PIE Discussion Paper Series

Private Pension Funds in Hungary[*]
- Politics, Institutions, and Performance -

Ichiro Iwasaki [**] & Kazuko Sato [***]

(3rd Draft)

Abstract

The new pension system launched in Hungary in 1998 is epoch-making for having introduced a mandatory private pension scheme (MPPS). However, the political decision-making on pension reform and the scheme operations have been greatly influenced by conflicts of interests among ministries, political conflicts between parties, and the presence of special interest groups, including trade unions and financial institutions. This situation may have had a certain negative influence on the legal framework of the MPPS and on the management performance of private pension funds. In order for the MPPS to be sustainable in the future and to make insurance beneficiary profits a top priority, the corporate governance reform of pension funds and reinforcement of the monitoring system over them, and political neutralization of the public pension system are necessary.

JEL classification index: H55, P21, P26

[**] Corresponding author: Associate professor, Institute of Economic Research, Hitotsubashi University, 2-1 Naka, Kunitachi city, Tokyo 186-8603, JAPAN, E-mail: iiwasaki@ier.hit-u.ac.jp.
[***] Research fellow, Institute of Russian & East European Economic Studies, Japan Association for Trade with Russia & Central-Eastern Europe.

1. INTRODUCTION

The Mandatory Private Pension Scheme (MPPS),[1] which puts the operation of public pensions in the hands of the private sector, and its organizational entity, the Private Pension Funds (PPFs), are the core of pension reform in Hungary. In 1998, the central government carried out a transition to the so-called Three-Pillar Pension System. A smooth development of the MPPS, which constitutes the second pillar, and securing sound management practices of fund bodies are fundamental elements to guide the 1998 pension reform to success as well as very significant ones in terms of social policy to overcome the uneasiness citizens feel about their future. Such anxiety arises from the opaqueness of the future triggered by the transition to a market economy and from the worsening of problems related to the declining birthrate and the aging population (Szeman 2001; Sato 2003; Gál and Tarcali 2003; Hablicsek 2004). Because Hungary's endeavor serves as a pilot case for other Central and Eastern European countries, which also need drastic pension reforms, it has a hidden potential to highly influence pension reform debates in the region. Thus, an objective of this paper was to describe how pension reform in Hungary occurred with special references to MPPS and PPFs, which have become a touchstone for the pension system in Hungary and also in Central and Eastern Europe.[2] The paper is organized as follows: the next section is a description of the political circumstances before and after the 1998 pension reform. The third section is a review of the institutional framework of the second pillar of the new pension system. The fourth illuminates the development process and the industrial structure of the mandatory private pension market. In the fifth, the performance of the pension funds is quantitatively examined. Finally, the conclusion presents a summary of the results and the major implications of the findings.

2. POLITICS OF THE 1998 PENSION REFORM

The most outstanding feature of the pension reform in 1998 is that MPPS has been introduced as the "second pillar," after the state pay-as-you-go (PAYG) social security pension scheme. The process leading up to the 1998 pension reform was lengthy and filled with complicated political

---

[1] In Hungarian, it is refered to as *Kötelező magánnyugdíjrendszer*. The reason that it is desribed as "mandatory" is simply that, as opposed to the third pillar (the voluntary pension scheme), it entails statutory membership. See Matits (2004a) for details.

[2] The public pension scheme in Hungary is composed of (1) an old-age pension; (2) a disability pension; (3) a widow's pension; (4) an orphan's allowance; and (5) a parent's pension. However, in this paper, only the old-age pension is addressed. As for the terms of the old-age pension scheme, only some parts of it are considered since the focus of this study is to investigate the flaws in the MPPS and PPFs. For an outline and operating situation of the old-age pension as a whole, see Sato (2000), Augsztinovics *et al.* (2002), and the East-West Management Institute (2003).

debates. Since then, the new pension system has largely been affected by the political conflict between the ruling and the opposition parties. It also had a manifest influence on MPPS itself.[3]

The Socialist Party, which won the 1994 parliamentary election, formed a coalition government (the Horn Cabinet) with the Alliance of Free Democrats, and, in the following year, undertook an economic stabilization policy known as the "Bokros Package," which was named after the then Minister of Finance. The Horn administration made its intention clear to drastically revise the pension system as part of this policy package aimed at sharply reducing public finance. This resulted in an intense confrontation over a special feature of the reform, namely the MPPS, between the Ministry of Finance, which strongly argued for the introduction of the MPPS, and the Ministry of Welfare, which first of all requested improvement of the existing state PAYG scheme, together with the Pension Insurance Fund Self-governing Body (PIF), which is the operative body of the state pension.

The reform proposal of the Ministry of Finance was prepared by a working group for pension reform established in the beginning of 1995. At first, Finance Minister Lajos Bokros and his powerful advisor and famous banker Adam Gere asserted, as the fundamental policy of the reform, the phase-out of the PAYG scheme and its complete replacement with MPPS. However, such an excessively radical policy did not receive sufficient support within the Ministry and was renounced in an early stage of the review.[4] Instead, the working group suggested a more realistic reform plan in which both the PAYG and the MPPS schemes would work in harmony. This proposal strongly reflected the intention of the World Bank at the time, namely, that it was very eager to implement "the Three-pillar Pension System" in post-socialist countries.[5]

Meanwhile, the Ministry of Welfare sought the cooperation of German pension advisors and set forth an argument opposing the pension reform draft proposed by the Ministry of Finance. The PIF, which was under the supervision of the National Association of Hungarian Trade Unions (MSZOSZ), entered the debate between the ministries in favor of the Ministry of Welfare, as the

---

[3] Furthermore, the arguments presented in this paper are based on the literature quoted and on survey interviews conducted by the authors in March 2003 and March 2004 among Hungarian researchers and specialists, to whom we expressed our gratitude earlier.

[4] According to Müller (1999, 73-74), the blueprint of Minister Bokros's initial reform plan was based on the old-age pension privatization policy implemented by the Chilean government. However, due to the negative attitude of the Hungarian people toward the Pinochet dictatorship and the developing Latin America as a whole, reference to the Latin-American-type pension reform ceased afterwards.

[5] According to our interview with Tibor Párniczky, former vice-president of the Supervisory Authority of Pension Funds, who served as chairman of that working group, a member of the group and the World Bank's Budapest office made frequent contacts in the process of preparing the draft proposal of the Finance Ministry. In fact, as Gedeon (2001) states, international organizations had significant influence on the policy decision-making process in Hungary, including the pension reform.

intention of the unions was to retain strong control of the public pension system (Orenstein 2000; Rein 2002). While the Ministry of Welfare referred to the German pension system and proposed a system with two features, namely a state PAYG pension proportional to income and a voluntary pension fund, the PIF demanded to tune up the basic pension based on tax to maintain and complement the existing state PAYG scheme as well as the voluntary savings-type pension. In other words, the Ministry of Welfare and the PIF were convinced that "the problems of the Hungarian Pension Reform could be solved without a forced paradigm shift in the approach to the basic social role of obligatory pension insurance" (Bod 1995, 174). As a result, bureaucratic debate on the reform was actually deadlocked until the Minister of Finance Bokros resigned in February 1996.

The controversy was resolved by a compromise prompted by the new Finance Minister, Péter Medgyessy. The Horn cabinet valued its relationship with the West and viewed the agreement among the parties involved with the reform as an impending problem in order to accomplish an official commitment with the IMF, which was to pave the way for the implementation of the pension reform by the end of 1996. In addition, it was clear that the approaching parliamentary elections were being taken into account by the central government. Thus, Minister Medgyessy, keeping an eye on the political calendar, initiated a persuasive plot that targeted high-ranking officials. In April 1996, thanks to his adroitness, an inter-ministerial committee was created, and the vice-ministers of finance and welfare were joint chairmen. At this point, the Ministry of Welfare had accepted the basic policy in the Ministry of Finance's reform proposal, which was laid out by the inter-ministerial committee for pension reform, and considerably softened its attitude by giving in to the pressure from the cabinet. Therefore, the inter-ministerial committee, right after beginning the operation, was able to start preparing for a reform proposal of social insurance-related legislation and MPPS-related bills on the premise that the Three-Pillar Pension System would be introduced.[6]

Simultaneously, the governmental pension reform proposal was discussed by the Interest Reconciliation Council, which was made up of representatives from the central government, trade unions, and business and academic circles.[7] The council's ostensible role was to shape the pension reform for the national debate; however, its true objective was presumably to reflect the interests of

---

[6] Furthermore, as a result of consultation with the inter-ministerial committee, it was decided that the Ministry of Welfare would continue to have jurisdiction over the PAYG scheme after the pension reform. The Ministry of Welfare dealt with a reform proposal of social insurance-related legislation, while the MPPS and pension fund-related bills were allotted to the Ministry of Finance and the Supervisory Authority of Pension Funds.

[7] The Interest Reconciliation Council is a standing government advisory board established during the Antall administration (1990 to 1993) and is convened by the prime minister or high-ranking government officials out of political necessity.

the MSZOSZ and the PIF. In fact, the Council was set up as a result of strong lobbying activity against Socialist parliamentarians by these two organizations demanding to ease the burden of employees and to secure the authority of trade unions.

The process of reform discussions and political compromising at the inter-ministerial committee and the Interest Reconciliation Council are summarized in the text that follows. With the introduction of the Three Pillar Pension System, the reform draft by the Ministry of Finance stipulated that (1) the total pension insurance contribution of the employer and employee would be 25 % of gross wages; (2) of this amount, 15 % of the employer contribution would go to the state PAYG scheme; (3) 10 % of the employee contribution would go to the MPPS; and (4) all insured under 40 must join both the PAYG scheme and MPPS (with no changes for those aged 40 and above). Meanwhile, the Ministry of Welfare proposed that (1) the total pension insurance contribution would be 28 %; (2) 18 % of that amount would be employer contributions earmarked for the PAYG scheme; and (3) the remaining 10 % of the employee contributions would go to the MPPS. However, the MSZOSZ protested against an increase in the employee share, and, therefore, the initial contribution by workers to the second pillar was reduced to 6 % (to be raised to 8 % two years later). Moreover, the MSZOSZ also made the following compromises: (1) the establishment of a Guarantee Fund of pension funds (discussed in the next section); (2) the continuation of PIF management by the MSZOSZ; and (3) the grant of authority to the trade union for the establishment of PPFs; and (4) the postponement of disability pension reform.[8]

The new pension insurance rate legislated after going through the above process and deliberations in Parliament was set at 24 % of the employer contribution and 7 % of the employee contribution (*Table 1*).[9] The resulting total insurance rate was 31 %, 6 % higher than that proposed by the Ministry of Finance. In other words, although the Finance Ministry did actualize the Three Pillar Pension System, it did not succeed in alleviating the burden imposed on the corporate sector. In addition, and contrary to the Finance Ministry's intentions, a sharp decrease in the insurance rate from 10 % to 6 % on the contribution to MPPS was adopted, as well as switching to a choice system enabling employees, except for the new entrants into the labor market, to opt for (1) the PAYG scheme exclusively or (2) both the PAYG scheme and MPPS. The foregoing points convey

---

[8] Despite these facts, however, our interview survey revealed that many Hungarian researchers share a common view that the MSZOSZ did not have enough influence over the 1998 reform as a whole.

[9] However, this measure was effective for a specified period in 1998 to reduce the employer contributions by one percent annually to 22 % by 2000, while, at the same time, increasing the employee contributions by one percent annually to 9 % by 2000. During parliamentary deliberations, the following points were resolved: (1) the abolition of gender distinction in the pension system; (2) a phased increase in the pension eligibility age from 60 for men and 55 for women to 62 for both sexes; and (3) postponing the introduction of a Swiss style of indexing for two years.

the systematic inertia, a legacy of socialist Hungary, which was mockingly described as "a premature welfare state" by Kornai (1997).

In addition, the fact that private financial institutions and influential investors were deeply involved in the introduction of the MPPS cannot be overlooked. In 1993, the present third pillar or Voluntary Pension Funds (VPFs) were established at once, and main entrants to this new financial market were prominent foreign and domestic banks and insurance companies. For financial institutions with experience establishing VPFs, the MPPS is a good business opportunity with low risk and great future perspectives. Therefore, it was only natural that these financial institutions would act as an interest group supporting the introduction of the MPPS (Rein 2002, 216). Indeed, since 1998, the largest VPFs instantly achieved business development in the mandatory private pension market. Furthermore, the inter-ministerial committee chose famous investor Csaba Lantos as chief of a working party entrusted with the creation of PPF asset investment rules (Orenstein 2000, 38). This case and the preceding one involving Adam Gere are just two examples, but the fact that private financial institutions and investors directly or indirectly participated in the policy decision-making process of introducing the MPPS had a certain influence on the organizational structure and management performance of pension PPFs, as discussed later.

On January 1, 1998, the Three-pillar Pension System was introduced. It is noteworthy that the first (even partial) pension privatization in Central and Eastern Europe was implemented by a Socialist government. As Müller (2004, 3) pointed out, this measure could be a resolute signal from the Hungarian policymakers to struggle with outstanding structural reforms.

The new pension system, however, did not take root easily. The Socialist Party, contrary to the expectations of the majority, only won 134 seats in the parliamentary elections of May 1998, losing against the Young Democrats, who won 148 seats. As a result, a coalition government was formed comprising the Young Democrats, the Independent Smallholders', Land Workers' and Civic Party, and the Hungarian Democratic Forum. Before the parliamentary elections, the Young Democrats assumed a wait-and-see attitude, which suggested that they did not support radical reform but were unwilling to protest against the government. However, as soon as they assumed power, the coalition government headed by Viktor Orban altered the new pension system. The main changes were (1) a phased decrease in the employer insurance contribution; (2) a delay of the one-percent increase in the contribution from the employee, which was originally set for 2000; and (3) the abolishment of the formal and real authorities over the PIF delegated to the MSZOSZ by the placement of the PIF under direct government control. It is clear that the aim of such political acts by the Young Democrats was to gain support from industry and labor and to split the pro-socialist trade unions, including the MSZOSZ.

In the 2002 April elections, the Young Democrats won against the Socialist Party by a narrow

margin (188 seats to 178 seats), but the Socialist Party joined hands with the Alliance of Free Democrats, which gained 20 seats. As a result, the Young Democrats lost power. Due to this power shift, the new pension system was partly modified once again. First, in 2002, compulsory entry into the MPPS for newcomers to the labor market was abolished, but, in 2003, it was again mandatory. In the same year, employee pension insurance was raised from 8.0 % to 8.5 %, and the employee reserve pension insurance rate for those who chose the second pillar went up from 6.0 % to 7.0 %. It is truly unfortunate for the Hungarian citizens that the institutional framework of pension schemes and insurance rates, which, in reality, should be decided with a view to the future, were influenced by the dynamics of a political takeover.

As observed, the new pension system introduced in 1998 has continually been subject to political whims and remains so today. The possibility that this negative influence is extending to the operations of the MPPS cannot be denied. With this in mind, the next section provides an examination of the institutional framework of the MPPS and PPFs.

3. THE INSTITUTIONAL FRAMEWORK OF THE MANDATORY PRIVATE PENSION SCHEME AND THE PRIVATE PENSION FUNDS

The legislation regulating the basic framework of the MPPS and the organizational and operational form of PPFs has a two-layered structure, namely republican acts and governmental decrees. According to a report of the Financial Supervisory Authority (FSA) (2001) and the East-West Management Institute (2003), the four main acts providing the basic structure of the second pillar are noted as follows:

(1) Act LXXX of 1997 on Persons Entitled to Social Security Benefits and Private Pension, as well as the Coverage of these Services;

(2) Act LXXXI of 1997 on the Social Insurance Pension;

(3) Act LXXXII of 1997 on Private Pension and Private Pension Funds;

(4) Act LXXXIV of 1997 on Amendments to Act III of 1993 on Social Administration and Social Benefits.

On the other hand, governmental decrees contain detailed rules on insurance premium administrative affairs and investment activities of PPFs, as well as on organizational/operational regulations of the Guarantee Fund. This layer includes eight decrees, such as the Governmental Decree No. 168/1997 on the Enforcement of Act LXXXI and No. 169/1997 on the Organizational and Operational Rules of the Guarantee Fund.[10] Besides these laws and decrees, PPF activities are

---

[10] Other ordinances are (1) Governmental Decree No. 170/1997 on the Actuarial and Financial Planning Rules Related to the Activities of Private Pension Funds, as well as on Reserving Requirements; (2)

controlled by administrative orders from the Ministry of Finance and the FSA. Based on these official documents and Augusztinovits *et al.* (2002, 40-45), the institutional framework of the newly introduced second pension pillar can be summarized as follows:

According to Act LXXXII of 1997, PPFs are established as nonprofit organizations. Those who have the right to establish PPFs are employers as corporate bodies, the Chamber of Commerce, trade unions, and VPFs. These entitled bodies are allowed to establish a fund in mutual cooperation.

Legally, PPFs are owned by their members, and their rights are exercised through the general member assembly. In order to control fund activities, the general member assembly elects a board of directors, which is in charge of management strategy decision-making, and a board of supervisors, which is responsible for the examination of financial statements and other auditing affairs. The daily operation of a fund is carried out by personnel belonging exclusively to that fund and by other employees, as required by law. Among these officers are a managing director, an auditor, an actuary, a legal officer, and an internal auditor. Moreover, outsourcing is permitted for a series of tasks, such as asset management, membership recruitment, administration, and record keeping. The expenses related to these outsourced operations are added up, respectively, in the following manner: asset management to investment spending expenditure; and, membership recruitment, administration, and record keeping to operational expenditure.

The PPFs and financial institutions involved in the management and control of fund assets are under FSA supervision. This state authority is in charge of a pension-fund license-approval procedure. In addition, the FSA conducts minute inspections of quarterly and annual reports, which each PPF is compelled to disclose by law. The FSA receives operational funds from the national budget, but, at the same time, receives supervisory fees from each PPF. Such fees function as a type of tax and are added up to the operational expenditure within the fixed expenditure of each fund.[11] The amount, from 1998 to 2000, was 0.2 % of the member contribution, but it was raised to 0.35 % in 2001 and to 0.5 % in 2002.

Governmental Decrees No. 171/1997 and No. 282/2001 on the Investment and Economic Activities Private Pension Funds; (3) Governmental Decree No. 172/1997 on Tasks Related to the Central Registration by Funds and the Data Supply Obligation of Funds and Employers Related to Funds Members; (4) Governmental Decree No. 173/1997 on the Specific Annual Reporting and Bookkeeping Liabilities of Private Pension Funds; (5) Governmental Decree No. 174/1997 on the Specific Annual Reporting and Bookkeeping Liabilities of the Guarantee Fund of the Funds; and (6) Governmental Decree No. 217/2000 and Governmental Decree No. 222/2000 on the Special Features of the Obligation to Prepare the Annual Report of the Cash Office Guarantee Fund and of its Accounting.

[11] The supervisory fee paid to the FSA in 2002 and 2003 was 8.0 % and 8.6 % of the total operating expenses, respectively (see *Table 8*). Obviously, this is no small amount by any means.

The changes in pension insurance rates from 1998 to 2003 are as shown in *Table 1*. The insurance rate at the time of the new scheme's introduction was 31 % for both the employer and employee combined. However, in order to sharply reduce the share from the employer, the insurance rate was decreased, and, as a result, the total rate as of 2003 was reduced to 26.5 %. On the other hand, the employee insurance rate went up by 1.5 % to 8.5 %. For instance, if an employee chooses the "mixed system," in which contributions are made to both the PAYG scheme and the MPPS, 82 % (7 % of gross wages) of the contributions will go to the PPFs. At the time of the reform, Act LXXX of 1997 had forecast to keep the total insurance rate constant at 31 % and to increase the employee rate to 9 %, of which 89 % (8 % of gross wages) was to be allocated to the PPFs. However, in reality, the contribution that was paid to each fund was set at 6 % of gross wages for five years (1998-2002). These changes were obviously not welcomed by the funds. As we have emphasized in the previous section, it is considered that these details are a direct manifestation of the pension system being a political issue between the ruling and opposition parties scrambling fiercely for political power.

About 4 or 5 % of the member contribution covers operational costs, and another 1 % is appropriated for various contingency reserves. Therefore, the remaining 94 to 95 % is credited to the members' individual accounts. The reason for the existence of the fund will be called into question as a pension payment institution unless it annually secures a real rate of return of at least 1 to 2 % after deductions are made. The investment activity by PPFs is stipulated in detail by the laws and decrees cited above; namely, the Governmental Decree No. 171/1997 sets down strict guidelines for the financial products, which fund assets may be invested into, and the maximum asset ratio that may be invested. For example, out of the total assets, the PPFs and asset management companies commissioned by PPFs cannot invest more than 30 % in foreign government securities, 30 % in international financial institution bonds, 10 % in local government securities, 30 % in domestic rated A stocks, 20 % in domestic rated B and C stocks, and 10 % in real estate investment securities (FSA 2001, 34-35). Hungarian government securities are the only ones with no imposed limit.

Table 2 indicates the portfolio structure evolution of MPPS assets. As it is clear at one glance, asset contents are fixed in general terms. That is, PPFs manage the majority of its assets on government securities, with the ratio averaging 75.9 % from 1998 to 2003. Meanwhile, the ratio of stocks and corporate bonds is 10.2 % and 2.6 %, respectively.[12] However, in Hungary, PPFs are considered to produce short-term profits in comparison to other institutional investors.[13] This

---

[12] Upon evaluating these facts, the FSA (2001, 18) expressed its opinion that, in reality, laws and governmental decrees hardly put a limit on investment activities of asset management companies.

[13] For instance, the distribution ratio of domestic stocks in the whole 2001 fourth-quarter portfolio for

opinion is mostly based on the facts that the political restrictions on insurance contributions had a negative effect on the funds and they influenced the policy governing asset management.

For the most part, the annuity rate of the MPPS depends on the investment returns of the reserve period. However, Act LXXXII of 1997 established a safeguard by introducing the concept of guaranteed capital. That is, if the capital endowment of an eligible member is less than the minimum stipulated amount, that individual's capital is brought up to the guaranteed level by a capital transfer from the Guarantee Fund. This applies only to those who have contributed to MPPS for more than 180 months (i.e., 15 years). In order to secure this measure, PPFs are obligated to contribute a portion of a member's contributions (0.3 to 0.5 %) to the Guarantee Fund.[14] The rate is decided by the board of the Guarantee Fund and approved by the FSA. The assets built up in this manner must be managed through government securities. It is stipulated that, when funds are insufficient, the government will make up the difference. Needless to say, the existence of the Guarantee Fund accelerates the shift from the first pillar of the pension scheme to the second. At the same time, it increases the risk of inducing a moral hazard on citizens and PPFs.

Keeping the above facts in mind, the fourth section will deal with the development process and the industrial organization of the mandatory private pension market.

4. DEVELOPMENT AND INDUSTRIAL ORGANIZATION OF
THE MANDATORY PRIVATE PENSION MARKET

First, we will track down the development process of the mandatory private pension market. *Figure 1* shows membership enrolment and asset values of the PPFs. At the time the new pension system was introduced, employees were given a grace period of 20 months (from January 1998 to August 1999) to choose whether to continue depending 100 % on the PAYG scheme after 1998 or to change to the mixed system. The government anticipated that about 1.5 million citizens would join the MPPS; however, in reality, 2.0 million people decided to join the mixed system. This figure accounts for 52 % of the then total number of employees (3.8 million people). As *Figure 2* shows, 462,000 people selected the mixed system right before the grace period ended. Since then, the number of members in MPPS continued to fluctuate slightly and reached 2.3 million by the end of 2003, which accounts for 58.7 % of the total number of employees (3.9 million people). Meanwhile, the value of the fund assets continued to increase steadily, reaching 561.4 billion HUF in 2003,

---

PPFs, VPFs, investment trust companies, and insurance companies was 11.6 %, 10.8 %, 6.9 %, and 5.6 %, respectively (FSA 2002).

[14] As the supervisory fee, the portion of a member's contributions paid to the Guarantee Fund is included in the operating costs of PPFs. According to *Table 8*, its portion within the operating expenses averaged 5.7 % in 2002 and 6.2 % in 2003.

which corresponds to 2.6 % of GDP.

The expansion of the mandatory private pension market, which is backed by legal enforcement, is remarkable in comparison to other social security markets. In other words, if we say that PPF membership and asset value increased from 1999 to 2003 by 957,000 people and 53.3 billion HUF, the same figures for the voluntary pension fund market only increased by 278,000 people and 33.3 billion HUF, the health insurance fund market by 179,000 people and 1.3 billion HUF, and the income replacement fund market by 76,000 people and 130 million HUF.[15] As a result, in terms of the market value of assets, in 2002, PPFs surpassed VPFs, which had been active even before the implementation of the new pension system. In this way, the mandatory pension business grew to become the biggest industry in the social security sector.

However, there is still a lot of room for development in the mandatory private pension market. The ground for this argument is the size of the pension fund market in comparison to the national economy and the age structure of fund members. That is, first of all, the ratio of the total gross asset values of PPFs and VPFs at the end of 2003 to GDP was only 4.9 %. In this regard, Hungary lags many European countries, which are led by Holland and Sweden (*Figure 2*). Second, the membership ratio of those in their late teens or twenties to the total membership was short of 43.6 % even by the end of 2003, and the possibility of many more youths being lured to the mandatory private pension market has been pointed out (Augsztinovics *et al.* 2002, 70-71). Despite these circumstances, as indicated in *Figure 1*, total membership has been leveling off for the last few years, and, moreover, the number of citizens who go back to the old state PAYG social security pension system from the mixed system has been increasing rapidly year after year.[16] One of the reasons for this is that PPFs, which are private organizations, have not been able to provide sufficiently attractive financial services in comparison to the state-managed PAYG scheme.[17] Hence, the focus should be turned on the industrial organization of the mandatory private pension market and the performance of funds.

PPFs have been forming quite a concentrated market since the MPPS was introduced. The top six funds (OPT, ING, Aegon, Allianz, Credit Suisse, and Évgyűrűk) have always retained a share of

---

[15] Calculated by the authors based on FSA (2002; 2003a; 2004a). Moreover, the income replacement fund is a welfare fund whose main objectives are to support childbirth, to assist the purchase of medicines and medical tools, and to provide education.

[16] According to Párniczky (2003), only 1,594 members left the MPPS in 1998, but the number continued to increase, reaching 9,815 in 1999, 17,778 in 2000, and 52,233 in 2002.

[17] There is another possible reason: a large number of employees over a certain age, who should have stayed in the PAYG system on the basis of pure financial calculation, joined MPPS in time for the introduction of the new pension system because they lost faith in the PAYG, which had performed very badly in the early 1990s. Shortly afterwards, some of them, however, recognized that they would be better in the PAYG system than in the mixed system.

approximately 85 % of membership and 80 % of asset balance through 1998 to 2003. In fact, the Herfindahl index for the mandatory private pension market in 2003 reached 0.159 in member base and 0.16 in asset value base. Regarding the voluntary pension markets, the Herfindahl indices were 0.075 and 0.060 respectively, which demonstrates how high the concentration rate of the mandatory private pension market really is.[18] During the same period, the FSA issued licenses to a total of 60 organizations, 20 of which had to give up on their inauguration because they could not attract 2,000 members,[19] the minimum membership required by law, and 22 other organizations made it to the inauguration but disappeared one after the other as they were being absorbed by large funds.[20] As a result of intensive M&A activities, only 18 PPFs had survived by the end of 2003 (*Table 3*). Even today, small- and medium-sized funds are exposed to the danger of non-continuance due to severe market competition.[21]

As stated in the previous section, PPFs are legally owned by ordinary citizens with membership status in a fund whose representative body is the general member assembly as the highest decision-making body. However, it is not an exaggeration to say that, as in mutual corporations in developed countries, the real fund management is entirely in the hands of the founding body. In the case of Hungary, such bodies are classified into four categories: (1) banks, (2) insurance companies, (3) employers including the military and public corporations,[22] and (4) other mixed institutions.[23] The industrial organization of the mandatory private pension market by group is shown in *Table 4*. As of the end of 2003, the composition of the management body of all 18 funds was distributed among five banks, five insurance companies, six direct employer management bodies, and two mixed institutions. As *Table 4* shows, PPFs belonging to banks and insurance companies are in fact dominating the market. Of the six big funds mentioned above, the top five have banks and insurance companies as direct founding bodies.

Fund organizations whose real management power is seized by banks and insurance

---

[18] Calculated by the authors based on statistics available at the FSA website.

[19] Conversely, the minimum membership of VPFs, whose legal regulations are less strict, is only 15 members.

[20] According to Augsztinovics *et al.* (2002, 68), members of almost all of the absorbed PPFs amounted to less than 10,000 people.

[21] In fact, researchers and specialists whom we interviewed in March, 2004 suggested that the exit of the funds from the market would continue even after joining the EU and, in a few years, the number of funds would decrease to between 10 and 15.

[22] For instance, the following is a list of funds and their founding bodies: Postás (postal service), Honvéd (military), DIMENZIÓ (telecommunication company), Vasutas (railway company), and Villamosenergia (electric power company).

[23] This category includes PPFs jointly established by employers, trade unions, and small- and medium-sized VPFs. Most of the PPFs culled out between 1998 and 2002 were mixed institutions.

companies have a remarkably strong survival capacity. That is, the ratio for currently active funds out of the sixty organizations is 24 % in case of direct management by employer and 11 % in case of mixed institutions, whereas that for PPFs whose main management body is either a bank or an insurance company is 59 %.

Table 5 shows the average values and standard deviations for 2003 performance by management bodies. This data strongly suggests that PPFs belonging to banks and insurance companies gained many members by using their established reputation, as well as their powerful branches and networks. On the other hand, it is characteristic of funds established by employers to have a significantly high asset value per member, particularly when compared to PPFs in other categories. According to Augsztinovics *et al.* (2002, 70) and Párniczky (2003), the reason for this is that the income levels of members (namely, of employees at big corporations) are considerably higher than the average income in Hungary. In this sense, funds managed by employers have a predominance in terms of membership quality.

As shown above, it has been confirmed that, after the introduction of the new pension system in 1998, the mandatory private pension market has developed rapidly, and the number of PPFs has considerably diminished. If the economic size of Hungary is considered, the market dominance of PPFs, whose real management power belongs to banks and insurance companies, is far from being tantamount to an oligopoly. Rather, the problem is a fund's profitability, which will influence the future of MPPS. The following section investigates this point.

5. PERFORMANCE OF PRIVATE PENSION FUNDS

By focusing on 2003, the asset management performance of PPFs operated by banks and insurance companies is not too different from that of PPFs directly operated by the employers and is rather inferior to that of mixed institution funds (*Table 5*). However, assessments based on the performance of a single fiscal year are risky. Hence, we have tested whether differences in a management body have a statistically significant impact on the investment activities by estimating regression models of net rate of return on investments to total assets (*PFTRAT*) for each fiscal year from 1998 to 2003 to year dummies (*99D*, *00D*, *01D*, 0*2D*, *03D*) that control the market volatility in each year, management body dummies (*BNK*, *ISR*, *EMP*), and the individual effect of each fund. The results are shown in *Table 6*. The coefficients of all management body dummies in Model (A) have quite a low explanatory power with no statistical significance.[24] Models (B, C), which control the individual effects of each fund, also showed the same results. This evidence strongly suggests

---

[24] In addition, the interval estimation rejects at the 5 % level of significance the hypothesis that a difference in management body spells a 0.5 % difference in investment performance.

that the difference in management body does not have a significant influence on investment performance. However, even though the level of investment performance of PPFs belonging to banks and insurance companies is not higher, it is possible that this type of PPFs is superior in terms of asset management stability, because banks and insurance companies can enjoy scale-economy. Therefore, we estimated a regression model that takes the variance of the net rate of return to total assets (*RFTVAR*) in 1998-2003 as a dependent variable. The following is the result:

$$PFTVAR = 32.873 + 12.776 \; BNK - 2.931 \; ISR - 6.036 \; EMP$$
$$(3.14) \; (1.03) \qquad (-0.24) \qquad (-0.50)$$

N=18, R^2=0.258, Adjusted R^2=0.099, F=1.625

Moreover, we also estimated a model controlling the asset scale of each fund by adding the natural logarithm of the total asset value (*TAV*) by the end of 2003 to the explanatory variables:

$$PFTVAR = -61.994 + 4.603 \; BNK - 17.888 \; ISR - 4.607 \; EMP + 6.293 \; \ln(TAV)$$
$$(-1.36) \quad (0.39) \qquad (-1.37) \qquad (-0.43) \qquad (2.14)$$

N=18, R^2=0.451, Adjusted R^2=0.283, F=2.677

These results suggest that it is highly possible that the differences in management body do not have a statistically significant impact even from the viewpoint of asset management stability. This empirical evidence confirms that having a bank or an insurance company as the fund's operational body does not amount to any sort of a substantial plus factor, at least not in regard to the investment activities of PPFs.

Here, an interesting question has surfaced, and it is how to interpret the fact that there is no significant economic or statistical gap in terms of the level and stability of investment performance between powerful funds operated by banks and insurance companies, including foreign-owned financial institutions with abundant investment experience and the remaining small and medium-sized funds. Augsztinovics *et al.* (2002, 76-80) approached this point by comparing the investment performance in 2000 between the two groups of funds. The first group is PPFs that chose asset managers in a competitive market, and the second group is PPFs, in which the asset manager is an insider from the interest group of the founding bank or insurance company. As a result, they point out the following two points: (1) although there is hardly any gap in terms of gross investment returns (7.7 % to 7.4 %), the net returns[25] displays a considerable gap favorable to the first group (7.1 % to 5.9 %); (2) the asset management costs of the second group are considerably higher than those of the first group in terms of total asset value (0.6 % to 1.5 %) and gross investment returns (8.5 % to 23.8 %).

---

[25] It is a residual value after subtracting expenses on asset management from gross investment returns.

The credibility of the first point is somewhat questionable in the sense that their analysis was based on data from a single year and may not consider the variance of the investment return ratio within the groups. In addition, this point is not consistent with the results of regression analysis conducted by the authors. On the other hand, the second point on management costs shows an extremely significant difference between the two groups, which is noteworthy as a perspective in the investigation of this issue. In fact, Párniczky (2003) also mentions the relative superiority in terms of the management costs of funds directly managed by employers over the ones belonging to banks and insurance companies. As stated in the third section, PPFs have the sanction of law to outsource asset management, membership recruitment, administration, and record keeping. Actually, funds belonging to very large financial groups outsource almost all these affairs to their group companies; thus, it is commonplace to see funds operated by a few individuals. Consequently, as it is clear from the data on investment returns and the operating expense structure of PFFs, shown in *Tables 7* and *8*, the outsourcing fees paid to affiliated companies are large enough to affect the final business outcome of the fund. Moreover, these ratios tend to increase annually.

Management activities of PPFs are not likely to be monitored effectively by members because their ownership is broadly dispersed. Especially, larger funds, such as those operated by banks and insurance companies, have a greater tendency to be unsupervised. In addition, when an outsourcing company belongs to the same corporate group, it is extremely difficult to motivate the staff members of funds to reduce fees paid to affiliated companies. Therefore, fund assets may be used to pay outsourcing fees to recoup initial investments, unless the government or the FSA considers it a crucial problem or pension members "exit" all together. [26]

So far, hampered by a lack of information disclosure, the facts of outsourcing activities by PPFs have hardly been brought to light. However, data released specially by the FSA for this research strongly suggests the high cost of funds operated by banks and insurance companies (*Table 9*). Such tendencies are especially apparent when investment expenditures are considered as a part of the total assets. Moreover, the relative superiority of funds belonging to banks and insurance companies over funds managed by employers directly and of mixed institutions cannot be found in other indices either. We surmise that these facts are reflections of the relatively high asset management and administration costs, a large part of which corresponds to outsourcing fees, of funds operated by banks and insurance companies when compared to other PPFs.

6. CONCLUSION

---

[26] In fact, according to a Hungarian researcher we interviewed in March 2004, an executive at a big pension fund honestly admitted at a conference that he was controlling the rate of outsourcing fees at his discretion for early recoup of initial investments.

Empirical results and facts reported in the previous section indicate the emergence of an "agency problem" (Jensen 2000) in management activities of bank/insurance company-affiliated private pension funds. If this were the case, it would be possible to overlook such problems in cases in which PPFs have enough investment returns to provide sufficient future benefits to members when taking management body incentives into consideration. However, according to FSA estimations, the annual real rate of return on investments for PPFs from 1998 to 2000 surpassed the real wage increase for the same period by only 0.73 %. International experience shows that the real rate of return for a private pension fund normally surpasses the real wage increase rate by at least 1.5 % (FSA 2001, 22). Regrettably, *Figure 3* demonstrates that it is highly probable that asset management performance of the surviving 18 funds throughout the 2001-2003 period is even lower than that for the three years following the pension reform.[27] That is to say, currently, since the establishment of PPFs, lower asset management performance in comparison to international standards has become common. In order for the MPPS to be sustainable in the future, corporate governance reform and reinforcement of the monitoring system are required. This is also an important policy issue determining whether or not the pension reform executed by the Hungarian government in 1998 will succeed. Nevertheless, this is not the only problem. To begin with, the management behaviors of PPFs largely result from the political instability of the pension system itself. Freeing MPS operations from political conflict contributes significantly to the management of PPFs as well as to their efficiency and transparency. From this point of view, the EU accession in May, 2004 provides an important opportunity for the MPPS to become more sophisticated as an institutional and to seek political neutrality. As Müller (2004, 17) stated, there is no universal and optimal pension model in Western Europe that is simply applicable to the new EU members. This does not exclude, however, the possibility that the Hungarian government can improve the second pillar by borrowing institutional designs and regulations of pension funds from Western experience. In additon, if the Hungarian people are familiar with the actual circumstances of the old members and clearly recognize the necessity to manage their own social security system from long-term perspectives, they must be more critical of their politicians, who regard the pension system as a tool for power over their opposition. Needless to say, economic integration into the EU may have a positive impact on the management discipline of PPFs and their backup bodies by promoting market competition in the Hungarian market. We are hopeful that the Hungarian government and its citizens will make the best possible decisions in this regard.

---

[27] Moreover, according to the assesment provided by specialists interviewed in March, 2004, the worsening of the investment return rate in the last few years is largely due to three factors: (1) a domestic stock market slump; (2) a fall in long-term government securities yields; and (3) an inflation rate decline.

REFERENCES

Augusztinovics, M. *et al.* (2002): The Hungarian Pension System Before and After the 1998 Reform. In: Fultz, E. (ed.): *Pension Reform in Central and Eastern Europe Volume 1 - Restructuring with Privatization: Case Studies of Hungary and Poland*, Budapest: International Labor Organization (ILO): 25-93.

Bod, P. (1995): For the Pension System and Reform. In: Éhrlich, E. and G. Révész (eds.): *Human Resources and Social Stability During Transition in Hungary,* San Francisco: International Center for Growth: 173-174.

East-West Management Institute (2003): Recent Developments and Country Reports: Hungary. Paper submitted to the International Network of Pensions Regulators and Supervisors (INPRES) Seminar on Private Pensions. Zagreb, May 27-28.

Gál, R., and G. Tarcali (2003): Pension Reform and Intergenerational Redistribution in Hungary. *The Economic Review* (Hitotsubashi University), 54(3): 237-247.

Gedeon, P. (2001): Pension Reform in Hungary. *Acta Oeconomica*, 51(2): 201-238.

Hablicsek, L. (2004): *Demographics of Population Aging in Hungary*. PIE Discussion Paper No. 207. Tokyo: Institute of Economic Research, Hitotsubashi University.

Iwasaki, I., and K. Sato (2004): The New Pension System and Private Pension Funds in Hungary. *Bulletin of the Japan Association for Comparative Economic Studie*s, 41 (2): 14-30. (in Japanese)

Jensen, M. (2000): *A Theory of the Firm: Governance, Residual Claims, and Organizational Forms*. Cambridge and London: Harvard University Press.

Kornai, J. (1997): *Struggle and Hope: Essays on Stabilization and Reform in a Post-socialist Economy*. Cheltenham: Edward Elgar.

Matits, A. (2004a): *Supplementary Pension Funds in Hungary*. PIE Discussion Paper No. 208. Tokyo: Institute of Economic Research, Hitotsubashi University.

___ (2004b): Practical Experience on the Second Pillar of the Hungarian Mandatory Pension System. Research paper prepared for the International Labour Office (ILO), Budapest.

Müller, K. (1999): *The Political Economy of Pension Reform in Central-Eastern Europ*e. Cheltenham: Edward Elger.

___ (2004): Privatizing Old-Age Security in the New Member States. Paper submitted to the 8th EACES (European Association for Comparative Economic Studies) Bi-annual Conference, September 23-25, Belgrade.

Orenstein, M. (2000): How Politics and Institutions Affect Pension Reform in Three Post-communist Countries. World Bank Policy Research Paper No. 2310. Washington, D.C.: World Bank.

Párniczky, T. (2003): The Experience of the Mandatory Private Pension Funds and Lessons of the Operations of the Funds: Facts and Tendencies. Paper submitted to EU Open Method of Communication Seminar on National Pension Strategies "Hungarian National Seminar on Sustainable and Adequate Pension System." July 10.

Pénzügyi Szervezetek Állami Felügyelete (FSA) (2001): *Magánnyugdíjpénztárak Teljesítménye*

1998-2000 (Performance of Private Pension Funds in 1998-2000). Budapest: FSA.

___ (2002): *Éves Jelentés 2001* (2001 Annual Report). Budapest: FSA.

___ (2003a): *Éves Jelentés 200*2 (2002 Annual Report). Budapest: FSA.

___ (2003b): *Beszámoló a Felügzelt Szektorok 2003. Első Félévi Működéséről* (Report on Activities of the Supervised Sectors in the First Half of 2003). Budapest: FSA.

___ (2004a): *A Felügyelt Szektorok 2003. Évi Működése* (On Activities of the Supervised Sectors in 2003). Budapest: FSA.

___ (2004b): *Beszámoló a Felügyelt Szektorok 2004. Első Negyedévi Tevékenységéről* (Report on Performance of the Supervised Sectors in the First Quarter of 2004). Budapest: FSA.

Rein, M. (2002), The Political Economy of Pension Reform: Poland and Hungary. In: Posusney, M. Prinstein and C. Linda (eds.): *Privatization and Labor*. Cheltteham: Edward Elgar: 200-243.

Sato, K. (2000): *The Social Security System in Hungary: Economics of Cost Burdening*. Master Thesis. Tokyo: Hitotsubashi University. (in Japanese)

Sato, K. (2003): Transition into a Market Economy and Pension Reform in Hungary. *The Hitotsubashi Review*, 129(6): 91-107. (in Japanese)

Szeman, Z. (2001): *Interest Co-ordination among Generations*. PIE Discussion Paper No. 21. Tokyo: Institute of Economic Research of Hitotsubashi University.

Table 1 . Pension Insurance Contribution Rates, 1998-2003

				(Gross wages=100)	
				Insurance rate for employees who chose mixed system	
	Employer	Employee	Total	PAYG Scheme	MPPS
1998	24.0	7.0	31.0	1.0	6.0
1999	22.0	8.0	30.0	2.0	6.0
2000	22.0	8.0	30.0	2.0	6.0
2001	20.0	8.0	28.0	2.0	6.0
2002	18.0	8.0	26.0	2.0	6.0
2003	18.0	8.5	26.5	1.5	7.0

Source : Augsztinovits *et al.* (2002, 50) revised.

Table 2 . Portfolio Composition of the Private Pension Funds, 1998-2003

	1998		1999		2000		2001		2002		2003	
	Billion HUF	Share ( )	Billion HUF	Share ( )	Billion HUF	Share ( )	Billion HUF	Share ( )	Billion HUF	Share ( )	Billion HUF	Share ( )
Total asset value	28.8	100.0	89.8	100.0	175.7	100.0	283.0	100.0	413.1	100.0	564.6	100.0
Cash and current account	3.1	10.76	2.5	2.78	2.3	1.31	3.0	1.06	13.7	3.32	3.8	0.7
Bank deposits	1.0	3.47	0.3	0.33	0.1	0.06	0.1	0.04	2.9	0.71	2.1	0.4
Government securities	22.1	76.74	74.9	83.41	136.3	77.58	226.5	80.04	280.9	68.01	394.5	69.9
Stocks	1.9	6.60	8.8	9.80	26.0	14.80	32.9	11.63	36.8	8.90	52.3	9.3
Corporate and municipal bonds	0.5	1.74	1.5	1.67	4.1	2.33	8.4	2.97	17.2	4.16	16.8	3.0
Investment vouchers	0.1	0.35	1.5	1.67	4.6	2.62	6.6	2.33	29.3	7.08	40.6	7.2
Others	0.1	0.35	0.3	0.33	2.3	1.31	5.5	1.94	32.3	7.81	54.5	9.6

Source : Authors' calculation based on FSA (2004a).

('000 membership)   (Billion HUF)

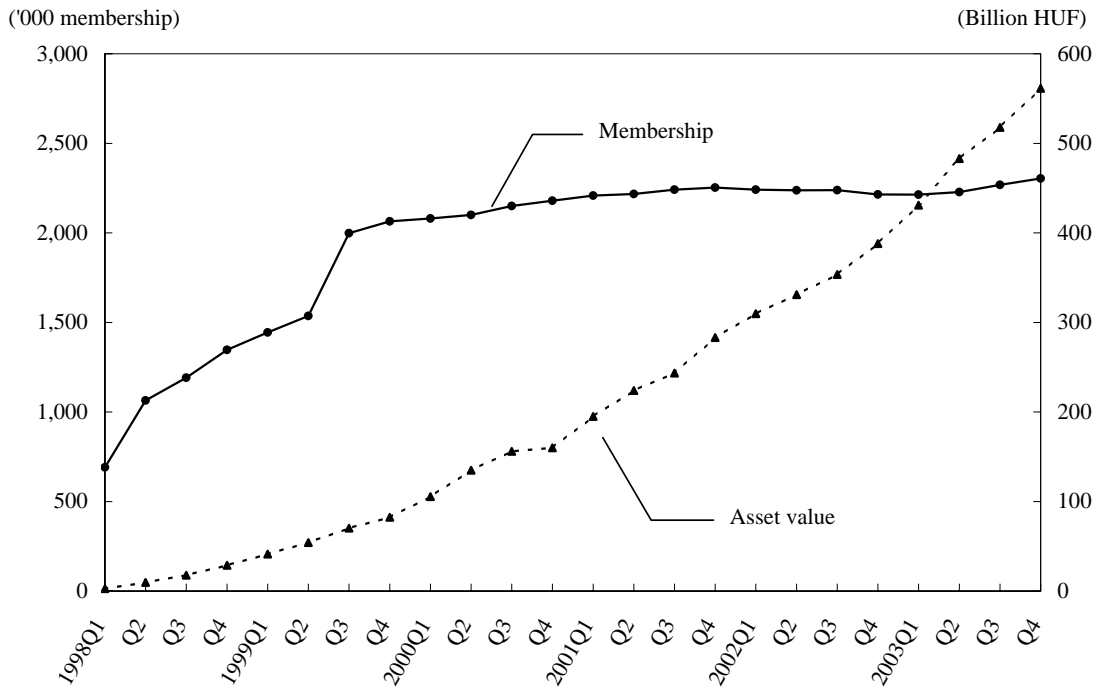*Figure 1*. Membership and Asset Value of Private Pension Funds, 1998-2003

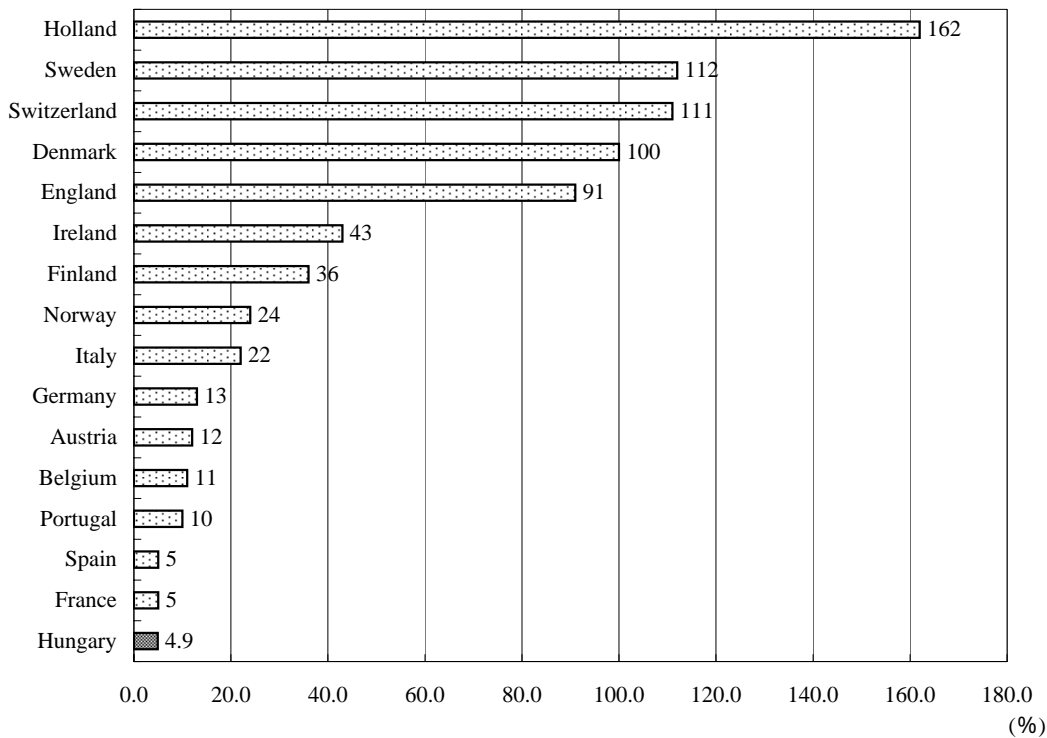*Source* : Authors' illustration based on FSA (2003b; 2004b).

Figure 2. Total Assets of Pension Funds to GDP of Hungary and European Countries

Note : Hungary, as of the end of 2003; the rest, as of June, 2001 (including EU Pension Fund and domestic private and voluntary pension funds).
Source : Authors' illustration based on FSA (2001; 2004a).

Table 3. Performance and Organization of All 18 Private Pension Funds (as of the end of 2003)

Funds (ordered by membership enrolment)	Membership (person)	Total asset value ('000 HUF)	Asset value per member ('000 HUF)	Net profit to total assets ( )	Management body *	Asset management company
OTP	607,280	101,141,309	166.55	3.94	B	OTP Alapkezelő Rt.
ING	366,980	77,300,880	210.64	3.92	I	ING Investment Management Rt.
AEGON	362,727	67,287,600	185.50	1.31	I	AEGON Mo. Alapkezelő Rt.
Allianz	272,779	41,521,397	152.22	3.60	I	Allianz Hungária Biztosító Rt.
Credit Suisse	202,158	40,719,000	201.42	2.77	I	Credit Suisse Life & Pensions Biztosító Rt.
Évgyűrűk	105,452	16,295,933	154.53	4.37	M	Postabank Értékpapírforgal-mazási és Befeketési Rt., Erste Bank Alapkezelő Rt., Generali Alapkezelő Rt.
Aranykor	80,267	15,546,968	193.69	0.59	B	K&H Értékpapír Befektetési Alapkezelő Rt.
UNIQA	56,993	8,951,123	157.06	2.78	I	UNIQA Vagyonkezelő Rt.
Budapest	34,988	9,598,934	274.35	2.23	B	Budapest Alapkezelő Rt.
Erste Bank	21,768	3,466,563	159.25	1.46	B	Erste Bank Alapkezelő Rt.
MKB	20,262	6,861,117	338.62	2.78	B	MKB Rt.
Postás	20,185	5,146,558	254.97	0.68	E	MKB Rt., Erste Bank Alapkezelő Rt., CA-IB Értékpapír Befektetési Alapkezelő Rt., Raiffeisen Alapkezelő Rt.
Honvéd	15,506	7,751,328	499.89	2.95	E	MKB Rt., Erste Bank Alapkezelő Rt., Generali Alapkezelő Rt.
DIMENZIÓ	12,407	4,930,617	397.41	4.83	E	Concorde Befektetési Alapkezelő Rt., CA-IB Értékpapír Befektetési Alapkezelő Rt., MKB Rt.
Quaestor	9,572	351,804	36.75	n/a	E	Quaestor Értékpapír Rt.
Vasutas	8,381	2,273,896	271.32	2.30	E	CIB Értékpapír Rt., Erste Bank Befektetési Rt.
Villamosenergia	7,757	3,119,901	402.20	1.56	E	Managed by the same company
Életút Első	2,700	761,871	282.17	3.80	M	Concorde Befektetési Alapkezelő Rt., MKB Rt., Magyar Takarékszövetkezeti Bank Rt., CIB Befektetési Alapkezelő Rt.

* B: banks; I: insurance companies; E: employer directly; M: mixed institution.
Source: Compiled by the authors based on FSA official data.

Table 4 . Structure of Mandatory Private Pension Market, 2000-2003

Management body	Number of Funds				Membership (Millions)								Asset value (Billion HUF)							
					2000		2001		2002		2003		2000		2001		2002		2003	
	2000	2001	2002	2003	Number	Share ( )	Number	Share ( )	Number	Share ( )	Number	Share ( )	Value	Share ( )	Value	Share ( )	Value	Share ( )	Value	Share ( )
Bank	7	6	5	5	0.74	33.8	0.79	35.1	0.76	34.1	0.8	35.3	56.8	32.3	97.0	34.3	136.1	32.9	191.5	34.1
Insurance Company	5	5	5	5	1.22	55.5	1.27	56.4	1.28	57.4	1.3	56.7	97.0	55.2	156.4	55.2	235.1	56.9	316.4	56.4
Employer	8	7	5	6	0.07	3.4	0.07	3.1	0.07	3.1	0.1	3.3	12.1	6.9	17.6	6.2	24.8	6.0	30.7	5.5
Mixed	5	4	3	2	0.16	7.3	0.13	5.8	0.12	5.4	0.1	4.7	9.7	5.5	12.1	4.3	17.3	4.2	22.8	4.1
Total	25	22	18	18	2.19	100.0	2.25	100.0	2.23	100.0	2.3	100.0	175.6	100.0	283.1	100.0	413.1	100.0	561.4	100.0

Source : Compiled by the authors based on FSA data (2001; 2002; 2003a) and data provided to the authors by the FSA.

Table 5. Comparison of 18 Private Pension Fund Performances in 2003 by the Management Body

	Membership (Thousands)	Total asset value (Billion HUF)	Asset value per member ('000 HUF)	Net profit to total assets ( )
All funds	122.68 (172.08)	22.95 (30.20)	241.03 (112.48)	2.70 (1.28)
Bank	152.91 (255.16)	27.32 (41.50)	226.49 (77.55)	2.20 (1.28)
Insurance company	252.33 (128.86)	47.16 (26.68)	181.37 (26.06)	2.88 (1.01)
Employer	12.30 (4.81)	3.93 (2.58)	310.42 (162.10)	2.46 (1.57)
Mixed	54.08 (72.66)	8.53 (10.98)	218.35 (90.26)	4.09 (0.40)

Note: Standard deviations are given in parentheses.

Source: Authors' calcuration based on *Table 3*.

(a) In nominal term (%)   (b) In real term (%)
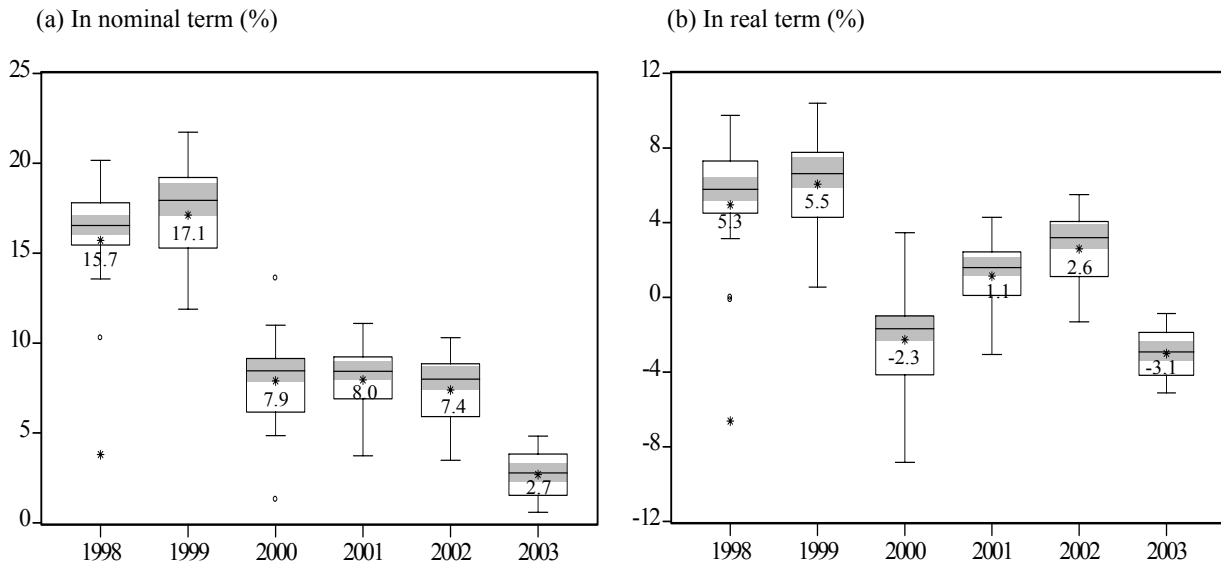
Figure 3. Distribution of Net Profit Rate to Total Assets of 18 Private Pension Funds, 1998-2003

Note: The box portion represents the first and third quartiles (middle 50 percent of the data). The mean is drawn using * in the box with its actual value, while the median is depicted using a line through the center of the box. The   and * outside the box indicate near and far outliers respectively. The shaded region displays approximate confidence intervals for the median.

Source: Authors' illustration based on FSA official data (in nominal terms) and Dr. Ágnes Matits's estimation (Matits, 2004b; in real terms).

Table 6. Panel Data Analysis on Investment Performance of Private Pension Funds

Dependent Variable *PFTRAT*	Plain OLS (A)	Fixed Effects (B)	Random Effects (C)
Const.	16.014 *	15.738 *	15.718 *
	(18.48)	(25.01)	(24.78)
99D	1.378	1.315	1.387
	(1.58)	(1.50)	(1.59)
00D	-7.781 *	-7.848 *	-7.817 *
	(-9.02)	(-9.07)	(-9.09)
01D	-7.730 *	-7.797 *	-7.767 *
	(-8.96)	(-9.01)	(-9.03)
02D	-8.288 *	-8.354 *	-8.324 *
	(-9.61)	(-9.65)	(-9.68)
03D	-12.964 *	-12.972 *	-13.012 *
	(-14.83)	(-14.84)	(-14.93)
BNK	-0.035	-	-
	(-0.05)	-	-
ISR	-1.193	-	-
	(-1.52)	-	-
EMP	0.030	-	-
	(0.04)	-	-
Individual Effects			
OTP	-	-0.302	-0.046
ING	-	-2.777	-0.421
AEGON	-	-1.540	-0.233
Allianz	-	1.481	0.224
Credit Suisse	-	-0.709	-0.107
Évgyűrűk	-	-0.910	-0.138
Aranykor	-	0.211	0.032
UNIQA	-	-0.778	-0.082
Budapest	-	-0.424	-0.064
Erste Bank	-	1.221	0.185
MKB	-	0.725	0.110
Postás	-	1.106	0.167
Honvéd	-	0.603	0.091
DIMENZIÓ	-	0.150	0.023
Quaestor	-	1.341	0.140
Vasutas	-	-0.260	-0.039
Villamosenergia	-	0.160	0.024
Életút Első	-	0.888	0.134
Means of Individual Effects	-		
Bank-affiliated	-	0.286	0.043
Insurance company-affiliated	-	-0.864	-0.124
Direct management by employers	-	0.352	0.053
Mixed institutions	-	0.439	0.046
Hausman Specification Test		χ^2=1.357 p=0.929	
N (unbalanced)	104	104	104
R^2	0.812	0.841	0.807
Adjusted R^2	0.796	0.798	0.797
F	51.341 *	19.440 *	81.890 *

Note: *99D* , *00D, 01D, 02D, 3D*: Annual dummies; *BNK*: Bank dummy; *ISR*: Insurance company dummy; *EMP*: Employer dummy. *t*-statistics are given in parentheses. * Significant at the 1%
Source: Authors' estimation based on FSA offical data.

Table 7 . Investment Revenue and Expenditure of Private Pension Funds, 2000-2003

	2000		2001		2002		2003	
	Million HUF	Share ( )	Million HUF	Share ( )	Million HUF	Share ( )	Million HUF	Share ( )
Investment revenue	31,544	100.0	30,602	100.0	45,709	100.0	26,314	100.0
Interest revenue	19,376	61.4	17,497	57.2	24,041	52.6	17,288	65.7
Latent returns from securities (unrealized capital gain)	10,599	33.6	10,420	34.1	17,519	38.3	5,448	20.7
Gain on sales of investments	0	0.0	149	0.5	698	1.5	2,814	10.7
Return from dividends	261	0.8	327	1.1	503	1.1	655	2.5
Returns on other financial transactions	1,308	4.1	2,208	7.2	2,947	6.4	109	0.4
Returns from real estate management investments	0	0.0	0	0.0	0	0.0	0	0.0
Investment expenditure	23,470	100.0	14,615	100.0	23,400	100.0	16,260	100.0
Interest repayment	8,256	35.2	39	0.3	1	0.0	981	6.0
Latent loss from securities (unrealized capital loss)	6,345	27.0	1,937	13.3	5,106	21.8	9,018	55.5
Loss from sales of investment	0	0.0	121	0.8	503	2.2	1,146	7.1
Loss from financial transactions	8,894 ⎤		13,567 ⎤		16,821 ⎤		-	
Loss from recovered financial transactions (-)	-2,811 ⎦	25.9	-5,873 ⎦	52.6	-5,437 ⎦	48.6	-	-
Expenditures on other financial transactions	0	0.0	34	0.2	-120	-0.5	7	0.0
Expenditures on real estate investment acquisitions	4	0.0	0	0.0	0	0.0	0	0.0
Outsourcing fee for asset management affairs	1,562	6.7	2,594	17.7	3,520	15.0	4,970	30.6
Expenditures on other investment activities	1,220	5.2	2,196	15.0	3,005	12.8	138	0.8
Total balance	8,074	-	15,986	-	22,309	-	10,054	-

Source : FSA (2004a).

Table 8 . Operating Expenditure of Private Pension Funds, 2000-2003

	2000		2001		2002		2003	
	Million HUF	Share ( )	Million HUF	Share ( )	Million HUF	Share ( )	Million HUF	Share ( )
Material expeditures	195	3.6	61	0.9	45	0.6	52	0.6
Wages and public contributions of fund employees	400	7.4	465	6.9	583	8.2	731	7.8
Compensation and public contribution of fund offficers	132	2.4	112	1.7	102	1.4	130	1.4
Membership recruitment	330	6.1	339	5.1	270	3.8	312	3.3
Administration/record keeping outsource fee	2,777	51.2	3,645	54.3	4,330	61.0	5,619	60.3
Auditing fee	34	0.6	54	0.8	53	0.7	54	0.6
Actuarial fee	12	0.2	19	0.3	29	0.4	33	0.4
Consulting fee	62	1.1	23	0.3	62	0.9	51	0.5
Marketing and advertisement	23	0.4	31	0.5	97	1.4	191	2.1
FSA supervisory fee	164	3.0	341	5.1	571	8.0	803	8.6
Guarantee Fund contribution fee	331	6.1	400	6.0	402	5.7	574	6.2
Others	968	17.8	1,222	18.2	560	7.9	769	8.2
Total	5,428	100.0	6,712	100.0	7,103	100.0	9,320	100.0

Source : FSA (2004a).

Table 9. Comparison of Investment Revenue, Investment Expenditure, and Operating Expenditure of Private Pension Funds by Management Body, 2002-2003

Management Body	2002			2003		
	Total (Million HUF)	Per member (HUF)	Per total asset of 1000 HUF (HUF)	Total (Million HUF)	Per member (HUF)	Per total asset of 1000 HUF (HUF)
Investment revenue (gross)						
Bank	14,391	18,834.9	105.7	11,067	13,604.6	57.8
Insurance company	27,334	21,293.5	116.3	12,929	9,893.1	40.9
Employer	2,071	31,733.8	83.4	1,102	14,511.3	35.9
Mixed	1,724	14,631.6	99.6	1,215	11,201.5	53.2
All funds	45,520	20,405.0	110.2	26,314	11,416.8	46.9
Investment expenditure						
Bank	6,967	9,117.7	51.2	6,588	8,098.1	34.4
Insurance company	14,999	11,684.2	63.8	8,797	6,731.2	27.8
Employer	689	10,565.2	27.8	473	6,232.4	15.4
Mixed	661	5,609.5	38.2	402	3,704.1	17.6
All funds	23,316	10,451.7	56.4	16,260	7,054.8	29.0
Investment revenue (net)						
Bank	7,425	9,717.2	54.6	4,479	5,506.5	23.4
Insurance company	12,335	9,609.2	52.5	4,132	3,161.8	13.1
Employer	1,381	21,168.6	55.6	629	8,278.9	20.5
Mixed	1,063	9,022.1	61.4	813	7,497.3	35.6
All funds	22,204	9,953.3	53.8	10,054	4,362.0	17.9
Operating expenditure						
Bank	2,389	3,126.9	17.6	3,169	3,895.8	16.5
Insurance company	3,988	3,107.0	17.0	5,281	4,040.7	16.7
Employer	378	5,796.0	15.2	428	5,629.3	13.9
Mixed	360	3,054.6	20.8	442	4,075.0	19.3
All funds	7,116	3,189.7	17.2	9,320	4,043.5	16.6

Source: Authors' calculation based on data provided to the authors by the FSA.