tax incentive stock investment programs in the past were income deductible, this new “Long-term Stock Saving Program”

successfully attracted individual investors to funds. As described in figure 6, during the first four months following the introduction of the program, more than 4.5 trillion won was invested in the stock market. This fund remained in the stock market until the validation date for the tax incentive. After that date, the funds gradually cashed out of the stock market.

[Figure 6] Outstanding Amount of Long-term Stock Saving Funds & Stock Funds



Data : AMAK

In March 2004, the net asset value of “Long-term Stock Saving” funds declined to a level of 400 billion won. It is hard to measure the effect of fund inflows to the depressed stock market but the policy goal of inducing long-term investment funds does not seem to have been successfully accomplished.

Investment banks and ITCs in Korea have been arguing that the short-term investment horizon of individual investors makes asset management inefficient and shortsighted, while the inflow of long term funds could enhance the efficiency of asset management and stability of the stock market. Although the 2-year duration of the “Long term stock saving Program” was short in comparison with the long holding periods of developed markets, it was relatively long in comparison with previous fund operation periods. So it is worthwhile to check the performance of “Long term stock saving program” funds with ordinary stock funds to draw on suitable policy implications.

For a proper comparison, we only included funds in existence between April 2002 and March 2004. The number of funds used in our analyses was 23 for ordinary funds and 32 for the “Long term stock saving program” funds. Table 14 reports on the results. It shows that “Long term stock saving program” funds under performed ordinary funds and we could not find strong evidence of efficient asset management.

<Table 14> A comparison of performance between Long term stock saving fund and ordinary fund

	Long term stock saving fund	Ordinary fund
Excess Return	0.27	0.48
CAPM	0.22	0.46

As analyzed above, the effect of a temporary incentive program for stock investments could not last longer than during “the benefit period.” Asset management performance does not necessarily exceed the performance of ordinary funds. This result should be taken into consideration when the government proposes policies in the future related to inducing long-term investment of funds in the stock market.

## IV. Policy Recommendations for the Asset Management Sector

### 1. Inducing Long-Term Funds to the Asset Management Sector

Given the fact that the growth of long-term retirement savings has played a crucial role in the development of the asset management industry in developed countries, it is necessary to promote long-term retirement savings and investment in asset management markets.

In the United States, the successful growth of the asset management industry is mainly due to the following three factors: Sound capital markets, various long-term retirement savings programs<sup>15</sup>, continuous improvements in asset management regulation and enhancements on the disclosure of information on investment products.

#### 1) Retirement Savings in the U.S.

It is generally accepted that the growth of long-term retirement savings has played a crucial role for the development of the asset management industry in developed countries including the U.S.

In the U.S., there are various kinds of retirement saving programs and target oriented saving programs that have contributed to providing long term savings to institutional investors. There is the 401(k) plan, several different forms of individual retirement accounts (IRAs) and educational saving programs, which provide different tax incentives for long-term savings (See Figure 7). The U.S. government does not exclusively provide savings tools targeted for different types of individual investors. But the regulation and tax benefits have been adjusted to reflect the need and economic environment of investors.<sup>16</sup>

Research using SCF (Survey of Consumer Finance) 2001 indicates that the proportion of retirement savings in financial asset exceeds 28%.

<Table 15> Type of Financial Asset held by U.S. Household: 1992~2001

Type of financial asset	1992	1995	1998	2001
Demand Deposit	17.5	13.9	11.4	11.5
CD	8.0	5.6	4.3	3.1
Savings bonds	1.1	1.3	0.7	0.7
Bonds	8.4	6.3	4.3	4.6
Stocks	16.5	15.6	22.7	21.6

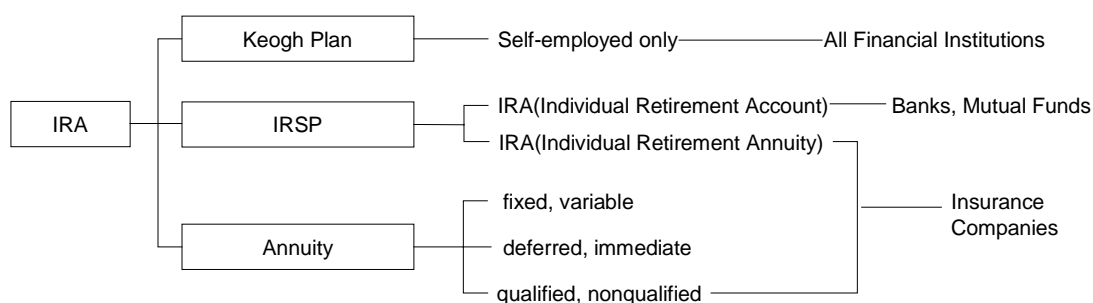
<sup>15</sup> See Poterba and Wise (1996) and Ma (2003)

<sup>16</sup> For example, see "The Economic Growth and Tax Relief Reconciliation Act".

Mutual Fund (excluding MMF)	7.6	12.7	12.4	12.2
Retirement Account	25.7	28.1	27.6	28.4
Present value of Life Insurance	5.9	7.2	6.4	5.3
Operational Asset etc.	5.4	5.9	8.6	10.6
Others	3.8	3.3	1.7	1.9
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>The Financial asset over Total Asset</b>	<b>31.6</b>	<b>36.7</b>	<b>40.7</b>	<b>42.0</b>

Data : Cited from Aizcorbe, Kennickell and Moore (2003)

[Figure 7] IRA in the United States



## 2) Retirement Saving in Korea and Policy Recommendations

Since the retirement annuity, which is similar to the U.S. 401 (k) plan, will be introduced in late 2005 and there are uncertainties on its final specification, we will concentrate on the individual savings account. Investors deposit money in banks, ITCs or insurance companies and funds deposited in individual retirement accounts is deductible from income up to 2,400 thousand won.

As of 2000, about 22% of Korean households have individual retirement accounts, which is far less than the 41.4% of U.S. households. In addition, the median size of individual retirement accounts in Korea is 2,940 thousand won but as of 2001, the size of IRAs in the U.S. exceeds 30 thousand dollars. Even if we consider the income difference of the two countries, the size of retirement savings and the proportion of households who save for retirement should increase significantly.

<Table 16> Asset Portfolio of Korean Household

(Unit: %)

	2001
Checking Deposit	9.9
Saving Deposit	35.1
Insurance	9.6
Stock	5.8

Bonds	0.5
Individual Retirement Account	5.0
Others	34.1
Total	100
Financial Asset over total Asset	21.7

Note : Saving Deposit are made of savings accounts, property savings and depositions and others include the installments, borrowing money, key money, warranted refundable deposit of monthly rental payment..

Data : Household consumption expenditures fact-finding Survey 2000.

In addition, it is desirable to utilize various financial products to target saving programs. That is, every household who wants to buy a new apartment should save through the “deposit for housing application” at banks. Since this financial product provides tax incentives, most households without a home have this account and this obligation restricts asset management to younger households. In the past, this policy was used to collect funds to construct new housing developments. Given that there are enough funds in the market for housing construction, it might be the right time to remove this compulsory restriction, which requires that deposits be made at banks.

<Table 17> Outstanding Amount of Savings Funds

(Unit : 100million won)

	2003. 12	2004. 6	Change			Current Outstanding Amount
			Jul.	Aug.	Sep.	
Net Asset Value	3,434	8,137	1,087	965	742	12,063

Note : As of 2004. 12

Data : Zeroin

Recently, individual investor behavior showed some meaningful changes. That is, individual investors who have sought short-term trading profits and trade stocks directly are now considering stock investments as a long-term investment and prefer putting money in funds managed by ITCs. For example, the “allotment fund” which puts a predetermined amount of money regularly in the fund became popular in the market and the asset size of these funds is growing rapidly. To make this change sustainable over the long term, it is desirable to provide proper supervision on this product and update regulations and tax incentive schemes to link this product and individual retirement savings programs.

## 2. Improvement of regulation on institutional investors

In order to promote the role of institutional investors by inducing inflows of long-term investments in the stock market, it is inevitable that efficient regulatory rules for institutional

investors be established by which market principles can work properly. In what follows, we will discuss some basic principles in reforming the regulatory framework regarding institutional investors.

### **1) Permission of direct sales of asset management products and Improvement of information distribution channel**

As shown in the previous analysis on the competition principle in the asset management industry, the direct sales of asset management products by institutional investors should be allowed following the time schedule designated by the Asset Management Company Act. This will foster growth in the asset management industry by enforcing market principles according to the ability of asset management among companies. Needless to say, continuous and consistent monitoring on illegal business practices should also be enhanced. The fact that the share of operation fees is greater than sales fees for Korean securities underscores the importance of direct sales by institutional investors. At the same time, investigation on the observation of obligatory risk notification by commercial banks when they sell the securities to their customers should be made a priority.

On the other hand, it would be necessary to improve the information distribution channel for institutional investors including their fee schedules, details of operational portfolios and historical rates of return. In the case of long-term investments, the rate of return could be different substantially according to the fee schedule and thus explain the terms of conditions of the contract; fee schedules must be explicitly and clearly conveyed to investors. It might be worthwhile to take an example from the U.S. where the SEC website provides a 'Fund Calculator' by which the expected rate of return is easily calculated with various fee schedules of funds.

Last but not least, it is necessary to construct a database regarding the asset structure of households, the characteristics of security investors and the level of understanding on invested assets. This will allow researchers and policy-makers to better understand the current status of the market and devise more desirable policies for the future. Taking another example from the U.S., the Federal Reserve has been conducting SCFs (Survey of Consumer Finance) every three years and ICI has been providing individual data on fund investors. Their databases are utilized in developing more customer-fitted financial products and in improving relevant regulatory systems.

### **2) Enhancing the Supervision on Securities Market including Asset Management Industry**

More than anything else, the conflict of interest between individual and institutional investors (such as financial institutes and corporate investors) should be cautiously monitored and regulated by supervisory authorities. As pointed out by a majority of previous literature, individual investors (who are generally minority shareholders in the stock market) should be protected from deliberate misbehavior of financial institutes. Only when confidence in financial institutes including asset management companies is established can inflows of long-term investments into the stock market continue.

At the same time, the level of punishment on deliberate misbehavior should be substantially increased in the securities-related industry. In Korea, the level of punishment on deliberate misbehavior is low compared with other advanced countries, and the means of punishment is limited as well. This has often been pointed out as one of the reasons why unfair practices by financial

institutes have not efficiently been restrained. By ensuring a strict supervisory and regulatory framework, the stock market can play its important role in the economy.

## V. Summary and Conclusion

As aging progresses in Korea, the economic and social burden will rapidly increase. To provide stable incomes and a decent livelihood for the elderly, it is unavoidable to establish social safety nets such as a public pension system. But if households themselves try to prepare for their retirement, the economic and social burden would be alleviated in the future. Thus, it is desirable to induce households to recognize the need to save for retirement voluntarily, and to do so in a diversified manner with appropriate policy support. In addition, financial regulators should warrant sound and transparent asset management markets for investors by imposing strict enforcement on illegal activities in the market and enhancing information flows concerning investment products.

The empirical analyses of this paper are composed of two parts: Performance and consistency of performance of asset management companies, current market competition mechanisms of asset management companies, and evaluation of government policies to induce long-term investments in the stock market. First, while the underperformance of actively managed funds in the fund industry in the United States does not appear in the Korean fund industry, the persistence of fund performance is significantly observed. Second, the relationship between past performance and fund inflows has strengthened since the financial crisis and this phenomenon is mainly led by “ independent ” asset management companies, which are affiliated to neither commercial banks nor investment banks. It is necessary, therefore, to check whether fund selling institutions, especially banks, are abiding by required regulations given that there seems to be no relationship between past performance and fund inflows in the case of bank-owned asset management companies.

Given the fact that the growth of long-term retirement savings has played a crucial role in the development of the asset management industry in developed countries, it is necessary to promote long-term retirement savings by investing in asset management markets. In the United States, the successful growth of the asset management industry is mainly due to the following three factors: Sound capital markets, various long-term retirement savings programs, and continuous improvements of asset management regulations and enhancements of information disclosure on investment products. Taking the case of the United States, we propose several policy options. As for the inducement of long-term investments, we recommend the following policies. First, to promote individual retirement accounts (IRA) programs in Korea as a major retirement savings tool, we propose to link the IRA with monthly allocation funds, which are becoming more widely recognized. Second, the targeted savings programs with tax benefits (housing, education, etc.) should be allowed in the asset management industry to alleviate the current concentration of financial assets of households on bank deposits. Meanwhile the regulation around institutional investors including asset management companies should be modified to provide a reliable investment environment for investors. First, we propose more detailed portfolio holdings of institutional investors including foreign investors to cope with their increasing market power as the SEC does through the 13-F rule. Second, we propose allowing asset management companies to sell funds directly to individual investors and to strengthen supervision of the operation of sales activities. In addition, the information relevant to investing in funds, such as fees, past performance, prospectus, etc. should be provided more efficiently. Third, the enforcement of regulators on illegal activities should be strengthened to warrant the confidence of investors.

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