Private Pension Funds in Hungary

Early Performance and Regulatory Issues

Dimitri Vittas

The early performance of Hungary's voluntary private pension funds suggests that concerns about Hungary's ability to implement successful pension reform may be exaggerated.

Summary findings

Despite the limited scope resulting from the high payroll taxes for the compulsory, unfunded public pillar in Hungary's pension system, the early performance of the voluntary private pension funds has been encouraging and in many respects better than expected. Investment returns have been well above the rate of inflation and participation has expanded rapidly. But, Vittas argues, the sector is highly fragmented and there are several regulatory weaknesses (although action is already under way to remedy some of them):

- No compulsory use of custodian and licensed asset managers.
- Use of book values and cashflow accounting rather than market values. Market valuation on "mutual fund" principles would allow more meaningful rates of return to be reported and would avoid penalizing workers who transfer their accounts.
- Costly tax treatment that benefits high income earners but provides no incentives to nontaxpayers.
- Infrequent statements and inadequate information disclosure on fund performance.
- No guarantees for minimum levels of relative profitability, and a need for strengthened and more effective supervision.

The potential of the private pension funds will clearly remain limited without systemic reform. Hungary's

pension system suffers from the same problems that afflict most pay-as-you-go (PAYG) systems in Eastern Europe: high system dependency ratios, low retirement ages, lax criteria for disability pensions, increasing evasion, heavy pension costs, and large deficits.

In May 1996, Hungarian authorities decided to create a mixed system with two mandatory pillars and one or more additional voluntary pillars. The first pillar will offer a basic pension to all eligible Hungarian workers and will be organized on a PAYG basis, while the second pillar will be a fully funded, privately managed, decentralized system based on individual capitalization accounts. The private pillars should boost economic growth by developing capital markets and removing distortions in labor markets.

Systemic reform faces two main regulatory challenges: whether to impose the mandate on individual workers or their employers, and how to build a mandatory pillar on institutions that have already emerged for the voluntary pillar.

Vittas suggests that a workable and promising compromise could be the use of a hybrid mandate combining an employer mandate with a right for workers to opt out and join an independent fund. Most other regulatory issues would apply with at least as much severity under a compulsory private funded pillar as under a voluntary one.

This paper — a product of the Financial Sector Development Department — is part of a larger effort in the department to study pension funds and contractual savings. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Priscilla Infante, room G8-115, telephone 202-473-7642, fax 202-522-3199, Internet address pinfante@worldbank.org. August 1996. (39 pages)

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**Financial Sector Development Department
The World Bank**

**PRIVATE PENSION FUNDS IN
HUNGARY**

**EARLY PERFORMANCE
AND
REGULATORY ISSUES**

Dimitri Vittas

I. INTRODUCTION AND SUMMARY OF FINDINGS

This paper reviews the early performance of private pension funds in Hungary and discusses some regulatory issues affecting them. It also addresses the regulatory implications of creating a mandatory "second" pillar. Because of the important role that insurance companies are called to play in a privately managed pension system, an annex to the paper reviews briefly the structure of the insurance sector and highlights the main features of its regulatory regime.

The paper does not discuss the issue of systemic pension reform. The Hungarian pension system suffers from the same problems that afflict most PAYG systems of Eastern European countries. These have been analyzed extensively in various Bank papers and reports¹ as well as in official Hungarian studies. The widespread problems in the region of: high system dependency ratios; low retirement ages; lax criteria for disability pensions; growing evasion; high payroll taxes; high levels of pension expenditures; and large deficits; also characterize the present Hungarian pension system. As in other countries, this expensive and inefficient system with distorted incentives also suffers from generally low pensions in both absolute and relative terms.

Faced with the challenge of an unduly burdensome pension system, the Hungarian authorities decided in early May 1996 to undertake a systemic pension reform. The plan is to create a mixed system with two mandatory pillars and one or more additional voluntary pillars. The first pillar will offer a basic pension to all eligible Hungarian workers and will be organized on a PAYG basis, while the second pillar will be a fully funded, privately managed, decentralized system based on individual capitalization accounts. The aim is to create a system that will protect the old and promote growth through its beneficial effects on the functioning of the labor market and the development of capital markets.

In Hungary as in other countries, the primary objective of pension reform is the provision of adequate but affordable and therefore sustainable pensions. The proposed multi-pillar system involves a diversification across providers and also aims to achieve redistribution through the public pillar and long-term capital accumulation through the private pillar(s). The latter will provide a major boost to the development of the capital markets and through them to economic growth, while the removal of distorted incentives will enhance the efficiency of the labor market.

The Hungarian authorities intend to submit to Parliament within the next few months a framework law that will set the basic structure of the new system and will underscore the irreversible commitment to complete the reform program. More detailed legislation and the implementing regulations will be finalized during 1997. These will fix the relative size and structure of each pillar and the multitude of design issues that arise in creating a multi-pillar system.

By reviewing the early performance of the voluntary private pension funds, this paper aims to make a constructive contribution to the resolution of the many regulatory issues that the reformers will face. Apart from assessing the financial performance of the funds, the paper also addresses two important questions: the nature of the mandate, i.e. whether the mandate for compulsory participation should be imposed on individual workers or their employers; and what should be the links between the proposed mandatory second pillar and the existing voluntary third pillar.

¹ See World Bank (1994, 1995), Fox (1994) and Vittas and Michelitsch (1995).

These issues are discussed in the fourth section of the paper. The next section focuses on the structure and performance of pension funds. Section 3 discusses various regulatory issues, including gaps and misconceived rules, and reviews some recent changes in regulations. As already noted, the annex looks briefly at the structure and regulation of the insurance sector. The remainder of this introductory section summarizes the main findings of the paper.

Structure and Performance

- * Despite the limited scope caused by the high payroll taxes, the early performance of the voluntary private pension funds has been encouraging and in many respects much better than expected. The financial performance, in particular, has been very promising with true investment returns well above the rate of inflation. However, there are several regulatory weaknesses, while the potential of the private pension funds will clearly remain limited without a systemic reform.
- * At the end of 1995, there were 179 private pension funds in operation with 180,000 members. The sector is highly fragmented with an average size of 1,000 members per fund. Pension funds accumulated 6.3 billion forints at the end of 1995, corresponding to 45 million US dollars or just 0.1% of GDP. The average fund size was 0.3 million US dollars, while the size of assets per member amounted to 260 US dollars. The total assets of pension funds at 6 billion forints compare with 60 billion forints for the 50 or so mutual funds and 150 billion forints for the 14 insurance companies.
- * The development of Hungarian private pension funds lagged considerably behind private pension funds in other countries like Argentina and the Czech Republic (both of which have been in existence for a comparable length of time). The higher participation rates in the other two countries is explained by special factors. In Argentina, participation is compulsory, while in the Czech Republic the offer of a credit transfer (government contribution) has stimulated participation by large numbers of small savers. Table 1 provides some comparative summary data.

Table 1

Comparative Summary Data

	Hungary 1995	Czech 1995	Argentina 1995	Chile 1994
Period since creation	2 yrs	2 yrs	18 months	14 yrs
No of Funds	179	42	21	21
Membership (million)	0.18	1.2	4.5	3.0
% Labor Force	5%	30%	50%	60%
Members per Fund (000s)	1	30	210	143
Total Assets (billion US\$)	0.045	0.150	2.5	22.5
% GDP	0.1%	0.3%	1.0	43.0
Assets per Fund (mn US\$)	0.300	3.6	110	1,100
Assets per Member (US\$)	260	125	550	7,500

- * The financial performance of the Hungarian funds was positive in real terms in 1995 because most of the investments were in Government bills and bonds. Most funds earned real rates of return of 3% to 5%, reflecting the level of returns on government securities. However, the reported nominal rates of return were mostly below the rate of inflation because of accounting

rules that force the pension funds to use book values and do not allow inclusion in the reported returns of unrealized capital gains and accrued but not received income. The operating costs of the pension funds were not very high, but the cost accounting data are far from comprehensive and many of the costs may be hidden. Thus, the operating costs were also understated.

Regulatory Issues of Existing Private Pension Funds

- * The regulatory framework of the private pension funds requires significant changes to enhance their efficiency, increase their transparency and strengthen their soundness. The rules in force at the end of 1995 did not require compulsory use of authorized custodian or of licensed asset manager. Moreover, the required capital cover for external asset managers, at 30% of assets under management, was unduly high.²
- * The accounting rules do not allow the use of market values ("marked-to-market" approach) and they thus prevent pension funds from operating as long-term mutual funds. They force them instead to resemble savings accounts. Valuation on "mutual fund" principles will allow more meaningful rates of return to be reported and will avoid penalizing workers who transfer their accounts.
- * The tax treatment for those who can afford to participate, and thus receive their compensation in deferred form, is very generous. Contributions are exempt from social security taxes, while participants enjoy a 50% income tax credit, up to 200,000 forints per year. This approach is more costly to the budget than a tax exemption regime (either EET or TEE³), while conferring no benefits to nontaxpayers. But it treats equally basic rate and high marginal rate taxpayers. A less costly approach that also provides incentives for participation to low income workers is called for.
- * Pension funds are not currently required to provide frequent statements to their members and information disclosure appears generally to be low. No guarantees for minimum levels of relative profitability are offered, while the role of the supervision agency needs to be strengthened.

Regulatory Issues of Systemic Reform

- * Most of the regulatory issues that arise in a voluntary pillar will also have to be addressed in a mandatory pillar, although many of them should be applied with greater severity in a mandatory system.
- * A major policy challenge in Hungary is to build the mandatory "second" pillar on institutions that have already emerged for the voluntary pillar. The nature of the mandate would have implications for authorization criteria, for pension fund structure, and for pension fund governance.

² The supervision agency has already proposed amendments to these rules to bring them in conformity with international standards.

³ Following standard terminology:
EET refers to Exempt contributions, Exempt investment income, Tax pensions.
TEE refers to Tax contributions, Exempt investment income, Exempt pensions.

- * A hybrid approach, imposing the mandate on employers but giving individual workers the right to "opt out" for independent funds, would probably be a workable compromise. This could allow a consolidation of the sector and continuation of many of the regulatory policies on the voluntary funds.
- * A mandatory pillar would have to ensure the legal segregation of pension fund assets from those of other participating institutions and the compulsory use of custodians and licensed asset managers. But it might also need to apply more rigorous minimum relative profitability rules and state guarantees and develop a more forceful supervision agency than would probably be required for a voluntary pillar.

II. THE STRUCTURE AND PERFORMANCE OF PRIVATE PENSION FUNDS

Private pension funds were first established in Hungary in 1994 under the Act on Voluntary Mutual Benefit Funds⁴. They experienced modest growth, especially in terms of membership, despite the limited room allowed by the very high level of social security taxes. Their growth owes much to the tax incentives, which include a 50% income tax credit and exemption from social security taxes. These have mostly favored upper income workers. Without a substantial restructuring of the existing public pension system, the scope for private pension funds will remain limited and will not reach middle and lower income groups.

Most early pension funds were set up by companies for their staff or by small groups operating on a mutual basis (similar in some sense to the concept of a credit union). Insurance companies were at first hostile to the creation of independent pension funds enjoying major fiscal advantages. But they have now changed their attitude. All leading insurance companies have either established a pension fund or are about to do so. Similarly, most large banks have also entered the market.

STRUCTURE

Types of Pension Fund. At the end of 1995 there were 199 mutual benefit funds in operation, of which 179 were pension funds with 180,000 members. The remaining 20, with less than 1,000 members, were set up for healthcare and mutual aid purposes. Membership of pension funds represents less than 5% of the active labor force.

There are four types of pension funds: company funds, which are generally set up by large companies to cover their employees; trade union funds, presumably covering trade union members in such industries as construction; professional funds, covering doctors, lawyers, etc; and geographical or open funds, aiming for broader membership. Some companies, especially financial institutions such as the OTP Bank, operate both a company fund and an open fund. In addition, as already noted, a few companies, including among large employers, MAV (railways), MATAV (telecoms) and MOL (oil and gas), have established pension plans under the insurance law through the creation of insurance associations. Although the law allows for the creation of defined benefit plans, according to the supervision agency all the funds are set up as defined contribution plans. (However, the MATAV fund is reported to have some defined-benefit elements.)

Membership. The distribution of pension funds by type of fund and total membership, but excluding pension plans set up as insurance associations, is shown in table 2.⁵

⁴ Prior to 1994, some companies created pension plans through insurance associations that were formed under the insurance law. These have many features in common with private pension funds. Private pension funds also existed in the pre-communist era but they were probably wiped out by hyperinflation and the advent of communism.

⁵ All the data have been provided by the supervision agency and refer to the end of 1995. Pension funds collect and submit a plethora of data that could be amenable to a very detailed and insightful analysis. The data used here mostly refer to the various types of funds with very little breakdown by size, performance, membership characteristics, or other components.

Table 2

	Number	Members
Open	120	77,000
Company	41	58,000
Trade Union	14	44,000
Professional	4	1,000
Total	179	180,000

Source: Supervision Agency

Membership of pension funds grew very fast during the last quarter of 1995 (Table 3), perhaps reflecting the impact of tax incentives. There was a further increase in the number of authorized funds in the first two months of 1996 and presumably also a further increase in membership.

The main increase in the last quarter was registered among open funds. Of the 76,000 new members, 42,000 joined open funds against 23,000 for company funds. Looking at it from a different perspective, nearly 60% of open fund members joined in the last quarter of 1995 as did 800 out of the 1,000 members of professional pension funds.

Table 3

	Total Membership	Change
Dec 94	13,000	
Mar 95	52,000	39,000
Jun 95	86,000	34,000
Sep 95	104,000	18,000
Dec 95	180,000	76,000

Source: Supervision Agency

For the sake of comparison, in the Czech Republic 42 pension funds have a total membership of over 1.2 million people (about 30% of the labor force). The offer of government credit transfers, which also benefit nontaxpayers, probably explains the greater reach of the Czech pension funds. In Argentina, where participation is compulsory for all workers, including the self employed, the total number of affiliates in 21 pension funds is 6 million people (about 55% of the labor force), while active contributors exceed 4.5 million (about 50% of eligible workers). The less than universal coverage is due to continuing widespread evasion. In Chile (1994), 21 pension funds have 3 million active contributors and 5 million affiliates (about 60% and 100% of the labor force)⁶.

⁶ The discrepancy between affiliates and active contributors in Argentina and Chile is largely explained by career interruptions due to unemployment and temporary withdrawals from the labor force, though evasion and strategic behavior may also be a factor. Similar discrepancies probably also characterize traditional public pension systems, but published statistics do not distinguish between affiliates and active contributors.

The average size of a Chilean pension fund is 143,000 active members. In Argentina, the average size is over 210,000 and in the Czech Republic nearly 30,000, but in Hungary it is only 1,000 members. This underscores the fragmented structure of the Hungarian pension fund sector.

Total Assets. Based on actual but unaudited data for 155 pension funds, total funds under management amounted to 6.3 billion forints (HUF), equivalent to about 45 million US dollars, at the end of 1995. This corresponds to 0.1% of GDP. The 24 funds that have not submitted their annual accounts are generally small open funds so that their omission from the following data should not have a big impact. (It is assumed in the following table that these 24 funds had a total membership of 7,000.) The assets of the 155 funds were distributed as follows by type of fund:

Table 4

	Total Assets (mn HUF)	Assets per fund (mn HUF)	Assets per member (HUF)	US\$
Open	2,107	21.9	30,100	215
Company	2,894	70.6	49,900	356
Trade Union	1,157	82.6	26,300	188
Professional	100	25.0	100,000	714
Total	6,258	40.4	36,200	258

Source: Supervision Agency

In terms of financial mobilization, the Czech pension funds have total assets in excess of 150 million US dollars (about 0.3% of GDP).⁷ In Argentina, after 18 months of operation, total pension fund assets have reached 2.5 billion US dollars (1% of GDP). In Chile (1994), after 14 years of operation, 21 funds had total assets of 22.5 billion US dollars (43% of GDP).⁸

The average asset size of the Hungarian pension funds is 300,000 US dollars against 3.6 million US dollars per fund in the Czech Republic, 110 million US dollars in Argentina and 1.1 billion US dollars in Chile. Nearly 50% of pension fund assets are held by the 10 largest Hungarian funds. This implies that the average size of the remaining 145 funds, for which data have been collected by the supervision agency, is only 20,000 US dollars.⁹

⁷ The data on the Czech pension funds are based on market estimates.

⁸ The recent performance of private pension funds in Argentina and Chile is respectively reviewed in Vittas (1996b and 1996c).

⁹ The 20 largest funds account for 60% of all assets. In terms of membership, the largest 10 funds (by asset sizes) have 35% of all members, while the 20 largest account for 50% of all members. The remaining 159 funds have 500 members per fund. Allowing for the usual skewness of the distribution, there must quite a number of funds that have less than 300 members.

Average Level of Assets per Member. Company funds show a higher level of average assets per member than open funds. This may be explained by two factors: first, company funds, which were set up earlier, may have a longer history of contributions; and, second, participants in company funds may benefit from more generous contributions from their employers than participants in open funds. This last point is confirmed by Table 5. Employer contributions represent 68% of total contributions in company funds but only 44% in open funds. Rather interestingly, employer contributions also account for 68% of total contributions in trade union pension funds.

Table 5

Structure of Revenues

	Open	Company	TU (mn HUF)	Prof	Total
Employee Contr	919	579	290	21	1809
Employer Contr	718	1540	611	18	2887
Donations	185	210	95	50	540
Additional Contr	144	76	160	1	381
Other Income	364	1082	149	153	1748
Total	2330	3487	1305	243	7365

Source: Supervision Agency

The low average level of assets by member at the end of 1995 confirms a very important aspect of pension reform: **Great Things Have Small Beginnings.** Very few people will remember in the future that after 24 months of operation, the average level of pension fund assets per member was around 260 US dollars. In Chile the average level of assets is well over 7,500 US dollars per active contributor. Argentina after 18 months of operation has about 550 US dollars per active contributor. In the Czech Republic the level of assets per member is only around 125 US dollars. This reflects the opening of accounts by large numbers of low income workers as a result of the credit transfer offered by the government.

The small start is an important feature that should be emphasized in order to allay the frequently voiced concerns that pension funds may overwhelm the underdeveloped capital markets. As already noted above, the assets of pension funds are only 6 billion forints against 60 billion forints for mutual funds and 150 billion forints for insurance companies. Over time pension funds are likely to outgrow these other institutions but as their assets will grow slowly but steadily, there will be plenty of time for a reforming government to modernize and help develop the capital markets. The potential for a dynamic interaction between capital markets and pension funds is a real one and should not be overlooked in discussions of pension reform.

Table 5 (in conjunction with Table 4) also shows that total revenues exceed total assets by about 1 billion forints. The difference is partly due to operating costs and partly to the fact that cashflow accounting seems to be followed: the entry "other income" also includes proceeds from sales of securities. In similar vein, total outflows include actual costs and payments for the purchase of securities.

Asset Allocation. Despite being authorized to place up to 60% of their assets in company shares, equity investments were less than 1% of total assets at the end of 1995. This is explained by the conservatism of asset managers and the thinness of the local equity market but it may also be related to the accounting rules for pension funds (see below). The vast majority of funds were invested in government bills and bonds, bearing market rates of interest in excess of inflation (28%) and thus earning a positive return in real terms. There was also a small investment in real estate.

Market Structure. The biggest pension fund in terms of members has been set up by MVM (the electricity company). Known as VIP, this had 21,000 members and nearly 630 million forints in assets at the end of 1995. However, the largest in terms of assets is the pension fund of OTP (the largest Hungarian bank), which had 13,000 members and nearly 1.1 billion forints in assets. Thus, the two largest pension funds account for 27% of total assets. OTP has a higher level of contributions (10% from employer and 2% from employees against respectively 4.5% and 1.5% for MVM).

Market sources indicate that the OTP pension fund collects 100 million forints a month, while the MVM pension fund collects 80 million forints. Other large funds include the pension fund for civil servants with 8,000 members and 40 million forints per month and the group of 30 or so pension funds administered by Sedgwick Noble Lowndes (the insurance broking and consulting actuaries group that operates as a fund administrator). SNL-operated funds have 10,000 members and 50 million forints per month. (These data do not include the pension plans set up by some very large employers in the form of insurance associations.)

Assuming that the above data are accurate (they are based on ad hoc comments from market participants), they imply membership of 53,000 members contributing on an annual basis 3.2 billion forints. They suggest a continuing large increase in the accumulation of pension fund assets, even if membership growth slows down. In fact, an open fund created by Aegon insurance company at the beginning of 1996 enrolled more than 4,000 members within the first two months of the year.

Pension fund growth benefits from two major effects: what is often called **the magic of compounding** and what may be called by analogy **the magic of contractual saving**. The magic of compounding has by far the biggest impact later in the life of pension funds when investment income on existing assets dominates the new inflow of contributions. But in the first few years of their operation, it is the contractual nature of pension saving that ensures a rapid acceleration of pension fund assets.

Mutual Associations and Financial Groups. The highly fragmented and atomized structure is due to the newness of the system and to the creation of mutual associations that often have a very small membership (sometimes of as few as 200 members or less). Small funds run by mutual associations do not benefit from economies of scale but they may achieve satisfactory results if they confine their membership to small and well defined groups. Such funds do not need to undertake large marketing campaigns and, being mutual, they do not need to charge large operating commissions to meet profit objectives. However, to protect the interests of their members, mutual associations should be required to have adequate capital backing and should be subject to effective supervision to ensure that prudential and fiduciary standards are observed. In this respect, it would be interesting to collect and analyze data

by type and size of pension fund to ascertain whether small mutual associations incur higher operating costs and achieve lower returns than the larger, more commercially organized funds¹⁰.

The banks, insurance companies and other large financial groups may enjoy some competitive advantages, in terms of marketing and operating economies of scale as well as greater capital backing. In the longer run, these size advantages should reduce the fragmentation that characterizes the sector at present, especially if different types of funds are treated equally from the regulatory and fiscal perspective and mergers among funds are not discouraged.

Commercial banks and insurance companies, after a slow start, have adopted an aggressive stance in the market, trying to combine and integrate various services by different entities of their groups. For instance, OTP Bank set up a specialized subsidiary known as OTP-Confidencia to act as fund administrator and asset manager. OTP-Confidencia runs the OTP pension fund as well as an open fund (known as Persely). It has also helped establish and manage another 3 pension funds set up for other groups. OTP-Confidencia is owned by OTP-Bank, OTP-Garancia and OTP-Brokers (respectively, the group's insurance and securities brokers subsidiaries). It uses OTP-Brokers for its securities transactions and operates a direct debiting system to collect contributions from members who have an account with OTP-Bank. Among insurance companies, Aegon, Hungaria and Nationale Nederlanden (the insurance subsidiary of the ING Group) have taken the lead in promoting pension funds.

Asset Management. Of the 179 pension funds, 33 have external asset managers. The rest, including some small open funds, self-manage their investments. Some of the big company funds, like the one set up by the electricity company MVM, also self-manage the investment of pension fund assets. External management is divided among 18 asset managers, of which 9 are brokers, 2 are banks and 7 are advisers. 11 pension funds use more than one asset manager. Apparently no license is required to act as asset manager of pension funds.

Fund Administration. Pension fund administrators are active in helping to set up pension funds. They offer all types of services to pension funds, including account maintenance, collection of contributions, payment of benefits, handling of relations with asset managers, preparation and submission of reports to regulatory authorities, etc. Insurance brokers and consulting actuaries, such as Sedgwick Noble Lowndes, ITCB and Bankar, play an active part as fund administrators but some of the banks (e.g. OTP Bank and Postabank) also provide a similar service through their pension fund subsidiaries.

¹⁰ The historical experience of mutual financial institutions in Europe and North America, such as credit cooperatives and credit unions, suggests that mutual associations operating pension funds can achieve satisfactory results as long as their membership remains small and well defined. As their size grows, mutual institutions become more like commercially-based entities and their operating characteristics become identical. Their mutual character becomes weaker, while their need for external capital to finance expansion and perhaps also diversification in other areas induces them to convert their legal status from mutual to that of joint-stock companies.

PERFORMANCE

Operating Costs. Detailed data on operating costs are not available. Existing rules require pension fund managers to indicate how contributions are allocated between benefits, operating costs, and liquidity. The basic rule is a 90:9:1 allocation whereby 90% of a monthly contribution is credited to a member's account, 9% is used to cover operating costs, and 1% is used for maintaining a liquidity reserve. In practice, there seems to be significant variation between types of pension funds (and presumably also among individual funds).

Open funds allocated on average during 1995 88% of contributions to member accounts against 91% for trade union funds, 93% for company funds and 96% for professional funds (table 6). Operating cost allocations absorbed 9% of contributions in open funds, around 6% in trade union and company funds, and 3% in professional funds.

Table 6

Allocation of Contributions (%)

	Member Accounts	Operating Costs	Liquidity Reserve
Open	87.9	8.9	3.2
Company	92.7	5.5	1.8
Trade Union	90.8	6.5	2.7
Professional	96.1	2.8	1.1
Total	91.1	6.6	2.3

Source: Supervision Agency

An average 7% allocation for operating costs appears to be substantially lower than in Chile where commission fees for operating costs (i.e. excluding premiums for term life and disability insurance) amount to between 15% and 20% of contributions. Hungarian pension funds place less emphasis on account switching and their operating costs do not include large selling expenses, although some use is made of selling agents for opening new accounts.

However, the allocation for operating costs in Hungary does not cover all costs and therefore comparisons with Chile can be misleading. Chilean pension funds adopt comprehensive cost accounting and highly transparent reporting. In contrast, several Hungarian pension funds, especially among the larger company funds, receive donations from their sponsors, while many types of costs (such as office rents, salaries for supervisory board members, and even some advertising costs) are not charged on the pension funds.¹¹ Thus, although operating costs in Hungary are probably lower than in Chile, the difference is unlikely to be as large as implied by the reported statistics.

¹¹ One of the closed funds established by a large institution for its employees is reported to operate with nil costs and to be completely subsidized by its sponsor.

Rates of Return. Most pension funds earned nominal rates of return in the region of 32% to 35%. With inflation running at 28%, these correspond to positive real rates of return of the order of 3% to 5.5%. As already remarked, this satisfactory performance emanates from the fact that most of the investments were in government bills and bonds which earned good real returns in 1995. The real returns to members were probably lower because of the deductions for operating costs and the liquidity reserve.

Data from the supervision agency covering 20 of the largest funds show, however, much lower **reported** returns. These were generally low, in some cases very low. Compared with an inflation rate of around 28%, only one fund indicated a reported nominal return higher than the rate of inflation. At nearly 45%, that fund achieved a reported real rate of return of 13%. One fund had a reported nominal return of 27%, 6 had reported nominal returns between 15% and 20%, 3 had returns between 10% and 15%, and no less than 9 funds had returns of less than 10%.

These published data on rates of return in Hungary understate the true level of returns on two counts. First, pension funds are not allowed to invest their funds in bonds and equities, but only in bank deposits, until they receive authorization.¹² This forced inactivity on the large number of new funds caused lower returns and affected the average published returns for the whole sector. Second, as already noted, pension funds are allowed to credit to member accounts only interest and dividend income received and realized capital gains. Neither accrued but still to be received income nor unrealized capital gains are allowed to be credited. Clearly, this accounting rule depressed reported returns. The supervision agency should collect data on the size of hidden revenues and calculate returns on the basis of market values. But as discussed below, a better approach is to move to a "marked-to-market" approach.

ACCOUNTING, VALUATION AND TAX TREATMENT

Revenue Accounting Rule. The implication of the revenue accounting rule is that pension funds are not operated like long-term mutual funds with a daily valuation and a "marked-to-market" approach but they resemble savings accounts with quarterly crediting of income. Income accrued during the year but not yet received is not therefore credited and this clearly understates the returns for the year. In addition, any appreciation in the value of securities (say of government bonds during a period of declining interest rates) is not included in reported returns. Some pension funds sell and immediately buy back some of their securities in order to convert unrealized into realized gains and be able to credit them to member accounts. It seems that such transactions (which tend to be handled by brokers belonging to the same financial group) do not incur any commission or other explicit transaction costs, but they cause a distortion in trading volumes.

The rule on revenue accounting is one of the reasons why pension funds have been reticent so far in investing in equities. The volatility in equity prices is another reason. Pension fund managers seem to be very sensitive to fluctuations in their returns and to large deviations from the average for all funds. International experience suggests that workers are unlikely to be highly responsive to return differentials, but what probably matters here is the perception of fund managers. Avoidance of equity

¹² When they receive authorization they can also invest in government bills and bonds, while when they reach 10 million forints in assets they are further permitted to invest in equities and other assets of classes III and IV. However, since nearly all pension fund investments were in government bills and bonds, this last restriction had little practical impact in 1995.

investments may also be explained by lack of familiarity and the underlying conservatism of both asset managers and pension fund members.

Net Asset Values and Mutual Funds. Moving to a "mutual fund" basis of operation and use of "net asset values" should not present major difficulties. There are already many investment funds in Hungary that calculate net asset values on a regular basis. There are 40 closed end investment funds with total assets of around 40 billion forints and these publish their NAV on a bi-weekly basis. Since the beginning of 1995, 12 open ended investment funds have been created, several of them as money market mutual funds, with total assets of around 20 billion forints. Open ended investment funds calculate their NAV on a daily basis. Most mutual funds invest in government bonds and treasury bills but about 10% of total funds are invested in company shares.¹³

Tax Treatment. A major issue affecting the functioning of pension funds is their tax treatment. In Hungary, the tax rules were changed in 1995, after only one year of operation. Frequent changes in tax rules may create unpredictability and uncertainty and should be avoided. However, a fair and not unduly costly approach that provides adequate incentives for participation to most workers needs to be adopted.

Initially, contributions to pension funds were deductible from income tax (and were also exempt from social security taxes) up to a limit of 500,000 forints per year. Investment income was tax free, while pensions were subject to income tax. The system was thus based on the EET approach. In 1995, the tax treatment was changed. A 50% income tax credit, up to 200,000 forints per year, was introduced in place of the tax deductibility, while contributions continued to be exempt from social security taxes. In addition, pensions became exempt from income tax.

This new approach is more costly to the budget than the tax exemption regime because the 50% tax credit exceeds the top marginal income tax rate of 44%. Thus, all participating workers benefit more under this system, although basic rate and high marginal rate taxpayers are treated equally. However, no tax benefits are conferred on nontaxpayers.

The new approach is similar for pension funds and life insurance companies, except that the rate and level of the tax credit are higher for pension contributions (50% up to 200,000 forints) than for life insurance premiums (25% up to 50,000 forints). To get the maximum tax benefit a worker must contribute 400,000 forints to a pension fund and 200,000 forints to a life insurance policy.

The new treatment gave rise to some tax anomalies and manipulation as older people could save for one year in a pension fund and then claim a benefit at the end of the year with considerable tax savings. To stop this abuse, new tax regulations were introduced that required 3-year membership for exoneration of pension benefits from tax or use of a "true" annuity, i.e. one involving regular payments

¹³ Some market practitioners as well as the supervision agency are concerned that use of market values in undeveloped capital markets that suffer from low trading volumes and lack of depth and liquidity may cause excessive volatility in reported returns. A temporary solution to this problem is to use written up or written down values, especially for government bonds which may be held to maturity. This approach, plus recognition of accrued but not yet received income, would go a long way toward correcting reported returns. However, the longer-term objective should be to adopt market valuations at the latest by the year 2000.

over a longer period rather than a "fake" annuity with heavily loaded upfront payments. This is a good example of how an ill-advised tax treatment may give rise to the need for complicated tax regulations to prevent abuse.

Supervision Agency. The supervision agency is called to play a crucial part in the success of private pension funds. At present, the agency employs over 30 employees, about half of which are professional economists, lawyers, actuaries and computer specialists. The agency collects a considerable amount of statistical data, undertakes off-site analysis of submitted reports, and conducts on-site inspections, often with the help of consultants (actuaries, auditors and accountants) from the private sector. The agency faces some problems in recruiting and retaining skilled and experienced professionals because it has to follow the general civil service salary scale. Currently, it is financed from an allocation from the general departmental budget, but in the future it will be financed from fees levied on the regulated pension funds. The supervision agency maintains a very close consultation with representatives of the private pension funds, but it needs to improve the dissemination of information on the performance of the funds and to promote greater transparency in order to better safeguard the interests of workers.

CONCLUSION

While private pension funds face many regulatory and structural issues and while their growth is stymied by the high level of social security taxes, it is clear from this brief analysis that their early performance was very encouraging. Their financial returns were very promising, although reported rates of return were distorted by the current accounting rules which seem to grossly understate the true rates of return.

The record of private pension funds during their first two years of operation provides a strong reassurance that given a more favorable economic and fiscal environment, they could develop to play a major part both in pension provision and in capital market development in Hungary. Membership is likely to register a further big increase in 1996, especially in response to the entry into the market of most large banks and insurance companies, while total assets under management are likely to more than double during 1996 (a result of the contractual nature of pension fund saving and of the continuing growth of membership). But the full impact of private pension funds will not be felt until the planned systemic reform of the pension system, involving a restructuring and downsizing of the public pension pillar, is implemented.

III. REGULATORY ISSUES OF EXISTING SUPPLEMENTARY PRIVATE PENSION FUNDS

This section discusses briefly some regulatory issues affecting the private pension funds that now operate in Hungary. It provides a summary of the regulatory framework that was in force in 1995 and then offers a brief analysis of regulatory issues that needed to be addressed. In 1996, the Hungarian authorities took two measures that aim to improve the regulatory regime of voluntary private pension funds: they enacted some amendments to the basic law on voluntary mutual benefit funds and they prepared a government decree modifying the 1994 decree regarding the operating and investment rules of mutual benefit funds. This section highlights the main changes effected by these measures.

THE REGULATORY FRAMEWORK IN FORCE IN 1995

Private pension funds are governed by the Act on Voluntary Mutual Benefit Funds, which also covers funds set up for healthcare and mutual aid purposes. The act was approved by Parliament in November 1993 and became effective in January 1994. The main provisions of the Act cover the following:

Mutuality. Pension funds are set up as mutual associations by at least 15 natural persons on the basis of a common employer or a professional, sectoral or regional link. They are legal persons and are run as non-profit organizations. (This provision probably explains why some pension fund representatives are hostile to the idea of allowing commercial banks and insurance companies to play an active part in establishing and managing private pension funds.) Every fund member is an owner of the Fund and has the right to inspect the books. Each fund member has one vote at the Annual General Meeting, which elects the Board of Directors and the Control Committee.

Contributions. Contributions or membership fees must be a uniform amount or a certain proportion of income for all members. Employers can also contribute (either in fixed amounts per employee or a certain proportion of income). They have voice, but no voting rights, in the general meeting. Employers who cover at least 50% of contributions have voting rights in the Control Committee. Employers may also make donations to the fund, which can be used for specified purposes (to cover operating costs, create a liquidity reserve, or provide benefits).

Allocation of Contributions and Benefits. Contributions are divided into three reserves: benefits; operating costs; and liquidity reserves. Contributions allocated to benefits (coverage reserve) are collected in individual accounts. They are used to pay benefits. The minimum waiting period to withdraw the accumulated contributions and the credited investment income is ten years, unless a member reaches retirement age or dies before the completion of the waiting period. Withdrawals may be in the form of a lump sum payment or an annuity. Pension funds offering annuities must conduct actuarial reviews and must create the required reserves to support such business.

Fund Investments. The fund's assets must be invested in the sole interest of its members. Moreover, funds are only allowed to invest their own assets to avoid conflicts of interest.¹⁴ Funds may use up to two custodians for the safekeeping of their securities and may appoint an external asset manager

¹⁴ This ensures that pension funds cannot operate as asset managers for others. The assets of the pension fund are legally separate and are not allowed to be commingled with the assets of any other undertaking.

for investing their assets. Custodians are required to supervise the external asset managers used by the funds. Custodians must be institutions authorized to offer custodial services but external asset managers do not require a license. External asset managers must, however, provide financial security, in the form of a bank guarantee, insurance policy or specified assets, equal to 30% of the book value of fund assets under management. Pension funds may allocate up to 45% of their uninvested assets to one broker.

Risk Classes. Investments must be divided among different forms to reduce the risk for the fund and its members. Investments are classified in four risk classes. The first class consists of cash, bank deposits of less than one year, and state securities of less than one year (treasury bills). The second class comprises longer-term government and central bank bonds, mortgage bonds, and longer-term bonds issued by international organizations. The third class includes listed equities and corporate bonds, including bonds guaranteed by financial institutions. The fourth class covers unlisted shares, loans to members, and real estate.

Investment Limits. Pension funds are required to invest at least 10% in liquid instruments and at least 30% in class II assets. Investments in class III and IV assets cannot exceed 60% and 30% respectively of total assets. Loans to members may not exceed 5% of the assets of the fund or 30% of the accumulated balances of the member. In addition, funds may not acquire more than 10% of an undertaking and may not invest more than 10% of their own assets in an enterprise which is affiliated with an employer member. At most 20% of fund assets may be invested with the same issuer (except for government bonds) and at most 20% of fund deposits may be held in the same financial institution.

Guarantees. There are no legal guarantees for minimum pensions or minimum returns. The law provides for the possibility of establishing one or more guarantee funds by one or more federations of pension funds. These could compensate members against fraud or losses of accumulated balances. No such guarantee fund has been established so far. The law also provides for the possibility of creating one or more benefit equalization funds, though again none has been created thus far.

Account Switching. The operations of pension funds are governed by their statutes. These must provide, among other things, for the termination of membership and for the transfer of accounts to other funds. The law does not allow any discrimination against future members as long as they meet the specified membership criteria. The terms of transfers are dictated by the accounting rules.

Accounting Rules. Pension funds are required to report their assets at book value. Moreover, only income received and realized capital gains are allowed to be credited to member accounts. These suggest that pension funds resemble "saving accounts" and are not operated like "long-term mutual funds". Such accounting rules have implications for the computation and reporting of rates of return and for the value of transferred accounts.

Information Disclosure. Pension funds are required to send statements to their members once a year. The statements should show the credits from contributions posted on the accounts, the allocations to the operating and liquidity reserves, the investment income credited to the member accounts, and the accumulated value of balances. Members have the right to ask for information on their accounts at any time.

Tax Treatment. Initially, pension funds were subject to the EET regime (Exempt contributions, Exempt investment income, Tax pensions) with a limit on allowable contributions (500,000 forints per year). Pension fund contributions were also exempt from social security taxes. The tax treatment was

changed in 1995, partly to satisfy the insurance lobby, partly to allow benefits to be tax free. The new regime offers a 50% tax credit (up to an annual amount of 200,000 forints) but exempts from tax both investment income and benefits. However, to prevent abuse of the system by older people, a 3-year membership or use of a "true" annuity are required for the tax exemption of benefits.

Supervision. Pension funds are supervised by a specialized agency that is responsible for vetting their annual accounts and financial plans, issuing and revoking licenses, approving mergers or splits of funds, and proposing regulations or amendments to the law. The supervision is also responsible for inspecting the accounts and operations of pension funds and ensuring that they comply with the provision of the law and its implementing regulations.

DEFICIENCIES AND SHORT-TERM AMENDMENTS

Deficiencies. The regulatory framework governing the operations of the voluntary private pension funds seems to suffer from several deficiencies. The supervision agency is well aware of these problems and various working parties have been discussing solutions to them. Some amendments to the law have already been enacted, while other issues are under active discussion by working groups with broad private sector participation. At the time of revising this paper (May/June 1996), a proposed government decree modifying some operating and investment rules has been drafted and is expected to be enacted soon.

Short-Term Amendments. The amendments that have already been enacted cover the following areas:

- (i) Allowing greater flexibility to mutual benefit funds to select their membership base. Funds will no longer have to be organized on the basis of workplace, occupation, sector of economic activity, or region.
- (ii) Aligning the retirement age of private pension funds to that prescribed for the public pension system (this amendment would allow withdrawal of benefits free of tax on retirement and not on reaching age 60 for men and 55 for women as before--benefits withdrawn prior to retirement will be subject to income tax as under the current law);
- (iii) Clarifying the definition of the basic and additional monthly contributions and of the obligations of workers and employers;
- (iv) Introducing various measures to promote healthcare funds (including the creation of individual accounts, similar to the medical savings accounts that are currently discussed in the US, allowing healthcare funds to operate health facilities, allowing healthcare and mutual aid funds to be operated as part of one common fund, etc).

A change that was widely discussed but was not in the end included in the proposed amendments concerned the treatment of operating costs. Under the current law and regulations, gross investment income received has to be credited to member accounts without any deduction of expenses. The latter are to be covered by the regular cost allocation from contributions. However, over time operating costs may exceed the cost allocation. The proposal discussed was to allow deduction of expenses from gross investment income and crediting net investment income to member accounts. The change in the treatment of costs may be reconsidered as part of the longer term amendments discussed below.

OTHER REGULATORY ISSUES

Many issues are under discussion or are raised as concerns by pension fund representatives. These include the use of custodians and licensed asset managers, the required 30% capital cover guarantee, changes in accounting rules, tax treatment, information disclosure and transparency, and the role of the supervision agency. The changes envisaged in the draft government decree are indicated at the end of the section.

Use of Custodians and Auditors. Many pension fund managers argue in favor of making compulsory the use of custodians for the safekeeping of securities belonging to pension funds. At present (end of 1995), pension funds may use a custodian but are not required to do so. This change is of paramount importance as it will help prevent any fraud similar to the Maxwell affair in the UK. Ideally, each fund should use one authorized custodial institution, which should also be responsible for managing its operational account.

The need to compel the use of authorized custodial institutions for the safekeeping of securities and for executing transactions on the instructions of asset managers is heightened by the fragmentation of the sector and the presence of a large number of small funds based on mutual associations with limited capital resources. The fragmentation makes supervision more difficult and costly, and thus custodial institutions could play a useful role in exercising some oversight over the investment activities of pension funds. But custodians should not be expected to refuse settlements when particular transactions cause a pension fund to exceed the prescribed limits. Rather, custodians should be expected to notify the supervision agency, which should then initiate corrective actions.

Even if the sector was more consolidated, compulsory use of custodial institutions would still be highly advisable in order to minimize the risk of fraudulent transactions by asset managers. To ensure objectivity and consistent compliance with the regulations, custodial institutions should not belong to the same financial group as asset managers.¹⁵ Custodial institutions should be authorized by the central bank, the banking supervision agency, or the securities supervision agency.

Pension funds should also be subject to independent audits. Professional auditors would be expected to verify the truthfulness and fairness of accounting data and reports. Following modern practice, they could also be required to inform the Control Committee of a pension fund as well as the supervision agency on major problems with regard to asset valuations, adequacy of reserves, and compliance with rules.

Any change of custodian or auditor should be notified to the supervision agency within a reasonably short period. The supervision agency should also be empowered to seek and obtain additional information from custodians and auditors.

Use of Licensed Asset Managers. In similar vein, many pension fund managers argue in favor of licensing asset managers (presumably by the securities markets supervision agency) and requiring

¹⁵ It is appreciated that such a drastic rule may be difficult to implement in countries where the financial system is dominated by a few conglomerate groups. In such cases, requiring all transactions to be transparent and to be effected at market terms and conditions may be all that can be hoped for to minimize the incidence of self-dealing and abuse of conflict-of-interest situations.

pension funds to use one or more licensed asset managers. Licensed asset managers could be either authorized specialized companies or qualified individual experts that are employed full time by a pension fund. Licensed asset managers would presumably enhance the risk-adjusted investment returns of the pension funds by applying more professional techniques of investment and being better informed. They would not necessarily improve the security and protection of pension fund assets.

At present (end of 1995), use of licensed asset managers is voluntary. Compulsory use of licensed asset managers will likely raise the operating costs of pension funds, with a probable disproportionate effect on the smaller funds. Large pension funds, especially those set up by large employers, may be able to hire on a full-time basis individuals licensed as investment managers, but smaller funds will probably have to use the services of specialized companies. But the importance of ensuring prudent and professional investment management of available assets argues in favor of imposing the compulsory use of licensed (internal or external) asset managers.

Level of Required Capital Cover. A major issue seems to be the lowering of the level of required capital cover or bank guarantee that is imposed on external asset managers. Asset managers are currently required to provide financial security in the form of safe assets (i.e., treasury bills) or a bank guarantee for an amount equal to 30% of assets under management. This is inordinately high and no asset manager appears to have complied with it, although those connected with banks may have provided a comfort letter.

In Chile the required level of equity investment reserves (encaje) is set equal to 1% of pension fund assets. This was initially set at 5%, but it was reduced very early to its present level when the authorities realized that a 5% requirement was too high and prohibitively expensive. In Argentina the investment reserve requirement is set at 2% and in Mexico it is proposed to be equal to 2.5%. The investment reserves are invested in the same assets as the pension fund and not in safe (but low yielding) securities as is required in Hungary. A recent change in Chile requires investment reserves to be invested in the units of the pension fund (thus ensuring a convergence of the interests of the managers with those of the pension fund).

The level of required capital cover for external asset managers should not exceed 1% of assets under management, with a minimum capital requirement of 10 million forints. Pension funds should also be allowed to use as many external asset managers as they see fit. If custodial arrangements are limited to one institution as described above, then having several external asset managers would not pose particular problems, while it would allow the use of specialized investment expertise.

Change in the Revenue Accounting Rule. The current accounting rule, whereby only received income and realized capital gains can be credited to member accounts, distorts reported real rates of return, causes unnecessary transactions (as managers sell and buy back securities to realize capital gains) and is responsible for the operation of pension funds on "saving account" rather than "mutual fund" principles. It may also complicate transfers of balances between pension funds, generally discouraging asset switching out of funds with a "hidden surplus" and encouraging switching into such funds.

The use of a "saving account" approach was arguably appropriate at the start of the new system, given the lack of familiarity of the public with the operation of mutual funds. But the recent growth of mutual funds and the evident problems caused by this accounting rule suggest that changing it to require daily valuation of pension fund assets may be advisable now. This will allow the operation of pension funds along mutual fund lines with daily net asset values per fund unit or quota. It will also permit the

computation of economically meaningful total real rates of return and will avoid complicating account transfers.

As already noted, there are concerns that market values may be highly volatile in underdeveloped capital markets. A temporary solution to this problem could be to use written up or written down values, especially for government bonds which may be held to maturity. But the longer-term objective should be to adopt market valuations not later than the year 2000.

Rationalizing the Tax Treatment of Pension Funds. Most pension fund managers favor the establishment of a broadly acceptable and stable tax treatment that should be decided in an integrated way in conjunction with other decisions affecting the tax system and especially personal income taxation (PIT). Frequent changes in tax treatment may cause significant uncertainty in the market.

The preferred approaches internationally are the EET regime (which exempts contributions but taxes benefits) or the TEE regime (which taxes contributions but exempts benefits). The TEE has cashflow advantages for the budget since no tax income is lost upfront, but provides weaker incentives to workers to participate in voluntary pension funds.

A third alternative (which is now used in the Czech Republic and Australia and may also be introduced in Mexico) would be to offer a government contribution (credit transfer) to pension members **instead of** either a tax credit or tax exemption.¹⁶ The CET regime would be more redistributive than the other approaches since it would also benefit nontaxpayers. In addition, it would offer a strong incentive to low and middle income workers, irrespective of whether they pay income tax, to save for their retirement.¹⁷ As in the case of Australia, payment of the credit transfer could be gradually phased out for workers with above average earnings. Of course, the budgetary cost and affordability of a credit transfer system would need to be carefully assessed.

An objection against the use of credit transfers is the argument that it would also subsidize tax evaders. Tax evasion is a major problem in developing and transition countries. Countries need to take various measures to combat evasion, such as better inspections, use of imputed income and wealth for assessing tax liability based on observable and objective consumption criteria, etc. It would seem, however, inappropriate to allow the problems caused by tax evasion to prevent use of an otherwise desirable tax instrument.

The credit transfer could be limited to active workers and could be paid only to those workers who save a specified percentage of their income and who do not withdraw their balances until they retire. These rules would prevent the receipt of credit transfers by complete tax evaders. (In the Czech Republic penalty-free withdrawals are permitted after 15 years while no minimum specified percentage of salary

¹⁶ A credit transfer would be like a negative income tax. It is called a credit transfer because it would be paid into the retirement saving account of workers and could not be withdrawn before retirement. See Vitas (1996a) for a fuller discussion.

¹⁷ A CET approach, applied strictly, would penalize high income taxpayers, who would be making contributions from after tax income, but would be paying income tax on their pensions. A way to overcome this problem would be to subject to income tax only that part of the pension that derives from the investment income earned.

is required to be saved.) As the credit transfer would be added to the individual retirement saving account of each worker, the CET regime would generate a higher level of long-term financial resources than a tax treatment based on deductibility.

Lump Sum Payments and Annuities. At present, accumulated balances in an account with a pension fund can be paid either as lump sums or in the form of annuities. Moreover, such payments can be made after ten years of saving (or on retirement if it occurs earlier). To ensure, however, that pension funds increase the income of retirees, it would be desirable to permit withdrawal of balances only on retirement and to require that at least 80% of balances should be used to buy an appropriate form of life annuity.

Currently, the regulations allow pension funds to offer life or term annuities, provided they set up adequate reserves and conduct actuarial reviews. Any offer of annuities should be subject to the same regulations as the annuity business of insurance companies. However, it is difficult to see how smaller pension funds can acquire the underwriting expertise to offer annuities on their own. It would be much better and safer to require smaller pension funds to purchase annuity products from authorized insurance companies or at least to purchase appropriate reinsurance cover.

Information Disclosure. Currently, the information available on pension funds is quite limited. Account statements to members are sent once a year. There is little public awareness of patterns of contributions, investment returns, portfolio allocations, regulatory safeguards, etc. In addition, advertising does not seem to be subject to any rules regarding objectivity and comparisons with other funds.

Ideally, individual account statements should be sent three or four times a year. The expense of more frequent statements is not that high and the benefits from greater information and transparency will clearly outweigh the costs. Real rates of return should be calculated and publicized regularly, while information should be provided to members on the adequacy of their accumulated balances. Fund comparisons in publicity material should follow a clearly specified format to avoid any misleading claims or statements. More information should be disclosed on important aspects of the functioning of pension funds and more publicity should be given to both their achievements and their weaknesses. Regulatory issues should be discussed and debated very widely to inspire confidence in the transparency of the system.

Guarantees. As already noted, no guarantee funds or benefit equalization funds have been created so far, even though the possibility of establishing them is provided in the law. Guarantees against fraud or insolvency are important and the terms and conditions for their establishment should be examined. Minimum return guarantees, especially if they are expressed relative to the average of all pension funds, may offer protection to unsophisticated investors. However, no guarantee fund should be created until the authorities are satisfied with the effectiveness of supervision.

Role of Supervision Agency. The supervision agency needs to publicize the development of the sector with detailed quarterly reports and a full annual report. Ideally, the reports should also be published in English in order to enhance international awareness of the operations of pension funds in Hungary and of their potential contribution to the development and modernization of the Hungarian capital markets. It should give prominence to the safeguards it provides to both active and passive members of pension funds. Inspections and examinations must be strengthened and any violations of rules and imposed sanctions should be widely publicized.

The quarterly and annual reports of the supervision agency should publish data on the performance, real returns, operating costs, commissions and other fees, asset allocation, and other features of individual pension funds and should analyze the data by various fund characteristics (type of fund, size, management structure, etc.). Data on the performance of external asset managers and custodial institutions should also be published.

MAIN PROVISIONS OF PROPOSED DRAFT DECREE

The draft decree effects several changes to the operating and investment rules of pension funds. The following summarizes the main provisions. The changes represent major improvements in the regulatory framework. They underscore the extensive consultation between the regulators and market practitioners and confirm the long-term benefits from a dynamic interaction between them.

Custodians. The proposed draft decree will make compulsory the use of one custodian institution for pension funds with more than 20 million forints in assets. Moreover, the custodian will be required to monitor the observance of investment rules and to inform both the pension fund and the asset manager (as well as the supervision agency) of any deviations from the rules. But the custodian will not be required to reverse transactions that give rise to such deviations. To ensure objectivity and independence and avoid conflict of interest situations, any direct or indirect cross-ownership between custodian institutions and external asset managers will not be allowed to exceed 10% of the respective equity capital. Pension funds must inform the supervision agency within 15 days of the hiring or termination of a custodian.

Asset Managers. The proposed draft decree will not make compulsory the use of qualified (internal or external) asset managers. However, external asset managers will be required to employ at least one qualified person. External asset managers will be subject to the same direct or indirect cross-ownership limits as custodians. There will be no limit on the number of external asset managers. However, the allocation of investment business between brokers will be subject to an upper limit of 25% of investable assets per broker. Thus, pension funds that do not use external asset managers will be required to use at least four brokers for conducting their investment operations.

Required Capital Cover. The 30% capital cover or financial security requirement will be abolished. No capital cover related to the assets under management will be imposed, but external asset managers will be expected to have a minimum capital of 20 million forints. The complete absence of a capital cover requirement is probably due to the absence of a minimum (absolute or relative) profitability requirement.

Accounting Rules. No basic change is envisaged in the accounting rules. However, the supervision agency is collecting better and more detailed data on the investment performance of pension funds and is holding discussions with pension fund representatives on this issue. It is accepted that data on hidden revenues and reserves must also be collected and reported. However, there is a reluctance to move to market value accounting because of concern about the volatility of market prices in the local capital markets. As noted above, such concern is understandable. A temporary approach based on clear valuation models that will be used by all pension funds may be acceptable. However, the longer term objective should be the adoption of market value accounting, with appropriate valuation models for assets that are not traded actively.

Tax Treatment. The draft decree does not address the tax treatment of pension funds. This is clearly an important budgetary issue and should be covered by tax legislation as part of broader tax policy.

Lump Sum Payments and Annuities. The draft decree clarifies some aspects relating to the offer of annuities but does not change the rules regarding lump sum payments and does not require smaller pension funds to purchase annuities from insurance companies or to obtain appropriate reinsurance cover.

Portfolio Classes. The draft decree changes the terminology from risk classes to portfolio classes to allow for differences in risk and liquidity between various instruments. Four portfolio classes continue to be provided and the overall limits are unchanged. However, some changes in the composition of portfolio classes will be effected. For instance, investment funds specializing in treasury bills (class I) or government bonds (class II) will be classified in the same respective class. Two major changes concern permission to invest up to 20% of assets in securities of OECD countries as well as permission to use derivative products traded in Hungarian exchanges with a contract value up to 20% of total assets.

CONCLUSION

This brief discussion highlights the range and importance of regulatory issues facing the voluntary supplementary private pension funds. Some corrective measures are more urgent than others, but in general all the topics listed in this brief review should be acted upon without much delay. The proposed decree covers most of the urgent issues.

The majority of regulatory issues would also be relevant, perhaps more so, in the event that a mandatory funded pillar was created as part of a systemic pension reform. It is very encouraging that there is extensive consultation between the regulators and market practitioners and that the regulatory framework has been substantially improved even before the implementation of systemic reform.

The early performance of the pension funds and the constructive response of the supervision agency provide a strong indication that the concerns that are often expressed about the ability of the Hungarian pension funds, capital markets and regulatory infrastructure to implement a systemic pension reform are exaggerated.

IV. REGULATORY ISSUES OF SYSTEMIC REFORM FOR PRIVATE PENSION FUNDS

The merits and demerits of different approaches to systemic reform have been discussed in other Bank papers and reports as well as in proposals put forward by various Hungarian authorities. This section focuses on the regulatory implications of creating a mandatory funded private "second" pillar and on the potential linkages with the existing voluntary funded private "third" pillar.¹⁸

Most of the regulatory issues identified in the preceding section will have to be addressed, irrespective of whether the Hungarian authorities implement a systemic reform of the pension system. But a systemic reform involving a downsizing of the unfunded public "first" pillar and creation of a mandatory funded private "second" pillar will also have additional implications for regulatory policy.

The regulatory implications can be divided into two groups: those that will depend on the nature of the mandate, in particular whether the mandate is imposed on the employer or the individual worker; and those that will require greater severity in design and application but will otherwise be similar to the regulations that are applied on a voluntary "third" pillar. There are also some regulatory issues that should be applied with equal severity, irrespective of whether a scheme is mandatory or voluntary.

The philosophy of regulation and its reliance on draconian and restrictive rules will also be a major factor in shaping the regulatory structure. Much of the discussion that follows is based on the presumption that the authorities will aim to ensure that pension plans are fully vested, fully funded and fully portable. Such predilection would discourage companies from offering defined benefit schemes and it is thus presumed that the vast majority of pension funds would offer defined contribution plans.

NATURE OF THE MANDATE

Perhaps the most important issue regarding the creation of a mandatory funded private pillar is the nature of the mandate. Is the mandate imposed on employers, as has been the case in Switzerland and more recently Australia and Hong Kong, requiring them to establish a pension scheme for their employees? Or is the mandate imposed on the individual workers as is increasingly the case in Latin America, where new reforming countries appear to have followed the precedent set by Chile?

An employer mandate seems to be a natural evolution from company-based occupational pension schemes, which probably explains the choice made by Switzerland, Australia and Hong Kong. With an employer mandate, small firms tend to rely on financial institutions (mostly insurance companies) to run their pension schemes, but large ones create and run in-house schemes. Self-employed workers are not usually subject to compulsory participation, but are offered the same tax incentives to establish voluntary pension plans.

A worker mandate is closer in concept to the use of long-term mutual funds. Its adoption in Latin American countries mainly reflects the underdevelopment of company-based schemes rather than any predilection in favor of mutual funds. The desire to emphasize personal responsibility and individual capitalization accounts probably explains the choice made in Chile in the early 1980s.

¹⁸ The numerical terminology of pillars follows the emerging pattern of the debate in Hungary and other Central and Eastern European countries. It is not a very satisfactory and clear terminology and it does not correspond to prevailing practice in OECD countries.

The nature of the mandate has implications for the authorization criteria of pension funds, the structure of pension funds and pension fund governance. But as already noted, regulatory philosophy is also a very important determining factor.

Authorization Criteria. The first question is who should be authorized to run a pension fund and what criteria should be satisfied.

In the United States, where there is neither an employer nor a worker mandate for a "second" pillar,¹⁹ employers are authorized to set up pension schemes on a voluntary basis provided they meet some basic scheme rules. All workers, but especially those who do not participate in company schemes, are also encouraged by tax benefits to save for their retirement with existing financial institutions. No special authorizations are required and financial institutions offering retirement accounts are not compelled to maintain segregated assets for these accounts. Individual workers can place their retirement savings with banks, insurance companies, or mutual funds and can have multiple accounts. They are responsible for making investment decisions and for maintaining tax records. Financial institutions offering tax-advantaged retirement savings accounts must report contributions and withdrawals to the tax authorities.

In Latin America, where the mandate is on individual workers, only specially authorized institutions are allowed to operate pension funds. Authorization criteria include a minimum capital, a "fit and proper" test, and maintenance of adequate investment reserves. Banks and other financial institutions are usually authorized to establish such specialized subsidiaries, but other groups, such as trade unions, employer associations, or even individual employers, may also do so. The assets of the pension fund are legally separated from the assets of the pension fund management company. Individual workers are required to place their pension saving with one of the pension funds run by these specialized companies and have the right to switch their accounts among these companies. There are two main philosophical reasons for this approach in Latin American countries: compliance and transparency. The pension funds are operated as mutual funds with daily market valuations (marked-to-market), again for transparency reasons and to facilitate account switching.

In countries with employer mandates, any employer can be authorized to establish a pension fund, often in the form of a trust or foundation. The trusts or foundations are managed by a board of trustees that usually consist of employer and employee representatives. The trustees are responsible for selecting the asset managers and for running the pension fund. The assets of the pension fund must be kept separate from those of the sponsoring employer. There are minimum conditions that need to be observed, but otherwise employers may offer more generous benefits, including defined benefit pensions. Small employers usually employ insurance companies or other financial institutions to run their pension schemes. Individual workers do not have the right to switch pension funds, except when they change employment.

In Hungary, the voluntary "third" pillar is based on mutual associations that can be set up by employers, trade unions, professional associations, financial institutions, or any other group of people (at least 15 persons are required to establish an association). The associations are legal persons and are

¹⁹ All workers, including the self-employed, must participate in the social security system ("first pillar"). Company schemes may offer benefits that are integrated with social security pensions, but such integration is not required by law. Unlike the UK and some other countries, no contracting out is allowed from the public pillar.

run as non-profit organizations. Their assets are legally separated from those of their sponsors. Individual workers have the right to switch from one association to another. It is not, however, clear whether they can receive the employer contribution if they do not participate in the scheme sponsored by their employer. In practice, participating workers join the funds sponsored by their employer or trade union, if one has been set up, and one of the open funds, otherwise.

One of the challenging issues facing a systemic reform in Hungary is how to build a mandatory pillar on institutions that have already emerged for the voluntary pillar. If a worker mandate is imposed, the mutual associations may have to be re-authorized. Perhaps a minimum capital requirement would have to be imposed, maintenance of adequate investment reserves required, and passing of a more strenuous "fit and proper" test expected (these are part of the "greater severity" argument for mandatory schemes). A worker mandate for the "second" pillar would likely lead to mergers and consolidation of the sector as the institutions with more capital backing would be able to spend more on advertising and other publicity material and would be able to attract workers from other funds, especially if their investment performance turned out to be superior.

The implications of an employer mandate would probably be different. More large employers would be induced to establish their own schemes, while small employers would use the services of financial institutions. The structure of the pension fund sector would probably remain fragmented and more of the currently operating associations would be allowed to continue in existence.²⁰

One way to achieve a compromise between the two approaches would be to impose an employer mandate but to give individual workers the right to opt out of the employer-sponsored scheme and join one of the independent funds, set up by financial institutions or other associations. If this hybrid approach is adopted, employers should not be allowed to discriminate in any way against "opting out" workers, but the workers themselves would have to base their decision on whether the uncertain prospect of possibly higher investment returns under a non-employer scheme would outweigh the near certainty of higher operating costs (since large employer schemes are likely to benefit from economies of scale and group discounts).

A hybrid regime of this kind is currently contemplated in Australia. An alternative hybrid approach is under consideration in Chile. This would involve a worker mandate but with a provision for group contracts that would allow for group discounts and lower operating costs. Again an employee that is not happy with the performance of a group contract would be free to leave the group and join the same or another company on an individual basis. The higher operating costs of individual contracts would imply that few workers would opt out of group contracts, but having such a right would exert pressure on funds operating with group contracts to perform well and achieve satisfactory net investment returns. The two alternative hybrid approaches would have different starting points but would otherwise represent a convergence toward a structure that allows for scale economies and group discounts while protecting the rights of individual workers.

One approach that should **not** be entertained is the creation of a completely new structure of institutions that would confine existing associations to the voluntary "third" pillar. Such an approach

²⁰ More mutual associations would be able to continue operating under the worker mandate if special, less onerous capital and other requirements are imposed on small associations with limited and well defined membership.

would be ill-advised and would generate considerable hostility from a group that should otherwise favor the creation of a mandatory "second" pillar. The same institutions should be allowed to participate in the second and third pillars, perhaps with a requirement to maintain separate accounts for the two pillars (though this may not be necessary for people who make additional voluntary contributions to their "second" pillar accounts).

Pension Fund Structure. The second issue concerns the implications of the nature of the mandate for the structure of pension funds.

Starting again with the United States scene, voluntary company pension schemes are required to meet design rules that specify non-discrimination among workers. These can be very complicated and burdensome. For defined benefit plans, they imply similar contribution rates on employees and similar benefit formulas. Since employers assume the investment risk in defined benefit plans, the organization of the pension fund is a company decision, except that adequate funding of actuarially assessed pension obligations may be required. Required funding levels will have implications for the investment and asset allocation policies of the pension fund. Companies operate one pension fund for all covered employees and workers have no choice of fund.

In company-sponsored defined contribution plans, American companies used also to operate one fund for all covered workers, but increasingly companies offer a choice of fund and even individual instruments. The investment risk is assumed by the workers, though companies provide education and guidance to familiarize workers with market opportunities and promote better informed investment decisions. When employees set up their own accounts, they may place their retirement savings in several accounts and decide the allocation of their funds on an individual basis. It is important to emphasize that employers are reluctant to offer investment advice (because they may find themselves liable for losses) but they do offer education promoting better investment decisions.

In Chile and most other Latin American countries, pension regulations have imposed the "one account per worker" and "one fund per company" restrictions. The rationale for these restrictions is to keep the system simple, to verify compliance, and to encourage transparency. The restrictions are supported with a "non-discrimination" pricing rule that requires pension fund management companies to treat all workers equally. These rules have come under criticism from observers and students of the Latin American pension reforms.

The "one account per worker" rule is criticized because it forces workers to place all their pension savings with one company. Multiple accounts per worker would allow a diversification of company risk, although an unlimited number of accounts would tend to complicate the verification of compliance (a major issue in most mandated schemes). Allowing two or three accounts per worker may be a feasible compromise solution, once the mandatory pillar and supervisory capacity are well established.

The "one fund per company" rule is criticized because it does not allow companies to offer funds that are tailored to the different investment needs of young and old workers. In response to these criticisms, Chile is currently considering the introduction of a second fund per company that would be wholly invested in fixed income securities. A similar provision is likely to be included in the forthcoming Mexican pension reform. It is expected that the new funds would appeal to workers near retirement who may want to protect the value of their balances from the greater fluctuation of equity prices.

The "one price" rule is also criticized because it does not allow pension fund management companies to offer loyalty discounts. The absence of loyalty discounts and the employment of large numbers of aggressive selling agents have contributed to a very high proportion of account transfers (in Chile, account transfers reached one-third of all active accounts in 1994). The result has been an inflation of operating costs in Chile and other Latin American countries. Lower operating costs could also be achieved if group discounts are offered under worker mandates.

In countries with employer mandates, companies are required to operate one fund for all covered workers. Since account switching occurs only when workers change employment, selling costs are minimal. Selling costs are incurred by financial institutions competing for the business of small employers, but these are much smaller than those experienced in Latin America. But employer-based schemes restrict individual choice and run the risk of inadequate investment returns, although transparency and regular information disclosure could minimize that risk.

In Hungary, current regulations also include the "one account per worker" and "one fund per mutual association" rules. The main rationale seems to be simplicity and transparency and avoidance of discrimination among different workers. This could happen if companies are allowed to create several funds and encourage some workers (say senior executives) to join the better performing funds. There is also a problem associated with the allocation of securities among different funds. Ideally, the allocation of securities must be effected at the time the transaction (purchase or sale) is undertaken, but fund managers may fail to observe this rule and may discriminate in favor of one or other of the funds under their management.

If a mandatory "second" pillar is created in Hungary, it is likely that it will continue to apply the "one account per worker" and "one fund per association" rules and to discourage discrimination among members of a pension scheme. Creating a hybrid system, such as an employer mandate with an individual right to "opt out" to a non-employer scheme, would probably allow for the effective use of group discounts without worker discrimination. As already discussed above, it would probably also allow for a gradual consolidation of the sector and the natural integration of existing voluntary "third pillar" pension funds into the mandatory "second" pillar.

Participating Institutions and Fragmentation. At this point it is worth noting the several types of institutions will be participating in a mandatory pillar. In addition to sponsoring employers, these would include the pension funds, administrators, custodians, auditors, asset managers, insurance companies, and banks. Fragmentation may occur at different levels. Under an employer or hybrid mandate there could be tens of thousands of pension funds (in the United States there are nearly one million pension funds). Although this would imply a large fragmentation of the sector, it would not matter much because under an employer mandate the pension funds would in most cases be little more than record-keeping entities. From an operational point of view it is the structure of the asset management sector that would matter most, followed by those for custodians, auditors and insurance companies. Thus, continuing with a large number of pension funds and mutual associations would not lead to a large increase in costs if asset managers and the other types of institutions operate in consolidated but contestable (i.e. competitive) industries.

In worker mandates, there is a tendency for the pension fund sector to become overly concentrated with potentially adverse effects, not only in excessive profits by the pension fund management companies but also in excessive influence and market power in corporate affairs. In Chile, the top five pension funds control 75% of total pension fund assets. This level of concentration is several

times higher than what is observed in the United States and other OECD countries with large pension fund sectors. Although asset managers are more concentrated than pension funds in OECD countries, their concentration is very small by comparison to what is observed in Chile or Argentina.

Pension Fund Governance. The third issue that emanates from the nature of the mandate is the governance of pension funds.

In employer-sponsored schemes, with or without an employer mandate, pension funds are established as trusts or foundations and are governed by a board of trustees. The trustees may be appointed by the sponsoring employer and may include a number of representatives of active (workers) and passive (pensioners) members, but legislation may impose worker representation through trade union officials or more likely through election by workers and pensioners. A majority of trustees is usually reserved for the representatives of the sponsoring employer. In some cases, the trustees representing employees are elected by the respective categories of members. The rights and responsibilities of trustees vis-a-vis sponsoring employers, covered members, and the regulatory authorities have been increasing over time. A growing emphasis is being placed on selecting trustees with professional knowledge.

In countries with worker mandates, the corporate governance of pension funds does not arise. The pension fund management companies are set up as joint stock companies with their own shareholders, board of directors and corporate governance structures. They are often listed on the local stock exchanges and are required to abide by the provisions of company law of their country. Pension funds are legally separate from the management companies. Pension fund members (affiliates) have no say in the running of the companies or the selection of assets. As customers, they have the right to "vote with their feet" and transfer their business elsewhere, and they also are entitled to adequate disclosure of information. Similar considerations apply in the case of the voluntary individual retirement arrangements in the United States.

In Hungary, the mutual associations that operate voluntary pension funds have an elaborate governance structure. Members are entitled to vote the Board of Directors and the Control Committee, while sponsoring employers when they provide at least 50% of the regular contributions have voting rights in the Control Committee. However, having a right to vote does not necessarily mean that it will be exercised. The experience with mutual financial institutions in European and Anglo-American countries (US, UK, Canada, Australia, New Zealand and South Africa) is that only in very small mutual associations do members take an active interest in the affairs of the association and vote regularly. If the associations grow above a certain size, members perceive them as any other type of financial institution and see themselves as ordinary customers with perhaps a somewhat elevated degree of loyalty.

If a mandatory "second" pillar is introduced, based on employer, worker or hybrid mandates, the mutual character of the associations running the pension funds may need to be changed in favor of a capital and governance structure that would be more in line with the realities of the marketplace. However, small pension funds (in terms of membership) could be allowed to operate as mutual associations. Thus, the introduction of a mandatory "second" pillar may require a significant adaptation of rules of pension fund governance but without precluding existing institutions from participating in the new pillar. However, the details of any changes in governance rules would clearly depend on the form that the new mandatory "second" pillar would take.

RULES OF EQUAL OR GREATER SEVERITY

There are many regulatory aspects that are of equal or greater importance when a mandatory "second" pillar is created. Three that can be regarded as of equal importance are the requirements for asset segregation, custody, and asset management. Other issues where regulations of greater severity may be required when a mandatory pension pillar is involved include investment and valuation rules, transparency and information disclosure, state guarantees, and supervision.

Asset Segregation. Whether they are voluntary or compulsory and whether they take the form of trusts, foundations, mutual associations, or specialized pension fund companies, the segregation of the assets of the pension funds from those of their sponsoring employers, asset managers, or custodial institutions is of paramount importance. The assets of the pension funds must be legally separate, should belong to their members, should not be attachable, and should not be affected by any financial losses or other infringements of other institutions. In OECD countries, the ownership of pension fund assets may be disputed. For instance, if large companies operate defined-benefit pension schemes and those schemes show a surplus of assets over the actuarially ascertained pension obligations of the funds, there may be a contention about the legal ownership of the surplus assets. But in defined contribution schemes, such issues should not arise and thus the legal ownership of assets should be clearly vested with the members.

Custody. As already noted, custodial arrangements are very important for combatting fraud and for safekeeping the securities belonging to pension funds. Ideally, each fund should be required to use one authorized custodial institution, which should also be responsible for managing its operational account. Moreover, to ensure objectivity and consistent compliance with the regulations, custodial institutions should not belong to the same financial group as external asset managers. Custodial institutions should be authorized by the banking or the securities markets supervision agency. The draft decree imposes compulsory use of one custodian for pension funds with over 20 million forints in assets. It also places some limits on direct or indirect cross ownership between the pension fund, the custodian institution, and the external asset manager (if any). In small countries where a few conglomerate groups may dominate all segments of the financial system, such limits may not be practical. In these circumstances, requiring any transactions with related parties to be effected at market terms and conditions may be the only feasible solution, however difficult it may be to police self-dealing and enforce compliance with such rules.

Asset Management. To ensure professional management of assets, pension funds should be required to hire either licensed individual experts on a full-time basis or specialized companies that are licensed to offer external asset management services. Asset managers should be authorized by the securities markets supervision agency. External asset managers should be required to have a minimum capital of 20 million forints (as suggested in the draft decree) or 1% of assets under management. The latter would be essential if a requirement for a minimum relative profitability or for benchmark portfolios (see below) is introduced. Pension funds should also be allowed to use as many external asset managers as they see fit. If custodial arrangements are limited to one institution, having several external asset managers would not pose particular problems, while it would allow the use of specialized investment expertise.

Investment and Valuation Rules. Investment and valuation rules need to be stricter under a mandatory pillar in order to protect the large numbers of unsophisticated and inexperienced investors who will be forced to participate in the system.

Investment rules should emphasize profitability and safety. This means allowing pension funds to seek the highest returns in the market, but requiring them to diversify their asset holdings in order to avoid excessive concentration of risk. In several OECD countries, the "prudent man" rule is used. This allows fund managers to set their own investment guidelines. This approach seems appropriate when employers operate defined benefit schemes and assume the investment risk of the funds. In defined contribution schemes, relying on the "prudent man" rule may be less effective, as workers assume the investment risk and may not have the information and expertise to monitor the investment performance of different funds.

Investment rules setting maximum limits on different classes of assets have worked quite well in countries like Chile. To be effective, such rules must be flexible and adapted in line with the growing maturity of pension funds. Thus, any limit on equity investments should be revised upwards as the pension funds grow in size and become more mature and the capital markets are modernized and become more efficient.

A perennial question facing regulators of pension funds is whether to permit investments in overseas securities. The argument in favor of overseas investments is to permit a diversification of country risk and also to seek suitable investments for the placement of available funds. The argument against is that allowing investments overseas would deprive the domestic markets from valuable long-term financial resources and would thus weaken the modernizing influence that pension funds may have on the domestic markets. A workable compromise here is to allow overseas investments once accumulated pension fund assets reach a given percentage, say 20%, of GDP.

The current investment limits in Hungary seem sensible, given the state of development of pension funds and the domestic capital markets. The 30% minimum requirement for investment in class II securities could in the not too distant future be relaxed and replaced with a much higher maximum one, while the allowance of investments in OECD securities (up to 20% of assets) would probably be an adequate limit for many years to come. Encouraging the development of mortgage-backed and other asset-backed securities as well as specialized mutual funds (see below) would also be highly desirable.

There are two aspects of investment rules that are essential, whatever the approach on investment limits. First, investments should be effected, as far as possible, through organized exchanges and in listed securities. Any exceptions should be subject to clearly stipulated limits. Loans to members should be avoided, even if they are subject to low limits compared to accumulated balances. This is because pension funds may have difficulty in charging market rates of interest on such loans and in ensuring their timely repayment. Second, there should be clear limits in exposure to individual issuers of securities. For example, holding of equities or bonds of any one issuer should not exceed 5% (or at most 10%) of the total assets of the fund or 5% (or at most 10%) of the total value of securities of a given issuer. This limit avoids excessive concentration of risks and close involvement with any one company and should also apply to securities issued by the sponsoring employer of a fund.

Valuation rules should require assets to be "marked-to-market" on a daily or at most a monthly basis. Using listed securities through organized exchanges would facilitate market valuation. For assets that do not trade on organized exchanges (such as real estate), pension funds could be required to use a valuation model developed by the supervision agency. Such models could be based on the traditional "moving average" valuations used by accountants for nontraded assets. Although market values are subject to continuous, and sometimes large, fluctuations, using them is better than book values which may result in large deviations from the true value of various assets and the creation of hidden reserves. If

reserves are to be used for smoothing out large fluctuations in market values, they should be set up in an open and transparent manner, as for instance in the case of the profitability fluctuation reserves that are used in the pension fund systems of Chile and other Latin American countries.

To minimize the valuation problems caused by assets that are not actively traded on organized exchanges, investment rules could subject direct holdings of such assets to very low limits and could encourage use of traded specialized investment funds (such as real estate investment trusts, venture capital funds, or infrastructure funds) to facilitate indirect investments in such assets. Use of specialized mutual funds could also be advocated as a means of offsetting the natural bias of pension funds to invest in the securities of the state or large corporations. The financing of small firms, new ventures and large infrastructure projects could be greatly encouraged through such vehicles.

Minimum Profitability and State Guarantees. A mandatory "second" pillar implies a stronger obligation on the authorities to ensure that the system is simple, fair and safe. Minimum profitability rules and state guarantees aim to protect small and unsophisticated investors, not only from fraud and manipulative exploitation by pension fund managers, but also from large disparities and fluctuations in returns.

Minimum profitability rules vary considerably among countries. In most OECD countries, where funded pension schemes are still voluntary, there are no rules on minimum rates of return, even when the pension funds operate as defined contribution plans and workers assume the investment risk. In Switzerland, which has a mandatory "second" pillar, a minimum nominal rate of return of 4% is imposed on the funds. However, expressing a minimum return in nominal terms is not very satisfactory. It can be very costly if inflation is very low, and especially when prices are falling, and it is meaningless when inflation is out of control. Singapore also has a guaranteed nominal rate of return of 2.5%.

Expressing the minimum rate of return in real terms would provide more meaningful protection to individual workers, but it would not be advisable as it could expose a guarantee fund to large payments in years when stockmarkets register negative real returns. The fiscal cost of a guaranteed real rate of return could be prohibitive.

Latin American countries have opted for guaranteeing relative rates of return. Pension fund management companies are required to make up any shortfall in returns if these fall below the average return for the sector by a specified percentage. In Chile, the minimum rate of return, which is expressed in real terms, is equal to 50% of the average return, while in Argentina, where it is expressed in nominal terms, it is equal to 70% of the average. (For symmetric purposes, any returns in excess of 150% of the real average in Chile or 130% of the nominal average in Argentina are placed in a profitability fluctuation reserve.) In both countries, the rule is applied on a 12-month rolling basis. Pension fund management companies are expected to make up any shortfalls in returns by using first the profitability fluctuation reserve, if one has been created, and then their investment reserves (*encaje*). If these are exhausted, the companies are required to provide new equity to make up any remaining shortfall and reconstitute their investment reserves. If any company fails to make up the shortfall and refuses to provide additional equity from external funds, it is liquidated, the government makes up any remaining shortfall, and the workers transfer their accounts to another company of their choice.

Minimum relative profitability rules tend to cause pension funds to follow uniform investment policies, as small funds cannot afford to deviate too much from the investment profiles adopted by the large companies. To respond to this criticism and allow more flexibility in investment policies, the

Chilean authorities are considering changing the application of the rule to a 36-month rolling basis. Given that pension contracts are long-term contracts that can span up to sixty years, moving from an annual to a three-year, or even a five-year, guarantee would still provide adequate effective protection to affiliates.

The criticism that investment policies become uniform under a minimum profitability rule is sometimes exaggerated. Even without such a rule pension funds tend to bunch their investments in similar instruments. The rationale for such herding behavior by pension funds seems to be the reluctance of asset managers to underperform the market since the price for underperformance may well be the loss of business. A minimum relative profitability rule would protect investors from aberrant fund managers, without necessarily causing inefficiencies in investment policies.

This issue remains unresolved. One alternative to minimum relative profitability rules, which could have more appeal in advanced countries, could be to require management companies to spell out clearly their investment policy at the beginning of each year and to be liable for making up any shortfalls that might result from deviating from this policy. The use of benchmark portfolios and detailed investment guidelines may be a better approach to the current situation in developed countries where the only constraint facing fund management companies is the loss of business and the potentially adverse impact on their reputation. However, these penalties would occur after the event and would offer no consolation to retiring workers who may have suffered large losses from the failure of fund managers to comply with their own investment guidelines.

As already noted in the preceding section, the Hungarian law on private pension funds makes reference to the possibility of setting up benefit equalization funds. These go beyond minimum profitability guarantees and may aim to compensate for differences in contribution amounts or in contribution periods. But any such attempts should be resisted as redistributive objectives should be addressed under the public "first" pillar.

Apart from guaranteeing the minimum relative profitability of pension funds, the authorities may also need to guarantee annuity payments for old age pensions as well as for term life (survivors) and disability pensions of failed insurance companies. Upper limits may be imposed on the amounts of these guarantees, but especially in mandatory systems where benefits are required to take the form of monthly pensions (rather than lump sum payments), such guarantees are essential. Annuity payments subject to specified limits are guaranteed in both Chile and Argentina. The government stands behind these guarantees but insurance companies are tightly regulated and supervised to ensure that they have adequate reserves and to minimize the likelihood of insolvency.

Transparency and Information Disclosure. Transparency and information disclosure are of paramount importance for all kinds of pension funds, but especially so for mandatory ones. Latin American countries, following the precedent set by Chile, have adopted very extensive and strict rules on information disclosure.

In Chile, the pension fund management companies are required to report daily to the supervision agency their investment transactions and to submit monthly reports on their financial position and overall performance. They are also required to send three times a year account statements to their affiliates, disclosing the last four monthly contributions paid by employers, the financial performance of the pension fund, the accumulated balance on the account, and the rate of return.

Similar rules apply in other Latin American countries. In contrast, in most OECD countries pension funds are required to submit annual reports to the supervisory authorities and to send annual statements to their affiliates. The same approach is followed in Hungary. Such infrequent reporting may not be adequate. It does not ensure transparency and, as annual reports are often submitted with long delays, the supervisors, the affiliates and the sector lack up-to-date information on the performance of the funds.

It is not clear why disclosure rules should be less demanding in the case of trusts, foundations, or mutual associations. Disclosure requirements should be very demanding even when employers offer defined benefit schemes, assume the investment risk, and stand behind the pension funds. But for defined contribution schemes, where the investment risk is assumed by the workers, the need for adequate transparency and information disclosure would be higher, irrespective of the exact legal form of the entities that manage the pension funds.

Another issue concerns rules on advertising. Without consistent standards on advertising, pension fund management companies may tend to emphasize their performance over short periods, especially if they are favorable to them. Rules on advertising could aim to facilitate performance comparisons by requiring disclosure of returns over a pre-specified set of terms (3 months, 1 year, 3 years and 5 years) and comparison with the average for the sector.

Annuity Products. The underdevelopment of annuity products and the insurance market is often a source of concern for those who advocate pension reform and the creation of a funded pillar based on defined contribution plans with individual capitalization accounts. It is also a source of criticism by those who oppose such pension reform proposals. However, as in the case of the underdeveloped capital markets, this concern is often exaggerated. Annuity markets will evolve over time in response to the growing needs of pension funds. The presence of many large international insurers in the Hungarian market promises a smooth evolution of the market and quick transfer of financial technology and of particular products that have worked well in other countries.

Given a favorable regulatory and competitive environment, insurance companies are likely to develop several types of annuity products, ranging from the traditional whole life nominal annuity (where the monthly payment is fixed in absolute terms and is paid until the death of the annuitant) to real life annuities (i.e., annuities that are linked to prices and the rate of inflation), variable life annuities (i.e., annuities that are linked to the value of mutual funds), joint and last survivor annuities (i.e., those that make payments to the named beneficiary--usually the spouse--following the death of the main annuitant); term certain annuities (i.e., annuities that make payments for a guaranteed number of years even if the annuitant dies before the end of the specified period); and deferred annuities (i.e., annuities that start payments after a specified period). Pension funds may also offer what is known as scheduled or programmed withdrawals. These are similar to variable annuities except that they do not insure workers for their whole life so that payments may stop if a worker outlives the balances on the account.

Experience from OECD countries suggests that retiring workers will opt for a combination of annuity products, dividing their balances between a variable, a real and a nominal annuity. They will almost always use the term certain, joint and last survivor type of product since this provides the greater protection to dependents and heirs. It is also likely that financial markets will develop products that will be able to cope with the fluctuations in stock market prices, which are a more legitimate cause for concern.

Supervision. As is clearly indicated in this paper, a mandatory pension pillar must be subject to a host of regulations in order to ensure its safety and fairness to all affiliates. A strong supervision agency is required to ensure compliance with these regulations and to protect taxpayers from large fiscal costs when pension funds fail.

The supervision agency should be responsible for authorizing new pension funds, after verifying their satisfaction of authorization criteria. It should be empowered to review the business plans of new pension funds and to ensure that managers and major stakeholders meet the "fit and proper" test. It must receive regular reports to verify the continuing compliance of pension funds with all existing regulations. It should develop valuation models and establish financial standards for the determination and reporting of financial results by pension funds. It should be empowered to liquidate pension funds that are unable to comply with the regulations.

The supervision agency should also oversee the range and quality of services offered to affiliates, in particular the maintenance of individual accounts, the crediting of contributions and investment income and the regular dispatch of individual statements. This function could be assumed by an "ombudsman" office to whom workers and pensioners could turn when they have problems with their treatment by a pension fund.

An important function of the supervision agency is to publish regular reports and disseminate information on all pension funds (on at least a quarterly basis). These should include data on the performance of individual pension funds and should highlight the protections and safeguards offered to workers and the results of inspections (especially any sanctions imposed for violations of rules).

To be able to discharge its duties, a supervision agency should have clearly stipulated intervention powers. It should be staffed with skilled and experienced staff and should be equipped to conduct, efficiently and effectively, both off-site surveillance and on-site inspections. Its budget could be met by assessments on the regulated institutions, although to prevent abuse of its position, its budget should be subject to ministerial approval, after consultation with the association(s) of pension funds.

CONCLUSION

The regulatory structure of the mandatory pillar varies considerably across countries, reflecting the historical evolution of pension systems and differences in the social and political concerns of different countries. This brief reviews highlighted some of the more important regulatory issues. The solutions that are likely to be adopted in Hungary will clearly reflect its social and political priorities. Some regulatory issues will apply with equal severity, whether the funded pillar is mandatory or voluntary. Others will depend on the particular form that will be given to the compulsory "second" pillar.

THE STRUCTURE AND REGULATION OF THE INSURANCE SECTOR

Insurance companies are called upon to play a central part in the operation of decentralized private funded pension systems. If the system is based on voluntary plans that are usually sponsored by employers, or if the system is mandatory and the mandate is imposed on employers, insurance companies play a big part in running pension schemes for small employers. If the mandate is imposed on the worker and specialized institutions are established for managing pension funds, insurance companies take the lead in setting them up and are major shareholders (often in association with banks) of such companies.

Depending on how a pension system is structured and what benefits are offered by the public and private pillars, insurance companies may become extensively involved in offering annuity products as well as term life and disability insurance. In Latin America, insurance companies have been one of the main beneficiaries of systemic pension reform.

This Annex offer a brief overview of the structure and regulation of the insurance sector in Hungary. Although the development of insurance business lags behind that of most OECD countries, the Hungarian authorities have laid the foundations that will foster a sound and rapid growth of the sector.

The most noteworthy features of the Hungarian insurance sector at this point probably are: the extensive opening of the market to foreign participation; the adoption of a modern insurance law that follows the European Union model and places considerable emphasis on solvency monitoring; and, on the negative side, the retention of regulations requiring the prior approval of products and premiums for life insurance and for some lines of nonlife business until the end of 1998.

STRUCTURE OF THE SECTOR

Hungary has allowed foreign insurance companies to enter the domestic market and take majority stakes in existing companies or set up new companies, often in cooperation with Hungarian financial institutions. In fact, 11 out of the 14 authorized insurance companies had majority foreign ownership in 1994. The exceptions were OTP-Garancia, which is majority owned by OTP, the savings bank, ATLASZ, and the Hungarian Export Credit Insurance Company (MEHIB --a specialized company owned by the state). Four of the companies were 100% foreign majority owned (AB-Aegon, Nationale Nederlanden, Generali and Colonia). Over 75% of the capital of insurance companies was held by foreign companies. In addition to the 14 insurance companies, there were also 19 insurance associations and over 110 insurance brokers.

Total premium income amounted to 88 billion forints in the first nine months of 1995, corresponding to an annual total of 117 billion forints and up from 94 billion forints in 1994. This corresponds to 2.2% of GDP, a level that puts Hungary among countries in the Middle East and North African regions but well below the levels reached in the more advanced OECD countries. Life insurance premium accounted for 28% of total premiums in 1994. This is close to the low end of the experience of OECD countries (Italy, Portugal, or Greece).

The total assets of the insurance sector amounted in 1994 to 147.8 billion forints. Of these, 55.6 billion forints are represented by holdings of financial securities. The largest company in terms of assets was AB-Aegon with 65.7 billion forints, followed by Hungaria with 34.9 billion forints. 2 companies

had assets of over 11 billion forints and the rest were below 10 billion each. Aegon is the largest company in life insurance business, while Hungaria dominates nonlife business. Thus, in terms of total premiums, Hungaria has a larger market share than Aegon.

Because of high acquisition costs and some inherited problems, the insurance sector has suffered net operating losses over the past few years. Accumulated losses amounted in 1994 to nearly 31 billion forints but the net capital position of the sector as a whole was over 23 billion forints or over 15% of total assets. Hungaria reported a deficiency in its solvency margin in 1994, but the performance of the sector has been improving fast. With the volume of business expanding at a remarkably high rate, the insurance sector is expected to improve its financial strength considerably over the ensuing few years.

REGULATORY FRAMEWORK

The passage of the new insurance law in 1995 created a modern and robust framework for the insurance sector. The new law is based on the European Union (EU) approach, emphasizing solvency monitoring, but there are also some differences. For instance, product and premium regulation, in particular the requirement for prior approval by the supervision agency, will continue until the end of 1998 for life business and some lines of nonlife business. In a well regulated and supervised market with adequate solvency margins and sound actuarial reviews, substantive regulation of this kind is unnecessary and uneconomic. In addition, the law applies tight investment limits on insurance reserves. The "prudent man" rule and risk-based capital requirements have not been introduced yet. Finally, the law does not allow permanent residents to buy insurance overseas.

The law requires a separation of the accounts of life and nonlife business. Existing companies must separate the accounts and reserves of their life and nonlife business within a year from enactment of the new law (though they are not required to create separate subsidiaries), but new companies are only allowed to operate in one or other subsector. The minimum capital requirement is split into two components: organization and security capital. The organization capital requirement is 100 million forints for joint stock companies, 50 million forints for insurance cooperatives (mutuals), 1 million forints for insurance associations, and 100,000 forints for specialized insurance associations.

In addition, joint stock life insurance companies must have a security capital of 250 million forints, while nonlife companies must have a security capital ranging between 150 and 350 million forints, depending on the nature of the lines of insurance offered. Security capital requirements are lower for other types of insurance companies. Thus, the minimum capital is 350 million forints for life business and between 250 and 450 million forints for nonlife business. In the view of local experts, these capital requirements are on the low side, while major concern is expressed about the even lower requirements imposed on insurance companies that are not set up as joint stock companies.

The minimum solvency margins follow the pattern adopted in the EU. For nonlife business the solvency margin is related both to retained premiums (18% for the first 1 billion forints and 16% for any premiums above this level) and to retained claims (26% for the first 750 million forints and 23% for any claims above this level). The retention ratio that is taken into account for calculating the solvency margin cannot be lower than 50% (i.e. the reinsurance ratio cannot exceed 50%), while retained claims are either the 3-year or the 7-year average depending on the type of business (short or long tail). The higher of the two margins must be observed. The main solvency margin for life insurance is equal to 4% of the mathematical reserves for own and accepted reinsurance business multiplied by the retention ratio, which

cannot be lower than 85%. A lower margin is applied for short term business and on that part of life contracts for which mathematical reserves have not been constituted yet.

The investment limits imposed on the reserves of insurance companies are generally reasonable, although progress toward adoption of the "prudent man" rule would be advisable in the longer term. The limits require that at least 30% of reserves are invested in state bonds, including securities issued by the central bank. Other assets are subject to upper limits. Thus, no more than 25% can be placed in bank deposits; no more than 20% in real estate or real estate funds; no more than 10% in (each of) listed shares; securities issued by the pension and health insurance self-governments; and securities issued by public utilities; and no more than 5% in (each of) securities issued by local governments, mortgage bonds, and unlisted shares.

In addition to meeting the minimum capital requirements, all new insurance companies must submit their business plan for approval and must employ in addition to a chief executive officer, a senior actuary, a senior legal adviser, a chief accountant, and an internal auditor. Insurance associations with less than 100,000 forints in annual premiums may hire external experts. Insurance companies must also use an external auditor. Any changes in these appointments must be notified to the supervision agency within 30 days.

The actuary is required to certify the adequacy of reserves and solvency capital, the correctness of premium calculations and the allocation of investment income, while the internal auditor is required to certify compliance with both internal and legal regulations and to send its reports to both the board of directors and the supervision agency. External auditors must notify the chief executive officer if legal rules are violated. They may request a consultation with the supervision agency if no corrective action is taken and they must provide information to the supervision agency if requested to do so.

The supervision agency has broad powers of inspection and intervention. But before taking any decisions to refuse a license, impose a fine, withdraw authorization or start liquidation proceedings, it must consult with the Insurance Supervision Committee, which consists of 4 independent experts appointed by the Minister of Finance, the competent deputy secretary of the Ministry, and 2 representatives of insurance companies. No bankruptcy proceedings are admissible against insurance companies and thus only the supervision agency has the right to start liquidation proceedings against an insurer. In discharging its duties the supervision agency may contact directly foreign supervisors. Its operations are financed by a supervision fee of 0.1% of annual premiums levied on insurance companies.

This brief review of the regulatory framework shows that Hungary has enacted a modern insurance law and has invested the supervision agency with broadly adequate powers. To be effective, the regulatory and supervisory framework requires the employment of skilled and experienced staff and the political will to apply the rules equitably and consistently.

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