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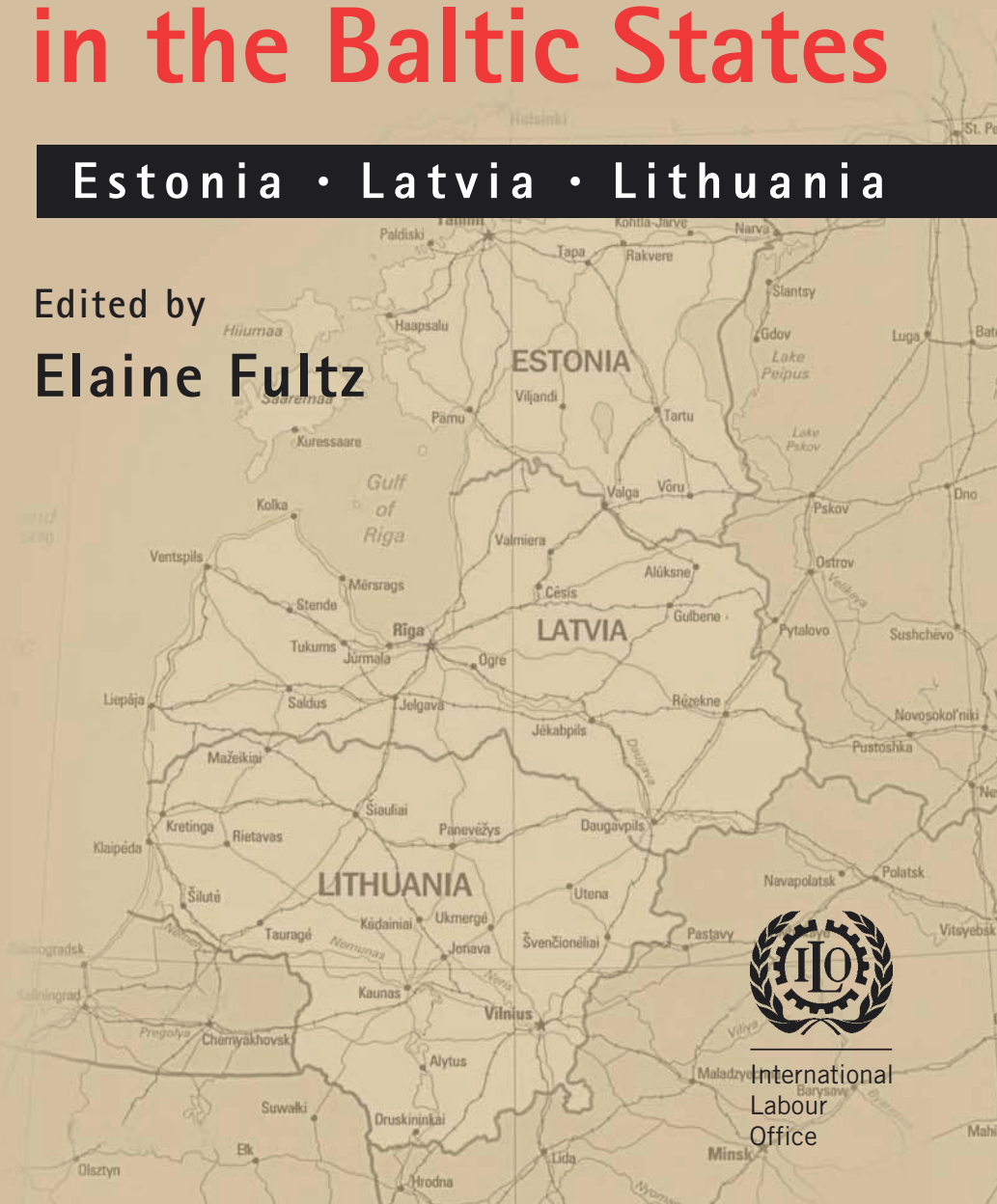
# Pension Reform
## in the Baltic States

**Estonia • Latvia • Lithuania**

Edited by
**Elaine Fultz**

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Editor
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**Katharina Müller** is a Research Officer at the German Development Institute, Bonn. Her articles and books on social policy in Latin America, Eastern Europe and Central Asia were published in eleven languages. She was granted both the *EACES Award* (European Association for Comparative Economic Studies) and the *Ed A. Hewett Prize* (American Association for the Advancement of Slavic Studies) for her book "The Political Economy of Pension Reform in Central and Eastern Europe". She previously worked at the Frankfurt Institute for Transformation Studies of European University Viadrina, Frankfurt/Oder, and served as a consultant for the ILO, OECD, GTZ and other institutions. She received her Ph.D. in economics in 1999.

**Inta Vanovska** was a member of the working group of the Latvian Welfare Reform Project that elaborated the original blueprint for the country's new three-pillar pension system. The working group also provided financial projections for the pension system based on a macro simulation. During the past decade, she served as head of the Division of Economic Analysis and Forecasts and, subsequently, of the Division of Pension Policy, in the Ministry of Welfare.

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# Foreword

This volume devoted to pension reform in the Baltic countries is appearing as part of a series of studies prepared by the ILO project, *Strengthening Social Security Governance in Central and Eastern Europe,* with financial support from the Government of France. The research component of the project seeks to analyze social security reform in the new EU member states and accession countries. The studies examine both policy formation in the countries' multi-party democracies and their experience in implementing reforms. The broad objective of this research is to provide countries that are deliberating reforms with pertinent information on the recent experience and policy results of neighbours addressing similar issues. It is intended as well to empower the governments' social partners in their role as participants in making social policy.

The research component of the project focuses predominantly on old age pensions. Earlier studies in this series analyzed pension reform in Hungary and Poland, where the governments scaled down the public, pay-as-you-go pension systems in favour of privately managed individual savings accounts (pension privatization), as well as in the Czech Republic and Slovenia, where the governments declined mandatory privatization in favor of measures to strengthen public pension schemes and create new avenues for voluntary private savings.[1] Subsequently the project carried out a Social Protection Expenditure Review of the Slovak Republic that examined pension restructuring along

[1] Augusztinovics et al., "The Hungarian Pension System before and after the 1998 Reform" and Agnieszka Chłon, "The Polish Pension Reform of 1999" in Elaine Fultz (ed.). *Pension Reform in Central and Eastern Europe*, Volumes 1 and 2. Budapest, ILO–CEET, 2002.

with other social security reforms.[2] Thus, with the completion of these Baltic studies, this project series has analyzed pension reform in all the new EU member states.

As the three Baltic governments partially privatized their pension systems along the same general lines as Hungary and Poland, these studies are focused and organized like those earlier ILO studies. Thus, they give central attention to the reasons for radical reform, the challenges of getting the new private systems up and running, their early performance (participation, market structure, and early performance of the new funds), and their impact on the preexisting pay-as-you-go systems and the adequacy of future pension benefits. The final section of this volume provides some comparative observations on the three reforms. These comments focus on expectations versus early experience with the reforms, the political economy of pension privatization in the Baltics, and the need for additional measures to ensure minimum protection (the zero pillar) in the reformed systems.

The studies reveal several broad similarities among the countries. Most obviously, all three Baltic governments began the reform process from the same starting point, the Soviet pension system, and developed new systems with the same basic design, all variations on the three-pillar system recommended by the World Bank.[3] In addition, the studies identify several commonalities that will have an important bearing on the countries' future pension policy. These include low and declining replacement rates, missing public pension revenues due to privatization and, unlike most other European countries, the prospect of some improvements in the ratio of workers to pensioners in coming years.

- *Low and declining replacement rates* – The studies show that pensions in all three countries were eroded significantly by inflation in the early 1990s, and replacement rates have since recovered only modestly. Compared to the high levels of the Soviet system (50–100% of wages), the average pension now stands at or below 40 percent of the average wage. The standards of the ILO and Council of Europe call for a

[2] Svorenova, Maria and Alexandra Petrasova, *Social Protection Expenditure and Performance Review: Slovak Republic*. Budapest, ILO, 2005.

[3] World Bank, *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth*. Washington, D.C., 1994.

minimum replacement rate of 40 percent.[4] Further, in two of the three countries (Estonia and Latvia), projections indicate that replacement rates (including both first and second tiers) will decline significantly in coming decades.[5] In Estonia, they are projected to decline to 36 percent for men and 30 percent for women, whereas in Latvia the decline for both sexes is projected at 32 percent of wages.

- *Missing public pension revenues due to privatization* – By diverting portions of contribution revenues to the new private savings accounts, all three reforms leave the public systems with "holes" in their financing. These holes are large and enduring, in the range of 1.1 to 2.0 percent per year over the next 50 years. As the governments passed the privatization laws without a long-term strategy for covering the losses, the issue of how to fill these holes remains open in all three countries.
- *Short-term demographic improvements* – In a development that is highly unusual for Europe, all three Baltic public pension schemes are projected to develop annual surpluses in coming decades, due in part to a temporary improvement in the ratio of workers to pensioners, coupled with strong economic performance. In Latvia and Lithuania, these surpluses will peak in 15–20 years and then decline gradually. In Estonia, the surpluses are projected to continue until 2060 (the end of the projection period), by which time the accumulation will equal 40 percent of GDP.

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[4] In 2003, the average pension replaced 34 percent of the gross average wage in Estonia (43 percent of the net wages), 38 percent in Latvia (48 percent of the net wage) and 32 percent in Lithuania (40 percent of the net wage). See Leppik and Vork, Chart 37; Vanovska, Table 9; and Lazutka, Charts 2–3, this volume. ILO Convention 102 calls for the 40 percent minimum standard after 30 years of work. It is generally measured against the wages for the "standard beneficiary", defined as an adult male laborer. ILO, *Introduction to Social Security*, Geneva, 1984, p. 179.

[5] Leppik and Vork, Figure 37 and surrounding text; and Vanovska, Figure 21, this volume. Lazutka did not project long-term replacement rates for Lithuania due to the lack of a set formula for pension adjustments and the absence of any experience with private investment returns at the time he completed the study.

As shown by the studies, these common features interact in complex ways. Without a long-term strategy for covering the costs of privatization, the coming surpluses provide an obvious means to compensate for the diverted public pension revenues. Yet this use would render them unavailable for use in increasing the current low replacement rate (Lithuania) or avoiding the declines in replacement rates that are on the horizon (Estonia and Latvia). In Latvia, there is also discussion of placing the surpluses in a demographic reserve fund. However, unless additional resources are devoted to pension financing, this use too would allow replacement rates (for both tiers combined) to decline.

The studies are timely in bringing these issues into focus at a point when a revised understanding of the impact of demographic ageing on pension financing can contribute clearer discussion of them. Namely, there is now agreement among experts of all persuasions that the increased pension costs of demographic ageing cannot be averted by shifting from pay-as-you-go pension schemes to capitalized savings.[6] Rather, all types of pension systems, whether pay-as-you-go or funded, are mechanisms for transferring a portion of current GDP from active members of society to inactive ones. As such, all types of schemes will come under stress when the ratio of workers to pensioners decreases. As the World Bank has explained,

> *In the end, both [types of] schemes require a subsequent generation to fulfill the generational contract, either in the form of current contributions (in unfunded schemes) or through the purchase of accumulated assets (in funded schemes). Money put aside for retirement alone does not change this fact, and even the idea of investing in demographically younger countries (i.e., emerging markets) can probably help only at the margin to cope with an ageing population.*[7]

With the previous notion that a shift to private pensions could avert an old age crisis now discredited, the genuine strategies for coping with its pension costs have also come into clearer focus. These include –

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[6] This claim was put forth in the World Bank report, *Averting the Old Age Crisis*, as previously cited.

[7] According to Robert Holzmann and Robert Palacios of the World Bank Social Protection Sector, World Bank SP Discussion Paper No. 0114, June 2001, p. 3.

- increasing national employment rates to offset the expected decline in the worker/pensioner ratio. Extending the working life of older persons can help to achieve this, as can raising employment rates for youth, women, persons with disabilities, and other social groups with lower rates for workforce participation. Allowing increased immigration can also have this effect;[8]
- strengthening enforcement of the contribution requirement, thus plugging the leaks in pension financing due to work in the grey economy and chronic underreporting of wages;
- reducing national debt in order to create fiscal space for increases in pension spending;
- raising national productivity levels in order to make the increased pension costs easier for societies to bear; and
- investing now in the goods, services, and infrastructure that societies with expanded elderly populations will need.

The Baltic countries' strong economic performance in recent years gives them an advantage in pursuing several of these strategies. Their current employment rates are among the highest of the new EU member states.[9] Recent per capita GDP growth rates are double of those of the other new EU member states and even further ahead of the EU–15 average.[10] Government deficits are low in Latvia and Lithuania, and Estonia has been running a significant budget surplus.[11] To maintain and build on these advantages, the governments will need to place high priority on the first strategy above, that is, increasing overall employment levels.[12] At the same time, their relatively low levels of pension spending and public debt provide fiscal space to spend more on the elderly if so decided.

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[8] However, the possible longer term impact of immigration must also be taken into account, i.e., an increase in demographic dependency.

[9] These rates are in the range of 61–63 percent. Only Slovenia exceeds the Baltic rates. EUROSTAT (2005).

[10] That is, during 1999–2004. World Bank, EU8, as previously cited, Chart 11.

[11] These deficits were in the range of 1–2 percent of GDP in 2001–4. World Bank, as previously cited, Statistical Index.

[12] The European Union has set the target of 70 percent by 2010.

With these genuine strategies clearly on the radar screen, the issues of benefit adequacy raised by these studies merit serious discussion. Key reference points are provided by the minimum benefit standards of ILO Convention 102 and the European Code of Social Security. As the studies make clear, providing decent pensions for the current and coming generations while covering privatization costs would require additional resources. Thus, the discussions of the study findings could provide an occasion to review the planned scope and cost of the new private savings tiers. Yet altering the second pillars is not an essential precondition to ensuring decent pensions in the Baltic countries. With their economic dynamism and low current spending levels, the countries have the resources to reach and maintain minimum standards of pension adequacy while covering the costs of privatization, if that is their political will.

The ILO thanks the national authors warmly for their contributions to this project. They each combine their close personal familiarity with the reforms with strong analytical skills and high objectivity. Lauri Leppik, a researcher, lecturer, and consultant on social policy, was a member of the Estonian Social Security Reform Commission and social security advisor to the Ministry of Social Affairs during its design of the Estonian second tier. Romas Lazutka, chair of the social work department at the University of Vilnius, has written extensively on the Lithuanian pension system and was closely involved in the deliberations on partial privatization. As a senior staff member of the Latvian Ministry of Welfare, Inta Vanovska served on the working group that elaborated the original design for Latvia's three tier system. Subsequently she headed the Ministry division responsible for long-term forecasting of its performance. Our team's close personal involvements in the reforms they describe enable them to provide readers with an insider's view of many key aspects. Yet one finds no one-sidedness in their accounts. They examine the issues and results from multiple perspectives, identifying both achievements and problems that require attention. We at the ILO learned much from our involvement with this team and feel sure that the users of this volume will as well.

We thank especially the French Ministry of Social Affairs, Labour, and Family for the financial support which made this analysis possible. The ILO appreciates the French Government's support for analyses that casts light on the early experience of the new EU Member States with social security reform and thus point the way for further changes aimed at strengthening their systems.

We at ILO Budapest hope that these profiles of the Baltic pension reforms will provoke new national discussions of the important issues they raise, as well as enabling others in Central Europe and elsewhere to learn from the Baltic countries' experiences.

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# Part I

# COUNTRY REPORTS

Chapter 1

# Pension Reform in Estonia

*Lauri Leppik, Andres Võrk*

## Abbreviations

| | |
|---|---|
| CEEC | Central and Eastern European Countries |
| CPI | Consumer Price Index |
| ECDS | Estonian Central Depository for Securities |
| EEA | European Economic Area |
| EEK | Estonian Kroon (currency) |
| ENSIB | Estonian National Social Insurance Board |
| ESO | Estonian Statistical Office |
| EU | European Union |
| EUR | Euro (currency) |
| FI | Financial Inspectorate |
| GDP | Gross Domestic Product |
| ILO | International Labour Organization |
| IMF | International Monetary Fund |
| NAV | Net Asset Value |
| OECD | Organisation of Economic Co-operation and Development |
| PAYG | Pay-as-you-go |
| SSRC | Social Security Reform Commission |
| WB | World Bank |

## Introduction

Estonia was the fifth country in Central and Eastern Europe – after Hungary, Poland, Latvia, and Croatia – to implement a three-pillar pension system with a fully funded second pillar.

On a broad scale, the Estonian pension reform bears certain similarities with other pension reforms in CEE countries, namely the three-pillar framework with a second pillar consisting of privately-managed individual savings accounts paying defined-contribution benefits. However, several parameters of the reform, including the configuration of the first pillar as well as the conditions for implementing the second pillar, are different from the other countries, making the Estonian case unusual and worthy of closer analysis. In particular, Estonia has been the only country in Central and Eastern Europe to increase the total contribution rate when introducing the second pillar, using both so-called "top-up" and "carve-out" methods simultaneously. Other CEE countries had used only the carve-out method, implementing the reform by dividing the former first-pillar contribution rate between the first and the new second pillar.

Transformation of the Estonian pension system occurred in two major waves. The first one, 1990–92, was a turbulent period when both the financing and benefit sides of the Estonian pension system were separated from the Soviet system. This was followed by a period of relative stability when the pension system operated under a transitional arrangement. The second wave of transformation took place in 1998–2002, when the new three-pillar pension system was introduced.

This study focuses centrally on the second wave of transformation, which was initiated by a 1997 concept paper. The resulting reform was implemented over 1998–2002. The reform of the first pillar was implemented during 1999–2000; the second pillar, in 2002; and legal framework for the third pillar was introduced in 1998.

The analysis that follows has four main parts. The first section provides an overview of the pre-reform situation. Both the objective influences driving the reform – demographic changes and economic environment – and the political process are analysed. The second section describes the main elements of the second wave of transformation and discusses the main international influences that seem to have shaped it. The third section focuses on early experience with the latest reform. The fourth and final chapter offers conclusions.

# 1. The Pre-reform Scene

The pre-reform scene in Estonia, like the other Baltic countries, differed from that in other countries of Central and Eastern Europe which are now new members of the European Union. The Soviet legacy of nearly 50 years shaped not only the pension system, but virtually all facets of society. Although countries like Hungary and Poland also belonged to the socialist block and were heavily influenced by the Soviet Union both through economic ties and general politics, they nevertheless had some degree of autonomy, including autonomous pension systems.

In addition, the adjustment to market conditions and related social reforms after the breakdown of the Soviet Union followed somewhat different patterns in the Baltic states. The economic recession in the first half of 1990s was more severe in the Baltic countries compared to Poland, Hungary, and the Czech and Slovak Republics. Also, demographic changes in the Baltics were more dramatic, including declining birth rates and increasing mortality rates.[1]

## *1.1 Demographic and Economic Background*

### Demographic Changes

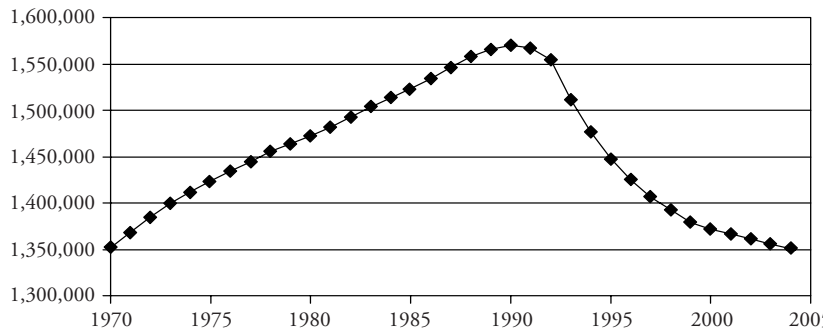
The processes of political, economic, and social transition associated with Estonia's regaining of independence had major demographic impacts.

The steady growth of the population in the 1970s and 1980s – caused by relatively high birth rates and immigration – was replaced by a rapid decline beginning in 1991. This was rooted in a host of negative developments: negative net migration, decline of birth rates, and increase of mortality rates (Estonian Statistical Office, 2003). The most drastic changes occurred in 1990–95. Later the situation has gradually stabilised: migration declined, birth rates stabilised (albeit on a considerably lower level) and life expectancy even increased.

[1] For further details, see, for example, Schmähl and Horstmann 2002.

However, as a net effect of demographic changes, by 2004 the total population had declined to the level of the early 1970s (see Figure 1).

**Figure 1**
**Population of Estonia (at the beginning of the year), 1970–2004**



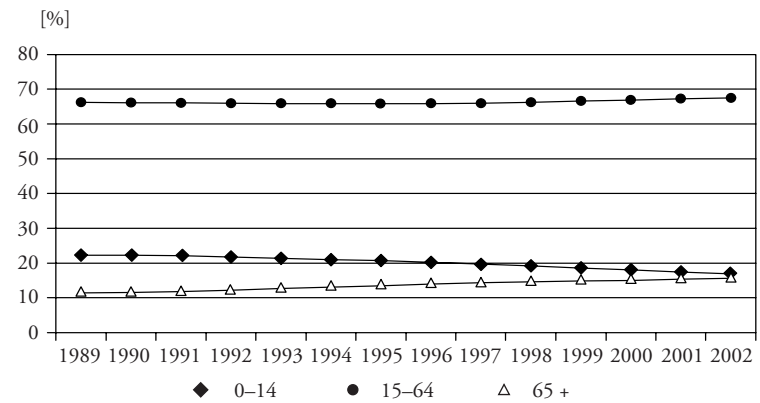

*Source*: Estonian Statistical Office.

Parallel to the decrease of total population, the population also began to age. The median age increased from 34.1 in 1989 to 38.1 in 2002, while over the same period the share of the population aged 65 or over increased from 11.5 percent to 15.7 percent (Figure 2).

Ageing of the population is caused mainly by a decrease in the birth rate and increase in life expectancy. The total fertility rate was above the rate of reproduction needed to maintain the population (i.e., 2.1 births per female) in 1990, but declined rapidly in the following years to all-time lowest 1.28 in 1998. However, the rate had begun to stabilise in the second half of 1990s; and from 1999 a slight increase in the total fertility rate has been observed (Figure 3). However, the improvement is still far too modest to change the long-term impact of more than a decade of low birth rates.

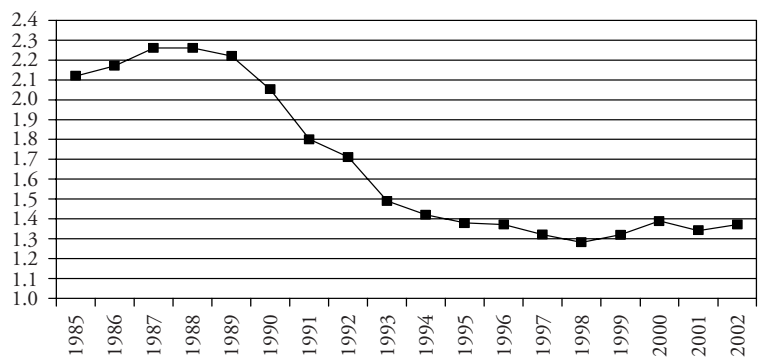
The average life expectancy at birth declined in the first half of 1990s, reaching the lowest level in 1994, when it was 61.1 years for men and 73.1 for women. However, since then, life expectancy has been increasing, with the average reaching 65.2 years for men and 77.0 years for women in 2002.

**Figure 2**
**Population age structure, 1989–2002**




*Source*: Estonian Statistical Office.

**Figure 3**
**The total fertility rate, 1985–2002**




*Source*: Estonian Statistical Office.

The decline of average life expectancy in mid 1990s was primarily due to rising mortality rates for groups aged 30–49 and 50–69. At the same time, mortality rates for persons aged 70 and over declined, i.e., the life expectancy at higher ages increased.

The difference between the life expectancy of men and women at birth is considerable, nearly 12 years. By the age of 60, however, this difference declines to 5.5 years.

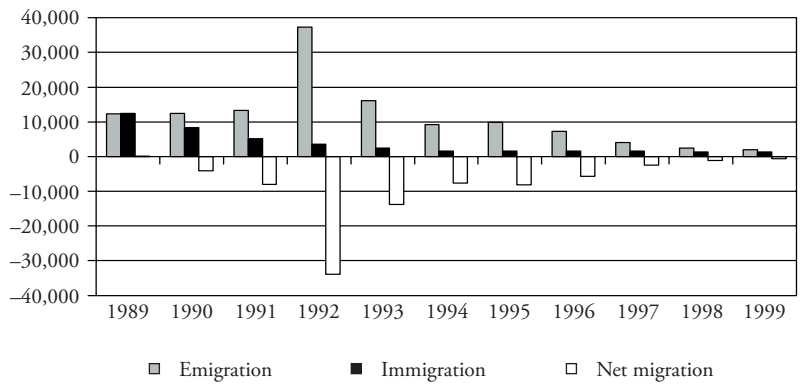
**Table 1**
**Life expectancy at birth and at age 60, 1980–2002**

| | | 1980 | 1990 | 1994 | 1998 | 2002 |
|---|---|---|---|---|---|---|
| Men | 0 | 64.1 | 64.6 | 61.1 | 64.4 | 65.2 |
| | 60 | 14.8 | 14.8 | 14.1 | 14.8 | 15.4 |
| Women | 0 | 74.1 | 74.6 | 73.1 | 75.5 | 77.0 |
| | 60 | 19.4 | 19.4 | 19.3 | 20.3 | 21.2 |

*Source*: Estonian Statistical Office.

Net migration has been negative since 1990, as emigration exceeded immigration considerably. Immediately after Estonia regained independence, a large proportion of the non-Estonian population moved, mostly to Russia and other parts of the former Soviet Union. Emigration peaked in 1992 and has shown a decreasing trend since then. In the second half of the 1990s, net migration approached zero as emigration had declined to the level of immigration (Figure 4).

**Figure 4**
**Emigration, immigration and net migration[2]**




*Source*: Estonian Statistical Office.

## Economic Background

Transition to a new economic system and reconstruction of the economy caused a sharp decline in Estonia's GDP from 1991 through 1994. After regaining its independence, Estonia chose a radical approach to economic restructuring, re-shifting economic ties from East to West. The cornerstones of economic reform were a currency board arrangement, a liberal trade policy, a balanced budget doctrine with very limited state borrowing, and far-reaching privatisation. These principles were followed by successive governments in spite of changes in coalitions.

[2] In 2000, the Estonian Statistical Office stopped publishing migration data, because of the low quality of administrative data. The main problem is that changes of residence are underreported, as registration of place of residence is not compulsory.

A major factor in stabilising the economic situation was the introduction of the national currency – Estonian kroon (EEK) – in June 1992, based on a currency board arrangement with a fixed exchange rate (Table 2).[3]

**Table 2**
**Real economic growth and inflation, 1992–2003[4]**

| | Real GDP growth [%] | CPI change [%] |
|---|---|---|
| 1992 | –14.2 | 1,076.0 |
| 1993 | –9.0 | 89.8 |
| 1994 | –1.6 | 47.7 |
| 1995 | 4.5 | 29.0 |
| 1996 | 4.5 | 23.1 |
| 1997 | 10.5 | 11.2 |
| 1998 | 5.2 | 8.2 |
| 1999 | –0.1 | 3.3 |
| 2000 | 7.8 | 4.0 |
| 2001 | 6.4 | 5.8 |
| 2002 | 7.2 | 3.6 |
| 2003 | 5.1 | 1.3 |

*Sources*: Estonian Statistical Office; data on GDP growth for 1992 and 1993 from Sillaste, 1998.

[3] On 20 June 1992, Soviet roubles were converted to Estonian kroons (EEK) at the rate of 10 roubles per kroon. The exchange rate for the kroon was pegged to the German mark (DEM) at the rate of 1 DEM = 8 EEK. From 2002, the Estonian kroon is pegged to Euro (EUR) at the rate of 1 EUR = 15.64664 EEK.

[4] In May 2004, the Estonian Statistical Office published adjusted GDP time series, which were recalculated according to the Eurostat methodology (changes related mainly to consideration of imputed rent and amortisation of fixed capital). This is causing some discrepancies between various time series, which are based of GDP, since certain indicators calculated as a percentage of GDP (e.g., pensions as a share of GDP) have not yet been recalculated and are based on earlier published data. Projections in the current report are also based on the formerly published GDP data.

The measures undertaken helped the small open economy of Estonia to overcome recession by 1995. In the following years, the economy recovered quickly. Economic growth was mainly driven by a rapid growth in exports to Western countries, reinforced by a high level of foreign investments. Economic growth reached 10.5 percent in 1997. In 1998, Estonia experienced an economic slowdown due to a crisis in the financial sector combined with a decline in foreign demand (including a major crisis in the Russian market). As a result, Estonia's GDP decreased by 0.1 percent in 1999. In 2000, the economy recovered rapidly and posted a GDP increase of 7.8 percent. High growth continued in 2001–2003.

Currency reform cut the inflation rate, which was as high as 1,100 percent in 1992, to 90 percent in 1993. The inflation rate continued to decline steadily through 1999. Economic revival after the 1999 economic recession and the increase of some administratively regulated prices (e.g., electricity, heating, public transportation) increased the inflation rate in 2001, when it reached 5.8 percent. However, in 2002–03 the inflation rate declined again, reaching a historic low of 1.3 percent in 2003. Estonian inflation has in recent years followed the dynamics of the Euro area (however, at a slightly higher level), indicating the close links of the Estonian economy with the EU through trade channels and capital markets.

The economic downturn of the first half of the 1990s was coupled with declines in both the labour force participation rate and the employment rate. This adjustment to the market economy marked the end of the Soviet period of full-employment. The employment rate among those aged 15–64 declined from 77.4 percent in 1990 to 60.7 percent in 2000. Over the same period, the unemployment rate increased from 0.6 to 13.8 percent (Figure 5).

Notably, the employment rate continued to decline in the second half of the 1990s in spite of the economic recovery, i.e., Estonia experienced jobless growth. Even the very high growth rate in 1997 did not significantly affect the employment situation. After a period of relative stability in 1995–1998, the employment rate declined and the unemployment rate increased again in 1999 and 2000.

Some correlation between GDP growth and the employment rate can be observed only beginning in 2000. Annual growth rates of around 5–7 percent were accompanied by an increase in the employment rate from 60.7 percent in 2000 to 62.6 percent in 2003, while over the same period the unemployment

rate declined from 13.8 percent to 10.3 percent. Compared to the average unemployment rate in the EU (around 8 percent), the unemployment rate in Estonia is still high.

**Figure 5**
**Employment and unemployment rates for those aged 15–64 [%], 1990–2003**


*Note*: Data on unemployment rate for 1990–1992 is for those aged 15–69.

*Source*: Estonian Statistical Office.

In absolute numbers, the total labour force in 2003 was 660,000 persons, down from 831,000 in 1990. The number of employed persons was 594,000 in 2003 as opposed to 826,000 in 1990. In 2003, the number of unemployed persons was around 66,000.

As a part of the Soviet legacy, the employment rate of women has been relatively high. In fact, over the transition period their employment rate declined less than the employment rate of men. In 2003, the employment rate of men was 66.7 percent whereas for women the rate was 58.8 percent, which is over the EU average.

Contrary to the situation in several other European countries, women have a slightly lower average unemployment rate than men. In 2003, the unemployment rate of men was 10.5 percent as opposed to 10.2 percent for women. A similar gap has existed since the mid 1990s.

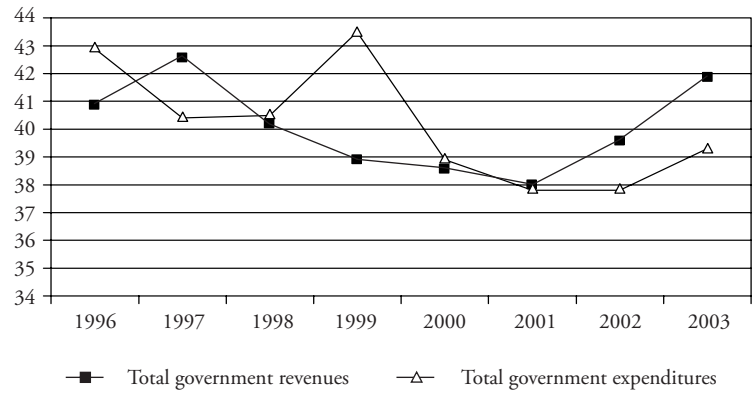
The decline in the employment rate in the first half of 1990s was most significant for older workers, i.e., those aged 55–64. However, beginning in 1995, this trend reversed itself and by 2003 the employment rates rebounded to the level of 1991–1992. At the same time, employment rates among those aged 15–29 continued to decline.

Other noteworthy trends in the 1990s were the restructuring of the labour force between economic sectors and changes in the types of employment. Namely, employment in the agricultural and manufacturing sectors decreased while the service sector grew. While total employment declined, the number of self-employed persons increased and comprises currently about 10 percent of total employment.

Maintaining the competitiveness of the Estonian economy has been a major concern of all governments starting in the early 1990s. In addition to the policy measures mentioned above, tax policy has been used in this respect. Estonia abandoned progressive income tax and introduced a proportional income tax in 1994. The tax rate is 26 percent beyond the annual threshold. In 2004, this was 16,800 EEK. In 2000, corporate income tax on reinvested profits was abolished. The government has set a target to cut the income tax rate to 20 percent by 2007, while increasing the non-taxable threshold to 24,000 EEK a year. In 2005 the tax rate was reduced to 24 percent; and further reductions of 2 percentage points are planned for 2006 and 2007.

The strict principles of a balanced budget, limited borrowing, lower taxes have obviously limited available public finances. Overall public spending in the second half of the 1990s was slightly above 40 percent of GDP. In 1999, it rose to 43 percent due to optimistic assumptions about economic performance in the state budget, while in reality the GDP declined in 1999. In the following years, the conservative approach to drafting the state budget was restored, resulting in a surplus in the total government sector balance beginning in 2001. As a result of tax cuts (abolition of the corporate income tax on reinvested profits) total government expenditures declined to below 38 percent of GDP in 2001 and 2002. Economic growth, the increasing employment rate, and transfers from EU funds increased state revenues in 2002 and 2003. On the other hand, EU and NATO-related commitments increased expenditures as well (Figure 6).

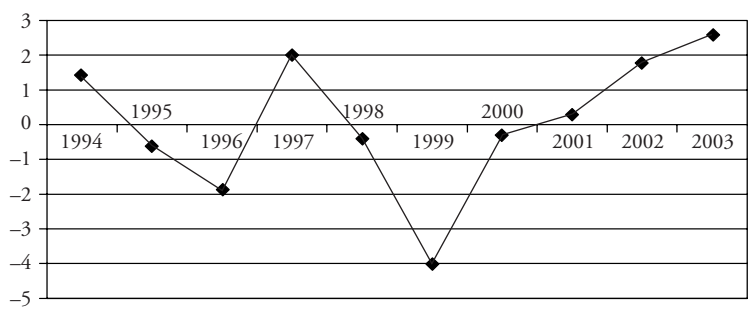
**Figure 6**
**Total government sector expenditures as a percentage of GDP, 1996–2003**




*Sources*: Ministry of Finance, Estonian Statistical Office.

Figure 7 illustrates government fiscal policy. Estonia has largely followed the Maastricht criteria on the budget deficit (not to exceed 3 percent of GDP) and in the last 3 years ran a surplus.

**Figure 7**
**Balance of the total government sector as a percentage of GDP, 1994–2003**




*Sources*: Ministry of Finance, Estonian Statistical Office.

The total government sector debt has been rather low, around 5–6 percent of GDP. In 1997, a year of very high economic growth, the government formed a stabilisation reserve, to which it directed the surplus of revenues – a buffer fund to soften the effects of possible macroeconomic shocks and to finance major structural reforms, e.g., pension reform. The reserve was further increased in 2001–2003. By the end of 2004, the stabilisation reserve amounted to 5 billion EEK or 3.6 percent of GDP. About 95 percent of its assets are invested in German, French, Dutch, and Belgian government bonds. The total reserves of the government (including short-term cash reserves) amounted to 14 billion EEK (or 10 percent of GDP) by the end of 2004, or more than double the total government debt.

### *1.2 Pension System Developments in 1990s*

Estonia, like the other two Baltic countries, inherited its benefit systems from the Soviet Union. Until 1990, pension arrangements in Estonia were a part of the Soviet pension system. The Soviet legacy of the pension system included the following features:

1) low general pensionable age – 55 for women and 60 for men;
2) privileged retirement rules for several occupational groups, including lower pensionable ages;
3) entitlement to a pension based on previous work, benefits linked to the former wage;
4) a relatively high replacement rate ranging from 100 percent for low-income earners down to 50 percent for higher-income earners;
5) separate schemes for workers and farmers; and
6) financing from the general state budget, no individual contributions by workers.

Thus, whereas entitlement rules had Bismarckian features, pensions were financed from the state budget, not from contributions as in a typical Bismarckian scheme.

By 1990 Moscow had recognised the need to reform the pension system, and under the *glasnost* campaign a public debate on a draft of a new Soviet pension law commenced. However, a strong national aspiration for independence had

developed by that time, and the political aim of the Estonian government was to separate all social systems from the rest of the Soviet Union. Yet despite this goal, the features of the Soviet pension system influenced people's image of the optimal pension arrangement, including such features as the pensionable age, benefit rates, and the willingness to pay contributions (or rather the lack thereof).

The Soviet heritage of a low pensionable age and relatively high replacement rate was clearly not a favourable starting point for an autonomous pension system, especially given that the cost of pensions had been largely hidden in the socialist period.

### 1.2.1 The First Wave of Transformation, 1990–93

Early transformation of the pension system in Estonia may be characterised by the following stages (see also Leppik, 2002):

1) Financial separation of the benefit system (1990);
2) Failed attempt to liberalise benefit rules (1991);
3) Benefit retrenchment with introduction of flat-rate pensions (1992);
4) Benefit restructuring with the State Allowances Act (1993).

#### *1990 – Financial Separation*

Separation of the Estonian pension system from the Soviet arrangement started from the financial side in 1990, while the main benefit rules remained unchanged for another year.[5] This was because the deepening economic and fiscal problems in the Soviet system forced the Estonian government to take steps to consolidate the financing of the pension system even before it formally regained independence.[6]

[5] There were a few changes adopted already in 1990, e.g., personal pensions for Communist Party officials were ceased beginning in July 1990; and minimum pension benefits were increased beginning in October 1990.

[6] Estonia regained independence on 20 August 1991. See Leppik and Männik 2002 for a more detailed description of the situation in 1989 and 1990.

With the underlying aims of limiting transfers to the Soviet budget and limiting damage from economic turbulence caused by price liberalisation, increasing inflation and disturbed cash flows, the government separated the financing of the Estonian pension system from the rest of the Soviet Union (Leppik, 2002).

The adoption of the Social Tax Act in 1990 introduced a social tax of 20 percent of gross payroll to be paid by employers as the financing instrument of the state pension system.[7] Revenues collected by the Social Fund were earmarked for this purpose, and pension expenditures were separated from other budgetary expenditures.

### *1991 – Failed Attempt to Introduce a New Pension Law*

Although the Soviet pension system provided rather high replacement rates, the Estonian government's first attempts to reform the system were partly motivated by a desire to raise the level of social protection even further. There was a common belief that financial separation would allow for the provision of improved benefits.

The new Pension Act of Estonia, adopted 15 April 1991, had two main objectives – to separate the benefit side of the Estonian pension system from the Soviet system and to increase coverage and the level of benefits. Prime Minister Edgar Savisaar (the leader of the National Front) ordered that no paragraph of the new pension law should be a copy of the text of the Soviet law (Leppik and Männik, 2002).

The formerly separate schemes of workers and farmers (*kolhoz* members) were unified into a single system with universal coverage. The new act liberalised eligibility rules, broadening the coverage of the pension scheme to all residents, and prescribed higher pension rates (Leppik, 2002).

The pensionable age and qualification period for an old-age pension both remained unchanged. However, the qualification period for the disability pension was abolished, making access to disability pensions easier.

[7] The act was adopted on 12 September 1990 and came into effect on 1 January 1991.

The act prescribed a mixed pension formula – a flat rate base amount supplemented by an earnings-related component. The calculation of pensions was based on two factors: the minimum wage and the worker's former earnings. For example, old-age pensions were calculated as 60 percent of the minimum wage supplemented by 40 percent of the average former earnings of the beneficiary.[8] The previous supplements for uninterrupted service were abolished. The minimum old-age pension was set at 85 percent of the minimum wage. The act also introduced a social pension equal to 70 percent of the minimum wage for persons not eligible for an old-age pension; however, the payment was deferred for 5 years after the normal pensionable age.

The new act created a quite typical defined-benefit pension scheme financed by contributions. However, high expectations soon collided with economic reality and the act had a very short life, being implemented for only few months. Because of the total neglect of financial calculations, implementation of the act turned out to be unaffordable.[9] The failure of the first reform was mostly due to a striking lack of qualified staff able to develop policies and legislation in a coherent way, while the situation was further exacerbated by serious economic crisis at the time of the collapse of the Soviet Union (see Leppik and Männik, 2002; and Leppik and Kruuda, 2003).

### *1992 – Flat-rate Pensions*

Parliament suspended the Pension Act in February 1992, and pensions were replaced by flat-rate state living allowances. The introduction of flat-rate allowances was a temporary rescue measure to help cope with deep economic

[8] Similar to the Soviet system, the "best years" approach was used to determine former earnings. These were now determined on the basis of the five best consecutive years within the 15 years preceding the pension application or the end of the working career.

[9] Another problem was the need for multiple recalculations of pensions in an environment of very high inflation in 1991–1992. This had to be done manually, as the level of computerisation of pension offices in the early 1990s was still very low.

crisis rather than an intentional shift towards egalitarian principles.[10] With flat-rate benefits, payments were easier to administer and calculations easier to make. The levels of pensions were linked to the minimum wage. To keep pace with the very high inflation (see Table 2), the minimum wage and the rates of pensions were increased five times during the course of the year. However, in spite of these nominal increases, the real values and the replacement rate of pensions decreased considerably. Katus et al (2004) calculated that the gross replacement rate of the average old-age pension declined from 36 to 16 percent over these turbulent times. The flat-rate pension package thus entailed a substantial benefit retrenchment.

The later developments of pension system were strongly influenced by two important reforms in 1992, setting the broader context for various national policies – monetary reform and the adoption of the Constitution.[11] The currency board arrangement, which limited public expenditures to available tax revenues, set strict budgetary limits for the pension system. The Constitution, inter alia, laid down the general principles of social security:

> *Estonian citizens shall be entitled to state assistance in case of old age, inability to work, loss of provider, and need. The types of assistance, their level, eligibility conditions and procedures shall be established by law. Unless otherwise determined by law, this right shall exist equally for Estonian citizens, citizens of foreign states, and stateless persons who are present in Estonia.*

Notably, social rights were formulated in a rather weak manner in the Constitution. Although referring to the traditional social risks insured by the pension system (old age, disability, survivors) there is no explicit reference to the concept of "pension". Instead, the formulation refers to "state assistance" with the implicit assumption that the primary responsibility lies with the individual.

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[10] The failure of the 1991 pension law was not admitted by politicians. The resolution on flat-rate allowances was supplemented with a decision to reintroduce the pension law three months after the introduction of Estonia's own currency. However, in the reality, the 1991 pension law was never put back into force.

[11] The Constitution was drafted by a Constitutional Assembly, adopted by referendum on 28 June 1992, and entered into force on 3 July 1992.

### *1993 – State Allowances Act*

After the first democratic elections of the Estonian Parliament in September 1992, a national conservative government came in power.

Public dissatisfaction (in particular from pensioners' organisations) with the system of flat-rate benefits forced the preparation and adoption of a State Living Allowances Act, which differentiated old-age pensions on the basis of length of service, marking a shift in the social-political distribution principle.[12] The pension formula comprised two elements: a flat-rate base amount and a component depending on the years of pensionable service. Pension amounts still related to the minimum wage, with the individual variable being the length of service.

Originally, the base amount was calculated as 85 percent of the minimum wage. If the length of service exceeded 40 years, 1 percent of the minimum wage was added to the base amount for each year of service, whereas in case of the length of service of 15 years, the value of one service year was only 0.5 percent of the minimum wage (see Table 3 and Figure 8). In other words, longer service periods had higher values. Notably, the pension had no maximum value. Disability pensions continued to be paid at a flat rate, depending only on the extent of disability.

As an essential change, the 1993 State Allowances Act introduced a gradual increase of the pensionable age by 6 months each year with the target of reaching 65 for men and 60 for women by 2003. With the experience of the failed 1991 pension law, the need to take steps for financial consolidation of the pension system was recognised. The increase of the pensionable age also reflected a recognition that demographic ageing is on the horizon for Estonia and constituted an effort to begin to prepare for it.

In fact, in the draft act presented to Parliament, the government suggested equalising the pensionable age of men and women at 65. However, when the

[12] The Act was adopted on 17 March 1993 and entered into force on 1 April 1993. The use of the term "state living allowances" in the title was suggested by politicians who were behind the 1991 pension law, but who landed in the opposition after the 1992 elections. The use of this term was intended to indicate that the benefit rules of the law were still temporary, and a true "Pension Law" was missing.

vote was put to Parliament, female politicians succeeded in changing the scale to 65/60.

Though the pensionable age was increased while maintaining gender differences, the qualification period for old-age pension was equalised for men and women: it was reduced from 25 for men and 20 for women to 15 years for both sexes. Working pensioners were paid full pension only if their earnings were below the minimum wage, otherwise the benefit was reduced.

The existing social pension was renamed national pension, with payment levels set at 85 percent of the minimum wage. Age criteria for the national pension were set at 65 years for men and 60 for women, or 5 years higher than for a normal old-age pension. However, as the general pensionable age was to be increased, the age criteria for an old-age pension and a national pension will eventually become identical.

From the financing side, the act authorised a pension scheme that could be classified as a defined-contribution scheme at the macro level (Leppik, 2002). The revenues of the system were set by a fixed contribution rate, and benefit levels were adjusted according to the revenues available. This closed-budget approach introduced clear fiscal boundaries to the pension system.

### 1.2.2 Pension Rules Over the Transition Period 1993–99

The pension formula in the 1993 State Allowance Act was broadly considered (by political parties as well as by pensioners) as a temporary solution for a period of economic transition. The political aim was to reintroduce earnings-related pensions in a period of few years. However, the benefit rules which were established as temporary, survived a period of 7 years – from April 1993 to April 2000 – and exerted a heavy influence on subsequent pension rules for the first pillar. Despite the longer-than-expected duration of these rules, the period of their existence was also marked by some important parametric changes.

Beginning in July 1994, pension amounts were decoupled from the minimum wage. This increased flexibility in both the pension system and national wage policy, allowing pensions to increase without changing the minimum wage and vice versa. The calculation of pensions was based on a

fixed rate – national pension rate (NPR) – to be established by Parliament for each fiscal year.[13]

The formula which was used to calculate the amount of old-age pension from July 1994 to April 2000 may be represented as:[14]

$$P = B + E \times \alpha(E) \times B$$

where

$B$ is the flat-rate base amount,

$E$ is the length of service (years of employment and equalised periods), and

$\alpha$ is a coefficient which varies with the length of service $E$.

Starting in September 1996, pensions could be received simultaneously with income from work without any restrictions. Accordingly, working pensioners could receive full benefits.

Also starting in 1996, the timetable for increasing the pensionable age was modified to remove a perceived injustice between those born in the first half of the year and those born in the second half, inherent in the previous timetable. To provide a smoother and more gradual increase, the rate of increase was reduced from 6 months a year to an average of 4 months a year. The target pensionable age remained at 65 for men and 60 for women, but with the modified scale these targets were to be achieved by 2007 instead of 2003.

From the financing side, the Estonian pension system operated on the macro-level defined-contribution principle, as previously described, during 1993–1999. The rate of social tax to finance the pension system did not change, remaining at 20 percent of an employer's gross payroll. In spite of frequent changes in government, successive coalitions followed a conservative fiscal policy, increasing pensions only when sufficient reserves were available from social tax revenues.[15]

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[13] The only additional restricting clause was that the new value of the national pension could not be less than that of the previous year. In reality, however, the NPR remained unchanged at 410 EEK from 1996 to 2000.

[14] This is a mathematical illustration, the act contained no formula. The values of B and $\alpha$ were determined by Parliament. For the development of these values, see Table 3.

[15] Over the period of 1993–1999, six different governments were in power.

At the micro level, i.e., concerning the benefit calculation rules, the pension scheme could still be seen as a defined-benefit scheme. Although the level of benefits could also fluctuate downwards in such a system in theory, in practice this did not happen, as social tax revenues increased due to economic growth and inflation.

In the absence of any pre-determined rules for increasing pensions (e.g., indexation), two methods were used: increasing the base amount (the flat-rate component of the pension) and increasing the coefficients for years of service. Each increase required an ad hoc legislative amendment by Parliament modifying the pension benefit formula. Over the period of 1993–1999, the benefit formula was modified ten times (Table 3).

In principle, pensions could also be increased by raising the value of the national pension rate (NPR), rather than changing the coefficients. This method was not used, however, because the NPR also served as the flat-rate base amount. With respect to old-age pensions, the political aim was to emphasise the work-related length-of-service component. Therefore, starting in 1996, the basic amount was left unchanged and only the coefficients were increased. As a result, the relative importance of the flat-rate base amount declined, while the importance of work-related length-of-service component increased. For a person with 40 years of service, the share of the flat-rate component in the total pension declined from 71 percent in 1993 to 28 percent in 1999. In this way, differentiation of pensions increased and the system became more advantageous for people with long periods of service. At the same time, progressivity was reduced in the length-of-service component and, by 1999, the values of service years were equalised.

Figure 8 illustrates the impacts of changes of the pension formula on the values of pensions.

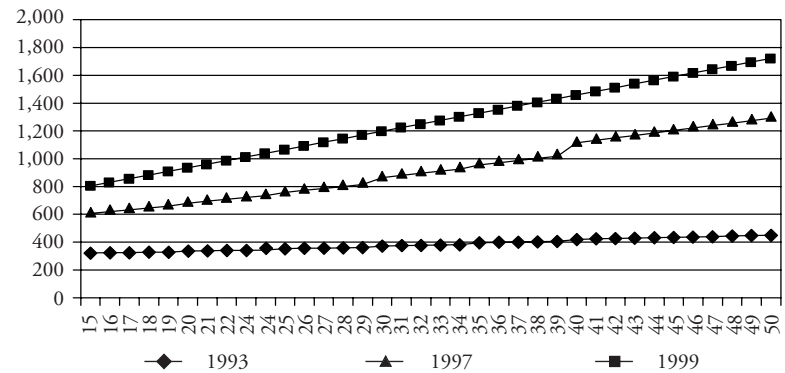
**Table 3**
**Changes in the pension formula, 1993–99**

| | April 1993 | April 1994 | July 1994 | September 1995 | January 1996 |
|---|---|---|---|---|---|
| Minimum wage (MW) | EEK 300 | EEK 300 | EEK 300 | EEK 450 | EEK 680 |
| National pension rate (NPR) | — | — | — | — | EEK 410 |
| National pension (NP) | 85% MW | 85% MW | EEK 300 | EEK 410 | 110% NPR |
| Old-age pension | | | | | |
| base amount: | 85% MW | 85% MW | NP | NP | NPR |
| the value of one service year: | | | | | |
| 15–19 years | 0.5% MW | 1.0% MW | 1.0% NP | 1.7% NP | 2.3% NPR |
| 20–24 years | 0.6% MW | 1.1% MW | 1.1% NP | 1.8% NP | 2.4% NPR |
| 25–29 years | 0.7% MW | 1.2% MW | 1.2% NP | 1.9% NP | 2.5% NPR |
| 30–34 years | 0.8% MW | 1.5% MW | 1.5% NP | 2.2% NP | 2.8% NPR |
| 35–39 years | 0.9% MW | 1.6% MW | 1.6% NP | 2.3% NP | 2.9% NPR |
| 40 years and over | 1.0% MW | 1.7% MW | 1.7% NP | 2.5% NP | 3.1% NPR |

| | April 1996 | January 1997 | November 1997 | March 1998 | January 1999 |
|---|---|---|---|---|---|
| Minimum wage (MW) | EEK 680 | EEK 680 | EEK 680 | EEK 1100 | EEK 1250 |
| National pension rate (NPR) | EEK 410 | EEK 410 | EEK 410 | EEK 410 | EEK 410 |
| National pension (NP) | 120% NPR | 135% NPR | 145% NPR | 160% NPR | 195% NPR |
| Old-age pension | | | | | |
| base amount: | NPR | NPR | NPR | NPR | NPR |
| the value of one service year: | | | | | |
| 15–19 years | 2.6% NPR | 3.2% NPR | 3.9% NPR | 4.7% NPR | 6.4% NPR |
| 20–24 years | 2.7% NPR | 3.3% NPR | 3.9% NPR | 4.7% NPR | 6.4% NPR |
| 25–29 years | 2.8% NPR | 3.4% NPR | 3.9% NPR | 4.7% NPR | 6.4% NPR |
| 30–34 years | 3.1% NPR | 3.7% NPR | 3.9% NPR | 4.8% NPR | 6.4% NPR |
| 35–39 years | 3.2% NPR | 3.8% NPR | 4.1% NPR | 4.8% NPR | 6.4% NPR |
| 40 years and over | 3.4% NPR | 4.0% NPR | 4.3% NPR | 4.9% NPR | 6.4% NPR |

*Source*: Adapted from Leppik and Männik 2002.

**Figure 8**
**Values of pensions [EEK] depending on the length of service [years] in April 1993, January 1997 and January 1999**




*Source*: Calculations by authors.

### 1.2.3 Operation of the State Pension System in 1990–2000

Administratively, starting in 1993, the state pension system was operated by the National Social Insurance Board (ENSIB), a government agency under the Ministry of Social Affairs. However, since at the Ministry there was no department dealing with social security matters, the ENSIB had to grapple with a broad range of issues ranging from policy development to administration of the pension insurance budget to the supervision of regional pension offices.[16] The latter were responsible for collection of the pension insurance part of social tax and the payment of benefits.

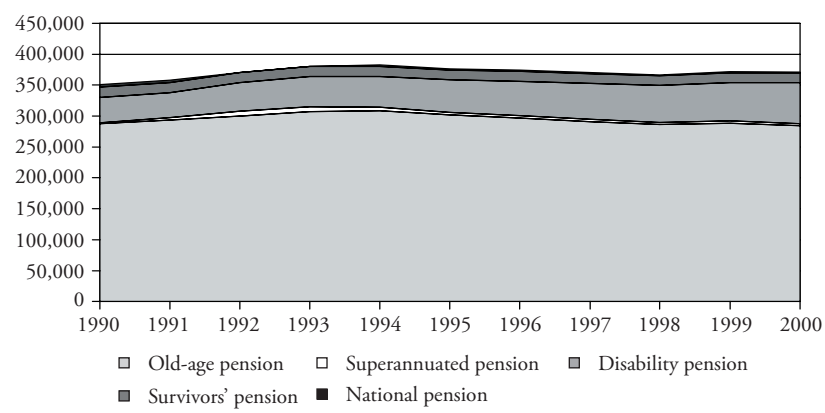
During 1992–93, there was an increase in the total number of pensioners due to the 1991 broadening of pension coverage and abolition of the qualification period for disability pensions. The increase in the pensionable age, enacted with the 1993 State Living Allowances Act, stabilised the total number of pensioners around 375,000 in the second half of the 1990s (Figure 9).

[16] The Social Security Department at the Ministry of Social Affairs was established only in 2000.

The number of old-age pensioners decreased by nearly 24,000 during 1994–2000, whereas the number of disability pensioners increased by nearly 17,000 over the same period.

The rate of influx of new pensioners was reduced by the increase in the pensionable age (Figure 10).[17] Here, changes in the timetable for increase of pensionable age and differences in cohort size caused some yearly fluctuations in the number of new pensioners. In general, however, the number of newly granted old-age pensions has decreased. An offsetting trend can be observed for disability pensions. As the incidence of disability increases with age, raising the pensionable age caused a simultaneous increase in the number of new disability pensions.

**Figure 9**
**Total number of pensioners and distribution by types of pension (at the beginning of the year), 1990–2000**

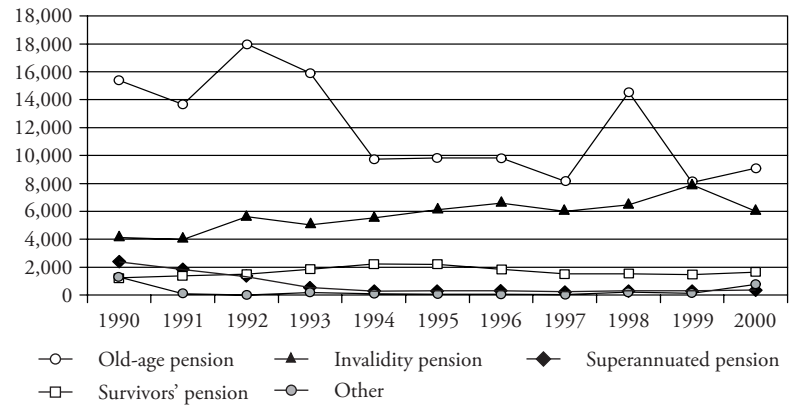



*Note*: The so-called superannuated pension was inherited from the Soviet pension system (called "service pension" by some authors). It is a special early retirement pension for some occupational groups, e.g., artists, miners, pilots, sailors, etc.

*Source*: Ministry of Social Affairs.

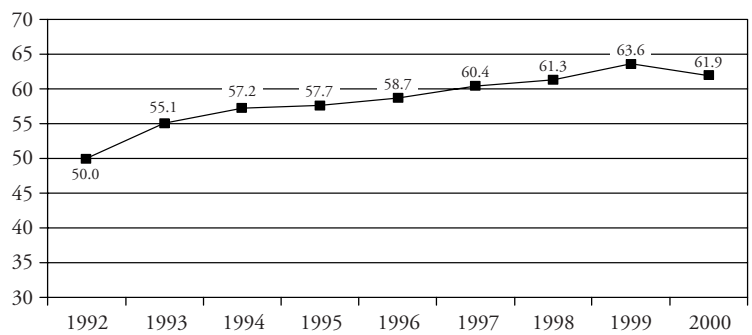
[17] Due to the timetable for increasing the pensionable age (on average by 4–6 months a year) in some years only half of the age cohort (with the same year of birth) could retire, whereas in some other years (e.g., in 1998) a full cohort reached pensionable age.

**Figure 10**
**The number of newly granted pensions by type, 1990–2000**




*Source*: Ministry of Social Affairs.

**Figure 11**
**System dependency ratio, 1992–2000** [%]




*Sources*: National Social Insurance Board, calculations by authors.

However, in spite of the increase in the pensionable age, the system dependency ratio (ratio of pensioners to insured persons)[18] increased from 50 percent in 1992 to 63.6 percent in 1999 (Figure 11). Although the number of pensioners declined beginning in 1994, the number of insured persons declined even more rapidly due to shrinking employment. Recovery in the labour market can be observed only beginning in 2000 (see Figure 5).

The increasing system dependency ratio, however, did not translate immediately into financial problems of the pension system. Quite the contrary, in spite of the decline in the number of insured persons, the pension insurance budget maintained reserves (Table 4).

**Table 4**
**Revenues, expenditures and reserves of the state pension system [million EEK], 1992–2000**

| | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|---|---|---|
| Social tax revenues | 731 | 1,514 | 2,170 | 2,917 | 3,844 | 4,637 | 5,339 | 5,520 | 6,297 |
| State budget allocations | — | — | 30 | — | 26 | 19 | 150 | 176 | 254 |
| Other revenues | — | 49 | 162 | 214 | 73 | 198 | 38 | 15 | 3 |
| Total revenues | 731 | 1,563 | 2,362 | 3,131 | 3,917 | 4,855 | 5,527 | 5,711 | 6,554 |
| Total expenditures | 694 | 1,440 | 1,970 | 2,908 | 4,067 | 4,728 | 5,306 | 6,460 | 6,504 |
| Cash reserves at year end | 67 | 190 | 582 | 769 | 618 | 744 | 965 | 216 | 20 |
| Annual change in reserves | +36 | +123 | +392 | +186 | –151 | +127 | +221 | –749 | –196 |

*Source*: National Social Insurance Board, calculations by authors.

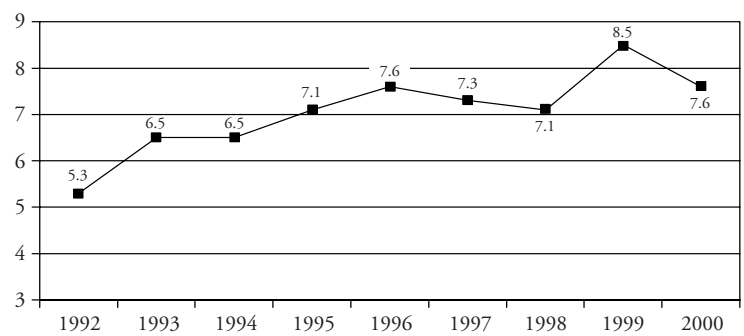
This was because, as previously explained, the state pension system was operating on a macro-level defined-contribution principle, whereby

[18] When calculating the system dependency ratio, the annual average number of pensioners (total number of recipients of all types of state pension) is divided by the annual average number of insured persons (employees on whose behalf employers paid social tax and self-employed persons who themselves paid social tax to the pension insurance budget).

expenditures were largely determined by available revenues from social tax. However, annual expenditures were also influenced by the timing of pension increases – pensions were increased by ad hoc political decisions in the absence of any pre-determined rules on the time or size of the increase.

During 1992–2000, pension expenditures exceeded revenues in two years, 1996 and 1999, reflecting political attempts to use pension increases to attract pensioner voters. On 1 January 1999, pensions were increased by over 20 percent in anticipation of general elections in March 1999. Against the backdrop of negative economic growth and changes in the social tax collection procedures, pension expenditures exceeded social tax revenues by over 750 million EEK in 1999, nearly exhausting the reserves which had been accumulated in 1997–1998.[19] However, as pensions were not increased in 2000 while the economy recovered, the balance between revenues and expenditures was restored by the end of 2000.

**Figure 12**
**State expenditures on pensions as a percentage of GDP, 1992–2000**




*Source*: Ministry of Social Affairs.

[19] As of 1 January 1999, collection of social tax was transferred from pension offices to the Tax Office. At the same time, dates of payment of social tax by employers were changed. Due to this transition, there was no deadline for payment of social tax in January 1999. As a result, in 1999, social tax was paid by employers only for 11 months.

Pension expenditure as a percentage of GDP increased from 1992 to 1996 even though the rate of social tax remained unchanged (Figure 12). The reasons for this varied. In 1992–94, the increase was driven mainly by the increase of real wages, which offset the impact of a declining number of wage-earners and resulted in the growth of the total wage bill in GDP from 34 percent in 1992 to 40 percent in 1994. As a consequence, social tax revenues increased, allowing for an increase in pension expenditures and the establishment of some reserves. In 1995–97, the total wage bill as a share of GDP decreased. However, pension expenditures continued to increase in 1995 and 1996, mainly due to the use of reserves from earlier years and improved collection of social tax.[20] In 1997–98, the expenditure level stabilised slightly above 7 percent of GDP. In 1999, this percentage jumped to 8.5 percent due to large increase of pensions in a period of negative economic growth. In 2000, pensions were not increased while at the same time the economy quickly recovered, resulting in the decline of pensions in GDP to the level of the mid 1990s.

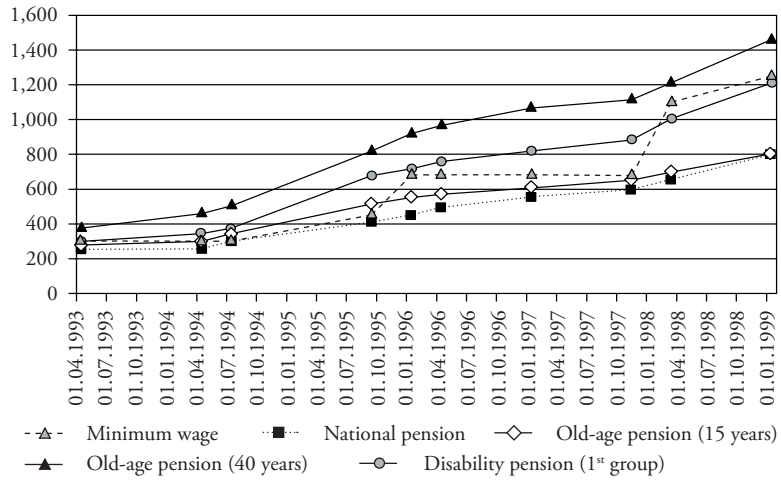
Old-age pensions account for nearly 85 percent of total pension expenditure. Accordingly, the share of old-age pensions in GDP has been slightly below 6 percent.

Figure 13 illustrates changes in pensions over the period when the State Allowances Act was in effect, 1993–99. The differentiation of pensions increased over the time span. Old-age pensions for persons with a service record of 40 years quadrupled in nominal terms, while the increase for those with a service record of 15 years tripled. It should be noted, however, that the average length of service was quite extended, exceeding 40 years.

As Table 5 indicates, average old-age pensions increased in real value by over 50 percent during 1993–2000, as pension increases steadily exceeded the inflation rate.

[20] The collection rate of social tax (revenues from social tax divided by social tax calculated from the reported wages) increased from 87 percent in 1994 to 97 percent in 1997 (see Leppik and Männik 2002 for further details).

**Figure 13**
**The amounts of pensions under the State Living Allowances Act, 1993–1999**




*Source*: Ministry of Social Affairs, calculations by authors.

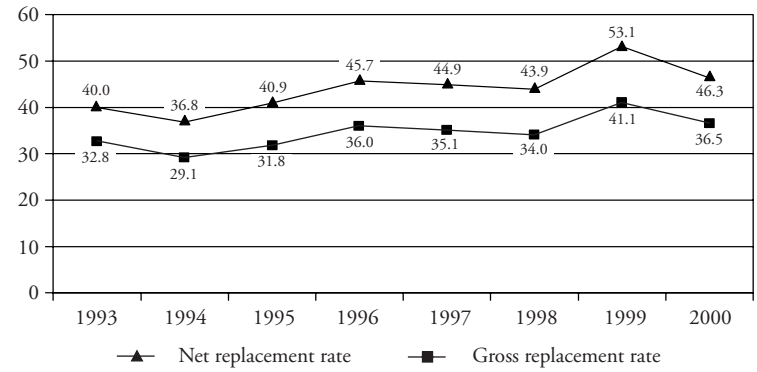
**Table 5**
**Average old-age pension *versus* the consumer price index, 1993–2000**

| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|---|---|
| Cumulative CPI growth (1993=100) | 100 | 148 | 191 | 235 | 261 | 283 | 292 | 304 |
| Average old-age pension [EEK] | 320 | 453 | 671 | 953 | 1,110 | 1,247 | 1,545 | 1,532 |
| Old-age pension in real terms (1993=100) | 100 | 96 | 110 | 127 | 133 | 138 | 165 | 157 |

*Sources*: Estonian Statistical Office, National Social Insurance Board, calculations by authors.

The net replacement rate of the average old-age pension (that is average pension as a percentage of average wage) increased from 40 percent in early 1990s to 45 percent in mid 1990s. The replacement rate exceeded 50 percent in 1999. However, this level was not sustainable due to the fixed revenue base of the pension system; and the replacement rate dropped to 46 percent in 2000 (Figure 14).

**Figure 14**
**Gross and net replacement rate of average old-age pension [%], 1993–2000**




*Note*: Replacement rates were calculated on the basis of the average earnings upon which social tax was paid.

*Source*: National Social Insurance Board, calculations by authors.

While most pensioners have incomes below the median, poverty rates among pensioner households appear lower than for other vulnerable groups like the unemployed, single-parent households, and large families (see Kutsar and Trumm, 1999; Kuddo et al, 2002; Tiit et al, 2004). This is explained by the relatively flat structure of pensions, which results in most pensioners being in the second income quintile – above the poverty level but below the average income. Puur (2000) has shown that the relative incomes of oldest olds (75 years and over) improved during the transition period.

## *1.3 Reasons for Reform and Expected Results*

### 1.3.1 Pension Reform Debate in the Mid 1990s

Starting in 1994, i.e., the year after adoption of the State Allowances Act, pension reform was promised by different political groups. There seemed to be an implicit political consensus that a pension reform was necessary but rather

different views on what the reform should accomplish. In 1994–1997, every Minister of Social Affairs – there were 4 different ministers over the period – promised to present a new draft pension law and did so. Two more draft laws were presented by members of Parliament. In total, over the period of 4 years, six different pension bills were presented to Parliament.

Two main themes dominated public debate during the mid 1990s – the low replacement rate provided by state pensions and questions about the fairness of the pension benefit formula. On the first issue, pensioner organisations demanded that the average old-age pension be increased to 50 percent of the average wage. During the 1995 Parliamentary election campaign, several political parties promised to implement a pension reform to achieve this if they were elected. As a result of the public discourse on this issue, the general public came to associate pension reform with an increase in benefits.

Concerning the calculation of pensions, the dominant perception held that pensions should be calculated on the basis of former earnings. This was related to the issue of "rouble salaries" – that is, the demand by pensioner organisations to recalculate pensions on the basis of salaries earned during the Soviet period. In essence, the issue of rouble salaries was a veiled demand to increase pensions, since it was believed that such a recalculation would boost pension amounts. The plan was however rejected by national conservative parties, who considered the idea as a throwback to the Soviet legacy.

A further complication was due to competing proposals within the coalition which took power after 1995 elections.[21] In addition to government proposals, the Social Commission of Parliament put forward its own drafts.

The pension debate broadened to include other policy matters and other actors, including the social partners. For example, with respect to the administrative management of the pension system, the question was raised whether to establish an autonomous public legal body with a tripartite council or to continue with the government institution. The social partners advocated an autonomous institution, while the government was in favour of a governmental institution.

[21] After the general elections in 1995, the government was formed by the centre-right Coalition Party and centre-left agrarian parties.

However, there was broad consensus on pension financing, namely, that state pensions should continue to be financed from ear-marked social tax and that the budget must continue to be balanced. In this context, the claims of pensioner organisations to increase pensions translated directly into an increase in the rate of social tax, which was opposed by employers and rejected by successive ruling coalitions.

Nevertheless, the possibility of dividing the burden of social tax between employers and employees was debated, primarily among the social partners. Employers' organisations suggested sharing the social tax burden, while trade unions were opposed.

These reform debates often took place without the benefit of background analysis. Policy alternatives were mostly debated in abstract terms, often referring to the experience of particular countries, without quantitative or qualitative analysis in the Estonian context.

In addition to the reform of the state pension system, public discussions also focused on possibilities for establishing private pension schemes. By the mid 1990s, the banking and insurance sectors had already been privatised, yet there were no private pension products available. This was largely because it was unclear whether there would be a sufficient market for them. The discussions thus concentrated on a two-tier system with the state pay-as-you-go pillar and the voluntary private pillar.

To conclude, the main obstacles to reform in the early and mid 1990s were the existence of multiple competing ideas, a lack of political consensus on the aims of pension reform (including conflicts inside the ruling coalition), the short life span of governments, and the absence of background analysis on various proposals. Together these factors created a stalemate that extended to 1997.

### 1.3.2 The 1997 Reform Blueprint

Prime Minister Mart Siimann, who headed the minority government that took power in March 1997, quickly took steps to overcome this stalemate. By a decree issued on 5 May 1997, the government appointed a Social Security Reform Commission (SSRC) with the mandate to prepare an outline for

pension reform. The expert commission was headed by Mr. Ardo Hansson, an economic advisor to the prime minister, and included experts both from the National Social Insurance Board and the Ministry of Finance. In less than a month, this expert commission elaborated a reform proposal – a policy paper entitled *Conceptual Framework for Pension Reform.*

The drafting of this paper marked a shift in the strategy and tactics of preparing the reform. Given the existence of numerous pension reform proposals, the SSRC suggested that before advancing to the stage of drafting legislation, a political agreement should be reached on the basic policy choices.

The concept paper also presented an analysis of the existing problems of the pension system, in particular drawing attention to the worsening of the demographic situation and its long-term consequences for pension financing. By this, the SSRC broadened the focus of the pension reform debate from the concerns of current pensioners to the long-term sustainability of the system and intergenerational equity.

The paper also set objectives for the new pension system. It stated that pension reform ought to balance the interests of various groups and create political and legal stability. As a social policy objective, it suggested that the compulsory pension system should secure at least the European minimum standard of social security, defined by the European Social Charter and the European Code of Social Security (see below). At the same time, it stressed that the reform should maintain the financial stability and sustainability of the pension system, as well as of public finances. The paper argued that in the long run, these objectives could essentially be achieved only by a multi-pillar pension system. In particular, it proposed to introduce a compulsory pre-funded second pillar with the following features:

- I pillar: a state-managed compulsory pension scheme, operating on the pay-as-you-go principle, financed by the employer-paid social tax, and offering earnings-related benefits;
- II pillar: a privately-managed, compulsory, and fully-funded pension scheme, financed by employees' individual contributions;
- III pillar: privately-managed voluntary pension schemes, in the form of pension funds or insurance policies offered by insurance companies.

The first pillar was to be created by reforming the existing state pension scheme, while the second and the third pillars were to be introduced as new schemes. The first pillar was to cover the risks of old age, disability, and survivorship; the second pillar, only old age; and the voluntary third pillar, old age and disability.

The SSRC took also a position on several of the issues under public debate. It showed that a 50 percent replacement rate could not be achieved under existing financial constraints (i.e., maintaining the pensionable age and the rate of social tax). It also showed that, due to the increase of the system dependency ratio, even the existing replacement rate could not be maintained in the long run without tightening eligibility criteria. It weighed in against recalculation of existing pensions on the basis of rouble salaries. In terms of dividing the social tax burden between employer and employee, it took the position that the burden for the PAYG system should remain on the employer, whereas the pre-funded second pillar should be financed from individual contributions by the employee. In effect, this amounted to postponing the division of the social tax burden until introduction of the second pillar.

Concerning the timetable for reform, the Commission did not consider it realistic to undertake the reform as a single step. Rather, it suggested the reform of the first pillar as the first order of business, followed by introduction of the framework legislation for the voluntary third pillar. The introduction of the second pillar was scheduled only for 2001. The main considerations for this decision were:

- obtaining first some experience with the voluntary, third-pillar pension funds – both for the state as the regulator and supervisor as well as for the fund managers as administrators;
- expected further development of the local financial market; and
- expected further decline in the inflation rate, which in 1997 was still at 11 percent.

The Commission set the following primary objectives for the first-pillar reform:

1) Introducing stronger financial incentives for participation in the pension system and decreasing labour market distortions, especially the

phenomena of "envelope salaries", by relating each worker's benefits more closely to the actual contributions made on behalf of him/her;[22]
2) Combating an expected increase in the system dependency ratio (beneficiaries to contributors) due to demographic ageing by tightening eligibility criteria. In this way, a decline of the relative value (replacement rate) of pensions could be avoided;
3) Increasing financial transparency by shifting the financing of non-insurance pensions or pension supplements to general state revenues; and
4) Guaranteeing compliance with the EU's *acquis communautaire* by securing the equal treatment of men and women in all aspects of the pension system.

The first objective entailed establishing individualised records of the amounts of social tax paid by employer on behalf of each employee, since previously employers had paid social tax on the total payroll. The fourth objective was directly related to Estonia's application for EU membership in November 1995.

In spite of proposing to strengthen the earnings-benefit link in the first pillar, the concept paper held that an important feature of the first pillar was solidarity, both between and within generations. Intra-generational redistribution was to be achieved by minimum pension guarantees and a flat-rate base amount for pensions.

The main declared aim of the second pillar was to increase individual responsibility by providing a benefit that was based entirely on each worker's own contributions. In addition, the new compulsory pillar would in the longer term diversify retirement income, since pensioners would rely on at least two different sources of income. The second pillar was characterised in the concept paper by the following principles:

[22] The term "envelope salaries" refers to employers' practice of keeping books and paying taxes only on a part of a worker's total salary (often only on the minimum wage). The other portion is paid out (and accepted by the employee) "in an envelope", thus avoiding taxes.

- compulsory participation of all persons covered under the first pillar;
- benefits determined solely by the contributions paid, i.e., defined-contribution principle;
- contributions paid by individuals (i.e., not by employers);
- fully-funded financing principle;
- pension funds open to all workers and administrated by private asset management; and
- state supervision.

The Commission's recommendation to make the second-pillar mandatory as a way of increasing individual responsibility may seem confusing at first blush. The underlying logic was that, once people start to make individual contributions towards their private pensions, they will also revise their expectations towards the state pension system, thus easing the financial pressure on it. The Commission judged that universal mandatory coverage under the second pillar would facilitate such a paradigm shift more quickly.

While providing a broad outline for reform, the Commission left several practical issues unaddressed. It did not take a firm position on the second-pillar contribution rate, instead citing a need for further demographic and financial projections. It argued that the second-pillar contribution rate should not be too small; otherwise the new system would not be able to provide reasonable replacement rates. At the same time, it said, the contribution rate should not be too high either, as a high rate could be perceived more like a tax rather than a contribution.

The Commission also did not take a firm position on the possible division of the social tax rate between the first and the second pillar. It did make it clear, however, that introduction of the second pillar might be financed in part by an additional contribution.

The aim of the third pillar was to provide instruments for additional savings for old age, so as to allow workers to maintain their earlier living standard. The SSRC supported an individual savings approach (similar to the second pillar), objecting to employer-based schemes on the grounds of potential negative effects on labour market flexibility. However, while it conceived of the second pillar of pension as providing a single standardised product, it saw the third pillar as developing in two main forms: pension insurance policies offered by

life insurance companies or participation in voluntary private pension funds. According to the concept paper, both forms were to be promoted by excluding contributions from taxation, whereas the benefits should be taxable.

The concept paper was strongly backed by the Prime Minister and the leading Coalition Party. Approved by the government on 3 June 1997, it served as a basis for drafting new pension legislation.

Beyond the declared objectives and arguments of the *Conceptual Framework for Pension Reform,* the author's personal conversations point to several other reasons why the three-pillar reform was suggested by the SSRC. First, the SSRC considered that without the second pillar, the average replacement rate would fall below the level of social adequacy in the long run, which would be neither socially nor politically sustainable. Second, the SSRC considered that the second pillar was necessary to prevent an increase in the social tax for the purpose of increasing first-pillar pensions. In this sense, it considered the second pillar as a sort of insurance against possible future increases of social tax, which in turn would have increased labour costs. These considerations were not imaginary problems of the future, but a reflection of the actual situation in 1997. In spite of following a macro-level defined-contribution principle with the rate of social tax being unchanged throughout the 1990s, there had been repeated claims to increase social tax in order to increase state pensions. The SSRC considered that with the ageing of population these pressures were only likely to increase. In this context, the second pillar was seen as a necessary tool with which to illustrate the cost of pensions for the broad public and, in this way, to add an element of realism and balance to the public debate. The SSRC also considered that when the option of increasing the social tax is evaluated, for longer-term sustainability it would be preferable to increase the total contribution rate in order to create the second pillar rather than expand the first.

### 1.3.3 Pension Reform Preparations in 1998–2002

The reform of the state pension scheme was initiated by a new Social Tax Act, adopted on 15 April 1998 and implemented from 1 January 1999. Most crucial changes were enacted with the State Pension Insurance Act, adopted on

26 June 1998, with gradual implementation foreseen during 1999–2000. The legal framework for the third pillar was also enacted in 1998 in the Pension Funds Act, adopted on 10 June 1998 and entering into force on 1 August 1998.[23]

It is noteworthy that these changes were legislated by a minority coalition. Although there was no formal agreement between the coalition and opposition, the opposition did not challenge the principles of the reform.

After the general elections in March 1999, the former opposition gained a majority in Parliament.[24] A new three-party coalition was established comprising the liberal Reform Party, the national-conservative Pro Patria, and a "third way" social-democratic party of Moderates.

In spite of political changes, the three-party coalition followed the broad reform outline accepted by the previous government. Moreover, in the coalition agreement signed by the three parties, the new coalition promised to continue to finalise pension reform, establishing the compulsory funded pension scheme. At the same time, the coalition committed itself not to increase the rate of the social tax.

The new coalition soon restructured the Social Security Reform Commission. Two cabinet members – the Minister of Social Affairs (Mr. Eiki Nestor) and the Minister of Finance (Mr. Siim Kallas) – joined the Commission, with the Minister of Social Affairs taking the chairmanship.

The reconstituted commission – comprising a mix of politicians and experts – opened a debate on the key policy issues related to introduction of the second pillar:

- who should be covered and whether the coverage should be voluntary or compulsory;
- the second-pillar contribution rate;
- the management of the second pillar;
- guarantees to fund participants;

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[23] The legislated changes are described in Section 2.

[24] At the end 1998, the ruling Coalition Party – hoping for re-election – took the controversial step of increasing state pensions over 20 percent beginning in January 1999 in a situation of economic recession. However, this did not buy political support for the party – on the contrary, the Coalition Party failed in the 1999 elections and was dismantled a couple of years later.

- tax treatment of second-pillar contributions and benefits;
- how to cover the transitional costs of establishing the second pillar; and
- impacts of the second pillar on first-pillar benefits.

Finding acceptable compromises among the three political parties, which in essence represented a broad political spectrum (liberals, conservatives and social democrats) was not easy. Simultaneously, the government held trilateral consultations with employers and trade unions, which further broadened the debate. While none of these parties questioned the necessity of the reform, there were rather different views on how it should be implemented.

These deliberations lasted nearly 2 years. Different divisions of contributions between the first and second pillars were debated, ranging from a radical 10+10 (i.e.,10 percent for the first pillar and 10 percent for the second pillar) to 16+6 (see also Oorn 2004). Another aspect of the debate concerned a possible division of social tax burden between the employer and employee, with a simultaneous increase in nominal wages. The population to be covered by the second pillar was also debated, with proposals ranging from compulsory participation for everyone under 50 years of age to voluntary participation for all.

Finally, the coalition reached a compromise solution in January 2001. It included the formula "16+4+2", indicating the new division of the contribution burden – 16 percent for the first pillar, 4 percent for the second, and an additional 2 percent contribution by employees for the latter.[25] According to the compromise, the second pillar was to be voluntary for all workers regardless of age and broad participation was to be achieved by attractive switching rules.

Under this proposal, the transitional financing costs of creating the second pillar were estimated to be about 0.3–0.8 percent of GDP per year depending on how many from the current work force decided to join the second pillar.[26] The methods suggested by the Social Security Reform Commission to cover these transition costs included the use of the stabilisation reserve in the short run. In the longer-term, it suggested transfers from the state budget and possibly issuing of government bonds (borrowing).

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[25] Full details of the plan are described in Section 2.

[26] Here transition costs refer to the "hole" in first-pillar financing created by diverting a portion of social tax revenues to the second pillar.

It is noteworthy that the government's approach clearly softened in the course of debates. Debates started with a radical approach of 10+10 (with simultaneous division of contributions between employers and employees) and compulsory participation for everyone under 50 years of age – this position was held by the government in July 1999. Debates ended with a plan in which: (1) the first-pillar contribution (social tax) was reduced only by 4 percentage points, (2) an additional individual contribution of 2 percent was introduced, (3) there was no division of the first-pillar contribution (social tax) between employers and employees, and (4) participation was to be voluntary for all workers.

Among the three coalition members, the second-pillar reform was strongly backed (perhaps somewhat surprisingly in the international context) by the social democratic Moderates, with Eiki Nestor, the Minister of Social Affairs and chairman of the Social Security Reform Commission, being the main spokesman for the reform. Siim Kallas, the Minister of Finance and the leader of the liberal Reform Party, although originally a supporter of the radical 10+10 approach, later took a more cautious position towards the reform, due to the high transitional financing costs.

To understand the development of the compromise, the positions of the different parties and dynamics of the public debate have to be examined. The Moderates regarded the second-pillar reform as feasible only if the total contribution rate were increased and thus supported the top-up element. They felt that future pensions for current workers could be increased only if some new resources were pulled into the system and therefore agreed to introduce an additional contribution for workers. This additional contribution was also acceptable to Pro Patria. However, the liberal Reform Party had concerns, as it was ideologically opposed to increasing taxes and contributions. Therefore, it insisted that the second pillar should be voluntary, leaving to each individual a free choice of whether to pay higher contributions. To move forward with the pension reform, Moderates and Pro Patria together agreed to this condition.

Once the reform plan was made public, it received generally positive evaluations from the media – the main daily newspapers, TV, and radio commentators. However, the issue of voluntary participation was questioned by several commentators, and the government was criticised for taking a soft position in this respect. In the public debate that followed, the idea of compulsory participation was backed in particular by trade unions, and from

the other side by potential market players – financial institutions. In this situation, the Reform Party agreed to make participation in the second pillar compulsory for all new entrants to the labour market. The new compromise allowed all parties to save face. The Reform Party could still point out that for all current workers the choice was free, whereas the Moderates could point to the top-up element of the second pillar.

The draft Funded Pensions Act was presented to Parliament in April 2001. In Parliament, the draft was reviewed jointly by two committees – the Social Affairs Commission and the Finance Commission – a fairly rare procedure for handling draft legislation. It was also defended before Parliament by two ministers – the Minister of Social Affairs and the Minister of Finance.

The Estonian Parliament adopted the Funded Pensions Act on 12 September 2001. The Act was supported by 47 (from the total of 101) Members of Parliament from the coalition of Moderates, Reform Party and Pro Patria. 26 Members of Parliament from the Center Party, the agrarian Peoples' Union and the predominantly Russian-speaking Estonian United People's Party were against it, and the others were absent. However, even the representatives of opposition parties indicated support for the second pillar while at the same time criticising the government bill for weak guarantees to fund participants and the potential negative impact of transition costs on the future increases of state pensions for current pensioners.

Peculiarly enough, the strongest critics of the second pillar were not the opposition parties, but insurance companies who were concerned about the short-term weakening of their market position in selling voluntary pension products once the compulsory pension funds entered the market.

Before the second-pillar reform was implemented, the government faced a crisis. Loss of trust in their coalition partner and mutual accusations on controversial privatisation issues (namely, the failed privatisations of Estonian energy companies and problems associated with the privatisation of Estonian Railways) led Pro Patria and Moderates to step down from the government at the end of 2001.

In January 2002, the liberal Reform Party formed a new coalition with the Center Party, which had been its main ideological opponent in the 1999 election campaign. With the Center Party entering the coalition, some of the former critics of the reform were now in the government. However, the

new coalition agreement of the Center Party and Reform Party included a commitment to guarantee stability of the three-pillar pension system.[27] As the Center Party enjoyed rather strong support from the pensioner population, the coalition also promised an additional pension increase on top of the regular indexation.

The new Minister of Social Affairs from the Center Party (Ms. Siiri Oviir) personally participated in the awareness campaign, stating that she was concerned about her future and was therefore joining the second pillar.

## 2. Main Elements of the Reform

The new Estonian pension law and its implementation over the period 1998–2002 can be seen as a second wave of transformation. While the first wave separated the Estonian pension system from the Soviet one, the second wave entailed a move from a single-pillar to a multi-pillar system. The reform made changes in the state pension system but, even more significantly, it supplemented the state system with privately managed pre-funded pension schemes.

### *2.1 Changes in the State Pension System*

Reform of the first pillar entailed parametric changes in both pension financing and benefits.

[27] The reasons why the Center Party changed its earlier positions relate to political circumstances. The party had been in opposition for a long time in spite of rather strong electoral support. As the party was in conflict with almost all other major parties, it was generally not accepted as a coalition partner. The government crises in 2001 provided a window of opportunity for the Center Party to enter into government, but because of its weak negotiating power, it was forced to accept the proposals of the Reform Party.

**Changes in the Financing of State Pension Insurance**

The 1999 Social Tax Act brought about some important changes in the collection of social tax. Up to 1999, pension offices had collected the pension insurance part of social tax (20 percent), while sickness funds had collected the health insurance part (13 percent). As the collection was separate, some employers treated the two parts as separate taxes. Occasionally some employers transferred only one part, falling into arrears on the other.

While the 1999 Social Tax Act maintained the rate of social tax unchanged, it made a significant change in the method of tax collection. This function was unified under the Tax Office. Starting 1 January 1999, employers were required to pay the total rate of social tax (33 percent of gross wage) to the Tax Office accounts. Under this new arrangement, the Tax Office then transfers 20 percent to the account of the pension insurance budget and 13 percent to the health insurance budget.[28] The Tax Office performs the control functions previously performed by the pension and health insurance offices, as well as pursuing payments in arrears.

While previously employers had calculated and paid social tax on the total payroll without providing any information on individual earnings, since 1999 employers have been required to provide data on the amount of social tax paid on behalf of each insured person. This information is reported on monthly basis to the Tax Office, which transmits the information to the Social Insurance Board.

As mandated by the new State Pension Insurance Act, a State Pension Insurance Register was established as a structural unit of the Social Insurance Board, to record data on insured persons, including the amounts of social tax paid on their behalf.

The new procedures thus required individual registration of social tax paid by employers on behalf of their employees. This was an important prerequisite for the introduction of the new contribution-related component of state pensions. Individual recording of social tax started on 1 January 1999, and the new benefit rules were to be applied beginning in 2000.

[28] The accounts of the pension insurance budget are administrated by the National Social Insurance Board. Health insurance revenues are managed separately by the Health Insurance Fund.

The new legislation also prescribed integration of the formerly autonomous social insurance budgets with the general state budget. Starting in 1999, the state pension insurance budget was adopted annually by Parliament as a part of the general state budget. However, this was a technical, rather than a substantive, change since the earmarked nature of social tax had always been maintained and revenues from social tax were held strictly separate from other state revenues. Also according to the State Pension Insurance Act, revenues from the pension insurance component of social tax cannot be used for any other purpose except payment of state pensions.

The 1997 concept paper had proposed that beginning in 1999 all new pension rights would be based only on the payment of social tax. Earlier, certain periods were considered as covered employment even though no contributions were paid. These credited periods were financed by intra-generational redistribution. However, the cost of this redistribution was not transparent. The SSRC suggested that the state pay contributions on a deemed amount equal to the minimum wage on behalf of parents raising children, conscripts in compulsory military service, and unemployed persons. Essentially, the payment of contributions by the state would strengthen the financial base of the pension system.

In the course of passing this proposal into law, Parliament modified the original SSRC plan. The list of categories of persons for whom the state pays social tax was extended, while the amount of social tax contributed by the state was reduced. The list of persons for whom the state pays social tax includes:

- parents with a child of up to 3 years of age who are on parental leave or who are receiving a child-care fee pursuant to the Family Benefits Act;
- conscripts in compulsory military service;
- persons providing care for a disabled child or disabled adult or receiving a caregivers' allowance pursuant to the Social Benefits for Disabled Act;
- persons with disabilities working in enterprises listed by the Minister of Social Affairs;
- non-working spouses of diplomats working in a foreign representation; and
- non-working persons who participated in the clean-up of the Chernobyl nuclear disaster.

However, the state pays social tax on behalf of these persons only on a deemed amount of 700 EEK per month, while the minimum wage in 1999 was 1,400 EEK.[29] As a result, pension rights for periods outside the labour market are fairly modest.

The 1998 State Pension Insurance Act also shifted a part of the burden for funding the state pension system to general taxation. The state budget became responsible for financing non-contributory pensions (national pensions), certain politically motivated pension supplements that were unrelated to past earnings (e.g., to compensate for the periods of repression), and the administrative costs of the pension offices.

**Changes in the Benefit Side of State Pension Insurance**

The 1998 State Pension Insurance Act made a number of policy changes compared to the previous State Living Allowances Act, most importantly:

1) equalisation of the pensionable age for men and women;
2) provision for early retirement with a reduced pension;
3) introducing a contribution-related element in the pension formula by linking the acquisition of new pension rights to social tax paid on behalf of the person;
4) replacement of disability pensions with so-called work incapacity pensions;
5) introduction of qualification periods for work-incapacity and survivors' pensions; and
6) calculation of old-age, work-incapacity and survivors' pensions on similar principles.

Most of these changes entered into force on 1 April 2000. However, the counting of pension insurance periods on the basis of registered social tax payments started 1 January 1999.

[29] The amount of social tax paid by the state has remained unchanged since 1999, while the minimum wage increased to 2,460 EEK by 2004. As a result, the pension insurance coefficients for the periods when the state pays social tax are only in the range of 0.15, i.e., about 15 percent of the pension right acquired by a person earning an average wage.

The pensionable age had first been increased in 1994 by the State Allowances Act. However, the earlier legislation maintained different target ages for men and women (65 and 60 respectively) to be reached by 2007. The State Pension Insurance Act stipulated equalisation of the pensionable ages of men and women at 63 years. In essence, the target pensionable age of men was reduced from 65 to 63 (the pensionable age of men reached the target level in 2001) whereas the pensionable age of women was further increased, so that it will reach 63 in 2016. With demographic ageing on the horizon, the increase of statutory pensionable age was seen as a key cost-containment measure.

Parallel to increasing the pensionable age, the new act also provided an option for early retirement up to 3 years before the normal retirement age, with a reduction in benefits of 0.4 percent for each month of earlier retirement (i.e., 4.8 percent per year).[30] The declared objective of this provision was to allow for greater flexibility in retirement decisions and in particular to provide an alternative for persons who lost their jobs shortly before reaching pensionable age.

To counterbalance the options of earlier retirement, a deferred old-age pension was introduced beginning 1 January 2002. Under this option, pensions were increased by 0.9 percent per month of postponed retirement (i.e., 10.8 percent per year). This is considerably more than an actuarially fair adjustment and provides a strong incentive to continue in work without drawing a pension.[31] Continuation of work yields a double benefit, as the full career is taken into account for calculation of the pension and the additional working years also increase the pension amount.

The new formula to calculate old-age pensions consists of three additive elements:

- a flat-rate base amount;
- a length of service component applying to service periods through 31 December 1998; and

[30] In the draft law, the government suggested to reduce the pension by 0.5 percent per month, which was the actuarially fair reduction. However, an amendment by trade union representatives reduced the coefficient to 0.4, making early retirement more attractive. However, in contrast to regular old-age pensions, these early retirement pensions are not paid to working persons.

[31] An actuarially fair increase would be about 0.6 percent per month.

- a pension insurance component applying to contributions made after 1 January 1999.

The pension formula could be expressed as:

$$P = B + s \times V + \sum I \times V$$

where

*B* is the base amount,
*s* is the pensionable length of service of the applicant,
$\sum I$ is the sum of pension insurance coefficients of the applicant, where *I* is annual coefficient accrued from 1999 onwards, and
*V* is the cash value of 1 year of pensionable service and the pension insurance coefficient 1.0.[32]

The flat-rate base amount constitutes the solidarity element in the state pension system and provides vertical redistribution from higher-income earners to lower-income earners. The length of service component is also redistributive as it takes into account only the number of service years but not the former earnings. However, this component applies only to pre-reform "old service" up to the end of 1998.

From 1999 onwards pension rights are acquired only on the basis of social tax paid. The acquired rights are assessed through annual pension insurance coefficients, which indicate the social tax paid on behalf of the person as a proportion of the average amount of social tax paid for a worker in the given calendar year. Hence the insurance coefficient 1.0 corresponds to the payment of social tax on the average contribution wage (i.e., the average earnings upon which social tax is paid).

In fact, since the cash value of 1 year of pensionable service is the same as for the pension insurance coefficient 1.0, all service years up to 1998 are treated as if all persons earned an average wage.

[32] Starting in April 2004, the base amount B is 663.70 EEK and the value of the service year V is 37.31 EEK. Let us take, for example, a person with service of 39 years before 1999 and pension insurance coefficients acquired since 1999 summing to 3.5. According to the formula, the pension would be calculated as P = 663.70 + 39 × 37.31 + 3.5 × 37.31 = 663.70 + 1,455.09 + 130.59 ≈ 2,249 EEK.

Thus, the amount of a pension depends on two individual variables – length of pensionable service before 1999 and the sum of pension insurance coefficients accumulated thereafter. Longer service before 1999 and higher amounts of social tax paid (i.e., higher legal wages) from 1999 onwards are the factors which contribute to a higher individual pension – there is no maximum pension. As pensions are essentially calculated on lifetime earnings, there are presumably no adverse incentives on labour market behaviour.

In essence, the new formula entails gradually increasing differentiation of state pensions as pension insurance coefficients vary more than the length of service. At the same time, a minimum pension guarantee was introduced, which limits the differentiation toward the lower end – the old-age pension for a person who has fulfilled the qualification period (which remained at 15 years of pensionable service) will not be less than the national pension.

For the majority of current pensioners who withdrew from work before 1999, the pension amount depends only on the flat-rate base amount and the number of service years. For persons who entered the labour market in 1999 or later, the state pension will consist of two parts: the flat-rate base amount and a contribution-related insurance component. In fact, the three-part pension formula applies only to the "transition generations", who have worked before as well as after 1999.

The real amounts of pensions in payment depend on the values of *B* (the base amount) and *V* (the value of 1 service year and pension insurance coefficient 1.0). Until 2002, these values were determined annually by Parliament and the government, respectively, within budget constraints. From 2002, pensions in payment as well as components determining the amounts of newly granted pensions (i.e., *B* and *V*) are indexed annually on 1 April.[33] The index is an

[33] The introduction of pension indexation was suggested in the 1997 concept paper. In the course of drafting the law, the idea of indexation was rejected by the political coalition, maintaining the earlier "macro level defined-contribution" approach. It was argued that with indexation, social tax revenues might be insufficient to finance pensions, depending on the development of factors determining the index and considering possible increases in the number of pensioners. In reality, the main driving force against indexation was politicians' desire to leave their hands free to increase pensions before the next general elections, which were scheduled for March 1999.

arithmetic average of the annual increase of the consumer price index and the increase of social tax revenues.[34]

In an important sense, the introduction of indexation changed the Estonian first pillar into a defined-benefit pension scheme, since benefits are now adjusted based on a formula in the law rather than on an ad hoc basis according to available revenues.[35] This new index, which gives equal weight to price increases and increases in social tax revenues, determines changes over time in individual pensions and the state's total pension obligations.

Disability pensions were replaced by so-called work incapacity pensions. Whereas the former disability pensions could be paid regardless of age (from birth to death), work incapacity pensions are limited to persons of working age (from 16 to the pensionable age). Three previous disability groups were replaced by a new assessment of work incapacity in percentages. Furthermore, an age-related qualification period was established for work incapacity and survivors' pensions.[36]

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[34] In principle, social tax revenues and the price index could also decline. However, according to the law, pensions cannot be reduced and in these cases indexation is not applied. When calculating the index, the whole pension insurance part of social tax – 20 percent – is taken into account. Therefore, the partial loss of social tax revenues due to transfers to the second pillar does not affect the development of first-pillar pensions.

[35] It may be argued, however, that qualitatively the determination of pension rights on the basis of pension insurance coefficients calculated on the basis of social tax (i.e., the Estonian first pillar) is similar to the determination of pension rights in the notional-defined-contribution (NDC) systems (e.g., the Polish and Latvian first pillars). Furthermore, the NDC systems also use indexation for revalorisation of the paid contributions as well as for pensions in payment. The difference in recording individual contributions lies only in the aspect that in the Estonian first pillar, contribution data are recorded in relative amounts (weighted against the average contribution) whereas in the Latvian and Polish first-pillars contribution data is recorded in absolute amounts. Obviously, it may be argued that the latter method is more transparent. Moreover, the qualitative similarity of acquisition of pension rights does not make the Estonian first pillar a NDC scheme, as a crucial element of the latter is also the demographic adjustment factor (the "G-factor").

[36] In the latter case, the qualification period related to the insurance record of the breadwinner before death.

Calculation of work-incapacity and survivors' pensions is generally based on the same formula as the old-age pension. There are, however, certain deviations. First, the higher of the following two amounts is determined:

- The amount of an old-age pension calculated from the individual's years of service and pension insurance coefficients (i.e., the amount of a standard old-age pension),[37] or
- The amount of an old-age pension for a person with 30 years of pensionable service.[38]

For a work incapacity pension, the calculation base, as derived above, is multiplied by the percent of person's work incapacity. To create a floor below which work-incapacity pensions cannot fall, it is further stipulated that the work-incapacity pension may not be less than the rate of the national pension (that is, the minimum old-age pension). Otherwise, individuals with a low degree of work incapacity (40–60 percent) would end up with very low pensions.

In fact, this calculation algorithm created a two-level floor for the amounts of work-incapacity pensions depending on the level of work incapacity. In practice, most persons under 50 years of age – about two-thirds of all beneficiaries – receive the fixed rate, as their insurance record is relatively short. The standard old-age pension formula has relevance only for persons who are closer to the pensionable age and have insurance record longer than 30 years or whose sum of pension coefficients exceeds 30.

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[37] In the case of a work-incapacity pension, this applies to the applicant, whereas in case of a survivors' pension it applies to the breadwinner.

[38] The choice of the second component of the floor, as described above – an old-age pension for a person with 30 years of pensionable service – bears an indirect relation to the requirements of the European Code of Social Security, signed by the government in January 2000. The Code requires that the old-age pension for a standard beneficiary – a person with an insurance period of 30 years – shall correspond to at least 40 percent of the wage of an ordinary adult male labourer. The same standard applies for a disability pension for a person with a total loss of earnings' capacity and for a survivors' pension for a widow with two children. In establishing this particular floor, the government linked these requirements, so that the pension for a person with total work incapacity must at least equal the old-age pension for a person with 30 years of service.

The survivors' pension depends on the number of dependant family members. According to the new law, it amounts to:

- 100 percent of the calculation base, in the case of three or more dependant family members;
- 70 percent of the calculation base, in the case of two dependant family members; and
- 40 percent of the calculation base, in the case of one dependant family member.[39]

Again, the floor established in the calculation base – equal to the old-age pension for a person with 30 years of pensionable service – provides the minimum survivors' pension. However, given that many breadwinners with minor children have relatively short insurance records, the majority of survivors' pensions are paid in fixed amounts.

The State Pension Insurance Act also made significant changes in the role of the national pension. Previously, the national pension addressed only the risk of *old age* for persons without a sufficient qualification period. Under the new rules, it is also granted to persons who lack the required insurance period for receiving a disability or survivors' pension as well. While national pensions for old age are paid at a flat rate,[40] for work-incapacity they are calculated to reflect the loss of capacity for work and the national pension rate. In contrast with work-incapacity pensions, there is no second floor established; and, as a result, national pensions for persons with a low degree of work incapacity (40–50 percent) are modest, falling even below the social assistance benefit level. For survivors, the national pension also depends on the number of dependant family members and is calculated using the same percentages as in the survivors' pension, but again applying these to the national pension rate.

[39] These percentages were changed on 1 April 2004, when the rate of pension for a single survivor was increased to 50 percent and for two survivors, to 80 percent.

[40] As explained previously, the same rate – national pension rate – also serves as the minimum pension guarantee for old-age pensions.

Thus, in essence, the first pillar comprises 2 separate tiers:

- residence-based national pensions; and
- employment-based old-age, work incapacity, and survivors' pensions.

The state pension scheme also provides old-age pensions on favourable conditions and superannuated pensions. The former are paid to workers in occupations that are considered hard or hazardous (e.g., workers in chemical, metal, glass, pulp industry, mining, etc.). They may retire 5 or 10 years before the normal retirement age if they have fulfilled certain requirements – i.e., from 15 to 25 years of pensionable service of which at least half was in the given profession. In addition, parents of disabled children, parents who have raised three or more children, and some other categories may retire before the normal pensionable age. Superannuated pensions are in essence early retirement pensions for certain professional groups, like pilots, mariners, miners and artists, whose professional abilities are assumed to have declined before the normal pensionable age. Most of these privileged rules are inherited from the Soviet pension system.[41]

In the 1997 reform proposal, the SSRC had suggested limiting these privileged rules. Its rationale was that the actual working conditions in many privileged professions had improved. It also noted that the state's acceptance of certain professions as unhealthy provided no incentive for employers to improve working conditions. Concerning superannuated pensions, the SSRC also questioned state-provided early retirement for pilots and mariners, since these sectors had been privatised and favourable rules on retirement could be regarded as an indirect subsidy for some private enterprises.

The SSRC suggested applying universal rules in the state pension system, with any special early retirement provisions to be financed separately by

[41] The Soviet pension law included a lower pensionable age (by 5 years) for mothers with 5 or more children. The 1993 State Allowance Act extended this right to one of the parents at the choice of the family. The 1998 State Pension Insurance Act broadened early retirement to parents of 3 or more children – that is, retirement 1 year before general pensionable age for parents of 3 children, 3 years for parents of 4 children, and 5 years for parents of 5 or more children.

employers through voluntary insurance. These proposals, however, have so far not been implemented. They were strongly opposed by trade unions, which demanded the introduction of a separate scheme on work accident and occupational disease insurance as a precondition to any changes.[42] This in turn would necessitate the introduction of an additional contribution, i.e., an increase of labour costs, which was opposed both by employers and the government.

**Table 6**
**Comparison of the old and new rules for the first pillar**

| | Until 1999 | Starting with 1999–2000 |
|---|---|---|
| Collection of pension insurance part of social tax | Pension offices | Tax Office |
| Payment and declaration of social tax by employers | Paid on total payroll, no individual registration of wage data | Amounts of social tax indicated separately for each employee |
| Target pensionable age | 65 for men, 60 for women to be reached by 2007 | 63 for both genders, to be reached by 2001 for men and by 2016 for women |
| Acquisition of pension rights | On the basis of years of service | On the basis of social tax paid |
| Old-age pension formula | Flat-rate base, variation on the basis of length-of-service | Flat-rate base, variation on the basis of social tax paid over the full career |
| Increase of pensions | Ad hoc political decisions | Indexation (from 2002) |
| The key principle of the first pillar | Macro-level defined-contribution: the rate of social tax was fixed (at 20 percent of gross wages), the level of pensions depended on the resulting revenues | Defined-benefit principle: initial benefits determined by the amounts of social tax paid, pension adjustments and total expenditures determined by the index |

[42] There is no separate scheme for these risks in the Estonian social security system. The risks of work accidents and occupational diseases are covered respectively by the general health insurance and pension insurance schemes and, on top, employers' civil liability applies.

Until 2002, state pensions constituted non-taxable income. Since then, pensions have been treated as a taxable income, but a higher non-taxable allowance applies.[43]

### *2.2 Implementation of the Second Pillar*

The second pillar became operational on 1 July 2002, when collection of contributions for the new individual savings schemes started. The main second-pillar rules were enacted by the Funded Pensions Act (effective 12 September 2001) and subsequent regulations of the government and the Minister of Finance. However, in addition to the Funded Pensions Act, the Guarantee Fund Act (adopted 20 February 2002), the Investment Funds Act, and amendments to the Estonian Central Register of Securities Act (adopted 12 September 2001) had relevance for the implementation of the second pillar.

Moreover, as the first-pillar reform was legislated before the introduction of the second pillar, further amendments to the first-pillar rules were introduced to deal with the consequences of its introduction.

#### Coverage

The second pillar addresses only the risk of old age and does not provide pensions for the risks of disability and survivorship. Participation in the second pillar is compulsory for new entrants to the labour force beginning in 2002, while voluntary for all current workers, i.e., for those already in the labour market before 2002.[44] In contrast to Poland and Latvia, Estonia opted

[43] The general non-taxable income in 2004 was 16,800 EEK per year. For pension income, the non-taxable allowance was further increased by 36,000 EEK. As the overwhelming majority of state pensions remain below this threshold, they are not taxed.

[44] In operational terms, participation in the second pillar is compulsory for young persons aged 18 entering the labour market in 2002 or later – i.e., persons born after 1 January 1983.

not to apply explicit age restrictions for limiting access to second pillar for older age-groups. Instead, a qualification period of 5 years was used to prevent early access to second-pillar benefits. However, policy makers believed that the qualification period might also discourage older persons from joining the new system.

All persons born before 1 January 1983 were granted the option to join the second pillar voluntarily. Operational rules for exercising this right nevertheless contain some age discrimination – namely, older age-groups were provided shorter deadlines (Table 7).

**Table 7**
**Deadlines for submitting applications for groups, whose participation in the second pillar is voluntary**[45]

| Deadline | Age-groups |
|---|---|
| 31 October 2002 | Persons born 1942–1956 |
| 31 October 2003 | Persons born 1957–1961 |
| 31 October 2004 | Persons born 1962–1964 |
| 31 October 2005 | Persons born 1965–1967 |
| 31 October 2006 | Persons born 1968–1970 |
| 31 October 2007 | Persons born 1971–1973 |
| 31 October 2008 | Persons born 1974–1976 |
| 31 October 2009 | Persons born 1977–1979 |
| 31 October 2010 | Persons born 1980–1982 |

*Source*: Funded Pensions Act.

[45] Deadlines for younger age-groups were shortened in 2004. According to the previous timetable, persons born in 1982 could join the second pillar until 2024. The open season was shortened since, in 2004, over half of the eligible persons had already joined the second pillar. Another factor was the government's interest in getting a clear picture of transitional financing costs by determining with certainty who is participating in the second pillar and who is staying out.

The underlying thinking was that age-specific deadlines might implicitly discourage older persons from joining since they had to make a decision on the basis of limited information.

**Overview of Legal Rules on Participation in the Second Pillar**

Participation in the second pillar entails two basic choices:

- first, a decision to join the system, accepting an obligation to pay an additional contribution of 2 percent of wages; and
- second, the choice of a pension fund, to which contributions are directed for investment.

The first decision is irreversible: there is no option of ceasing payment of contributions, neither switching back to the first pillar. After joining the system, the payment of contributions becomes a legal obligation. The main incentive to join is the fact that individual contributions are supplemented by the state with 4 percent of gross wage, re-directed from the pension insurance part of social tax paid by employers. Put in other words, joining the second pillar and paying an individual contribution of 2 percent of gross wage provides a right to re-direct 4 percentage points of social tax to an individual pension account in a private pension fund.

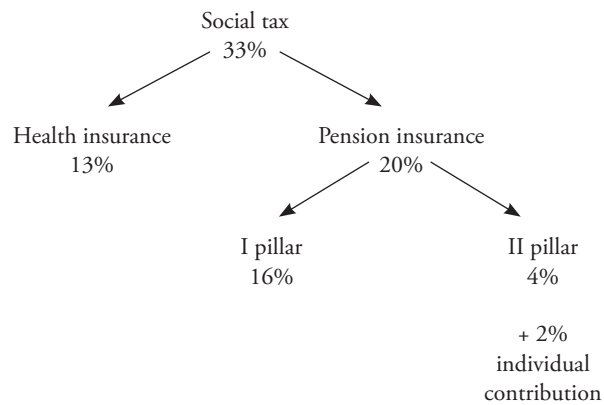
The second decision, choice of a fund, may be altered from time to time by the individual.

The new division of the pension insurance part of social tax is best captured by the formula "16+4+2". Participants in the second pillar pay an individual contribution of 2 percent of their gross wage, which is supplemented by the state with 4 percentage points of the individual gross wage posted on the social tax account of the employer.[46] In total, 6 percent of the gross wage is accumulated in individual account in the second-pillar pension fund, whereas 16 percentage points continue to finance current state pensions and to serve

[46] The individual contribution of 2 percent reduces taxable income (i.e., contributions are not taxable); therefore, the net wage decreases less than 2 percent.

as the basis for computing each worker's contribution-related state pension benefits.[47]

**Figure 15**
**Distribution of social tax after second-pillar pension reform**




As a consequence, participation in the second pillar diminishes pension rights in the first pillar. Since only 16 percentage points of social tax (instead of the previous 20 percent) goes to the first pillar, the annual pension insurance coefficient – determining the size of the contribution-related component of the first-pillar pension – is proportionally reduced (by 4/20, i.e., 1/5). However, this affects only post-reform periods, leaving previously acquired pension rights unaffected.

Two important features of the first-pillar benefit structure are unaffected by an individual's decision to join the second pillar. First, the base amount of the state pension (which in 2002, when the reform was introduced, accounted for about 25 percent of the average old-age pension) is not reduced. Second, the minimum pension guarantee in the first pillar – that is, the provision stipulating that the old-age pension cannot fall below the national pension

[47] It should be noted here that the first-pillar contribution 16 percent covers three risks – old age, disability and survivors – whereas the second-pillar contribution covers only the risk of old age.

rate – is maintained, regardless of an individual's decision to join the second pillar and consequent lower contributions to the first pillar. The first-pillar rules thus contain several additional incentives to join the second pillar.

Persons who decide not to participate in the second pillar will acquire rights only from the reformed first pillar. The pension insurance component of the social tax remains at 20 percent, and their pension will develop only from the first pillar.

As described above, the rules of the second pillar provide an opportunity for a partial opt-out from the state system, on the condition that the individual pays additional contributions. In other words, the second pillar was established using both a "carve-out" and a "top-up" method. A portion of the pension part of the social tax was redirected to the second pillar, to be supplemented by an additional contribution of the employee. The reform is neutral with respect to the overall social tax rate of employers, but affects the distribution of social tax revenues, redirecting a portion from the first to the second pillar.

Originally, second-pillar contributions could be paid only on wage income. Although there were no formal obstacles to joining the second pillar for self-employed individuals (i.e., they could make an application) contributions could not be paid on income from self-employment.[48] This was changed in 2004, allowing accumulation of a second-pillar pension for self-employed persons as well as employees.

Periods outside the labour market as a rule do not accrue second-pillar pensions, as contributions are paid only on wages (and beginning in 2005 on income from self-employment). There was, however, one exception introduced in 2004 – the state pays 1 percent contribution on the parental benefit.[49]

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[48] The reasons why second-pillar contributions were not permitted on income from self-employment in the first 2 years of the reform were administrative and technical rather than political. The barriers related to the different taxation period (which for self-employed persons is a calendar year, as opposed to a calendar month for employers) and to the procedures for making quarterly advance payments of social tax by self-employed persons.

[49] The parental benefit is an earnings-related benefit introduced in 2004. It provides 100 percent of previous earnings for one of the parents of a newborn child during its first 11 months. The 1 percent contribution paid by the state is still only one-sixth of what is accrued on work income.

**Types of Pension Funds and Rules for Joining Them**

By their nature, pension funds in Estonia are open contractual investment funds. The fund is not a separate legal entity, but a pool of assets owned mutually by fund participants. The assets of a pension fund are formed from contributions and investment returns. The rights of fund participants to their share of the assets of a fund are represented by units of the fund.[50]

Pension funds are managed by asset management companies. In 2002, 6 pension fund managers entered the Estonian market. Three of these are affiliated with the three largest banks in Estonia (Hansa Asset Management, Ühispank Asset Management, and Sampo Asset Management), two are linked to insurance companies (Ergo Asset Management, Seesam Asset Management), and one is linked to an investment bank (LHV Asset Management).

The pension funds themselves can be classified into three different categories according to investment strategy:

- lower-risk (or conservative) funds, which may invest only in fixed-interest instruments (bonds, money market instruments, and bank deposits);
- medium-risk (or balanced) funds, which may invest up to 25 percent of assets in equities; and
- higher-risk (or aggressive) funds, which may invest the maximum allowed amount – 50 percent – of assets in equities.

The Funded Pensions Act requires each fund manager to establish a low-risk fund. In addition, fund managers may set up additional second-pillar funds, but the investment strategy of the other fund must be qualitatively different. In practice, each of the fund managers has set up a higher-risk fund, and three fund managers also offer a medium-risk fund. Accordingly, there are a total 15 different second-pillar pension funds: 6 low-risk, 3 medium-risk, and 6 higher-risk funds.

In practical terms, there are three options to join the second pillar and to register for a fund. The same options also apply to switching to another fund.

[50] Each unit has a nominal value of 10 EEK.

The person has to complete an application either:

- in a bank office,
- through an internet bank, or
- at a special website of the Central Register of Securities *www.pensionikeskus.ee*, using an ID-card and a digital signature.

If the person uses a bank office or internet bank, the bank forwards the application to the Register.

In the application, the person indicates his or her choice of a pension fund and must accept its membership conditions.

In any given calendar year, contributions can be made to only one fund. However, at the beginning of the following year contributions can be re-directed to a new fund, leaving previously obtained units in the old fund. Thus, over a worker's full career it is possible to accumulate units in several different funds.[51]

It is also possible to convert the units of one pension fund to units of another one. However, in this case, a minimum threshold of 500 units applies.[52] Switching funds is possible only once a calendar year, always from 1 January.[53] These rules constrain members' ability to react to short-term market changes.

**Administration of the Second Pillar**

The 2 percent employee contribution to the second pillar is withheld by the employer and transferred together with the social tax to the Tax Office. The Tax Office supplements the 2 percent contribution with 4 percentage points from the social tax and transfers the total contribution (6 percent) to the

[51] Shifting of contributions to a new fund became possible as of 1 January 2004.

[52] Given the average wage of second-pillar participants at around 7,000 EEK a month, it takes the average wage earner about a year to acquire 500 units.

[53] Switching funds became an option on 1 January 2005, i.e., it was not possible to change funds in the first years of the reform.

bank account of the Estonian Central Depository for Securities (ECDS).[54] The ECDS calculates the number of pension fund units corresponding to the contribution received, issues the respective number of units, records the relevant information, and transfers the total contribution to the custodian bank of the fund management company. Pension fund managers then decide how to invest the assets. In this way, the functions of account administration and investment management are fully segregated.

The Estonian Central Depository for Securities – the registrar of the Estonian Central Register of Securities – plays a key role in administration of the second pillar. The ECDS is a private company, a part of the Tallinn Stock Exchange group, the latter being the infrastructural centre of the securities market in Estonia. The main functions of the ECDS are depositing of securities in custodian banks, including units of second-pillar pension funds, and processing of the relevant information. The ECDS opens a pension account for each participant in the second pillar. The pension account is a special type of securities account where only units of the second-pillar pension funds are registered.

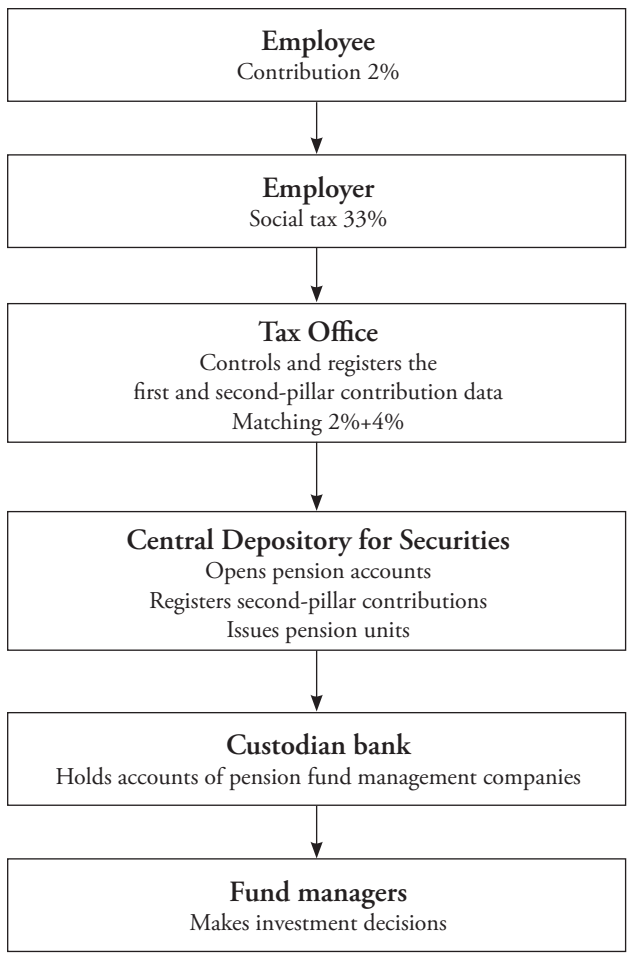
For each pension account, the following information is entered into the register:

1) the name of the account owner;
2) the address of the account owner;
3) the personal identification code or, in the absence thereof, date of birth;
4) the number of the bank account held by the account owner, and the name of the bank;
5) the number of the pension account and the date on which the account was opened;
6) the name of the second-pillar pension fund in which the account owner has units;
7) the time of registration of the units and their registry code;

[54] To do so, the Tax Office has to identify all participants of the second pillar. This information is provided to the Tax Office by employers, but the Tax Office may also check the information from the Central Register of Securities. In fact, there are different contribution rates for different employees of the same employer, depending on whether the person has joined the second pillar or not.

8) the basis for acquisition or redemption of units (contributions, exchange, entry into or termination of annuity contract, etc.);
9) the date of acquisition of units;
10) the number of units; and
11) information concerning the conditions for forwarding account statements to the owner of the pension account (by e-mail or by post).

**Figure 16**
**Administration of the second pillar**



The ECDS sends an annual account statement to all second-pillar participants, either by regular mail or electronically by e-mail. The person can also check the balance in his/her account at any time through an internet bank or special website of the register (*www.pensionikeskus.ee*). In principle, the person can ask for the balance in his/her pension account at the bank office (at the account administrator). However, in contrast with the internet bank, this is not free of charge and banks normally charge a small fee for printing out the balance statement.

When a person switches funds and decides to transfer his/her contributions to the new fund, the ECDS redeems the units of the old fund and issues units of the new fund.

In the future, the ECDS will also process benefit claims for second-pillar pensions, redeeming the pension fund units and transferring the corresponding sum to a life-insurance company. In the case of a programmed withdrawal (explained later in this section), the ECDS will redeem the units and administer the payment of the pension directly.

The law authorises pension fund management companies and their custodian banks to obtain from the ECDS the names and personal identification codes (ID-codes) of their account owners, as well as statistical information on issuing and redemption of pension units for these individuals. The ID-code contains information on the gender and date of birth of the person. In these ways, the fund managers may know the identity of their members. In addition, the law makes it possible for other persons to know whether a particular person has joined the second pillar or not. Inquiries may be submitted to the Register through its web site on the basis of the personal ID-code. The Register will disclose whether a pension account has been opened for that person and the year in which the obligation to make contributions commenced or will commence, but no information on which fund the person has chosen.

The decision to entrust the management of second pillar pension accounts to the ECDS rather than to the social security body (National Social Insurance Board) related to the fact that second pillar pension accounts are a particular type of security account. Before the second pillar was introduced, the ECDS already had the basic infrastructure for managing securities accounts as well as institutional links with the other institutions involved (custodian banks, fund management companies, life insurance companies). It was thus considered

more feasible to broaden the functions of the ECDS than to add some new functions to the Social Insurance Board.

**Investment Regulations**

Certain qualitative requirements and quantitative limits are applied to pension fund assets. They may be invested only in recognised securities (shares, bonds, units of investment funds, money market instruments, derivatives), bank deposits and real estate. To ensure risk diversification, a fund's share in one entity (instruments issued by the same issuer) may not exceed 5 percent of its assets, except for bonds issued by a member state of the European Economic Area (EEA) – in this case, the limit is 35 percent.

Among the CEECs, Estonia has one of the most liberal regulations concerning foreign investments (FI-AD 2003). In contrast to countries like Poland or Hungary, which have placed a general limit on pension fund assets available for foreign investments (5 percent in Poland and 30 percent in Hungary), there is no general limit in Estonian legislation. Instead, there is a currency matching limit – investments denominated in currencies of third countries may not exceed 30 percent of funds assets. This limit, however, does not apply to instruments denoted in Euros, as the Estonian Kroon is pegged to Euro.

For geographical risk diversification, the share of pension fund assets invested in instruments of issuers of any single country may generally not exceed 30 percent, unless a higher share is accepted in the operating conditions of the pension fund.[55] There is also a limit on investments outside the EEA and OECD – for companies registered in such countries, 30 percent of pension fund assets may be invested in their securities, while for instruments traded only in such countries, 20 percent of pension fund assets may be invested in those securities.

Similar to the situation in Poland and Hungary, Estonia has a limit on equity risk exposure. Pension funds are allowed to invest up to 50 percent of

[55] Operating conditions of the pension fund are subject to the approval of the Financial Inspectorate.

their assets in shares. The limit for equities also includes the units of mutual funds investing in equities. Investments in money market instruments are allowed up to 35 percent of pension fund assets. Direct investments in real estate are allowed up to 10 percent of pension fund assets, but not more than 2 percent in a single piece of real estate.

The aim of applicable investment regulations was to secure an effective diversification of the investment risk, both geographically and by types of instruments, since high risk diversification is presumably in the best interest of participants. On the one hand, the EU free movement of capital principles were applied. At the same time, considering the relatively small size of the local stock market, substantial restrictions on foreign investments would have entailed high local risk concentration.

**Operating Rules for Pension Fund Managers**

A number of requirements apply to pension fund management companies that seek to establish second-pillar funds. The company must first apply for a special licence from the Financial Inspectorate (FI). To be eligible, the minimum share capital of the fund management company must be least 3 million EUR. Once licensed, the fund management company must present the conditions of the pension fund for registration. If the fund manager intends to run more than one second-pillar pension fund, each pension fund must have a different investment strategy, distinguished by the share of pension fund assets invested in equities. For the investment strategy to be considered as qualitatively different, the share of assets invested in equities must differ by at least 25 percentage points. As the maximum allowed share of equity investments is 50 percent, in essence, one fund management company may run up to three second pillar pension funds.

Besides the second-pillar pension funds, the fund management company is allowed to run other types of investment funds (e.g., voluntary pension funds, open or closed investment funds, individual portfolios).

A pension fund management company is obliged to participate itself in the pension funds it manages; at the same time it may not participate in other pension funds. The fund manager is thus obliged to purchase the units of

pension funds it manages and keep the share of it units within established limits – within 3 years of establishing the fund, the fund manager must have at least 2 percent of the pension fund units. When the number of units of the pension fund exceeds 100 million, compulsory participation is 2 percent of the first 100 million units (i.e., 2 million units) and 1 percent of the units exceeding 100 million.

As noted above, the units of a pension fund represent the rights of fund participants to a share of pension fund assets. The nominal value of pension fund units is 10 EEK. The market value of units is captured in the notion of net asset value (NAV). The net asset value of units is calculated as the total market value of a fund divided by its total number of units.[56]

The operational costs of the fund management company are covered by fees. The rate of the management fee is determined as a proportion of the market value of the assets of the pension fund and is set on a yearly basis. The maximum rate of the management fee is established by the Minister of Finance and differs for fixed income funds versus those that also invest in equities. For fixed income funds, the maximum rate of management fee is 1.5 percent of assets under management; and for funds investing also in equities, it is 2.0 percent.

The gross management fee includes a registrar charge, custodian charge, guarantee fund charge, supervision charge, and net management fee.[57] The costs of organising the issue and redemption of the units of the pension fund, managing the pension accounts, and performing other duties prescribed by the act are covered by the registrar's charge, payable by the pension fund management company to the registrar (i.e., the ECSD).

Fund participants pay separate fees for issuing and redemption of pension units. In both cases, maximum fees are established by legislation. The maximum subscription fee for pension funds units (applicable until 1 January 2007) is 3 percent of the net asset value of the unit. The maximum redemption fee is 1 percent of the net asset value of the unit.

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[56] When calculating the market value of a fund, the management fee is deducted from the value of its assets.

[57] For the structure of the management fee, see Põld 2002.

**Mechanisms to Protect the Interests of Fund Participants**

In contrast with Poland and Hungary, the Estonian second pillar has relatively modest explicit guarantees. There are no guarantees on absolute or relative rate of return, leaving the investment risk on participants. The fund management company is even prohibited from making any direct guarantees on rate of return. However, members are protected against any breaches (e.g., violation of investment rules) by the fund managers. For protection against any possible damages caused by the fund managers, the pension fund management company must pay contributions to a Guarantee Fund.

In taking this approach, the SSRC's primary consideration was avoiding the potentially counterproductive effects of guaranteeing the rate of return – i.e., adverse incentives for fund managers and participants. It was considered more appropriate to build into the system an appropriate incentive structure. One example is compulsory participation of the fund manager in the pension fund. In this way, the fund manager is motivated to make reasonable investment decisions. The lack of guarantees must also be evaluated in light of the option provided for participants to choose among pension funds with different levels of risk.

Although in principle the participants of a pension fund can "vote with their feet", i.e., leave pension funds with poor investment returns, this option is limited since switching can occur only at the beginning of the next calendar year.

In this context, a crucial role in protecting the interests of pension fund participants has been assigned to the Financial Inspectorate, which supervises pension funds. Established in 2002, the Financial Inspectorate is an independent legal authority which consolidates the formerly separate inspections of banking, insurance, and the securities market. The FI issues activity licences for pension fund management companies and approves conditions of pension funds and any amendments thereto. The FI checks all information provided by fund management companies when applying for licences or registration of conditions. The FI also controls the application of funds' investment policies and their adherence to investment limits prescribed by legislation. To perform these functions, the FI may demand any necessary information, statistical data, or explanations from fund managers, custodian banks, or any other relevant

party. In the case of violations, the FI may impose penalties. Any mergers of fund management companies are subject to the approval of the FI. All fund management companies have to submit semi-annual activity reports to the FI.

**Second-Pillar Benefits**

As the second pillar is a defined-contribution system, future pensions depend on the value of assets accumulated by the individual over the whole career – the total value of contributions and the rate of return from their investment, minus administrative expenses. Thus, the net rate of return is influenced *inter alia* by the fees charged by the fund management company.

For a person to be eligible for a second-pillar pension, he/she must have:

- reached pensionable age (the same as in the first pillar);
- been granted a first-pillar pension; and
- participated in the second-pillar scheme for at least 5 years.

In fact, the latter rule has relevance only for those who joined the system voluntarily.

As a general rule, second-pillar benefits must be paid out in the form of annuities, i.e., the purchase of annuities is mandatory. However, there are exceptions if the calculated annuity is rather small, i.e., less than one-fourth of the rate of national pension (or one-fourth of the minimum first-pillar benefit) per month. In this case, the person has a right to a programmed withdrawal of assets from the pension fund. Also, when the calculated annuity exceeds three times the rate of national pension, the person has a right to a supplementary programmed withdrawal of the funds that remain after purchasing the compulsory annuity. In other words, there is a minimum and a ceiling on the mandatory annuity. If the calculated annuity falls below the minimum (currently corresponding to about 16 EUR) or exceeds the ceiling (currently corresponding to about 190 EUR), the person may opt for a programmed withdrawal, which in the former case replaces the annuity and in the latter case supplements it.

To claim an annuity, a person must enter into a contract with a specially-licensed life-insurance company and thereafter submit an application to the

Central Register of Securities for redemption of pension units. For a programmed withdrawal, the person must submit an application to the Register.

Whereas during the accumulation period pension funds are not allowed to guarantee any rate of return, insurance companies may guarantee interest rates on annuities. However, the interest rate used for calculation of an annuity (i.e., guaranteed interest) may not exceed 3 percent.

The insurance company must apply unisex mortality tables for men and women in calculating annuities.

If the insured person dies before reaching pensionable age, the units of the fund are inherited. However, if the person dies thereafter, only undistributed assets from a programmed withdrawals are inherited. Any reserves from life-long annuities are not inherited unless a guarantee period is agreed at the time of purchasing the annuity.

Second-pillar pensions constitute taxable income in principle. However, the higher non-taxable allowance for pensions (see 2.1) also applies for second-pillar pensions. Only the part of the sum of first and second-pillar pensions which exceeds the higher non-taxable threshold is taxed.[58]

The first benefits from the second pillar will be paid out in 2009.

### *2.3 International Influences*

The Estonian pension reform package was not developed in isolation from outside influences. Direct foreign inputs (for example, drafting of legislation by foreign experts) were however very limited. Instead, various international

[58] In 2004, the general non-taxable allowance was 16,800 EEK per year. For pension income, the non-taxable allowance is further increased by 36,000 EEK. According to amendments to the Income Tax Act adopted in 2003, the general non-taxable allowance is increased to 24,000 EEK a year by 2006. Therefore, pension income would be taxed only if the sum of the first and second-pillar pension exceeds 5,000 EEK and the tax would apply only to the part exceeding 5,000 EEK. Considering the average old-age pension (currently 2,200 EEK) and projections on the development of first- and second-pillar pensions, it seems very likely that at least in the initial years (when the second-pillar benefits are likely to be rather small due to short collection period) the effective tax on second-pillar pensions will be very small, if any.

influences were internalised by different national actors. Lindeman (2004: 12) characterised the situation as follows: "Though key policy advisors in Estonia closely monitored pension reform innovations in the region and debates in the literature, the eventual three-pillar reform was a home grown product".

Indeed, developments in the other Central and Eastern European countries were monitored. For example, the 1997 *Conceptual Framework for Pension Reform* included an annex describing pension reform developments in the Czech Republic, Hungary, Latvia, Slovenia, and Poland. Although the Estonian reform does not copy any other, the experience of earlier reformers taught important lessons which were taken into account. Besides this regional learning, a number of international agencies had some influence on policy developments in Estonia.

**World Bank**

Readers of the 1997 *Conceptual Framework for Pension Reform* would obviously notice some clear influences from the 1994 World Bank's *Averting the Old Age Crises*. This includes not only the bank's general three-pillar framework but also argumentation on why the reform was needed. However, a closer look also reveals a number of differences from the World Bank approach. For example, for the first pillar, the Social Security Reform Commission suggested a gradual replacement of the earlier length-of-service pensions with a German-type point system, rather than shifting towards the means-tested or flat-rate pensions advocated by the bank at that time.

While the government held regular consultations with the World Bank on economic policy and some social policy issues, direct involvement of the bank in the area of pension policy was rather limited. One Bank-commissioned expert gave advice on draft legislation for the third pillar in 1998, and one seminar to discuss the policy preferences of the Social Security Reform Commission concerning the second pillar was held in 1999 (see also Lindeman, 2004).

This limited involvement relates partly to the fact that the Estonian government did not seek to take any structural adjustment loans from the Bank to reform the pension system. However, it must also be said that by the time

Estonia entered into serious pension reform debates, the Bank's approach had shifted towards a more flexible and country-specific one (see e.g., Holzmann, 1999) compared to the policy prescription in the 1994 *Averting the Old Age Crises*.

**Council of Europe**

Estonia became a member state of the Council of Europe in 1993, and this membership was widely considered an important step in integration into European structures. One of the key instruments of the Council of Europe – the European Social Charter – had a clear influence on Estonian pension policy objectives. The 1997 *Conceptual Framework for Pension Reform* identified compliance with European minimum standards on social security as one of the main objectives of the reform. These standards are prescribed by the European Code of Social Security, which in turn is modelled on ILO Convention 102, Social Security Minimum Standards.

In May 1998, the government signed the revised, 1996 version of the European Social Charter. The Charter was ratified by Estonia in September 2000, including Article 12 on the right to social security, thus committing it to observe the standards of the code. For old-age pensions, the code requires that the benefit of a person with an insurance period of 30 years shall correspond to at least 40 percent of the wage of an ordinary adult male labourer. Analysis of the Ministry of Social Affairs at the time that the government was preparing to ratify the Charter indicated that Estonia barely exceeded this minimum standard: the old-age pension for the standard beneficiary amounted to just 41.4 percent of the average net wage of a male production worker in 1998. However, in political terms, it was inconceivable that the government would abstain from ratification of this article of the Charter, as such an action could clearly turn the pensioner electorate against it. Recognising the political realities, the government signed the code in January 2000; and the instrument was ratified in May 2004, including the part on old-age pensions. Nevertheless, in 2001, the average replacement rate for a person with 30 years insurance record dropped below the standards of the code – to 37.4 percent – as the wages of production workers had increased substantially. However, additional pension

increases in 2002 again raised the replacement rate above the minimum level, to 41.6 percent.

The current three-party political coalition (Res Publica, the Reform Party, and the People's Union) which took seats in the government in 2003 promised in its coalition agreement to maintain the level of pensions above the minimum standards of the code, thus reaffirming the government's earlier commitment.

Thus, the 40 percent replacement rate stipulated by the code and Charter played an important role in Estonian pension policy debates. It has served as a key benchmark against which the adequacy of the system has been measured; and it has been widely accepted that this standard will be observed in the future. Furthermore, through ratification of the code, this is now an international commitment of the Estonian government.

**European Union**

Estonia submitted an application to join the European Union in November 1995 and, from that time, EU accession was high on the political agenda of every successive government.

Although the practical implications of the EU *acquis communautaire* for the Estonian pension system were rather limited, the role played by the EU in the Estonian reform was more substantial than generally recognised.

As to the impacts of the EU *acquis*, two issues can be outlined. Firstly, the EU social security co-ordination rules for migrant workers (Regulations 1408/71 and 574/72) implied an obligation to export pensions to other EU member states upon accession. Until accession, the payment of pensions was limited to persons residing in Estonia, export of pensions being possible only under bilateral agreements.[59] This new obligation would increase pension expenditures, but only slightly due to limited number of persons concerned.

A second relevant aspect of the EU legislation concerned equal treatment of men and women. Different qualifying conditions for men and women inherited from the Soviet pension system were already largely equalised with

[59] Estonia had such agreements with Latvia, Lithuania, Finland and Ukraine.

the 1993 State Allowances Act, with the main remaining exception being pensionable ages for men and women. However, derogations in respect of pensionable age in statutory systems were allowed by the relevant EU law (Directive 79/7). Nevertheless, the EU equal treatment principles were used by the government to justify the plan on gradual equalisation of pensionable ages for men and women.

Considerably more important than these limited impacts of EU legislation was the placing of pension reform among the economic criteria for accession by the Council of the EU and the European Commission. This was to some extent surprising as at that time, the EU did not have any common policy on pensions.[60] Indeed, since according to the EU basic treaties the regulation of pension systems is within the competence of member states, the grounds for putting forward conditions related to the pension system were unclear.

However, in the European Commission's opinion *Agenda 2000* (published in July 1997) on Estonia's economic progress as a candidate country, the Commission expressed concern that "reform of the pension system has not yet started" (European Commission, 1997: 39). The descriptive and analytic part of the opinion made no further reference to this subject. For example, it did not state what problems were observed regarding the existing system or what was to be the expected outcome of reform. Notably, as the opinion was delivered after the Estonian government had adopted the *Conceptual Framework for Pension Reform* in May 1997, the opinion could be interpreted as a silent approval of reform principles coupled with a concern that the reform had not yet been started. This position became explicit in later EU documents.

In the 1998 Accession Partnership between the EU and Estonia, adoption of key legislation linked to pension reform was explicitly listed under short-term priorities for 1998.[61] With the 1999 amendments to the Accession Partnership, completion of the necessary legislation for pension reform was

[60] The EU Common Pension Policy Objectives were developed only in 2001 and 2002 as a part of the Lisbon process.

[61] Council Decision 98/264/EC of 30 March 1998 on the principles, priorities, intermediate objectives, and conditions contained in the accession partnership with the Republic of Estonia. Official Journal of the European Union, L121 of 23 April 1998: 26–30.

regarded as a short-term priority for 2000, while completion of the whole reform was viewed as a medium-term priority.[62] In fact, Estonia became formally committed to meeting these objectives since, according to the Accession Partnership agreement, pre-accession financial assistance under the PHARE, ISPA, and SAPARD programmes was conditional on fulfilment of obligations taken under the Accession Partnership.

The EU Commission closely monitored the reform process and reflected upon developments in its annual progress reports. For example, in the progress report published in November 2000 (i.e., after entry into force of the new first pillar legislation), the Commission noted (European Commission, 2000: 25, 31, 89): "Progress on pension and health-care reform has been steady. With the entry into force of the State Pension Insurance Act on 1 April 2000, the long-term financial sustainability of the first pillar (pay-as-you-go element) has been reinforced…Nevertheless,…not enough progress in containing government expenditures has been made, especially in the pension and health care reform area…Further measures need to be taken in order to complete the pension reform programme. Therefore, this priority has been only partially met." The commission expressed satisfaction with the new State Pension Insurance Act, but at the same time considered that this was not enough, and government should pursue other elements of the earlier envisaged reform.

In the 2001 progress report published in November 2001 (i.e., after adoption of the second pillar legislation) the Commission stated (European Commission, 2001: 29, 33, 94): "The pension system is being gradually reformed to establish a 3-pillar model.... The law establishing the mandatory funded scheme (second pillar) has been adopted by Parliament and will come into force in 2002...The pension reform has been adopted. The legal, institutional and regulatory framework is in place and enforcement is largely adequate... The necessary legislation for pension reform has now been adopted.... Therefore, this priority has been met to a large extent." The Commission thus notes

[62] Council Decision 1999/855/EC of 6 December 1999 on the principles, priorities, intermediate objectives and conditions contained in the Accession Partnership with the Republic of Estonia. *Official Journal of the European Union*, L335 of 28 December 1999: 35–40.

with satisfaction that the second pillar was implemented and regards the short-term pension reform priority as met.

To conclude, the European Commission acted as a guarantor of implementation of the reform. Though its assessments were sometimes vaguely worded, the Commission's position was clearly in support of the government's reform plan. As quick accession to the EU was a consensual priority for all major political parties represented in Parliament, commitments taken in the Accession Partnership helped to sustain the reform timetable (Leppik, 2003).

**International Monetary Fund**

From the early 1990s, after introduction of the Estonian Kroon based on a currency board arrangement, the government held regular consultations with the IMF on monetary policy within the framework of so-called stand-by arrangements.[63] IMF staff reports on Estonia and its memoranda on economic policies make pension policy a relatively common theme, placing it among the structural policies to support general economic policy.

The IMF was known for its support for private pension arrangements. Following consultations in the fall of 1997 (i.e., after the government had approved the *Conceptual Framework for Pension Reform*), the IMF board of directors "urged the authorities to press ahead with privatisation of the large infrastructure enterprises and reform of the pension system".[64]

A shift in the IMF position occurred in 2000. The IMF mission, which visited Estonia in summer 2000, expressed rather sceptical views on the second pillar and advised the government to reconsider its reform plan or at least to limit the size of the second pillar to keep transitional financing costs under control. Following the mission, "the directors agreed that a second, fully funded, defined contribution pillar has certain advantages, but that it would not, by itself, solve issues arising from the adverse demographic shift....The

[63] Stand-by credits were promised by the IMF in case of unexpected balance of payments needs. In reality, the need never arose and Estonia never used such credits.

[64] *IMF Press Information Notice 97/41* of 24 December 1997 is available at *http://www.imf.org/external/ np/sec/pn/1997/pn9741.htm.*

directors stressed that care would need to be taken that the transition costs associated with a second pillar are constrained to avoid budget pressures or an excessive increase in public debt."[65] Similar concerns were expressed later in the IMF paper on pension reform in the Baltic countries (Schiff et al, 2001).

These events placed the Estonian government in the curious situation where it had to justify the feasibility of the second pillar to the formerly enthusiastic IMF.

In sum, international influences on Estonian pension reform derived mainly from these four international agencies. The role of other organisations (e.g., ILO, OECD) was more modest. Besides these big international players, bilateral assistance from the United Kingdom also deserves a mention. The UK Know How Fund financed assistance to the Ministry of Finance in developing pension projections. Assistance with modelling was provided by Callund Consulting Ltd.

## 3. Early Post-reform Experience

### *3.1 Results of First-Pillar Reforms*

#### Changes in the Number of Pensioners

Changes in the state pension system affected the total number of pensioners only slightly. From 2000 (pre-reform) to 2001 (post-reform) the number of pensioners declined by about 6,000 persons, or less than 1.5 percent, mainly due to some former pension recipients (disabled children) being transferred to state benefits financed from general revenues.

More considerable were the influences of structural changes internal to the state pension system. As a result of the transition from disability pensions

[65] *IMF Public Information Notice 00/49* of 11 July 2000 is available at *http://www.imf.org/external/np/sec/pn/2000/pn0049.htm.*

to work incapacity pensions, the total number of pensioners in this category declined by 24,000. At the same time, the number of old-age pensioners increased by 13,000 persons. This reflected to a large extent the transfer to old-age pensions of disability pensioners who were already over the pensionable age. Due to the introduction of a qualification period for work incapacity and survivors' pensions, some of the former recipients of these types of pensions were transferred to the national pension, contributing to a rapid increase in the number of recipients of this benefit (Table 8).

**Table 8**
**Recipients of state pensions, 2000–2004 (beginning of years)**

| | Pre-reform | | Post-reform | | |
|---|---|---|---|---|---|
| | **2000** | **2001** | **2002** | **2003** | **2004** |
| Old-age pension | 284,327 | 297,363 | 298,490 | 296,836 | 294,063 |
| Superannuated pension | 3,240 | 3,369 | 3,386 | 2,839 | 2,820 |
| Disability pension | 66,814 | 43,394 | 47,140 | 51,339 | 55,480 |
| Survivors' pension | 23,256 | 21,936 | 19,429 | 11,960 | 11,613 |
| National pension | 1,655 | 6,816 | 7,481 | 11,391 | 11,012 |
| Total | 379,292 | 372,878 | 375,926 | 374,365 | 374,988 |

*Sources*: Ministry of Social Affairs, National Social Insurance Board.

In the wake of the reform, the total number of pensioners stabilised at around 375,000 persons. The number of old-age pensioners has slightly declined. After the sudden reform-induced decrease, the number of disability/work-incapacity pensioners has started to increase again. At the same time, further restrictions introduced on eligibility for survivors' pensions in 2002 have decreased the number of recipients of this benefit.

While the increase of the pensionable age is causing a decline in the total number of old-age pensioners, the possibility of early retirement – introduced by the State Pension Insurance Act from 2000 – has been used relatively broadly. In 2000–2003, early retirement pensions accounted for more than one-fifth of all newly granted old-age pensions (Table 9).

**Table 9**
**Newly granted early retirement pensions in 2000–2003**

| Year | The number of newly granted early retirement pensions | Share from all newly granted old-age pensions [%] |
|---|---|---|
| 2000 | 2,170 | 24 |
| 2001 | 2,363 | 21 |
| 2002 | 1,723 | 21 |
| 2003 | 1,564 | 20 |

*Source*: National Social Insurance Board, calculation by authors.

At the same time, the possibility of deferring receipt of an old-age pension and thereby receiving a larger benefit, introduced in 2002 to counterbalance the option of early retirement and to allow for more flexibility individual retirement decisions, has been used rather seldom in spite of strong financial incentives. In 2002, a deferred old-age pension was granted to only 87 persons, followed by 79 new cases in 2003.

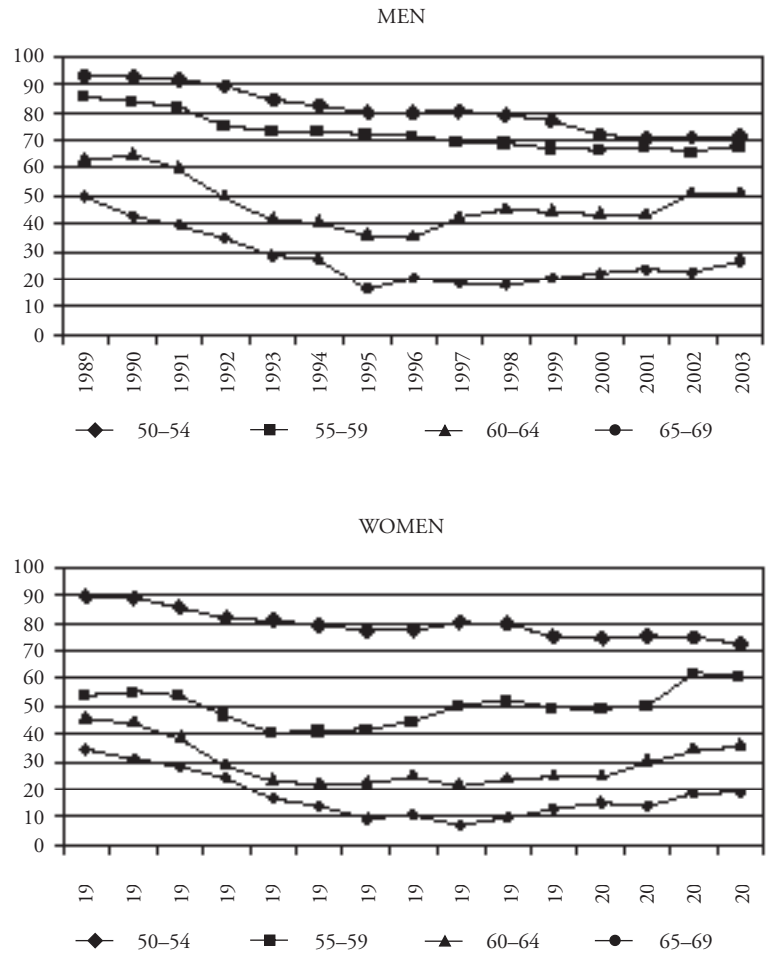
A closer look at the recipients of early retirement pensions indicate that about 80 percent of them were out of a job at the time the pension was granted (Võrk and Uudeküll, 2002; Tiit et al, 2004).

Looking further at the interaction of the pension system and the labour market, it can be observed that following a decline in the employment rate of older workers (aged 55–64) in the first half of 1990s, there was a recovery in the second half of the decade and the employment rates have continued to increase in the early new century (Leetmaa et al, 2004).

These developments have been attributed to legislative changes in the pension system: the increase of the pensionable age, which commenced in 1994, and the payment of full pensions to working pensioners, beginning in 1996 (Tiit et al, 2004).

In other words, the increase of the pensionable age, accompanied by the increase of the employment rate, has had a positive impact on the labour market and thus contributed to the sustainability of the pension system. Further evidence in this respect is the increase of the average exit age from the labour market, which in 2002 reached 61.6 years, exceeding the EU average (Leetmaa et al, 2004). Nevertheless, as the analysis of early retirement pensions

**Figure 17**
**Employment rates among those aged 50 to 69, 1989–2003**




*Source*: Estonian Labour Force Surveys, Leetmaa et al, 2004.

indicates, there appears to be segregation in the labour market situation of older workers – whereas on average the employment rate of older persons (55–64) has increased, some long-term unemployed are unable to find a job and enter the pension system before the normal pensionable age.

While the payment of a full pension to working pensioners has contributed to increasing the activity rates of older persons, there is another side of the coin,

as the measure also provides an incentive to draw pension as early as possible.[66] As a result, the average effective pensionable age is below the average exit age from the labour market. A study by the PRAXIS Center for Policy Studies showed that the average effective pensionable age in 2001 for both genders was about 2 years below the statutory pensionable age.[67] About one-third of women and one-half of men actually retired before the normal pensionable age, i.e., were pension recipients at least a year before reaching the pensionable age (Tiit et al 2004).

### Changes in the Real Value of Pensions and Replacement Rates

Since politicians declined to provide automatic indexation of pensions in the 1998 State Pension Insurance Act, the increase of pensions in 2000 and 2001 was still dependent on political decisions. Due to the fact that pensions had been increased by 20 percent in 1999, which caused exhaustion of earlier reserves by 2000, there was no pension increase in 2000, as previously explained. In 2001, the average old-age pension was increased by about 3.3 percent against an inflation rate of 5.8 percent and an increase of the average wage of about 11 percent (Table 10).

**Table 10**
**Average old-age pension [annual average, EEK], 2000–2003**

| | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|
| Old-age pension | 1,532 | 1,583 | 1,758 | 1,985 |

*Sources*: National Social Insurance Board, Ministry of Social Affairs.

[66] It should be noted that early retirement pensions are not paid in case of working. However, old-age pensions on favourable conditions and superannuated pensions, which are also granted before the normal pensionable age, can be combined with earnings from work.

[67] The pensionable age in 2001 was 58 for women and 63 for men. By 2004, the pensionable age for women had increased to 59.

Starting in 2002, regular indexation was introduced, using an index that gives equal weights to the consumer price index (CPI) and the increase in social tax revenues. The latter factor, in principle, equals the increase of the total wage bill, depending thus on changes in the number of insured persons and changes in the average wage to which contributions apply. Pensions are indexed once a year on 1 April. In practical terms, in 2002 the CPI increased by 5.8 percent, while social tax revenues increased by 11 percent.[68] According to the index formula, pensions were increased by 8.4 percent, i.e., 11 percent plus 5.8 percent divided by 2 (Table 11).

**Table 11**
**Adjustments in pensions (the pension index and its components, plus ad hoc increases), 2002–2004**

| | 2002 | 2003 | 2004 |
|---|---|---|---|
| Pension index | 8.4 | 7.4 | 6.3 |
| CPI change | 5.8 | 3.6 | 1.3 |
| Increase of social tax revenues | 11.0 | 11.1 | 11.3 |
| Additional ad hoc pension increase[69] | 3.7 | 5.2 | 4.8 |
| **Total increase of the average old-age pension** | **12.1** | **12.6** | **11.1** |

*Source*: National Social Insurance Board, calculation by authors.

The value of pension index decreased from 8.4 percent in 2002 to 6.3 percent in 2004 due to the decline in CPI. At the same time, the annual increase of social tax revenues remained at the level of 11 percent. As the number of pensioners remained stable in 2002–2004 around 375 thousand

[68] To calculate the pension index, the CPI change and increase of social tax revenues from the previous year are taken, i.e., it is an ex post facto indexation. Accordingly, in Table 11, the CPI change which is used for determining the 2002 pension index, is from 2001, etc.

[69] In fact, different methods have been used for ad hoc pension increases. In July 2002, the value of a service year was increased by boosting only the employment-related part of the formula. In July 2003, only the flat-rate base amount was increased. In April 2004, both the base amount and the value of a service year were increased. The percentage indicated in Table 11 refers to the increase in the average old-age pension.

persons (see Table 8), the increase of pensions with such index did not use up all revenues from social tax and created surplus in the pension insurance budget. In this situation, the new coalition which entered into government in 2002, initiated additional pension increases on top of the regular indexation from July 2002 (see also 1.3.3).

The same approach was also continued in 2003 and 2004 by the next government, which came to power after 2003 elections. Rather than changing the pension index, the government has also agreed on additional pension increases for 2005 and 2006.

The average net replacement rate of old-age pension, which jumped to over 50 percent in 1999 (see Figure 14), declined by 2001 again to the level of 43 percent – the same level as observed in 1995–1998. The indexation and additional pension increases in 2002–2003 have maintained the average replacement rate largely constant (Table 12).

**Table 12**
**Development of the replacement rate of the average old-age pension, 2000–2003**

| | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|
| Average gross earnings [EEK][70] | 4,193 | 4,658 | 5,247 | 5,824 |
| Average net earnings [EEK] | 3,311 | 3,707 | 4,104 | 4,527 |
| Gross replacement rate of average old-age pension [%] | 36.5 | 34.0 | 33.5 | 33.6 |
| Net replacement rate of average old-age pension [%] | 46.3 | 42.7 | 42.8 | 43.8 |

*Source*: National Social Insurance Board, calculation by authors.

It is clear, however, that without additional ad hoc pension increases, using only indexation, the replacement rate would have declined. This relates to the character of the pension index – in a situation where wages increase more than prices and the number of insured persons increases (or at least remains constant), the index results in declining replacement rate even though the real value of pensions increases. This aspect was not debated publicly at the

[70] The average earnings upon which social tax has been paid, includes wages of employees, and taxable income of self-employed persons.

time that indexation was introduced. The arguments used by the government coalition in 2001 (when indexation was legislated) characterised indexation as a desirable tool to put an end to political manipulation of pension increases before elections. Nevertheless, the current method of combining indexation with ad hoc increases does not provide a full solution to this problem either.

### *3.2 Transition to the Mixed System*

The second pillar became operational on 1 July 2002, from which date contributions to second-pillar pension funds could be made. Applications to join the second pillar were accepted beginning on 4 May 2002, the first deadline set for 31 May 2002.

#### Number of Participants by Phases

During the first phase of the open season, which lasted only one month, about 37,000 persons (6 percent of insured persons) joined the second pillar in order to begin accumulating their contributions on 1 July 2002. While the number of those who signed up in this phase fell below what was predicted, the next phase brought a real boom in joining the multi-pillar system.

By the end of the second phase, 31 October 2002, some 170,000 new participants had signed up. They started to accumulate contributions on 1 January 2003.[71] The total number of second-pillar participants thus reached over 207,000 persons (or 35 percent of insured persons). This period was the last chance to join the second pillar for persons born during 1942–1956 (aged 46–60 in 2002).

[71] Applications are accepted until 31 October each year in which case collection of contributions starts from 1 January of the following year. The first year of reform – 2002 – was an exception since the system was started from July.

Over the third phase of the open season, which lasted from 1 November 2002 to 31 October 2003, nearly 144,000 more persons joined the system, with contributions due beginning on 1 January 2004. The total number of participants thus reached over 351,000 or 59 percent of the insured population. The third phase was the last chance to join the system for persons born during 1957–1961 (see Table 7).

By 1 November 2004 – the end of the fourth period of the open season – the number of participants exceeded 423,000 persons. The participation rate thus reached 55 percent of the total population in the age bracket 18–60 (i.e., the age-group which was eligible to join the second pillar) and 70 percent of the labour force from 16 to pensionable age.

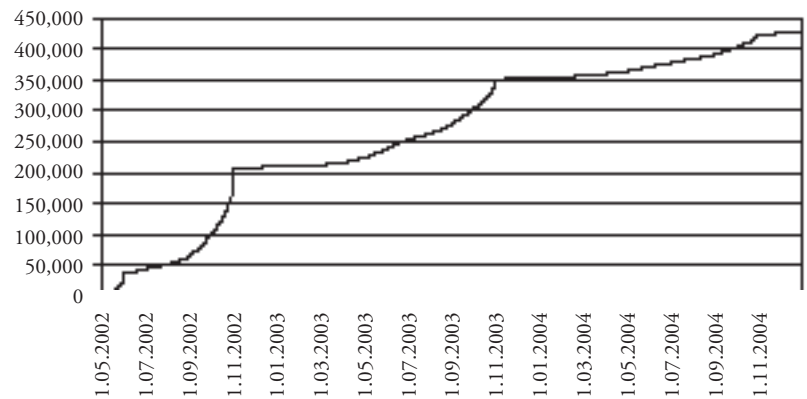
This is considerably more than the earlier public opinion polls suggested. According to a poll carried out by Estonian Surveys, Ltd. in April 2002 (i.e., immediately before introduction of the second pillar), 6 percent of working age respondents stated that they intended to join the mixed system in 2002. An additional 20 percent of respondents expressed their intention to join the system in the future, 33 percent were undecided, and 41 percent stated that they either probably or certainly were not going to join the second pillar.

In earlier forecasts, the government had predicted that participation in the second pillar would attract 50 percent of those insured with the first pillar in the course of 3–4 years. These predictions were partly based on actual participation rates in the Polish and Hungarian second pillars, taking note that in those countries the number of persons who joined the system voluntarily far exceeded earlier forecasts. However, it was considered that in Estonia the rate of those joining the system voluntary would probably stay below what was observed in Poland and Hungary, because of the additional contribution required in the Estonia second pillar. The actual developments showed that the latter discouragement was overshadowed by the advertisement campaign and sales work of pension fund managers and the public awareness campaign initiated by the government. It seems probable that the awareness and advertisement campaigns were successful primarily in convincing those persons who were undecided at the time the reform was launched.

With the number of participants exceeding 425,000 persons by the end of 2004, it now seems that the period of rapid growth in participation is over and the rate of future increase will be slower (see Section 3.4 for projections).

Further increases will come from new entrants to the labour market whose participation is compulsory, as well as from some individuals in younger age-groups who still have the right to join voluntarily.[72]

**Figure 18**
**Cumulative increase in second-pillar participation, 2002–2004**




*Source*: Estonian Central Depository for Securities.

*Note*: The Figure reflects the dates of submission of applications to join the second pillar. Actual participation starts from the date the first contribution is made.

Figure 18 illustrates the cumulative increase in second pillar participants.[73] The four deadlines for submitting applications appear as waves – many people joined during the last week or even on the very last day before a deadline. The phenomenon can be termed as the "deadline effect".

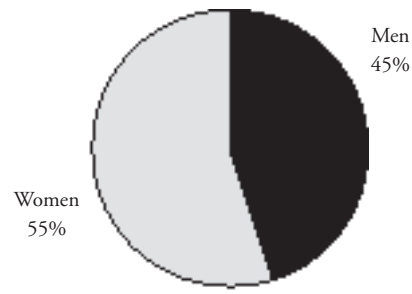
[72] It is possible to follow the increase in subscribers to the second pillar and the growth of assets of second-pillar pension funds online, *at www.pensionikeskus.ee*.

[73] The term "participants" here refers to persons who have submitted applications to join the system voluntarily or who have joined the system on a compulsory basis and for whom a pension account has been opened by the ECDS. The term includes persons who are temporarily inactive or unemployed. In other words, the number of active contributors is smaller than the number of participants. Although contributions to the second pillar can be made only by persons who are at least 18 years old, some persons who are 16 or 17 have already chosen a fund and therefore also appear as participants.

**Switching Behaviour:**
**Distribution of Second Pillar Participants by Age and Gender**

Although the employment rate for men is higher than that for women in Estonia, women outnumber men among second-pillar participants (Figure 19).[74]

**Figure 19**
**Participants of the second pillar by gender (as of 1 November 2004)**

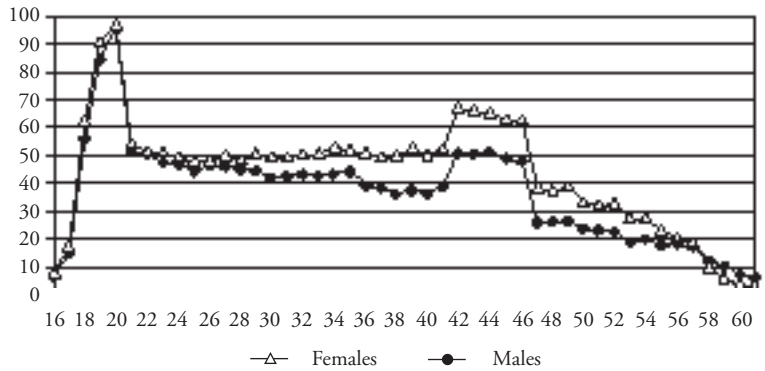



*Source*: Estonian Central Depository for Securities.

Figure 20 shows second-pillar participation rates in different age-groups, representing these participants as a share of the total population in one-year age groups. The Figure reflects another interesting aspect of the deadline effect. While participation rates among 20–41 year-olds are in the range of 40–50 percent, participation rates among those aged 42–46 are over 10 percentage points higher. This is because, for the latter age-group, 31 October 2003 was the last date to join the second pillar, and many persons did so, so as not to miss the last chance.

[74] In 2003, the employment rate for men was 66.7 percent and for women, 58.8 percent (among those aged 15–64).

**Figure 20**
**Second pillar participants as percent of age-group by gender (as of 1 November 2003)**




*Sources*: Estonian Central Depository for Securities, Estonian Statistical Office, calculation by authors.

Due to the shorter deadlines for older age-groups (see Table 7), older persons had to make their decision in a situation of limited information, while younger age-groups were given the option of a "wait-and-see" strategy, first observing how the system was evolving and how the funds performed, and then making a better informed decision at a later stage. In fact, since persons over 46 years of age could join only in 2002 (i.e., the first year of reform), when information about the actual performance of the system was limited, the participation rates in older age-groups are relatively low. By the end of 2003, there was already information on the experience of the first year, and in this situation the final deadline apparently increased participation rates among 42–46 year-olds.

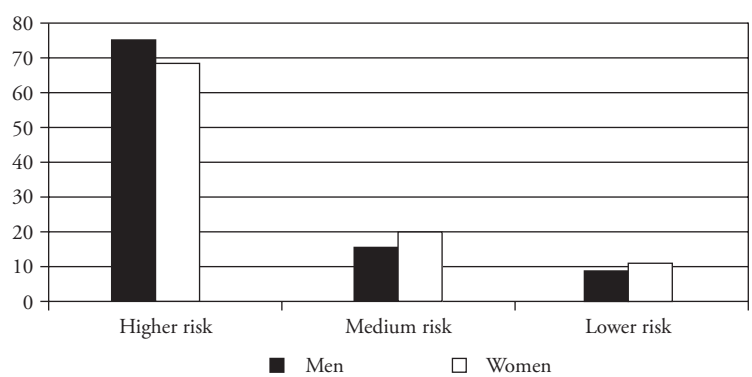
Participation rates among 18–20 year-olds are over 90 percent. Although for this age-group participation is compulsory, there is no automatic enrolment of all residents. Basically, there are two ways to become a participant. The major channel is through submitting applications – this applies also for compulsory participants as in the application the person indicates the choice of a pension fund. Persons whose participation is compulsory by age but who have not submitted applications enter the system when they receive their first wage payment that is subject to social tax. At this point, a pension account is opened and the person is assigned at random to a fund. The lottery includes

only conservative funds. However, 18–20 year-olds who have not submitted applications and who have not yet received income which is subject to social tax do not show up as participants in the system until they receive such income.

**Fund Choice: Distribution of Participants by Fund Manager and Risk Level**

Considering that second-pillar participants have to bear the entire investment risk, it may be somewhat surprising that the majority – 71.4 percent – have joined higher-risk funds, which invest up to 50 percent of assets in equities. Obviously, this relates to their hopes for higher returns from their investments and perhaps also to a lesser degree of risk adversity than has been observed among workers in countries with longer experience with stock market volatility. Only 10.4 percent have chosen low-risk funds, while the remaining 18.3 percent joined medium-risk funds.

**Figure 21**
**Distribution of second-pillar participants by pension fund risk level (as of 1 November 2004) [%]**




*Source*: Estonian Central Depository for Securities.

However, there is a clear age-gender pattern, with older persons and women opting more frequently for low-risk funds. In the group aged 45–60, 38 percent joined a low-risk fund and 34 percent, a medium-risk fund.

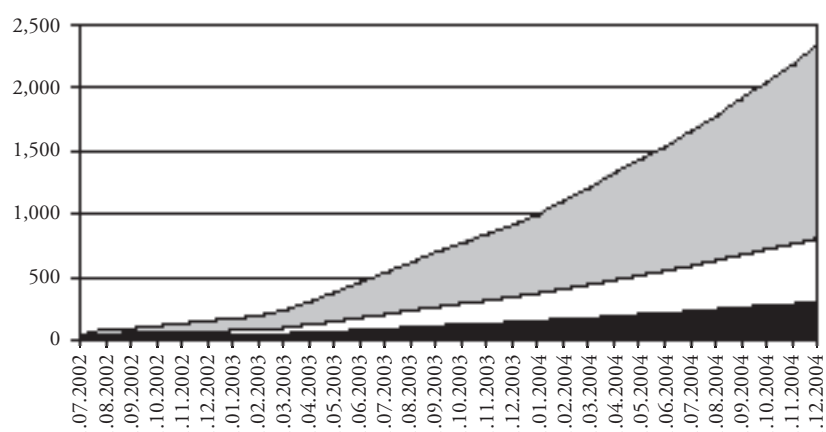
Hansa Asset Management – the market leader operating the biggest pension funds – recommends higher-risk funds to persons under 45 years of age, suggesting that they switch to medium-risk funds beginning at the age of 45 and to lower-risk funds, at the age of 55 (Hansapank 2004).

### *3.3 Initial Performance of the Second Pillar (2002–2004)*

#### Growth of Total Assets of Second-Pillar Pension Funds

By December 2004, after about two and half years of operation, the total assets of the second pillar reached 2.3 billion EEK or about 1.8 percent of GDP. Nearly two-thirds (65.3 percent) of all assets were in higher-risk funds, the remaining one-third of assets being divided between moderate (21.6 percent) and conservative funds (13.1 percent). The development of total assets and distribution of assets by the strategies of pension funds is illustrated on Figure 22.

**Figure 22**
**Total assets of second-pillar pension funds [million EEK] and distribution of assets by fund strategy, 2002–2004**

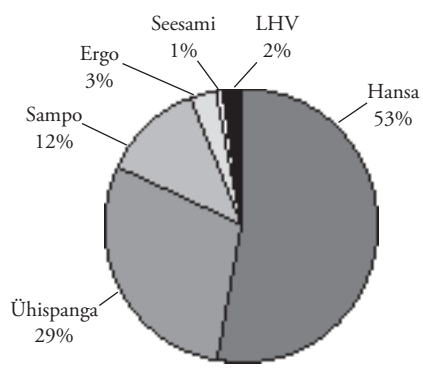



*Source*: Estonian Central Depository for Securities.

**Market Shares of Different Pension Fund Managers**

Figure 23 indicates that the greatest success in attracting clients was achieved by the pension fund managers affiliated to the three biggest banks in Estonia (Hansapank, Ühispank, Sampo Pank). Fund managers related to insurance companies (Ergo, Seesam) have been far less popular. Two main factors account for this phenomenon. First, bankruptcies of some insurance companies in the second half of 1990s tarnished the reputation of the whole insurance sector, whereas the consolidation of the banking sector and Scandinavian ownership of the largest banks had engendered public trust in the stability of the banking sector. Second, bank-affiliated fund managers gained a competitive advantage by using bank tellers in selling second-pillar pensions. As noted above (see Section 2.2) applications to join the second pillar could be submitted at any bank office. The fund management companies paid an extra commission to bank tellers for each subscribing client.

**Figure 23**
**Distribution of second-pillar participants by fund managers (as of 1 November 2004)**

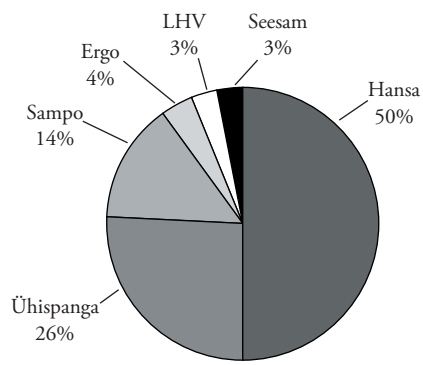



*Source*: Estonian Central Depository for Securities.

Distribution of assets by pension fund managers presents a largely similar picture (Figure 24). Hansa Asset Management is handling about 50 percent of all second-pillar pension fund assets. The three largest pension fund managers together hold 90 percent of total assets. The rate of market consolidation is similar to the situation in Hungary and Poland (see FI-AD, 2003).

However, the position of the three smaller fund managers appears somewhat more favourable when one looks at the share of assets under management. This is due to a higher share of active participants contributing on a regular basis in these pension funds. In 2003, about 24 percent of all opened pension accounts had zero balances, i.e., no contributions yet. This was mainly due to younger persons who had joined the system but were still studying at school or university.

**Figure 24**
**Market shares of pension fund managers by the asset value of pension funds under management (as of 1 December 2004)**




*Source*: Estonian Central Depository for Securities.

In July 2004, the two smallest pension fund managers – Seesam Asset Management and LHV Asset Management – announced a merger. This would reduce the number of pension fund managers from 6 to 5.

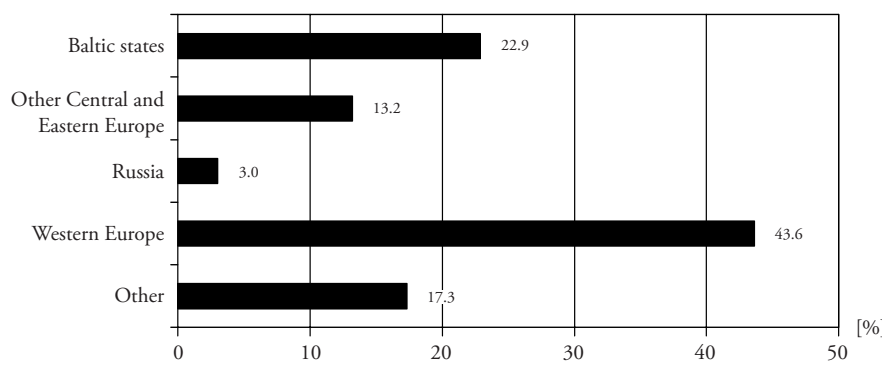
## Overview of Fund Portfolios

As of 1 November 2004, the total assets of the largest fund, the higher-risk Hansa K3, amounted to 580 million EEK, i.e., slightly over one-quarter of the total assets of the second pillar. Its investment strategy calls for up to 50 percent of assets to be placed in equities and up to 50 percent in bonds. For the bond portfolio, the target strategy is to invest up to 50 percent in bonds of European governments, 20 percent in Euro-based corporate bonds, and

the remaining 30 percent in government and corporate bonds of the Baltic states. From the equity portfolio, the biggest share (70 percent) is invested in international markets (European, North-American and Asian equities), mainly in index equities or third-party funds. For up to 30 percent of the equity portfolio, investment decisions are based on the specific situations of particular enterprises, targeting mainly the Baltic countries, Eastern Europe, and Russia.

As of 1 November 2004, the actual distribution of the Hansa K3 fund portfolio was 47.8 percent in equities, 47.2 percent in bonds, and 5.0 percent in bank deposits. The distribution of the portfolio by geographical region is illustrated on Figure 25. The majority of assets are invested on the "old markets" of Western Europe and North America. The share of emerging markets is about one-third.

**Figure 25**
**Distribution of assets of the largest pension fund, Hansa K3, by region (as of 1 November 2004)**




*Source*: Hansa Investment Funds.

As 2003 was a rather favourable year for international stock markets, Hansa K3 showed a relatively high rate of return – the net asset value of units (see 2.2) increased by 12.3 percent, which was the highest rate of return among the Estonian second-pillar pension funds.

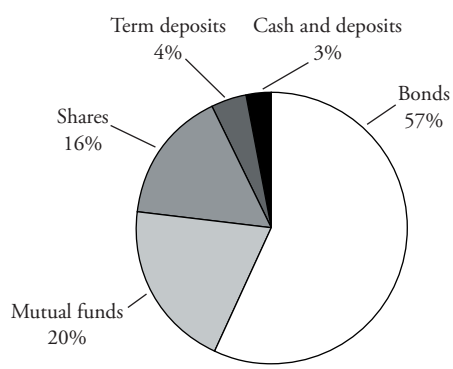
The largest conservative fund, Ühispanga Konservatiivne Pensionifond – with total assets of 123 million EEK as of 1 November 2004 – has invested

64 percent of assets in various government bonds and 32 percent in corporate bonds, the rest being held in bank deposits. As the government of Estonia does not issue debt instruments, the government bonds in the fund's portfolio are mainly from Central and Eastern Europe (Poland, Lithuania, Latvia, Hungary, Croatia) and to a lesser extent from Western Europe (Sweden, Germany).

Figure 26 illustrates the distribution of total investments of second-pillar pension funds by instrument. Bonds account for 57 percent; equity investments (shares and mutual funds), for 36 percent; and bank deposits, for 7 percent. The high share of bonds derives from legal requirements (see Section 2.2). Nevertheless, the proportion of equity investments has increased over the period of the scheme's operation (see Oorn 2004 for comparison). Whereas pension portfolios often include domestic government bonds, this option is practically nonexistent in Estonia due to the very low public debt – the lowest, in fact, in the European Union (see also Section 1.2). In fact, there has been no issuance of Estonian government bonds since 2002. Therefore Estonian pension funds have invested in corporate bonds and government bonds of other European countries.

As to the geographical distribution of investments, about 90 percent of total second-pillar assets are invested abroad and only about 10 percent in Estonia (see also Oorn, 2004).

**Figure 26**
**Second-pillar investments by instruments, October 2004**




*Source*: Ministry of Finance.

## Fees

The management fees of fixed income funds vary from 0.75 percent to 1.5 percent of the market value of total assets of the fund, while for equity funds the management fees are in the range of 1.25 percent to 2 percent. Subscription fees (for issuing units) vary from 1 percent to 3 percent of the net asset value of the unit. As a redemption fee, all funds charge exactly 1 percent of the net asset value of the unit, which is the maximum rate allowed by law (see Section 2.2).

**Table 13**
**Fees charged by fund managers (% of market value of total fund assets)**

| | Subscription fee | Redemption fee | Management fee |
|---|---|---|---|
| **Conservative funds** | | | |
| Hansa K1 | 1.5 | 1 | 1.19 |
| Ühispanga Konservatiivne | 1.5 | 1 | 1.20 |
| Sampo Pension Intress | 1.0 | 1 | 1.45 |
| ERGO Rahulik | 3.0 | 1 | 0.75 |
| LHV Intressi | 1.0 | 1 | 1.50 |
| Seesami Võlakirjade | 1.0 | 1 | 1.38 |
| **Balanced funds** | | | |
| Hansa K2 | 1.5 | 1 | 1.49 |
| Sampo Pension 25 | 1.0 | 1 | 1.75 |
| Seesami Optimaalne | 2.0 | 1 | 1.63 |
| **Aggressive funds** | | | |
| Hansa K3 | 1.5 | 1 | 1.59 |
| Ühispanga Progressiivne | 1.5 | 1 | 1.50 |
| Sampo Pension 50 | 1.0 | 1 | 1.85 |
| ERGO Tuleviku | 3.0 | 1 | 1.25 |
| LHV Aktsia | 1.0 | 1 | 2.00 |
| Seesami Kasvu | 2.0 | 1 | 1.88 |

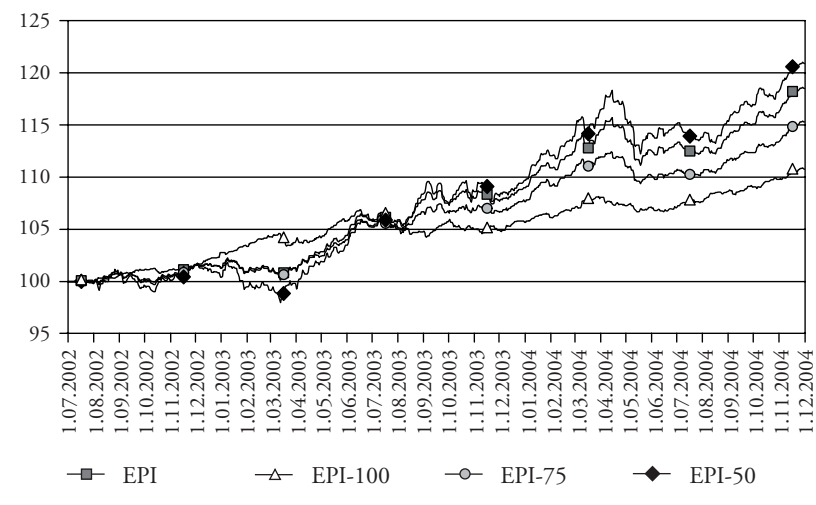
*Source*: Estonian Central Depository for Securities, prospects of pension funds.

*Note*: The subscription and redemption fees are calculated from the NAV of the unit. The management fee is calculated from the total assets of pension fund. The management fee is deducted in calculation of the NAV, i.e., the NAV already takes into account the management fee.

## Changes in Net Asset Value of Pension Units by Types (Risk Level) of Pension Funds

Changes in the net asset values of pension funds are captured by four pension indexes – the EPI, EPI-100, EPI-75 and EPI-50 – which are calculated by the ECDS for each business day. The EPI reflects the change in the NAV of all pension funds compared to the previous business day.[75] The EPI-100 measures conservative funds; EPI-75, medium-risk funds; and the EPI-50, higher-risk funds. In other words, the EPI indexes reflect the development of the weighted average NAV of pension fund units.

**Figure 27**
**Changes in second-pillar pension indexes for type of pension funds**




*Source*: Estonian Central Depository for Securities.

Over the first year, from July 2002 to July 2003, conservative funds showed the strongest performance and aggressive funds the worst, reflecting the situation in international stock markets. Since mid 2003, this trend has

[75] The impact of each pension fund on the index corresponds to its share in total NAV of all funds.

reversed itself and aggressive funds have provided the highest yield. As can be also seen from Figure 27, the development of NAV of aggressive funds has been more volatile than the NAV of conservative funds (Oorn, 2004).

It can also be observed that the EPI index of all funds is mostly influenced by the development of EPI-50, given the fact that the aggressive funds account for over 60 percent of total assets of the second pillar.

Nominal rates of return of aggressive funds have been in the range of 8–10 percent, with the exception of the aggressive fund of the smallest fund manager Seesam, which has been performing rather poorly. The rates of return of conservative funds have been in the range of 3–5 percent. Notably, in general, larger funds show higher rates of return (Table 14).

Nominal rates of return do not, however, take into account neither subscription or redemption fees, nor do they count inflation. Calculations by the authors of the internal rate of return of the second pillar indicated that for persons who joined the system on 1 July 2002, the contributions paid into the system had earned a real rate of return of 2.2 percent (per annum) by September 2004.[76]

[76] This is a weighted average internal rate of return for the whole second pillar. Calculations assumed 1.5 percent subscription fee and 1 percent redemption fee (see Table 13). The internal rate of return calculations do not take into account effects of postponing the payment of income tax (see Section 2.2) or the fact that the first-pillar pension is not reduced proportionally (see 2.2) – both aspects which make participation in the second pillar more beneficial.

**Table 14**
**Nominal rates of return [per year] for second pillar funds, 1 July 2002 – 1 December 2004**

| | Nominal rate of return |
|---|---|
| **Conservative funds** | |
| Hansa K1 | 4.9 |
| Ühispanga Konservatiivne | 4.2 |
| Sampo Pension Intress | 3.0 |
| ERGO Rahulik | 4.2 |
| LHV Intressi | 5.5 |
| Seesami Võlakirjade | 3.5 |
| **Balanced funds** | |
| Hansa K2 | 7.0 |
| Sampo Pension 25 | 5.7 |
| Seesami Optimaalne | 2.1 |
| **Aggressive funds** | |
| Hansa K3 | 10.0 |
| Ühispanga Progressiivne | 9.1 |
| Sampo Pension 50 | 9.0 |
| ERGO Tuleviku | 10.3 |
| LHV Aktsia | 7.5 |
| Seesami Kasvu | 1.7 |

*Source*: Estonian Central Depository for Securities.

*Note*: Nominal rates of return are net of management fee.

## Problems Encountered in the Process

The preparation period for implementation of the second pillar – from the date of adoption of the Funded Pensions Act to the date of collect of the first contribution – was about 9 months. This period was considerably longer than in some other countries which have undertaken a similar reform (e.g.,

Poland). Nevertheless, some difficulties occurred in meeting deadlines set by the Funded Pensions Act.

According to the original legislation, applications to join the second pillar should have been accepted starting on 1 April 2002. As it turned out, however, by that date no pension funds were registered yet. To start a pension fund, there are two administrative pre-requirements. First, the pension fund management company must obtain an operating licence from the Financial Inspectorate.[77] Second, the pension fund operating conditions (which, in particular, describe its investment policy) must be registered by the FI. While the Funded Pensions Act was adopted in September 2001, the fund managers applied for licences mainly during January-February 2002. In fact, these applications could not have been submitted earlier, since the unified FI was established only on 1 January 2002, replacing the three former separate inspectorates for banks, insurance and securities market. The applications to register the operating conditions of pension funds were submitted by fund managers mainly during March 2002. The latter applications were delayed by the late adoption of the Guarantee Fund Act, which provided protections for unit holders in the event of breaches of rules by fund managers.

The law provided that the FI had up to 6 months to process an application and grant a licence or not, plus an additional two months to make a decision on registering the fund's operating conditions. Thorough prior investigation by the FI was important from several angles.[78] Considering the responsibility of fund managers in handling the resources trusted to them by clients and the fact that the licences would have unlimited duration, careful inspection was crucial from the perspective of building public trust in the system.

By the end of March 2002, the FI had granted licences to two pension fund managers; but no fund was yet registered. Consequently, it was not possible to choose a pension fund on 1 April. Furthermore, the FI issued a warning to fund

[77] The earlier licences issued to some fund management companies to manage voluntary third-pillar funds were not sufficient, as the second-pillar requirements were stricter, e.g., the requirement of the minimum share capital was higher.

[78] The FI controls, among other activities, the fulfilment of the minimum share capital requirement, the balance sheet of the fund management company, its business plan, qualifications of fund managers, and agreements with custodian banks.

management companies, prohibiting the advertisement of any pension funds before their registration. In this situation, the fund managers could advertise only their trade mark, but not the specific product, i.e., specific pension funds with a distinctive investment strategy. The other 4 pension fund managers were granted licences in the course of April and by the end of that month the 6 pension fund managers that had announced that they would enter the market had been granted a licence.

To avoid any possible competitive distortions resulting from registration procedures, the FI announced its registration of the majority of pension funds on the same day. Eleven pension funds were registered on 30 April and 4 more funds, on 3 May 2002. One day later, on 4 May 2002, the Estonian Central Depository for Securities started to accept applications. Thus, 4 May was the practical date of commencement of the operations of the second pillar. This delay shortened the first application period to less than one month, giving fund managers very limited time to advertise their funds and workers an equally short period to make their choice.

In the original version, the Funded Pensions Act had made 31 May 2002 the final deadline for persons over age 50 to join the second pillar. However, the shortening of the first application period led the government to postpone this deadline; and older persons were allowed to join until 31 October 2002.

Some practical problems also arose. Since the rules of participation in the second pillar entail a higher contribution rate, employers have to know whether particular employees have joined the second pillar or not when declaring, withholding, and transferring taxes and contributions to the Tax Office. This places a critical role on the employers' accountants. In case of mistakes in the tax declaration or wrong calculations of contributions, the issue has to be settled before second-pillar contributions are transferred from the Tax Office to the ECDS.

In normal cases, the Tax Office has 15 working days to control the data, to match the individual contribution of 2 percent with the 4 percentage points from social tax paid by employer, and to transfer the total second-pillar contribution of 6 percent to the ECDS. The period may be prolonged in case of problems with data or calculation of contributions. Also, if the employer has arrears of social tax, the individual contribution of 2 percent (even if withheld by the employer) is not transferred to the ECDS and remains on the account of the Tax Office until the employer has settled the arrears.

In the first months of the new system, a number of such problems arouse. For example, by October 2002, the Tax Office had transferred second-pillar contributions of 48 million EEK to the ECDS, whereas nearly 10 million EEK (i.e., ca 17 percent of the total second-pillar contributions collected by the Tax Office) remained at the account of the Tax Office due to different problems with declarations or arrears.

However, the Tax Office and the ECDS have been quite efficient in solving the daily problems, educating employers, and introducing more user-friendly methods for data transfer. For example, employers are able to check the participation of their employees in the second pillar over the internet, by entering the ID-code of the employee. Also, electronic tax declaration forms have been introduced, allowing immediate control of the data.

A final problematic area was the marketing of pension funds, where some violations occurred. To attract clients, one of the fund management companies – Sampo Asset Management – advertised that it would guarantee a 10 percent rate of return in 2004 to all those who joined its higher-risk pension fund, Sampo Pension 50, and would make up the difference if the actual rate of return turned out to be lower.[79] This offer applied only to whose who joined the fund (submitted an application) from August to October 2003. The Financial Inspectorate intervened, pointing out that the advertisement slogan was misleading since the law prohibits a fund from guaranteeing a rate of return and the slogans created a contrary impression. At the demand of the Inspectorate, Sampo Asset Management changed the wording of advertisements but maintained the policy of paying compensation if the rate of return fell below 10 percent.[80]

### Factors Explaining the High Participation Rate in the Second Pillar

The unexpectedly high number of persons choosing to join the second pillar on a voluntary basis leads to a question: what are the main factors behind it?

[79] The slogan used was, "Sampo Pension 50 – guaranteed 10 percent". Sampo Pension 50 is the name of the higher-risk equity fund managed by Sampo Asset Management.

[80] In fact, the annual rate of return of Sampo Pension 50 in 2004 exceeded 10 percent, meaning that the fund management company did not have to pay any compensation.

In view of the authors, success of the reform can be attributed to several factors (see also Leppik, 2004).

The first was the attractive design of the reform. The designers and promoters of the reform succeeded in changing its "optics". What could be perceived as an increase in the total contribution rate was largely perceived as a bonus provided by the state. The main slogan promoted by the government and pension fund managers was: "You pay 2 percent, the state pays 4 percent".

The second crucial factor, in our view, was the fact that the reform debates reached the grass-roots level. The government information campaign succeeded in bringing the issue onto public agenda. Obviously the advertisement campaign of fund management companies and direct sales work of bank tellers and fund managers cannot be underestimated. However, it seemed that often ordinary people sold the idea to other people and joining the second pillar became a social-psychological phenomenon – once a critical mass of participants was achieved, other persons joined just as their friends and family members had done so.

Third, transparency can be pinpointed as an important success factor. In an era when the internet is a major channel of communication and information, many Estonians can take all the needed actions from the convenience of their own home or office: it is possible to join the second pillar, to choose a pension fund, to check the balance of the pension account, to view the investment portfolios of pension funds, to compare the performance of different funds etc. A special web site – *www.pensionikeskus.ee* – established by the Estonian Central Depository for Securities – serves as the main clearing house for information on the second pillar.

Last but not least was the role of efficient implementing bodies and infrastructure. The decision to delegate the tasks of co-ordinating the logistical side of the second pillar to the Estonian Central Depository for Securities – a private company in charge of the whole infrastructure for securities market in Estonia – turned to be the right one, considering for example the difficulties experienced by the Polish Social Security Institution (ZUS) in performing these tasks. The institution appears to be motivated and efficient in setting up user-friendly procedures for providing information to fund participants and solving the daily problems that have arisen in the implementation process. This was also noted by Lindeman (2004: 15): "Estonia's implementation encountered

few of the glitches that have plagued second pillar implementations in the general region. This was because it could build upon two already up-and-running agencies (the Tax Office and Central Depository for Securities) that were fully up to advanced system standards".

### *3.4 Transition Costs*

Implementation of the second pillar changed the allocation of the social tax. For participants in the mixed pension system, 4 percentage points of social tax were redirected to their individual accounts, causing the so-called transition cost of the reform. More specifically, transition costs can be divided into:

- gross transition costs, expressed as the amount of social tax which is transferred to the second pillar on behalf of persons who have joined the new scheme; and
- net transition costs, expressed as the difference between post-reform revenues and expenditures of the first pillar.

When drafting the state budgets for 2003 and 2004, the government envisaged covering the transition costs by reducing the reserves of the first pillar, i.e., using the surplus developed in previous years. However, in reality, despite of transferring parts of social tax to the second-pillar pension funds and increases of state pensions in 2002 and 2003, the surplus of the first pillar increased. In other words, in spite of gross transition costs, there were no net transition costs to the pension reform in 2002 and 2003. On the contrary, reserves of the first pillar increased as revenues from the remaining social tax exceeded expenditures on state pensions (Table 15).

This unexpected situation was attributable to a combination of factors. Increasing employment and real wages boosted social tax revenues (see Table 11) while due to the ex post facto pension indexation, the increase of pensions did not exhaust all social tax revenues.[81] Given the decline in the number of old-age pensioners (see Table 8), even with the additional pension increases which

[81] See Section 2.2.

were implemented in 2002 and 2003 to maintain the average replacement rate (see Table 12), all social tax revenues were not exhausted.

The same net result occurred in the first half of 2004: social tax revenues again exceeded expenditures on state pensions; and the pension budget surplus amounted to 1.5 billion EEK, or nearly 1.2 percent of GDP.

In November 2004, the government established an additional reserve for the first pillar, transferring 532 million EEK (or 0.4 percent of GDP) from the higher-than-expected general tax revenues of 2003. The current first-pillar reserves thus amount to 1.6 percent of GDP.

**Table 15**
**Gross and net transition costs of implementing the second pillar [percent of GDP], 2001–2008**

| | 2001 | 2002 | 2003 | 2004* | 2005* | 2006* | 2007* | 2008* |
|---|---|---|---|---|---|---|---|---|
| Annual surplus/deficit of the first pillar | 0.6 | 0.7 | 0.2 | –0.3 | –0.4 | –0.5 | –0.5 | –0.3 |
| Cash reserves of the first pillar | 0.6 | 1.2 | 1.4 | 1.4 | 0.9 | 0.3 | –0.2 | –0.5 |
| Transfers to the second pillar | — | 0.05 | 0.5 | 0.6 | 0.7 | 0.8 | 0.8 | 0.9 |

*Sources*: Ministry of Finance, National Social Insurance Board, calculations by authors.

*Note*: * forecast.

However, with the continuing increase in second-pillar participation and the additional ad hoc pension increases implemented in 2004 and envisaged for 2005 and 2006, the first-pillar reserves will be exhausted by 2007 and other revenues have to be sought to cover the first-pillar deficit.

The issue of transition costs has led to debates between the coalition and opposition parties concerning the method to cover the gap between social tax revenues and expenditures. The Social Security Reform Commission suggested the use of the stabilisation reserve in the short run, while for the longer run it proposed transfers from the state budget and possibly the issuance of government bonds. The SSRC also called for intergenerational equity in covering the transition costs, noting that different instruments place the burden of transition costs on different generations, e.g., the drawing down of existing reserves places the burden on the age-groups that participated in creating them, whereas the use of loans places the burden on future taxpayers.

The current government has announced that as the first source they intend to use the existing first pillar reserves (amounting currently to 1.6 percent of GDP) and, subsequently, the stabilisation reserve (amounting currently to 3.5 percent of GDP). The opposition parties oppose this use of existing reserves and argue that resources have to be found in the general state budget, i.e., from other tax revenues. They have also accused the current government of placing a disproportionate burden on current pensioners by limiting the increase of state pensions.

At the same time, the coalition has an ambitious plan for reducing the income tax rate from 26 percent in 2004 to 20 percent by 2007, reducing public revenues and thereby necessitating cuts in public expenditures. This will make it very difficult to find any resources from the general budget to cover the transition costs of the pension reform.

### *3.5 The Third Pillar*

As noted above (see Section 1.3.2), participation in the voluntary third pillar can take two different forms:

- pension insurance policies offered by licensed private insurance companies; and
- units of pension funds managed by private fund managers.

In case of pension insurance policies, the pensionable age is a matter of contract between the person and the insurance company. However, the minimum age at which tax privileges apply is 55. In the case of voluntary pension funds, the participating person decides the time that he/she will withdraw the savings; but again, tax advantages apply only from 55 years of age. Third-pillar pensions are thus available up to 8 years before the general pensionable age. Pension savings may also be withdrawn in the event of total and permanent work incapacity.

The following taxation rules apply to the third pillar:

- contributions (premiums paid on the bases of a pension insurance policy or sums paid for purchasing the units of a voluntary pension fund) are deductible from taxable income up to the ceiling of 15 percent of annual income;

- benefits paid on the basis of a private pension insurance policy or from redemption of the units of a pension fund are taxable at a lower rate (10 percent), instead of the normal income tax rate of 26 percent; and
- periodic, lifelong benefits paid from a defined-benefit type of insurance policy in equal or increasing amounts are not taxable.

The tax treatment is thus very favourable. In the case of life-long annuities, neither contributions nor benefits are taxable. This was not the original plan of the Social Security Reform Commission but rather the result of successful lobbying by insurance companies when the third-pillar legislation was discussed in Parliament.

Five life insurance companies (ERGO Life Insurance, Sampo Life Insurance, Seesam Life Insurance, Ühispanga Life Insurance and Hansapanga Life Insurance) have been issued licenses to sell pension insurance policies under favourable tax treatment.

Four fund managers (Hansa Asset Management, Ühispank Asset Management, Sampo Asset Management, LHV Asset Management) are currently operating 6 voluntary pension funds. Third-pillar pension funds are by their nature similar to second-pillar funds, except investment rules are more flexible.

Contrary to the earlier fears of insurance companies, the introduction of the second pillar has in fact increased participation in the third pillar, which was relatively low until 2001 despite the very favourable tax treatment. This probably relates to the general higher public awareness of pension issues achieved by the second-pillar campaigns.

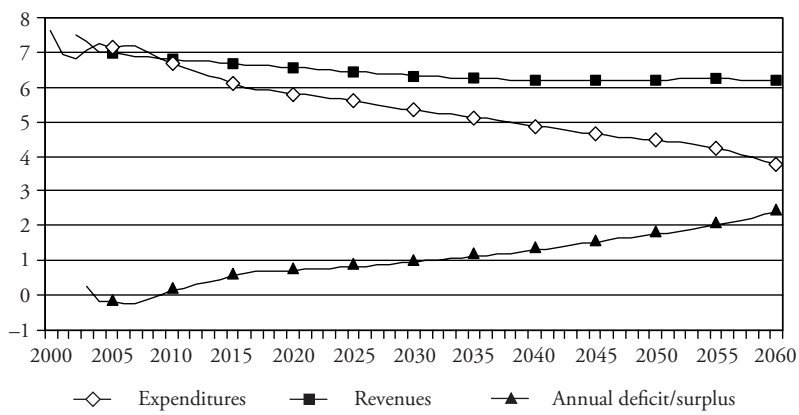
By October 2004, over 65,000 persons (over 10 percent of all employed persons) had concluded a pension contract with a life insurance company, while the number of participants in voluntary pension funds was slightly over 6,000 (around 1 percent of employed persons). Insurance reserves under pension insurance policies amounted to 784 million EEK (or 0.6 percent of GDP), while total assets of voluntary pension funds approached or exceeded 150 million EEK (0.1 percent of GDP).

Insurance companies have thus dominated the third-pillar market, mainly due to their more preferential tax treatment compared to voluntary pension funds.

### *3.6 Projections for the Future (Up to 2060)*

Projections done by the authors as part of this analysis show that under the current rules of the first pillar – taking into account the increase in the pensionable age and the current indexing mechanism – the first-pillar deficit will be a rather short-term phenomenon, lasting only from 2005 to 2009 (Figure 28).[82] The size of the annual deficit in this period will be less than 0.3 percent of GDP.

**Figure 28**
**Projected revenues and expenditures of the first pillar up to 2060 [as percentage of GDP]**



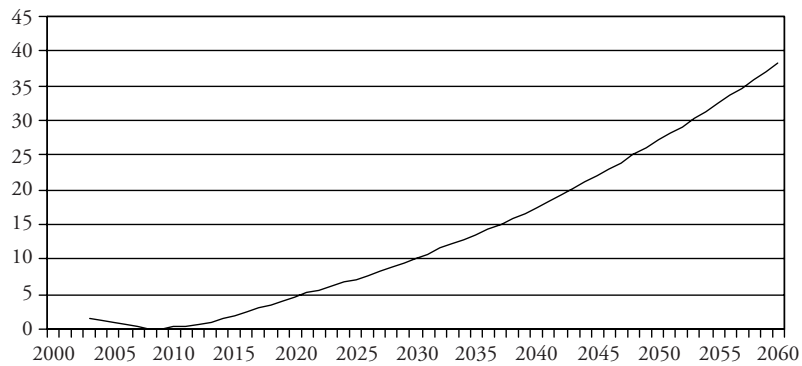

*Source*: Calculations by authors.

In the long run, first-pillar expenditures as a share of GDP will decline more rapidly than the revenues of the system (which also decline), creating a surplus. This is primarily due to the pension index since, according to these projections, the increase of the total wage bill exceeds the increase of prices.

[82] The projections also take into account the additional ad hoc pension increases announced by the government for 2005 and 2006.

The cumulative surplus in the first pillar would reach 10 percent of GDP by 2030 and approach 40 percent of GDP by 2060.[83]

**Figure 29**
**Cumulative surplus of the first pillar under the current indexation method [percent of GDP]**



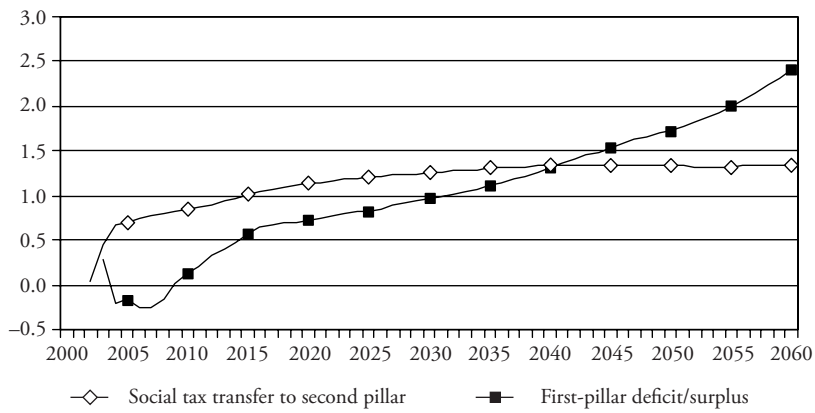

*Source*: Calculations by authors.

In other words, the net transition costs would be marginal due to the inhibition of expenditure growth by the current pension index. The other side of the coin is a considerable decline in the average replacement rate (see Figure 37).

The first pillar is projected to develop a surplus despite the transfer of 4 percentage points of social tax paid on their behalf to their individual accounts in second-pillar pension funds. The size of these transfers amounts to 0.7–0.8 percent in the current decade, increasing to 1 percent of GDP by 2015 (Figure 30).

[83] These are, of course, projections based on specified assumptions on demographic and economic developments. The assumptions behind these projections are described in the Annex. From the perspective of political economy, the creation of such reserves is rather unlikely.

**Figure 30**
**Annual transfers of a portion of social tax to the second pillar compared to first-pillar deficit/surplus [percent of GDP]**



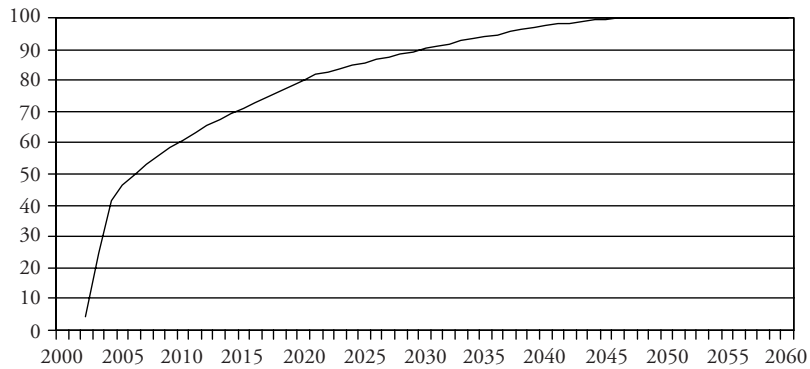

*Source*: Calculations by authors.

In 2004, 41 percent of persons in active age (18–63) participated in the second pillar. The share of second-pillar participants in this population is expected to increase to 60 percent by 2010, i.e., the year when the option for voluntary membership will be terminated. Thereafter the share of participants will increase on the account of gradual dominance of groups with compulsory participation, reaching 100 percent by 2045 (Figure 31).

Total contributions (2+4 percent) to the second pillar will increase from the current level of 1 percent of GDP per year to 2 percent of GDP by 2040 (Figure 32). While the first payments of benefits will start in 2009, a significant benefit outflow is expected only from 2020, when the first groups with participation rates over 50 percent would reach pensionable age. The volume of benefits would reach 3 percent of GDP by the end of 2040s, when large numbers of workers who had been under compulsory participation would retire.

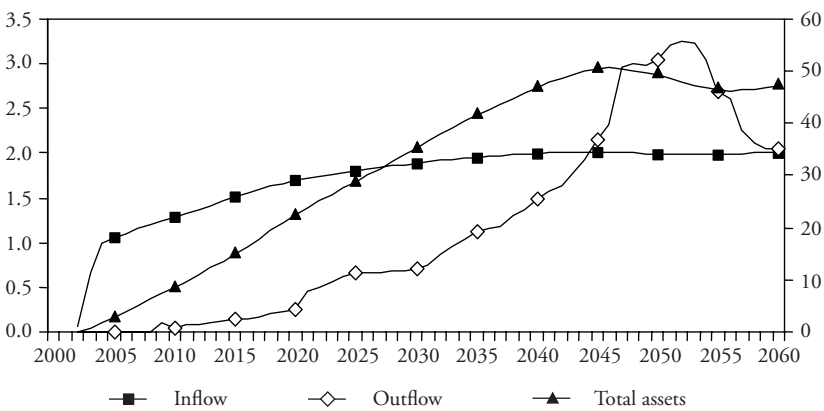
The total assets of the second pillar are expected to increase steadily, stabilising at around 50 percent of GDP by the mid 2040s.

**Figure 31**
**Second-pillar participants as a percent of the economically active population (age 18–63)**




*Source*: Calculations by authors.

**Figure 32**
**Inflow of contributions, outflow of benefits, and total assets of second-pillar pension funds [percent of GDP]**

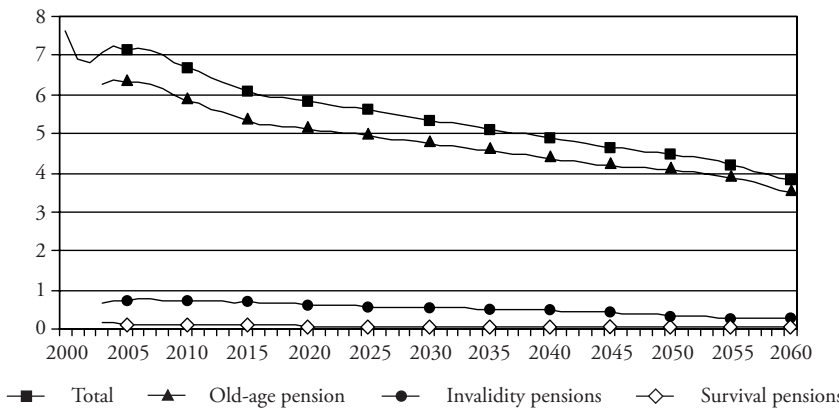



*Source*: Calculations by authors.

*Note*: Inflow and outflow – left scale; total assets (right scale).

As for the structure of first-pillar expenditures, old-age pensions continue to play the dominant role, with disability and survivors' pensions, combined, accounting for less than 1 percent of GDP (Figure 33).

**Figure 33**
**The structure of expenditures on state pensions [percent of GDP]**

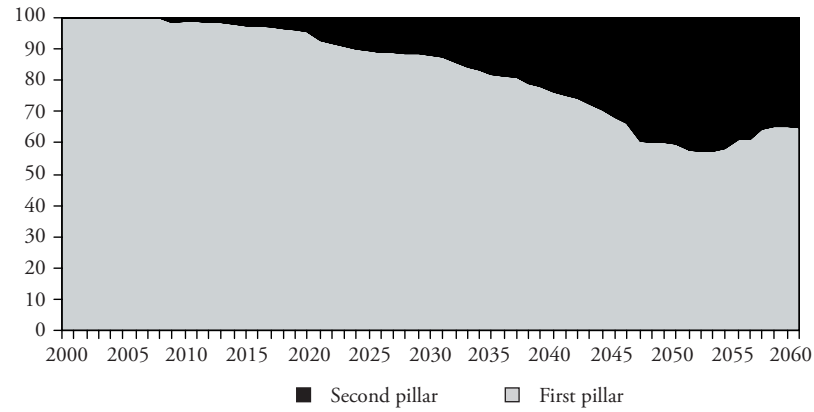



*Source*: Calculations by authors.

In spite of the Estonian government having introduced the second pillar, the role of the first pillar would remain dominant in the next few decades. The share of second-pillar pensions in the total pension expenditure would increase to 20 percent by the end of the 2030s and reach 40 percent by 2050 (Figure 34).

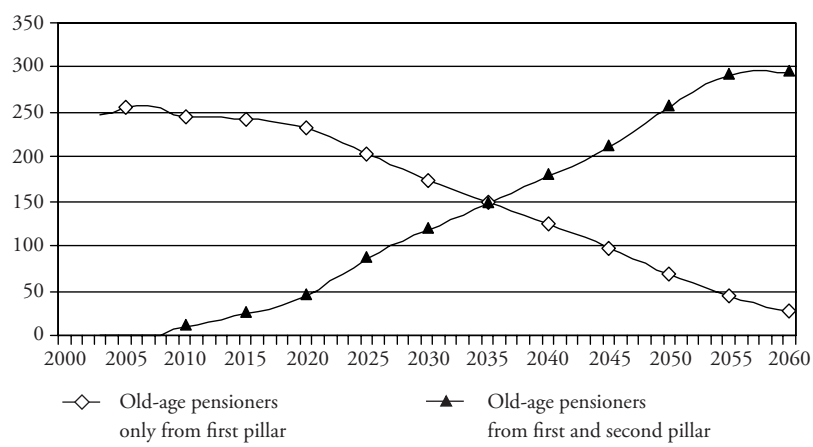
It seems that the number of pensioners relying only on the state pension system would be relatively stable over the next 10–15 years. Thereafter the number of "single-pillar pensioners" would start to decline, while the number of "multi-pillar" pensioners would increase. The size of the two categories would become equal around 2035, and thereafter the majority of pensioners would receive pension from both pillars (Figure 35).

**Figure 34**
**Distribution of pension expenditures between the first and second pillars**



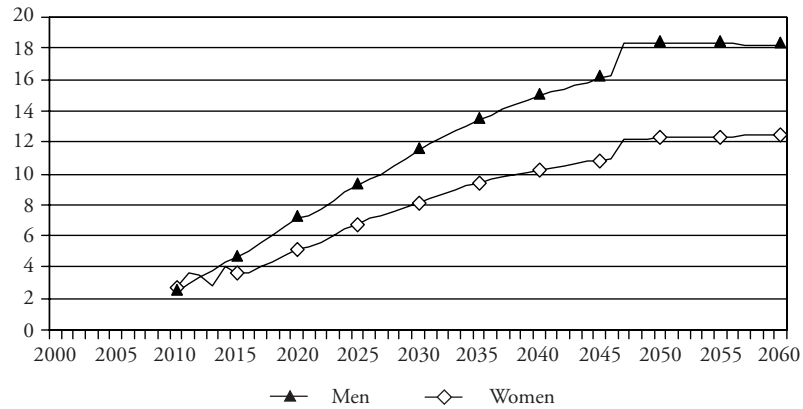

*Source*: Calculations by authors.

**Figure 35**
**Number of old-age pensioners receiving the state pension only versus those receiving pensions from both pillars**




*Source*: Calculations by authors.

**Figure 36**
**Average newly granted second-pillar pensions as a percent of the average net wage**




*Source*: Calculations by authors.

*Note*: Average wage is not gender-specific.

The second-pillar replacement rate is expected to increase with the period of accumulation of savings (Figure 36).[84] By the time of retirement of those groups whose participation in the second pillar is compulsory, the average replacement rate of second-pillar pensions is expected to reach 12 percent of the average wage for women and 18 percent for men.[85] In other words, even

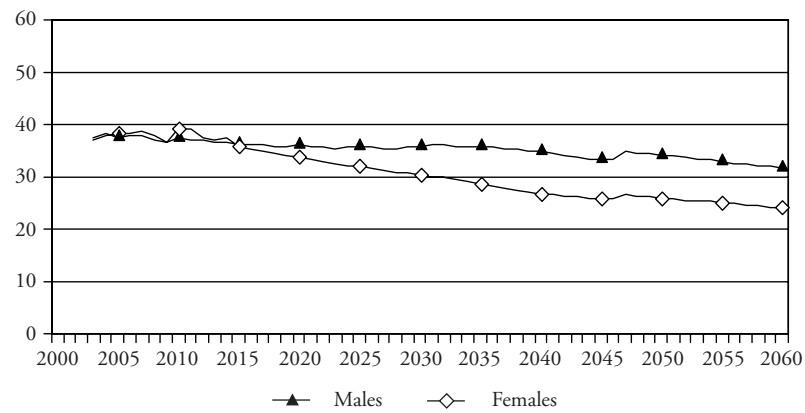
[84] On Figure 36, the second-pillar replacement rate is calculated as the ratio of newly granted pensions in a given year to the average net wage in that year. The net wage is based on the average taxable wage. Projections assume that in the long run the real rate of return of second pillar investments will follow the real growth rate of labour productivity (see Figure E in Annex). The redemption fee is not taken into account as the impact of this 1 percent fee is marginal compared to other factors which influence the second-pillar pension, e.g., the rate of return of investments, annuity rate, life expectancy, etc. At retirement, the accumulated investments by cohort are divided by the number of retirees. Calculations assume an annuity rate of 3 percent and unisex life tables (see Section 2.2). It is assumed that the average pension is not subject to income tax, as the average pension is projected to remain below the non-taxable allowance for pensions.

[85] A noteworthy increase in the replacement rate is projected for the late 2040s due to the retirement of the first age-group whose participation in the second pillar is compulsory.

under the new mixed pension system, the role of state pensions in providing old-age security remains dominant.

Furthermore, the introduction of the second pillar will be unlikely to prevent the average replacement rate of statutory pensions (including both the first and second pillars) from declining (Figure 37).

**Figure 37**
**Average replacement rate (first and second pillars)**




A recent study (Tiit et al, 2004) has suggested that in order to avoid a substantial decline in the replacement rate, the portion of social tax revenues counted in the first-pillar pension index could be increased to two-thirds from the current one-half. Although this would increase the deficit of the first pillar in the next decade, it would not jeopardise long-term financial sustainability, but would rather limit the first-pillar surplus that is projected to accumulate after 2015 (see Figure 29).

Another issue relates to the distributional effects and incentive structure of the current first pillar. Tiit et al (2004) have also suggested that the current distribution of wages in Estonia could lead to a situation in 40 years' time where about 17 percent of old-age pensioners receive a minimum pension.[86] This group would

[86] This projection was based on the analysis of actual pension insurance coefficients of all insured persons from 1999–2003.

consist mainly of workers receiving the minimum wage and those who have substantial gaps in their careers. Lindell (2001) has pointed out that, with the current minimum pension guarantee, the incentives for minimum wage earners to contribute are low. According to her calculations, the individual gross replacement rates under the new first-pillar formula would range from 50 percent for minimum wage earners to 27 percent for those earning 3-times the average wage.[87]

## 4. Conclusions

The first wave of transformation in the early 1990s separated the Estonian pension system from the Soviet system. The reform was implemented in two stages, first by shifting pension financing from the general state budget to an earmarked social tax, i.e., converting the system from non-contributory to contributory. New rules were also adopted in an attempt to improve benefits and extend of the level of protection. However, high social expectations of the population collided with the turbulent conditions during the first years of independence. The introduction of flat rate pensions in 1992 is to be regarded as a temporary rescue measure rather than a purposeful shift towards egalitarian principles. At the same time, a considerable retrenchment of the pension system took place in a situation of hyperinflation.

In the period that followed, the application of a macro-level defined-contribution approach limited pension expenditures to the revenues available from the social tax. The calculation of pensions on the basis of a flat-rate base supplemented by a length-of-service component resulted in a relatively flat benefit structure. The challenge for policy makers was to satisfy the public desire for a stronger link between benefits and previous earnings, while at the same time keeping all beneficiaries above the poverty level. Considering the

[87] Whitehouse (2004) has argued that the Estonian first pillar provides a linear individual replacement rate. While his paper is methodologically interesting, his calculations are unfortunately not correct due to mistakes in representing the pension formula. He has taken into account neither the flat-rate base amount nor the minimum pension guarantee.

relatively low average replacement rate, the question was in essence how much differentiation it is possible to introduce without increasing the poverty rate of those at the lower end of the pension benefit scale.

The second wave of pension transformation – initiated in 1997 – introduced significant parametric changes to the first pillar (e.g., equalisation of the pensionable age for men and women, linking pensions to contributions) while even more importantly setting the goal of establishing a multi-pillar system by adding two supplementary pillars based on pre-funding.

The parametric reform of the first pillar has improved the long-term sustainability of the system and seems to be consistent with the dominant public perception of distributional fairness. Nevertheless, some problems persist and require further reform efforts by the government. The high portion of persons retiring before the normal pensionable age reflects incentives to retire as early as possible. Today about half of all men and one-third of all women receive old-age pensions on favourable conditions, early retirement pensions, and superannuated pensions. Paradoxically, this is also fostered by allowing receipt of a full old-age pension combined with earnings from work. On the other hand, the latter measure combined with the increase of pensionable age has increased employment rates of workers in the group aged 55–64.

The state pension system has managed to keep the majority of pensioners above the poverty level, but the average net replacement rate – about 40 percent – is rather low in the European context, leaving the majority pensioners in the lower-middle range of the income continuum.

Projections of future developments in the first pillar indicate that, under the current rules, the system will not be able to maintain the average replacement above 40 percent over a long period. A decline of the replacement rate would not only be a problem from the adequacy perspective but would conflict with international commitments taken by Estonia through ratification of the European Social Charter.

Introduction of the pre-funded second pillar based on savings in individual accounts has marked a paradigmatic shift in Estonian pension policy. Estonia was not among the first countries in Central and Eastern Europe to introduce a second pillar. Lindeman (2004: 12) has characterised Estonia as the most cautious and deliberative among the three Baltic countries, adopting a "go-slow and very consensual approach".

Müller (1999) has explained the introduction of fully funded second-pillar schemes in Poland and Hungary as resulting from a combination of particular actor constellations and structural-institutional contexts. Looking at structural factors, she found that the financial situation of the PAYG scheme (deficit or surplus) influences the perceived urgency of radical reform. Another factor was the degree of external debt and resulting influence of international financial institutions that favour pension privatisation as a strategy. In her case study, she showed that these two factors triggered the active involvement of two actors – the Ministry of Finance and the World Bank – resulting in adoption of pension privatisation. In Estonia, however, the constellation of factors behind the reform was clearly different from that of Poland and Hungary. The first pillar was in surplus, both when the reform plan was developed and when it was implemented. External government debt was very low, and the involvement of the World Bank, quite limited. The Ministry of Finance was active, but the leading role was played by the Minister of Social Affairs. This calls for a different model to explain the emergence of the Estonian pension reform.

In the Estonian case, one of the structural background factors was far-reaching privatisation. From this perspective, it would not be logical to expect that the pendulum of privatisation would stop before reaching social insurance. However, the constellation of actors behind the Estonian reform was clearly unique. Trade unions and the social democratic party were among main supporters of the reform, while insurance companies among the main opponents.

The Estonian case also stands out among pension reforms in Central and Eastern Europe in several other respects. After lengthy deliberations on the reform design, there was substantial continuity in implementation. In spite of changes of the government, successive cabinets followed the general principles of the 1997 reform outline. The coalition that finally implemented the second pillar in 2002 was in fact the third coalition following the one which adopted the reform plan. As coalition governments are normally made up of 2–3 political parties, in fact 7 different political parties have so far been directly involved either with preparation or implementation of the pension reform.

While reform plans certainly created controversies, they were mainly rhetorical rather than serious political conflicts. Political opposition to the reform was also reduced by the minimum degree of compulsion in the short

run in participation rules. Leaving participation in the second pillar voluntary for all workers except for new entrants to the labour market gave people the option to "vote with their feet" for or against the reform. Such an option in turn increased political stability of the new system.

The most innovate feature of the Estonian reform was the combined use of top-up and carve-out methods for financing the second pillar, as previously described. So far Estonia is the only country in Central and Eastern Europe which increased the total contribution rate when introducing the second pillar. Other CEECs have used only the carve-out method, i.e., redirected a portion of the former first-pillar contribution to the second pillar, while some countries even lowered the total contribution rate. This indicates that similar institutional designs (e.g., fully funded second-pillar schemes) may be designed to fulfil rather different political and policy objectives. Whereas in some CEECs the second pillar was introduced with an implicit agenda to downsize the compulsory pension system and reduce pension expenditures, in the Estonian case the second pillar extended the compulsory system and required overtly that joiners pay a higher price for a higher pension.

Estonian reformers had in mind to achieve a paradigm change – to shift the focus of pension debates and the way the topic was tackled. First, they hoped that the increase of the total contribution rate for the second pillar would dampen future pressures to increase social tax for the first pillar. Second, they hoped that the second-pillar contribution would enable individuals to visualise the cost element of pensions which had been partially hidden from them so far. Third, they wanted participation in the second pillar and payment of individual contributions for private pensions to give people a more realistic assessment and expectations concerning future state pensions. Only time will tell whether these expectations will materialise.

Even though participation in the second pillar requires additional contributions from employees – 2 percent of wage – the participation rate is one of the highest among CEECs which have undertaken a similar reform, reaching 70 percent of the labour force in 2004. Broad coverage across various age-groups through voluntary membership is again a political stabiliser of the system, in spite of the fact that higher participation rate entails higher transition costs. With the higher rate of voluntary membership, it is more likely that voters of different political parties have joined the system, which in

turn discourages parties from making any significant changes in order not to upset their members.

As explained in Section 3.3, the popularity of the reform can be attributed to several factors. First, the reform design looked attractive. The reform slogan "You pay 2 percent, the state pays 4 percent" created an impression that there was a bonus provided by the state rather than an increase of the total contribution rate. Second, joining the second pillar became a socio-psychological phenomenon – once a critical mass had joined, others joined because their family members and friends had done so. Third, the use of the internet provided ease in both joining the second pillar and monitoring its performance.

Efficient implementing bodies and infrastructure appear to be an additional crucial determinant of reform success. The relevant Estonian bodies – in particular the Tax Office and the Estonian Central Depository for Securities – turned out to be rather efficient in setting up the necessary procedures, in providing information to fund participants, and in solving the daily problems that have arisen in the implementation process.

Last but not least, timing of the reform appears important. By 2002, when the reform was implemented, the financial sector had consolidated and addressed the problems of the early years of transition. Had the reform been implemented just a few years earlier, e.g., before the 1998 stock market crash in Estonia or 1999 Russian financial crises, probabilities of failure would have been much higher.

For several other CEECs, introduction of the second pillar has raised a major problem of covering transition costs. The problem appears to be less severe in Estonia. From one side, the fiscal position of the government is relatively good. The government can use several reserves created in earlier years, e.g., first pillar reserves and stabilisation reserve. From the other side, the relatively modest transition costs relate to the pension index used for increasing state pensions. Possible modification of the state pension index could in turn increase transition costs, while maintaining the current index would result in substantial decline in the replacement rate.

In this context, the main challenge for the Estonian pension system in the coming years is how to maintain the adequacy of state pensions, since as is clearly reflected in the preceding pages, the political and social sustainability of the pension system are no less important than its financial sustainability.

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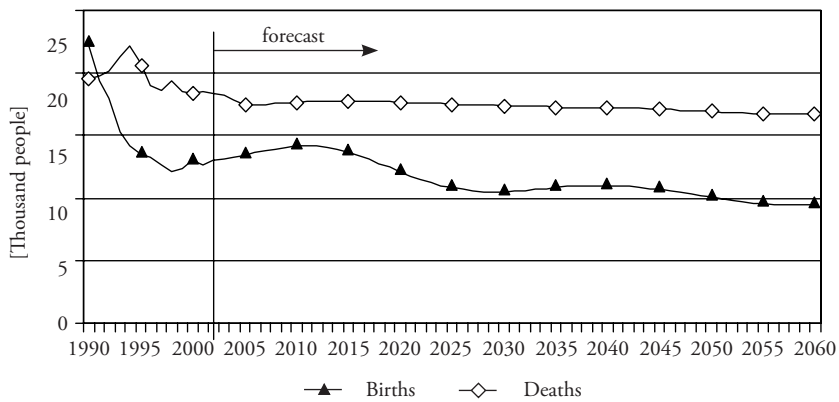
# Annex

## *Assumptions used in projections*

**Table 1**
**Main assumptions used in the simulation of pension expenditures and revenues [%]**

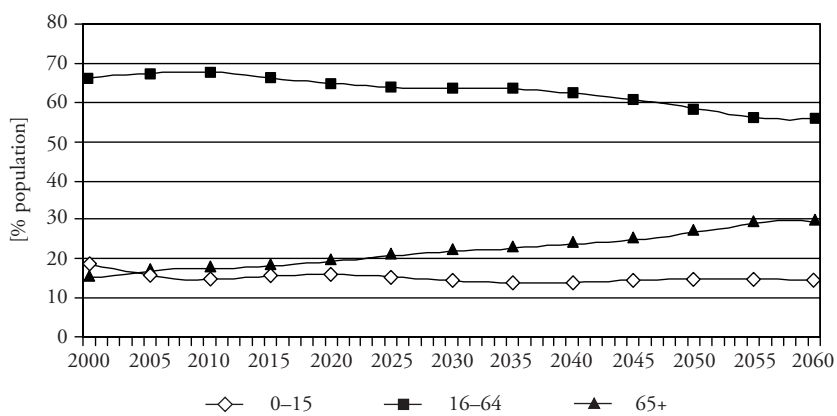
| | 2004 | 2010 | 2030 | 2060 |
|---|---|---|---|---|
| **Assumptions** | | | | |
| CPI growth (=GDP deflator) | 4.0 | 3.5 | 2.0 | 2.0 |
| Labour productivity growth [GDP per employee] (=Real wage growth) | 5.0 | 4.3 | 2.0 | 2.0 |
| Real return of second-pillar funds | 5.0 | 4.3 | 2.0 | 2.0 |
| Employment growth | 0.6 | 0.4 | –0.4 | –0.7 |
| **Results** | | | | |
| Real GDP growth | 5.6 | 4.8 | 1.6 | 1.3 |
| Nominal growth of social tax revenues | 9.7 | 8.5 | 3.4 | 3.3 |
| Pension index growth | 6.8 | 6.0 | 2.7 | 2.7 |

**Figure A**
**Births and deaths, actual for 1990–2003 and forecast to 2060**



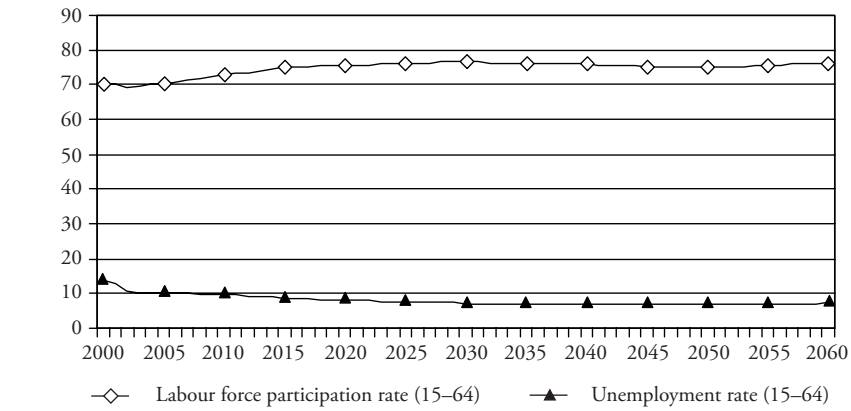

*Sources*: Estonian Statistical Office, PRAXIS Center for Policy Studies.

**Figure B**
**Demographic structure of the Estonian population 2000–2060**




*Sources*: Estonian Statistical Office, PRAXIS Center for Policy Studies.

**Figure C**
**Labour force participation and unemployment rates (ages 15–64)**

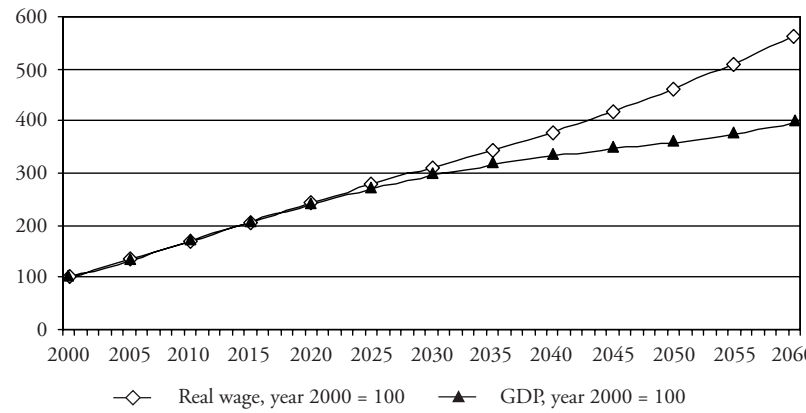



*Sources*: Estonian Statistical Office, PRAXIS Center for Policy Studies.

**Figure D**
**The size of the labour force and the number of employed persons**


*Sources*: Estonian Statistical Office, PRAXIS Center for Policy Studies.

**Figure E**
**Real wages**




*Source*: PRAXIS Center for Policy Studies.

Chapter 2

# Pension Reform in Latvia

*Inta Vanovska*

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The author expresses her appreciation to Sandra Stabina and Rita Pukinska from the Ministry of Welfare for their assistance simulations for this study, as well as to Ruta Avotiņa from the State Social Insurance Agency for technical support in calculations of the internal rate of efficiency of the second-pillar pension scheme. She also thanks Mária Augusztinovics, Professor of Economics at the Institute of Economics of the Hungarian Academy of Sciences, for her methodological support in this exercise and Sue Ward, an independent pension consultant from the U.K., for the careful editing of this analysis. In a broader sense, she is also obliged to Edward Palmer of the Swedish Social Insurance Board, who was the lead consultant under the Latvian Pension Reform Project. Along with Ingemar Svensson and Boguslaw D. Mikula, he taught, supported, and advised the Latvian team in preparation and implementation of the pension reform. In the course of this process, the team greatly improved its analytical and monitoring skills.

# Abbreviations and Expressions

| | |
|---|---|
| CB | Contribution base |
| CPI | Consumer Price Index |
| CSB | Central Statistical Bureau of Latvia |
| FCMC | Financial and Capital Market Commission |
| FDC | Financial defined contribution pension scheme (second pillar in Latvia) |
| GDP | Gross Domestic Product |
| IT | Information technologies |
| IMF | International Monetary Fund |
| IRR | Internal rate of return |
| LVL | Latvian Lat (currency) |
| LCD | Latvian Central Depository |
| LWRP | Latvia Welfare Reform Project |
| MoE | Ministry of Economics |
| MoF | Ministry of Finance |
| MoW | Ministry of Welfare |
| NAPE | Latvian National Action Plan for Employment |
| NDC | Notional defined contribution pension scheme (first pillar in Latvia) |
| NAP inclusion | Latvian National Action Plan to Reduce Poverty and Social Exclusion |
| PPF | Private pension fund |
| PR | Public relations |
| PAYG | Pay-as-you-go |
| Saeima | Latvian Parliament |
| SSIA | State Social Insurance Agency |
| WB | World Bank |
| SSIB | Swedish Social Insurance Board |
| BITS | Swedish Board for Investment Technical Support |
| SIB | Social Insurance Budget |
| SIDA | Swedish International Development Agency |
| LFS | Labour force survey |

# 1. Introduction

After regaining its independence in 1991, Latvia experienced a difficult transition to a market economy, marked by a steep fall in GDP, high inflation, population loss, and continuing low fertility rates. Today the Latvian demographic situation is improving, and this will probably continue for several years. In the longer time, the country faces demographic ageing, which will pose a challenge for pension financing, regardless of the pension system's design.

Alongside the challenges of developing the market economy and undertaking various reforms, the new Latvian Government took on the task of restructuring the Soviet-style social insurance system that it inherited. It made some reforms in 1992, but the financial improvement that was expected to result from these was largely negated by inflation and economic turmoil. In 1994, the Government requested help from the World Bank. Experts seconded by the Bank helped to draft a preliminary proposal for a "four-pillar" package, and subsequently, brought in Swedish experts who worked with the Government's own team of officials on the adoption of a rather different three-pillar arrangement. This was enacted in several laws.

In summary, this arrangement comprises:

- the first pillar – a pay-as-you-go Notional Defined Contribution (NDC) scheme, modelled on the proposals then under discussion in Sweden. First-pillar pensions depend on the records of each individual's "notional capital", the age of retirement, and the projected life expectancy of the age cohort at the time of the individual's retirement, with some complex minimum guarantees;
- the second pillar – a defined contribution (DC) arrangement (hereafter referred to as Financial Defined Contribution pension scheme, or FDC) financed by part of the contribution that would otherwise go to the first-pillar pension. Participation is compulsory for those below the age of 30 at the time of its introduction (2001), and voluntary for those between the ages of 30 and 49. Those 50 and over cannot participate in the second pillar; and
- the third pillar – voluntary defined-contribution (DC) savings arrangements, with tax relief, that can provide a lump-sum payment or phased withdrawals.

The rationale for the reforms was to provide a mix of public/private provision for old age, bring down the costs of social insurance in coming years, and hold these costs stable in the future. This combination of reforms – an entirely defined-contribution system without specific benefit promises – reflected the high priority given to stabilizing contribution rates.

However, the transition from the old system to the new system was far from smooth. A "big bang" approach to converting pension rights acquired under the old-scheme into new-scheme pension capital was adopted, but this led to some arbitrary results and was not well-explained to the public. Early administration was also characterized by some weaknesses. As a consequence, a series of amendments were adopted by the Parliament (Saeima) which have left the NDC scheme design less clear-cut and have increased its costs. Under the demographic assumptions that seem most reasonable today, our forecasts show that there will be a decline in the average pension compared to the average wage (the replacement rate). This will create a need for compensatory measures to avoid the threat of increased poverty among the elderly.

This analysis describes the economic and demographic picture now, the pre-reform pension arrangements, the details of the reform, the expected advantages of the chosen path, and the problems encountered along the road to implementation. The final section suggests some priorities for further improvements of the pension system.

# 2. The Pre-reform Scene

## *2.1 Demographic and Economic Background*

### 2.1.1 Demographic Background

Latvia's population stood at 2,668,000 in 1990, but had fallen to 2,319,000 by 2004, a drop of more than 13 percent, or 1 percent a year.[1] This resulted from three factors: negative net migration, low fertility rates, and comparatively low (but now rising) average life expectancy.

In the early 1990s, there were high levels of emigration by the Russian-speaking population and former Soviet army personnel. Emigration is, however, now gradually diminishing. Net migration exceeded 27,000 per year on average during 1991–1995, dropping to just under 7,000 during 1996–2000, and then falling steadily until 2003 (the latest date for which figures are available), when it was a mere 850 people.[2]

The crude birth and fertility rates are both low by international standards. Except for some brief periods at the beginning of the 20th century, some years after the world wars, and 1986–1988, the fertility rate in Latvia was below the population replacement rate (Zvidriņš and Vanovska, 1992: 111). The total fertility rate dropped from 2.16 in 1988 to a low point of 1.11 in 1998. There has been an upturn since then, but Latvia still has one of the world's lowest fertility rates (1.29 in 2003).[3]

Life expectancy has varied considerably during recent years. Due to national financial constraints, the quality of medical care declined during the transition, contributing to a rise in premature deaths. Average life expectancy decreased by 3.49 years for males and 1.71 years for females during 1990–1994.[4]

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1 CSB, *Demography*, 2004: 29.

2 CSB, *Demography*, 2004: 161.

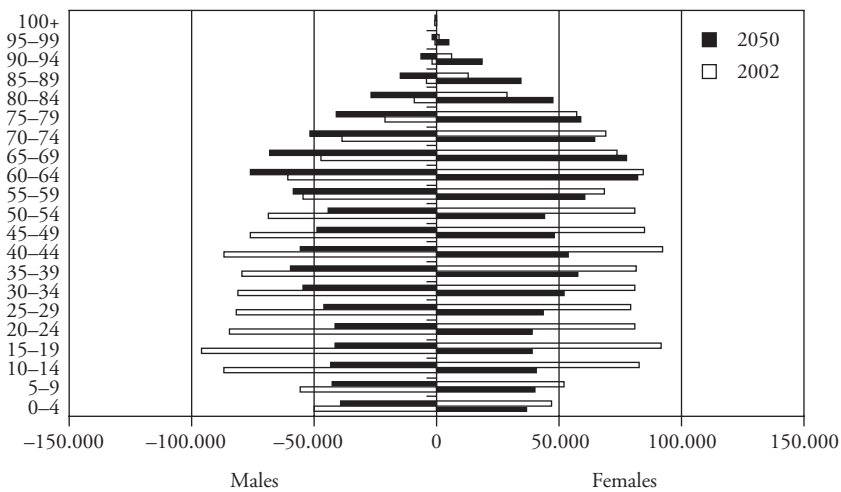
3 CSB, *Demography*, 2004: 179.

4 It reached 66.38 years on average for both sexes (combined) in 1994.

In 1995, it started to increase again, reaching 71.37 years on average in 2003.[5] A swift rebound – by almost 5 years – during 1995–2003 has still only brought life expectancy figures back to what they were during 1963–1964, the peak of the Soviet period.[6] As a result, Latvia is still among the group of countries with lowest life expectancy.

The age and gender structures have been severely distorted, so that ageing will take place both from the bottom of the population pyramid (as a result of decreased fertility) and from the top (due to the increase in the number of elderly).

**Figure 1**
**Population by age 2002–2050**




*Sources*: 2002 figures from CSB, *Demography*, 2003: 33; and Ministry of Welfare Model Projections, updated in summer 2004 (unpublished).

However, over the past 8 years, the portion of the population that is of working age has risen from 57.2 percent (1996) to 62.8 percent (end of 2003). It is expected that this will remain more or less stable until 2010.

[5] That is, 65.91 years for males and 76.86 for females.

[6] That is, 71 years on average, 67 for males and 74 for females. CSB, *Demography*, 2004: 139.

**Table 1**
**Population age groups as % of total population*, beginning of year**

| | 1991 | 1996 | 2004 |
|---|---|---|---|
| Below working age | 22.8 | 20.5 | 15.4 |
| Working age | 56.4 | 57.2 | 62.8 |
| Over retirement age | 20.8 | 22.3 | 21.8 |

* The retirement age has changed over this period, as will be explained below. Thus, the "working age" and "over retirement age" figures refer to the population above and below the applicable retirement ages for that period.

*Source*: CSB, *Demography*, 2004: 30.

### 2.1.2 Demographic Outlook in the Longer Term

Projections done for purposes of this study show that demographic aging is likely to occur later in Latvia than in much of Western Europe.[7] Indeed, the dependency ratio is projected to improve from 2.9 working age persons per person over working age at the beginning of 2004 to almost 3.3 around 2010.[8] This gives Latvia a demographic "window of opportunity". By 2020, this "window" will have closed.

While there is greater uncertainty in the more distant future, our analysis suggests that the demographic picture, including birth rates, is unlikely to change substantially. Depopulation is thus likely to continue, creating a major challenge for the economy as a whole and especially the pension system.

In this study, only a baseline scenario with the most realistic assumptions has been developed in detail. However, a number of simulations with more

[7] This analysis was done with the Ministry of Welfare's sophisticated macro-simulation model, built with the assistance of Swedish Government experts as part of their involvement in the 1994–2003 Welfare Reform Project. Baseline assumptions were based on the advice of demographers from the University of Latvia and the Latvian Academy of Science. For more, see Annex and Section 2.2.4.

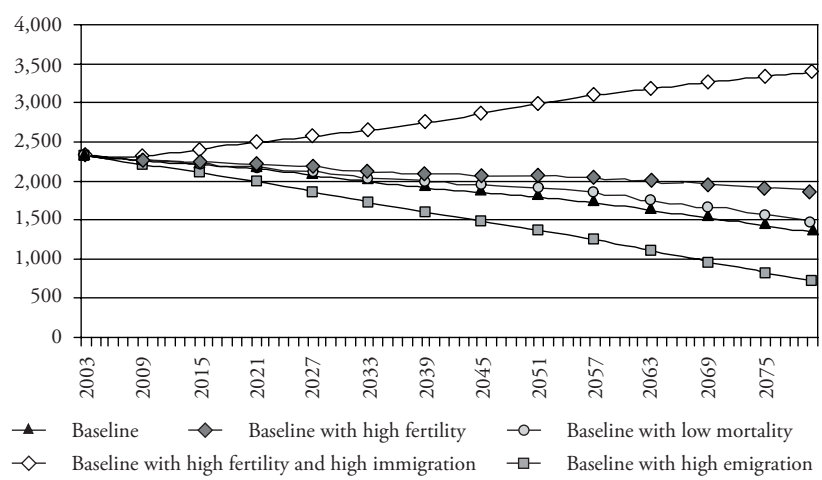
[8] CSB, *Statistical Yearbook of Latvia*, 2004: 30, and Ministry of Welfare Model Projections, updated in summer 2004 (unpublished).

extreme demographic assumptions have also been prepared and are shown in Figures 2 and 3. The baseline scenario assumes an increase in fertility from the 2003 level of 1.2 children per woman to 1.5 in 2015 and then to 1.6 for the remainder of the period examined. A more optimistic scenario with fertility reaching 1.8 children per woman in 2015 and then increasing and maintaining a level of 2.0 – implicitly assuming that economic prosperity will increase birth rates – is also examined.

The baseline scenario assumes negative net migration through 2010 and 0.0 thereafter. Two other scenarios assume positive and negative net migration flows after 2010.

In the baseline, life expectancy for men at birth increases from 65.4 years in 2002 to 74 years in 2050, and for women from 76.8 years in 2002 to 81 years in 2050. A set of more dramatic changes is also examined, with an increase in life expectancy for men to age 81 in 2050 and for women to age 87. This implies an increase of almost 16 years for men and approximately 10 years for women.

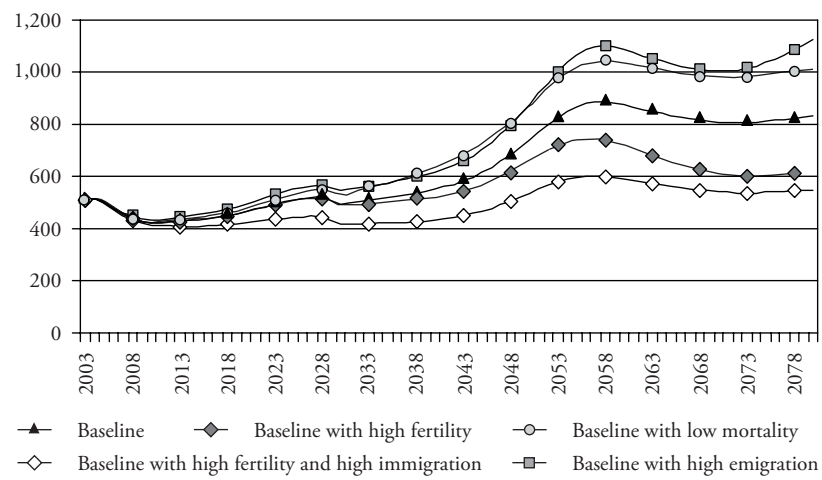
**Figure 2**
**The Latvian population [thousands of persons]**




*Source*: Ministry of Welfare Model Projections, updated in summer 2004 (unpublished).

As Figure 2 shows, under the baseline demographic assumptions the total Latvian population declines from about 2.3 million today to 1.5 million by 2075. This would then mean a dramatic fall in the working age population, from about 1.2 million around 2015 to only about 0.6 million in 2075. Adding the pessimistic assumption concerning migration, the population figure drops to less than 1 million in 2075. This scenario still assumes the significant improvement in fertility detailed in the baseline scenario, though this would still leave fertility below the replacement rate. Hopefully, this pessimistic migration scenario will not materialize.

**Figure 3**
**System dependency ratio**
**[number of old-age pensioners per thousand contributors]**




*Source*: Ministry of Welfare Model Projections, updated in summer 2004 (unpublished).

As Figure 3 shows, under the baseline scenario the system dependency ratio deteriorates to approximately 1.1–1.2 workers per old-age pensioner around 2055. After that, it becomes relatively stable. Under the high emigration and high life expectancy scenarios, the system dependency ratio deteriorates to less than 1 worker per old-age pensioner. These scenarios assume a retirement age of 62 (beginning for men born in 1944 and women born in 1948) and of 63 (beginning with the cohort born in 1967). A higher de facto retirement

age would increase the size of the labour force (assuming that there are jobs available for these older workers) and improve the dependency ratio a little – but without changing the fundamental picture very much.

### 2.1.3 Economic Background

Between 1991 and 1993, there was a cumulative drop in GDP of around 50 percent, reflecting a sharp decrease in employment (from 1.4 million in 1991 to 1 million in 1996) and a rapid increase in unemployment (from virtually 0.0, by the ILO definition, in 1991 to 20.7 percent in 1996).[9] Hidden unemployment also increased rapidly, taking the forms of forced stoppage of production, compulsory unpaid leave, and the downgrading of jobs to part-time. Attempts by the Government to protect some social groups by increasing housing and heating subsidies further distorted the price structure. In 1992, inflation reached 951 percent.[10] The number of taxpayers declined during 1991–1995 by almost 50 percent.[11]

A stabilization programme was adopted in the early 1990s, along with a series of structural reforms. Recovery was interrupted by a banking crisis in 1995, with the bankruptcy of Banka Baltija, Latvia's largest bank, and then in 1998 by the severe crisis in the Russian financial system. This threw the economy into recession, which extended until 2000. By 2002, the average inflation rate had dropped to 1.9 percent.[12]

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[9] Ministry of Welfare, *Latvian National Action Plan to Reduce Poverty and Social Exclusion*, 2004–2006: 5. The NAP is based on the *Single National Economy Strategy, the Single Programming Document*, 2004–2006, the *National Employment Plan*, 2004, and other national policy documents.

[10] CSB, *Statistical Yearbook of Latvia*, 2002: 74.

[11] Economic Evaluation Report prepared by the Ministry of Welfare for the draft Law on State Pensions, submitted to the Government and Saeima, 1995: 9. (unpublished).

[12] CSB, *Statistical Yearbook of Latvia*, 2004: 65.

During 1996–2003, real GDP growth per annum averaged 6.1 percent, or twice the EU-15 average.[13] Real per capita GDP, boosted in part by the falling population, now stands at more than 70 percent above its 1995 level, reaching 2,500 LVL (3,700 EUR) in 2003.[14] However, this was still quite low by purchasing power parity standards; it equalled only 42.6 percent of the 2003 EU-25 average.[15]

The privatization process is now largely complete. The private sector comprises over two-thirds of both GDP and employment. Wage agreements are largely decentralized.

In real terms, gross wages and salaries increased nearly 50 percent during 1996–2003. In 2003, the gross average monthly wage was 192 LVL (284 EUR).[16]

In 1992 the Latvian Government abandoned the Russian rouble in favour of the Latvian rouble, and in 1993 it switched to the Latvian Lat (LVL). This was pegged to the SDR (Special Drawing Rights) basket of currencies on 12 February 1994 (with 1 SDR = 0.7997 LVL) until January 2005, when it was pegged instead to the Euro, at a rate of 1 EUR = 0.702804 LVL.[17]

Latvia's state budget was balanced in 1997, but the Russian financial crisis resulted in large deficits. These have been slowly declining in the ensuing years. The general Government deficit averaged 2.1 percent of GDP during 2000–2003. Combined with GDP growth, the moderate deficits kept the level of Government debt low in relation to GDP: 13.2 on average during

[13] Ministry of Welfare, *Latvian National Action Plan to Reduce Poverty and Social Exclusion*, 2004–2006: 4. Provided there are no adverse external influences, real GDP growth in the medium term is expected to reach 7–7.5 percent per annum. Ministry of Finance, *Macroeconomic Development Scenario 2004–2009*, 4 November 2004 (for internal use).

[14] CSB, *Statistical Yearbook of Latvia*, 2004: 10. As the preparation of this publication was started late in 2004, its calculations are based on the currency exchange rate on 23 October 2004 (Bank of Latvia), when 1 EUR was equivalent to 0.677 LVL.

[15] CSB, *Statistical Yearbook of Latvia*, 2004: 242.

[16] CSB, *Statistical Yearbook of Latvia*, 2004: 58.

[17] The SDR basket consisted of currencies of the US, Germany, Japan, Great Britain, and France.

2000–2003.[18] Hence, Latvia's economy is broadly consistent with the Maastricht treaty criteria, but some risks of inflation remain. Before the EU accession, projections by the Ministry of Finance suggested that inflation might increase for a brief period, reflecting the harmonization of those prices set by Government and the municipalities, as well as tax rates, with EU standards. In fact, in 2004 the CPI reached 6.2 percent. It is expected to stabilize in the future in the range of 3 percent.[19]

The employment rate (the proportion of the population aged 15–64 in any form of employment) increased during 2000–2003 from 57.5 percent to 61.8 percent, although it was still lower than for the EU-15.[20] The employment rate for women (57.9 percent) exceeded the EU average in 2003 (56 percent).[21]

The social insurance contribution rate was reduced from 38 percent (1996) to 33 percent (2003).[22] The employer's share was reduced from 37 percent to 24 percent, while the employee's share was increased from 1 percent to 9 percent. The corporate income tax rate was reduced from 25 percent to 15 percent.[23] The tax burden on labour is still heavy. The tax wedge on labour costs for low wage earners in 2003 was 40.8 percent, exceeding the EU-15 average of 37.2 percent.[24] When the first shift of social tax from employer to employee occured in 1996, the Government mandated a corresponding increase in wages. However, the second shift, a further 4 percentage points of wages, was not met with automatic compensation and meant, for many, a wage cut.

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[18] CSB, *Statistical Yearbook of Latvia*, 2004: 19.

[19] Ministry of Finance, Macroeconomic Development Scenario 2004–2009, 4 November 2004 (for internal use).

[20] Ministry of Economy, *National Action Plan for Employment*, 2004: 68.

[21] Ministry of Economy, *National Action Plan for Employment*, 2004: 46.

[22] There is an additional 0.09 percent for employment injuries.

[23] This occured between 2002 and 2004.

[24] Newcronos database, EUROSTAT, visited on 22 October 2004. The tax wedge is defined as income tax on gross wage earnings plus the employee's and the employer's social security contributions. The tax rate used is the average rate of tax on earnings. In this case, the tax wedge for low wage earners is calculated as the tax rate for a single person (without children) earning 67 percent of an average wage of a full-time production worker in manufacturing.

The average wage is also still low. The minimum wage has been gradually increasing and reached 80 LVL (118 EUR) in 2004, which was approximately 40 percent of the average gross wage.

In the first quarter of 2004, the average wage paid to a woman was 84.9 percent of that paid to men (in 2002, 81.5 percent), largely because women's employment is concentrated in state- or municipality-funded sectors, such as education, health care and culture, which are still among the lowest-paid.[25]

However, there is widespread under-reporting of wages. The employment of people without an employment contract, and the payment of "envelope" salaries (as cash under the table), is still quite common. Undeclared work in Latvia is estimated at approximately 18 percent of GDP.[26]

Unemployment has declined from its peak of almost 20.6 percent in 1995 to 10.6 percent in 2003, although it is significantly higher than the average rate in the EU-15 countries, which was 8 percent in 2003.[27] There are also considerable differences in unemployment rates among regions. The highest registered rates are in the more depressed eastern part of Latvia, particularly the rural districts. The situation is much better in Riga, where the unemployment rate is 4.4 percent and in the surrounding district, 5.3 percent.[28]

Latvia has experienced a sharp increase in inequality, with the Gini coefficient rising from 0.24 in 1990 to 0.34 in 2003.[29] The most vulnerable groups are not pensioners, but larger families and single-parent families.[30] As Figure 4 shows, it is children below the age of 15 and young people between

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[25] CSB, *Statistical Yearbook of Latvia*, 2004: 59.

[26] European Commission, *Undeclared Work in an Enlarged Union*, *http://europe.eu.int*, visited on 3 August 2004.

[27] CSB, *Statistical Yearbook of Latvia*, 2002: 55, and CSB, *Statistical Yearbook of Latvia*, 2004: 235, and Newcronos database, EUROSTAT, visited on 22 October 2004.

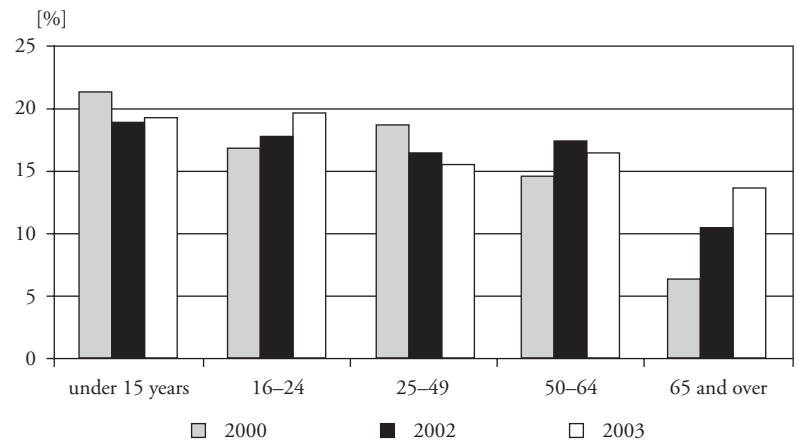
[28] CSB, *Statistical Yearbook of Latvia*, 2004: 55.

[29] This is a measure of inequality in a country's wealth distribution. It contrasts actual income and property distribution with perfectly equal distribution. The higher the value of the coefficient, or index, the greater the level of inequality. Ministry of Welfare, *Latvian National Action Plan to Reduce Poverty and Social Exclusion*, 2004–2006: 9.

[30] Ministry of Welfare, *Latvian National Action Plan to Reduce Poverty and Social Exclusion*, 2004–2006: 10.

the ages of 16 and 24 who face the highest poverty risks, while the risk is the lowest for those aged 65 years and over, although it is increasing.[31]

**Figure 4**
**At-risk-of-poverty rate in relation to age**




*Source*: CSB Press Release, "Indicators Characterizing Poverty in Latvia", 21 September 2004.

While net salaries and wages increased by 89 percent during 1995–2003, old-age pensions grew slightly more, on average by 99 percent.[32] In May 2003, the Government adopted the Concept on the Minimum Wage, setting a target of increasing the minimum wage rate to 50 percent of the average gross monthly salary of employed persons over 7 years.[33]

[31] According to the EUROSTAT definition, the "at-risk-of-poverty rate" is the percentage of individuals living in households where the total equivalent income is below 60 percent of the national equivalent median income.

[32] CSB, *Statistical Yearbook of Latvia*, 2004: 58, and SSIA, *State Statistical Review*, 2004: Table 47.

[33] In the Latvian legislative process, the term "concept" refers to a policy paper presented first to the Government and then to Saeima (the legislature) by the relevant Minister(s) and accepted or rejected. It may be followed by the passing of a statute.

## *2.2 The Pre-reform Pension System*

The pension system that Latvia inherited from the Soviet Union had the following features:

- a low pensionable age for most workers – 55 for women and 60 for men;
- privileged retirement rules for various occupational groups, including lower pensionable ages;
- entitlement to a pension based on the previous work record, with benefits linked to the previous wage;
- a relatively high replacement rate, ranging from 100 percent for low-income earners to 50 percent for higher-income earners;
- separate schemes for workers and farmers; and
- financing of the pension system from the general state budget, with no individual contributions by workers.

During the Soviet period, the unfavourable demographic burden on social security financing in Latvia, as well as in other aging parts of the former Soviet Union, was evened out to some degree by those Soviet republics with a much younger age structure. Thus, in the short-term, in a situation of full employment and redistributive income policy, it was possible to keep a low pension age while still guaranteeing a decent pension level for all.

### 2.2.1 Changes in 1991

After regaining independence, the Latvian Government almost immediately began to prepare changes in the structure and administration of social programs. This restructuring was mainly directed at creating a new system that would correspond to the standards of Western European countries. Two new laws, the Law on State Pensions and the Law on Social Tax, came into force in January 1991. The social security system was made independent from the state budget and was financed by employee and employer contributions, with a total social tax rate of 38 percent. It was the first attempt to implement Bismarckian social insurance principles in old-age protection. Latvian people had high expectations of this system:

> *The new generous system was constructed on the belief that the renewal of independence would ensure the elimination of all injustice under which the people suffered under the former Soviet regime.* (Bite, 2002: 130.)

In the political euphoria of that moment, the new Latvian pension law was passed without detailed economic and demographic estimates.

The new pension system was designed as an earnings-related, defined benefit PAYG scheme. Its coverage was universal. People without sufficient work records were covered by social assistance pensions, under the same scheme. Qualifying conditions for old-age pension entitlement were 25 years of service for men and 20 years for women. The statutory retirement age was 60 for men and 55 for women. More favourable terms were applied to a wide group of people, including those working in hazardous or arduous conditions, the blind and permanently disabled, and mothers with many children or children disabled from childhood. The replacement ratio was about 55 percent of average monthly earnings, calculated on the basis of any consecutive 5-year period selected by the pensioner during the last 15 years of work, including interruptions of employment, or any 10 consecutive years during the person's working life. For each full year of work in excess of the qualifying period, the old-age pension was increased by 2 percent of covered earnings. Pensions could not exceed 80 percent of earnings, except those for people who were disabled or victims of repression during the Soviet period.

### 2.2.2 Economic Problems and Pension Changes

Rising unemployment, hyperinflation, and structural changes quickly made the 1991 reform unaffordable. The financial balance of the newly adopted pension system was upset by the liberalization of prices and the skyrocketing inflation that followed on its heels, and the situation was worsened by an increase in the number of retirees. As a response to the general decline in the economy, cost of living adjustments were introduced and became an essential part of the pension system. The design of these adjustments had the effect of flattening the benefit structure and thus violating with the Bismarckian social insurance principle on which the 1991 reform had been based.

In January 1992, the price compensation payment was replaced by a new basic pension linked to the minimum standard of living. Pensions then consisted of a flat rate (basic) pension and an earnings-related pension. However, as the year progressed, hyperinflation caused the earnings factor to lose its significance; and the flat-rate part of the pension became dominant. In reality, the 1991 pension law ceased to operate (Bite, 2002: 135). When the budget for 1993 was drawn up, the separate social insurance budget was abolished and social expenditure was again included in the state budget.

In November 1993, the newly elected Saeima introduced a set of "Temporary Regulations for Calculating Pensions", which revised the Law on State Pensions. The calculation based pension amounts on the number of working years, disregarding the individual earnings record. The benefit formula included a guaranteed minimum flat-rate pension of 30 percent of the national average wage, with an increase of 0.4 percent for each year of service:

$$P = (0.3 \times W) + (W \times 0.004 \times L)$$

where

$P$ is the pension,
$W$ is the national average gross wage for previous quarter, and
$L$ is the total length of service record.

This method of calculation differentiated pensions at least slightly, depending on the length of service. The formula counted up to 38 years of service. (Pensions paid to politically repressed persons, however, were granted without limitation.) Women were eligible to retire at the age of 55 and men at 60, but benefits could be claimed as early as age 40 by people in a range of occupations and groups. The Temporary Regulations also specified that there should be quarterly pension increases, based on the increase in the average monthly gross wage in the economy during the previous quarter. On the whole, there were 6 such increases during operation of the Temporary Regulations – 1 in 1993, 3 in 1994, and 2 in 1995. However, beginning in 1994, pension indexation was carried out with chronic delays (i.e., passing over some quarters, or using stale wage information instead of the wage for the previous quarter).

There was continuing public dissatisfaction with the pension system because benefits were not related to past earnings, as had been previously promised.

In general, the material conditions of pensioners were poor. In relative terms, the average pension for a person retiring at the age of 55 was around 44 percent of the average wage (1995) and, at the age of 60, about 46 percent (Fox and Palmer, 1999: 3).

### 2.2.3 Moves towards Further Reform

During the first half of the 1990s, high levels of unemployment and emigration were reducing the number of contributors, while the number of pensioners was growing. Thus, an increasing share of GDP was being allocated to social insurance payments, mostly to pensioners. Pension-related expenditure had risen from 7.8 percent of GDP in 1991 to a (budgeted) 10.2 percent in 1994, and was expected to reach 9.7 percent in 1995. Table 2 illustrates the situation:

**Table 2**
**Number of pensioners and pension expenditure in Latvia, 1991–1995**

| | 1991 | 1992 | 1993 | 1994 | 1995 |
|---|---|---|---|---|---|
| 1. Number of employed [thousands] | 1,397 | 1,345 | 1,245 | 1,208 | 1,180 |
| 2. Number of pensioners [thousands] | 641 | 654 | 658 | 661 | 664 |
| 3. Average amount of pension [LVL] | 2.26 | 8.14 | 14.76 | 25.3 | 29.11 |
| 4. Total revenues from social tax [million LVL] | 15.2 | 101.3 | 167.0 | 216.0* | 269.2* |
| 5. Pension expenditure [million LVL] | 11.2 | 62.2 | 141.0 | 200.8* | 231.1* |
| 6. Percentage of social tax revenues used for pension expenditure [%] | 73.7 | 61.4 | 84.4 | 86.0 | 86.2 |
| 7. Pension expenditure [percentage of GDP] | 7.8 | 6.8 | 9.5 | 10.2 | 9.7 |

* Estimates included in the budget.

*Source*: *Pensiju reformas koncepcija*, Latvijas Vēstnesis, 9 February 1995: 9.

In 1993, Jānis Ritenis became the Minister of Welfare. While in exile in Australia, he had worked for private insurance companies. The new Minister began to draft a policy document based on a private insurance model. These new ideas met with strong resistance, however, and were opposed by the Latvian Association of Free Trade Unions, the Pensioners Federation, and the left-oriented parties. They were also criticized by German pension specialists

and visiting specialists from the World Bank. However, the notion of moving towards a capitalized system gradually gained acceptance in political circles. The ruling coalition supported the idea of an individualized pension system that would relate benefits more closely to each worker's own past contributions. It also supported the formation of mandatory individual savings schemes (provident funds) to encourage savings and growth.

In order to develop the proposals, and as part of a much larger project to reform social protection as a whole, in 1993 the Latvian Government negotiated with the World Bank for a loan to set up a Welfare Reform Project. As part of the preparation for this, a Pension Reform Concept document was drafted within the Ministry of Welfare. In the early stages of this process, some ideas were provided by Robert Holzmann of the World Bank. However, the Concept was largely a product of the Ministry's own analysis. The final Concept document laid out a comprehensive set of proposals for restructuring the pension system. It was submitted to the Saeima late in 1994.

### *The Concept Paper*

The principles underlying the Concept were:

- there should be a simple and clear approach, which would maintain financial stability irrespective of large-scale economic changes;
- the pension should be calculated on a clearly-defined formula which could be easily understood, thus building public support;
- the approach should take account of the hardships experienced by the older population, and provide an overall increase in the level of welfare for everyone; and
- the pension reform should be consistent with, and contribute to, the overall process of transformation in the country.

The Concept paper proposed a four-pillar pension arrangement, the last of which would be transitional and gradually terminated. The pillars were as follows:

- **first pillar** – a universal mandatory public pension scheme financed by contributions and operated on a pay-as-you-go basis. It would have two

separate PAYG components – the basic pension and a supplementary one. The statutory retirement age would be gradually increased to 65 both for men and women between 1995 and 2015. It would be possible to retire as early as 60, but with a reduction in the basic pension of 6 percent for every year by which the actual age of retirement fell short of the statutory retirement age. A contributor would be entitled to a full basic pension of around 20 percent of the average gross wage, if his/her insurance period included 40 years at the outset and 47 years once the pension age has been increased to 65. This would be reduced by 2 percent for every year that the insurance record diverged from the maximum possible length. The second (supplementary) component of the first pillar was to be earnings-related, with the aim of boosting the replacement rate by approximately 20 percent, so that, at the point when this pension system matured, the two pensions together would provide 40 percent of earnings.[34] There would be a minimum guaranteed amount for those without other resources. Complex transitional arrangements for moving the existing pension entitlements into the new system were also proposed;

- **second pillar** – an individual savings scheme that, in the future, would be mandatory for all employees and voluntary for the self-employed.[35] The contribution rate would be set at a level estimated to provide a pensioner with 30–40 percent of his/her previous earnings (so that the average employee would be expected to receive at least 70 percent of the previous income in combined pensions from the first and second pillars). Contribution collection for the second pillar would be centralized, and participants would have a choice of a limited number of individual funds. There would be a requirement that each fund's rate of return be at least 70 percent of the average rate. Funds that did not meet this average would have to use their reserves to top-up members' savings and, if the pattern continued, to go out of business. Participants would

[34] Such a replacement ratio would, to a certain extent, be in accord with replacement ratios provided by the pension scheme before the reform, which had been set to meet requirements set out in European Social Security Code. *Pensiju reformas koncepcija*, Latvijas Vēstnesis, 9 February 1995: 9–10.

[35] Participation in the second pillar would be mandatory for workers who were age 50 or younger at the time of enactment.

then be transferred to other funds. While the Concept paper did not propose a specific rate, it mentioned 5 percent as an example. It stated that later, contributions to the pillar might be increased to 10–15 percent;[36]

- **third pillar** – a voluntary private scheme, based on individual decisions to save more for retirement. There would be some tax relief on contributions; and
- **fourth pillar** – a scheme to provide additional retirement income to persons who were retired or approaching retirement and not participating in the second-pillar scheme. Older persons (above age 50) could choose whether to join the fourth or second-pillar scheme. This group, as well as all those who were already retired, would receive pension supplements from the fourth pillar. The level of these supplements would depend on the available revenues designated for this purpose, which could include privatization revenues and additional amounts from the state budget (Government subsidies gained from general taxes, issues of securities, or other sources).

The paper recognized that a considerable amount of preliminary work was needed to implement the changes, including:

- reorganizing the pension administration, especially the maintenance of contribution records and payments;
- establishing an administrative structure which would monitor the transitional fund;
- creating a legal and administrative structure for the proposed central collection agency for the second pillar;
- introducing by-laws to regulate and monitor the activities of the private pension funds; and
- creating the conditions necessary for the development of financial markets.

The Concept was formally agreed by the Saiema in February 1995. However, by that time ideas had moved on, as explained below. Although the Concept was never formally withdrawn by the Government, the legislation which followed took a rather different shape.

[36] *Pensiju reformas koncepcija*, Latvijas Vēstnesis, 9 February 1995: 9–10.

### 2.2.4 Swedish Assistance on the Latvian Pension Reform

In the autumn of 1994, the World Bank contacted the Government of Sweden to ask for assistance in developing the new pension system for Latvia.[37] The Swedish Social Insurance Board (SSIB) was interested in participating, and the Head of its Research and Evaluation Division, Edward Palmer, and former Minister for Social Welfare, Bo Konberg, visited Riga in December 1994. Swedish and Latvian teams of experts were formed and met together in Stockholm in January 1995 to produce a study of the feasibility of the Latvian proposals outlined in the Pension Reform Concept. As a result, the Latvian delegates became fully convinced that the first-pillar scheme proposed in the Concept would not fulfill its stated goal of providing income security. They judged the scheme to be very complicated and lacking clear financial incentives for compliance with the contribution requirement, since workers would have to pay contributions on their entire income, but income exceeding 5 times the average wage in a given year would not have provided any pension rights. The proposal would also have involved annual changes in contribution rates, contributing to an uncertain business environment.[38] Alternatives were therefore discussed at the meeting, with the aim of putting forward different ideas to the Minister of Welfare and Minister of Social Affairs.

The results of the January feasibility study were presented by the Latvian team at a seminar in February 1995. The Minister of Social Affairs, Mr. Makarovs, then announced that he would be putting forward a legislative package early in the summer of 1995, with the goal of implementing most of its provisions by January 1996. It was clear that further Swedish assistance would be needed to develop legislation and prepare for its implementation (not least because, at the same time, the Ministry was developing legislation for almost every other aspect of social insurance and social assistance).

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[37] "Reform of the Latvian Welfare System", project proposal, SIDA 105 25 Stockholm, 15 September 1995: Annex 3, p. 1 (unpublished document).

[38] Ministry of Welfare, "An Evaluation of the Latvian Pension Reform Concept", internal report developed on the basis of the Stockholm meeting, 16–20 January 1995: 15 (unpublished).

Work continued at a 1-week joint meeting of the Latvian and Swedish teams in Stockholm in March 1995, including Mr. Makarovs. At this point, a joint paper was given presenting a notional defined-contribution (NDC) alternative to the proposals in the Concept for the first tier, modelled on the new Swedish system. While technical teams continued working on additional calculations for the original 1994 Concept proposals, Ministers Berzins and Makarovs decided that a new law would be prepared and presented to Saeima in June, following the principles of the alternative NDC proposal. The Swedish team, now expanded to include legal expertise, worked with the Latvians throughout the spring.

At the same time, an initial version of a model for making pension projections was being developed by the Swedish technical team, with financial assistance from the Swedish Board for Investment Technical Support (BITS). This was an "educational tool which also helps structure the problems involved and assumptions needed to perform qualified analysis of the social budget in the short, medium and long-term". (SIDA, 1995: Appendix 3, p. 3.)

It was intended for use by the Ministry of Welfare and the SIF to assist with examining the consequences of different demographic, economic, and labour market scenarios on the development of pension revenues and benefit expenditures.

A World Bank mission in July focused on the implementation of issues and the development of legislation for the third (voluntary savings) pillar, the pensions working group of the Latvian Welfare Reform Project having decided to bring this forward in advance of the mandatory funded second pillar and to use it as a "pilot". Bo Konberg and a Swedish media consultant also visited to discuss the presentation of the new system to the Latvian public.

The costs of the current and proposed legislation were estimated for the period 1996–2005, based on varying assumptions on growth rates, unemployment, compliance with income reporting requirements, and survival rates. This entailed creating a detailed budget model, which fed further information on pension rights into the long-run model. New long-run calculations were carried out, up to 2050, for the old-age pension system, with alternative means of dealing with the funded second pillar, and using alternative assumptions about growth rates and market yields.

The Law on State Pensions was submitted to the Saeima in July 1995 and approved in November 1995, with implementation to begin in January 1996.

Throughout this process, there was very close and detailed co-operation between the Swedish and Latvian experts. The SIDA Europe representative commented at the World Bank's conference discussing its Implementation Report in 2004 that:

> *…From a Swedish point of view, the timing was… excellent since we could use the fresh experience from our own welfare reform. Our best experts from different sectors were available and could be gathered to work on the project as a team. In retrospect, the project has been almost as important for our experts and we hope that they, together with the Latvian part of what is now "the team", will be able to share their experience and help other countries with their welfare reforms.* (World Bank, 2004: 37.)

There were also some criticisms, however. The Ministry of Welfare commented in the same report that some activities were implemented too quickly and that Latvia's weak institutional capacity had at times led to over-reliance on external experts and World Bank staff (p. 31).

### *2.3 Reasons for Reform and Expected Results*

According to the 1994 Concept document, the main objectives of the reform were:

- to create a safe, simple, contribution-based pension system to provide income security for contributors;
- to increase the wealth of current pensioners, limit future increases in the number of pensioners, and differentiate pension amounts to reflect contributions paid;
- to create space for a system of funded pensions which would replace a portion of the existing state pension scheme; and

- to increase the national savings rate and encourage the development of financial markets as means of strengthening social security in Latvia.[39]

The paper argued that the current system had become expensive and required significant funding from both contributors and the state budget. It gave a series of projections for 2004, developed by Ministry of Welfare's Unit of Economic Analysis and Forecasts, based partly on projections of demographers at the University of Latvia. The average age of the population, these showed, would continue to rise if the retirement age stayed at its current level, and the proportion of pensioners to working population would increase from 391 to 429 per 1,000. Table 3 shows the pension expenditure projected for 2004 (that is, a ten-year change) without reform:

**Table 3**
**Projected pension-related expenditure for 2004 without reform**

| | **2004 (projection)** |
|---|---|
| Average salary [LVL] | 75.10 |
| Number of social tax payers | 805,000 |
| Total revenues from social tax payments [million LVL] | 268.4 |
| Number of pensioners | 691,000 |
| Average amount of pension | 30.2 |
| Pension related expenditure [million LVL] | 250.0 |
| Pension related expenditure as percentage of total revenues from social tax payments [%] | 93.0 |

*Source*: *Pensiju reformas koncepcija*, Latvijas Vēstnesis, 9 February 1995: 9.

To cover the social costs, the document continued:

> *… larger and larger resources are required, but high social tax rates present a constraint for the development of the private sector and sustain expansion of the shad[ow] economy.*

[39] *Pensiju reformas koncepcija*, Latvijas Vēstnesis, 9 February 1995: Section 2.1.

> *On the other hand, there is also a need for actions related to social security to protect a significant proportion of the population against shrinkage of industry, inflation, and increasing unemployment. People in the pension age form the most vulnerable and unprotected group of the population.*[40]

Pension reform, the document concluded, was required based on social, economic, financial and social security efficiency considerations.[41]

Based on projections done as part of the Latvian Welfare Reform Project, it was assumed that the pension reform would lead to a saving of 2 percent of GDP over 10 years, and that 1 percent of GDP would be allocated to privately managed accounts by 2005, with an associated positive impact on national savings (World Bank, 2004: 15).

As the preparations for reform progressed, further projections of the social insurance contribution rates that would be required in the long-term, if the existing system remained in force, were carried out by the joint Swedish/Latvian team. These showed that without further reform, the contribution rate needed to finance pension expenditure would have to increase from 30 percent to 35–36 percent (for old-age pensions, from 23 percent to 28 percent) by 2050. However, this projection was optimistic in two ways. It presupposed that a price index would continue to be applied (instead of the quarterly adjustment to wage growth required by the regulations then in force), and it did not take account of expenditure on benefits for the disabled under the old-age pension system, which were provided pursuant to a special provision under the old pension law. If these points had also been taken into account, the total contribution rate (social tax rate) would have had to rise even further above the level of 38 percent set in 1995.[42]

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[40] *Pensiju reformas koncepcija*, Latvijas Vēstnesis, 9 February 1995: Section 1.2.

[41] *Pensiju reformas koncepcija*, Latvijas Vēstnesis, 9 February 1995: Section 1.3.

[42] Ministry of Welfare, "The Economic Basis for the Draft Law of the Republic of Latvia on State Pensions", 1995: Table 1 (unpublished document, submitted to the Government and Saeima).

**Table 4**
**Estimated PAYG contribution rates in the unreformed pension system (with CPI increases on pensions in payment), 1995–2050**

| | Type of pension or benefits [%] | | | | |
|---|---|---|---|---|---|
| Year | Old age | Disability* | Survivors | Others | Total |
| 1995 | 23.0 | 5.4 | 1.3 | 0.5 | 30 |
| 2010 | 23.0 | 4.0–5.5 | 1.2 | 0.4 | 28–30 |
| 2020 | 24.5 | 4.0–5.5 | 1.1 | 0.3 | 30–31 |
| 2030 | 24.5 | 4.0–5.5 | 1.0 | 0.3 | 32–33 |
| 2040 | 26.0 | 4.0–5.5 | 0.9 | 0.2 | 33–34 |
| 2050 | 28.0 | 4.0–5.5 | 0.8 | 0.2 | 35–36 |

* Including the old-age pensions for disabled.

*Source*: Ministry of Welfare, "Economic Basis for the Draft Law of the Republic of Latvia on State Pensions", 1995: Table 1 (unpublished document, submitted to the Government and Saeima).

Citing the projections, the paper also argued that an increase in the pensionable age would improve the financial situation only temporarily. If the pension age were increased gradually from 55 to 65 for women and from 60 to 65 for men, holding all other variables constant, the contribution rate could have decreased until 2014, but thereafter would have to start increasing again. (See Table 5.)

The analysis stated that, in the early stages of the reform, the rate of contributions needed for pensions would remain high. However, the plan was to stabilize this by 2010, as illustrated in Table 6. The analysis also stated that, with good economic growth, it might be possible to reduce contributions in the future.

**Table 5**
**Estimated PAYG contribution rates for the unreformed pension system if the pensionable age increased to 65, 1995–2050**

| | Type of pension or benefit [%] | | | | |
|---|---|---|---|---|---|
| Year | Old age | Disability* | Survivors | Others | Total |
| 1995 | 23.0 | 5.4 | 1.3 | 0.5 | 30 |
| 2010 | 14.0 | 6.0–7.5 | 1.2 | 0.4 | 21–22 |
| 2020 | 14.5 | 6.0–7.5 | 1.1 | 0.3 | 22–23 |
| 2030 | 17.0 | 6.0–7.5 | 1.0 | 0.3 | 24–25 |
| 2040 | 17.0 | 6.0–7.5 | 0.9 | 0.2 | 24–25 |
| 2050 | 18.0 | 6.0–7.5 | 0.8 | 0.2 | 25–26 |

* Including the old-age pensions paid to persons with disabilities.

*Source*: Ministry of Welfare, "Economic Basis for the Draft Law of the Republic of Latvia on State Pensions", 1995: Table 1 (unpublished document, submitted to the Government and Saeima).

**Table 6**
**Estimated pension contribution rates under the reform proposals (pensions in payment indexed in line with CPI), with old-age pension contribution rate stabilizing at 20%, 1995–2050**

| | Type of pension or benefit [%] | | | | |
|---|---|---|---|---|---|
| Year | Old age | Disability* | Disability and unemployment contributions to the old-age pension system | Survivors | Total |
| 1995 | 23 | 5.4 | NA | 1.3 | 30.2 |
| 2010 | 20 | 4.0–5.5 | appr 1+1 | 1.2 | 27.0–28.5 |
| 2020 | 20 | 4.0–5.5 | appr 1+1 | 1.1 | 27.0–28.5 |
| 2030 | 20 | 4.0–5.5 | appr 1+1 | 1.0 | 27.0–28.5 |
| 2040 | 20 | 4.0–5.5 | appr 1+1 | 0.9 | 27.0–28.5 |
| 2050 | 20 | 4.0–5.5 | appr 1+1 | 0.8 | 27.0–28.5 |

* Including old-age pensions for paid to persons with disabilities.

*Source*: Ministry of Welfare, "Economic Basis for the draft Law of the Republic of Latvia on State Pensions", 1995: Table 4 (unpublished document, submitted to the Government and Saeima).

# 3. Substantial Elements of the Reform

## *3.1 Changes in the Public Tier*

As previously explained, the legislation on the first-pillar pension scheme was worked out in an extremely short period. It was approved by the Saeima, without much discussion of the detailed provisions in November 1995. When the new Law on State Pensions came into effect in January 1996, Latvia made a complete transition to a Notional Defined Contribution scheme for its entire working population.

### 3.1.1 The Provisions of the Reform Package

*The NDC pension formula* – The chosen NDC formula mimics a defined contribution-based pension, such as would be provided by an insurance company. An individual "account" is maintained on that part of each person's social insurance contributions earmarked for the NDC system. No contribution revenues are actually accumulated. Instead, the notional pension capital, which equals the sum of contributions paid during each worker's lifetime, is protected against loss of value through indexation according to the growth of the total wage sum from which pension contributions are paid in the entire economy (described as the "contribution base" (CB)). Upon retirement, at a time chosen by the individual, but not before a statutory minimum retirement age, the pension is calculated by dividing the amount recorded in the notional account by the projected unisex life expectancy at retirement for the individual's birth cohort. Postponement of retirement reduces the number of expected pension payments, allowing each to be higher.

NDC pension formula:

$$P = \frac{K}{G}$$

$P$ is annual pension under the NDC pension scheme;

*K* is accumulated lifetime notional pension capital of the insured person, recorded in the individual notional account (total amount contributed plus the annual increase of capital); and

*G* is time period (in years) for pension payouts, based on cohort projections of unisex life expectancy. These are adjusted annually on the basis of analysis and recommendations by a formal group of professional demographers, statisticians, and actuaries, established for this purpose. (Use of projected cohort life expectancy is one of the ways in which the Latvian system differs from the Swedish arrangement, which uses only current life expectancy figures. The objective is to take account of expected improvements in life expectancy as the Latvian standard of living improves.)

*Contributions* to the NDC account were set at 20 percent. These were to be paid on all wages up to a ceiling, to be applied in 1998.[43] Simple numerical calculations suggested that the credited 20 percent contribution rate would produce a 40 percent income replacement rate at the statutory retirement age, and could produce up to 60 percent if retirement were postponed.

The pension contribution collected from workers and employers at that time was well over 20 percent.[44] Contributions in excess of 20 percent were regarded as a tax to cover the cost of transition from the old to the new scheme and to finance the minimum pension.

*Pension credit for non-contributory periods* was reduced significantly in comparison with the pre-reform system and made more transparent. For time spent in military service, or at home taking care of children (for a maximum 1.5 years per child), contributions to the pension budget must be paid as transfers from the state budget, using the minimum wage as the base for this

[43] In 1998, the ceiling on contributions was 12,000 LVL (17,725 EUR) per year. In 2004 it was 19,900 LVL (29,394 EUR), which is about 10 times the average wage.

[44] The World Bank calculated this rate at 27.5 percent. However, that probably included disability pensions and was thus too high.

calculation.[45] However, for those receiving certain social insurance benefits (e.g., unemployment, sickness, disability, maternity, work injury benefits), transfers within the social insurance budget are authorized to cover these periods for purposes of old-age pension insurance. These transfers are paid from the corresponding special budgets (the employment budget; the disability, sickness, and maternity budget; and the work injury budget) to the pension budget.[46]

*Indexation* – The Law on State Pensions calls for pensions to be adjusted annually to reflect changes in the CPI and social insurance contribution earnings index. However, the transitional provisions of the same law stipulate that until 2000, pensions that do not exceed 3 times the minimum wage are adjusted every 6 months based on the CPI. The Ministry of Welfare establishes the index for adjustment.

*Entitlement* – Under the new law, a person would be entitled to an old-age pension if his/her insurance record is at least 10 years.

*Coverage* – The new law made participation in the social insurance system mandatory for all employees and self-employed persons aged 15 and over.

*Service pensions* – Authorized by a 1992 regulation, service pensions are privileged pensions for persons in certain professions where advancing age

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[45] However, starting in 1999, when the minimum wage was 50 LVL (74 EUR), this amount was frozen. Since then, the contribution base for this purpose has been set at a flat 50 LVL.

[46] Transfers from respective budgets are made in the following amounts:

- the employment budget, for persons receiving unemployment benefit – 20 percent of the unemployment benefit;
- the disability, maternity, and sickness budget:
  - for non-working recipients of the disability pension – 20 percent of half (50 percent) of average contribution wage in the country for the previous year;
  - for persons receiving maternity or sickness benefits – 20 percent of the benefit;
- the work injuries special budget:
  - for non-working disabled persons – 20 percent of the amount of the workers' compensation paid;
  - for recipients of sickness benefit – 20 percent of the benefit.

brings a loss of skills or competency (e.g., airline pilot, ballet dancer, fire fighter). The 1995 reform did not eliminate service pensions but required that they be calculated according to the NDC formula.[47]

*Survivors' pensions* – On the advice of the Swedish experts, spouses' benefits were not introduced. They were considered an "unnecessary subsidy", especially for spouses without children, given that women's labour force participation during the prime working years (25–50) was close to that of men – 84 percent of women in 1997, compared to 91 percent of men. Thus, they were generally building up benefits in their own rights (Fox and Palmer, 1999: 13). This was not considered particularly controversial since a pension for dependent children, based on the value of the notional capital in the account, with a minimum level to protect the children of those who die young, was included in the reform. For 1 child, the amount is 50 percent of the pension; for 2 children, 75 percent of the pension; and for 3 or more children, 90 percent of the pension, but not less than 50 percent of the state social security benefit amount for each child.[48]

*Disability pensions* – In the period following the 1995 reform, disability pensions continued to be calculated as under old law. A new method was introduced by amendments to the Law on State Pensions adopted in December 1996 (effective January 1997). This method was supposed to be an interim solution, pending a more comprehensive restructuring of disability pensions. (However, this reform has yet to be undertaken.) Under the regulations, those

[47] However, the 1992 regulations were subsequently terminated, effective 1 January 1999. An accompanying grandfather clause protected persons who were already receiving such pensions or were near qualifying for them. Only persons who, as of the effective date, had worked in their profession for at least three-fourths of the insurance period required for a service pension retained their entitlement.

[48] The state social security benefit (currently 35 LVL, or 52 EUR) was introduced in 1996 to replace the previous social pension. It is a residence-based benefit for persons who are not entitled to a social insurance pension. The benefit is financed from the state budget and can be granted to persons who are at least 5 years older than the statutory minimum retirement age, disabled persons who are older than 16 (including those disabled since childhood), and dependent children of a deceased person, if he/she had not paid social insurance contributions.

granted pensions are classified as category I, category II, and category III, depending on the severity of their impairment. Disability determinations are made by the Health and Work Ability Experts Medical Commission. Pensions are granted to persons with at least 3 years of insurance, whose disability was not caused by an occupational accident or disease, and who have not yet reached retirement age.[49]

At the statutory pension age, those on disability benefit are transferred to the old age pension, which is calculated according to the standard NDC formula. However, if the disabling impairment continues and the disability pension exceeds the old-age pension so calculated, the person would continue to receive the higher amount.

*The retirement age* was set in the 1995 reform at 60 for men and women (rather than 65 as envisaged in the Concept document). Practically, this meant a retirement age increase for women only. It was to be implemented gradually: in 1996, it was increased by 1 year, and in each subsequent year it was to be increased by 6 months. The law also provided for early retirement for women (with an actuarially reduced pension) beginning at age 55, as long as they had an insurance record of at least 10 years.[50]

*Minimum pension* – A minimum old-age pension, equal to one state social security benefit, was included to protect people with low earnings who had a social insurance record of at least 10 years.[51] This minimum benefit was recommended by the Latvian expert team working on the Law on State

[49] Persons whose disability was caused by an accident at work or occupational disease are covered by the Law on Social Insurance against Work Injury and Occupational Disease. As noted earlier, during the period on disability benefit, contributions for disabled pensioners who do not work are made on the individual's behalf to the NDC scheme by means of a transfer from the separate disability, sickness, and maternity budget.

[50] As noted previously, lower retirement ages are maintained for service pensions, as well as for several groups of persons who worked under especially hazardous and especially hard conditions (set by previous Law on State Pensions of 29 November 1990). The retirement age for those persons will increase according to the same pattern as for the system in general.

[51] For definition of state social security benefit, see the preceding explanation of survivors' pensions.

Pensions. The Team concluded that such a minimum formula was essential to ensure the adequacy of benefits during the transition.

*Fourth pillar* – The idea of a fourth pillar to be financed by payments from the state budget was dropped and not pursued further.

*New accounting arrangements* – Three important accounting changes were adopted in the 1995 pension-reform package. First, the link that the reform established between contributions paid on behalf of each worker and pension benefits that he/she would be entitled to receive made it necessary to establish an individual social tax contribution account-keeping system.[52] In November 1995, the Saeima provided the needed authority in the new Law on Social Tax (effective January 1996).

Second, pension revenues were again separated from the state budget, as they had been prior to 1993. This was done by a separate part of the Welfare Reform Project, which changed the national budgeting arrangements for social insurance. While adopted earlier than the other pension reform legislation, this also became effective in January 1996. Since then, social insurance contributions have been allocated to 4 separate accounts within the overall Social Insurance Budget (SIB), a legally separate account at the Treasury. The SIB is permitted by law to retain surpluses and to borrow from the state budget if it falls into deficit, but with a requirement to pay back the loan (with interest) in subsequent years. Although the importance of creating a reserve or "buffer" fund was emphasized in the Pension Reform Concept paper, a formal fund was not established as part of the 1995 legislation, or subsequently.

*The pension contribution rate* – As noted earlier, the 20 percent of the contribution rate that is earmarked for the calculation of old-age pensions is not the full rate paid by workers and employers to the pension system. A higher rate is needed to cover the cost of the minimum pension benefit and the transitional financing costs of the second pillar, as well as to finance survivor pensions and

[52] In addition to the pension reform, several new laws were adopted in 1995 within a comprehensive reform package that also linked contributions and benefits: The Law on Social Security, the Law on Mandatory Social Insurance against Unemployment, the Law on Mandatory Social Insurance In Case Of Work Injury and Professional Disease, and the Law on Sickness and Maternity Benefits.

some special pensions. While the 20 percent was set in the reform, the overall rate was not. This higher rate fluctuates on an annual basis, with the changes reviewed every year by the Cabinet. In 1998, the rate was 27.37 percent; in 1999, it was 27.91 percent; in 2000, it was 27.10 percent; in 2001, it was 26.93 percent; in 2002, it was 27.10 percent; in 2003, it was 25.59 percent; in 2004, it was 25.51 percent and in 2005, it is 25.26 percent.[53]

In addition, the 1995 Law on Social Tax set a schedule for reducing the overall social tax rate and, at the same time, redistributing the tax rate so that workers and employers would bear more equal shares. This plan was revised repeatedly, however, and the goal it set out of equalizing the tax burden has so far been only partially achieved. The main developments in this complex situation are described below.

**Box 1**
**The Latvian social tax**

The 1995 Law on Social Tax set a schedule for reducing the social tax rate from 38 percent in 1996 to 33 percent by 2001 and, at the same time, redistributing the tax rate from 37 percent and 1 percent, respectively, in 1996 to 18 percent and 15 percent in 2001. The dual objectives of this shift were to enhance the employee's responsibility and to reduce the employer's tax burden.

The shift commenced in July 1996, when the division of social tax rate was changed to 5 percent for the employee and 33 percent for the employer. This first step evoked a strong protest from workers, especially trade unions. The Government reacted with a regulation obliging all employers to boost their employees' pay by 4 percent. This meant that, in reality, the financial burden on employers was not reduced.

The next reduction took place in January 1997, when the social tax rate became 9 percent for employees and 28 percent for employers. At the same time, the total rate was reduced from 38 percent to 37 percent. This time the Government set no mandatory compensation.

[53] A system for distributing contribution rate among various schemes was set up only in 1998.

However, the schedule put in place for further shifts of the contribution burden was halted in January 1998, when the Law on State Social Insurance replaced the Law on Social Tax. The new law called for a further reduction of the contribution rate and an equal distribution of this between employer and employee (16.5 percent + 16.5 percent = 33 percent).

In fact, the employees' share was not increased as much as was called for in this law. In 2000, the employers' share was 27 percent (out of 36 percent), in 2001, 26 percent (out of 35 percent) and in 2002, 25 percent (out of 34 percent). In January 2003, the social insurance contribution rate finally reached 33 percent, i.e., the goal set in 1995. Yet the related goal of equalizing the distribution between the employer and the employee was not achieved. Employees pay 9 percent of their wage, while employers pay the remaining 24 percent.

**Transitional Arrangements**

The period provided for the transition between the old and the new arrangements was very short. This was in sharp contrast with the Swedish reforms being used as the template for the new Latvian rules, where transition was planned to take a full working lifetime. In Sweden, workers born before 1938 remained in the old system, those born in 1954 or after were fully shifted to the NDC system, and those in between received a pension calculated with gradually shifting proportions from both systems (Palmer, 1999a: 1).

By contrast in the Latvian reforms, the legislation provided for a "big bang" changeover at the beginning of 1996. The arguments for adopting this approach were summarized by Palmer and Fox in 1999:

> *While individual records of years of service and wages existed (in "workbooks") the hyperinflation of 1991–1992 made these old rouble salary records very difficult to use. No reliable price indices existed. Any method to set a value on these would have been arbitrary. As there were no centralized records or data, simulations of various formulae were impossible, which increased the reluctance of policy makers to base future pension liabilities on old salaries. On the other hand, it was agreed that years of service according to workbooks were important to honour.*
>
> *One of the key goals of the pension reform was to improve incentives to contribute, in order to reduce the (expected future) deficit of expenditures over contributions. One way to encourage contributions while honouring past work history was to set*

> *a value for initial capital using service year records and current earnings levels. It was decided to base initial pension capital (and thus, in a large measure future pensions) on contributions in the years immediately following the reform. This was in effect placing a very high social value on contributions in the first years of the system.* (Fox and Palmer, 1999a: 11.)

Thus, it was decided that insurance periods up until 1995 should be credited with initial notional capital based on each individual's own average contribution wages during 1996–1999, according to the formula set out below.

**Box 2**
**Transitional rules for calculating initial notional capital**

**Formula** $Ks = Vi \times As + 0.2$

*Ks* is initial (notional) pension capital;
*Vi* is the average contribution wage* of the individual in 1996 1999 (inclusive);
*As* is the length of the individual's insurance record through 1995.

| **Retirement year** | Definition of *Vi* |
|---|---|
| 1996 | Average contribution wage for the entire population, 1995 |
| 1997 | Average of individual's contribution wage for 1996 |
| 1998 | Average of individual's contribution wage 1996–1997 |
| 1999 | Average of individual's contribution wage 1996–1998 |
| 2000 onwards | Average of individual's contribution wage 1996–1999 |

To compute average annual contribution wage for 1996–1999, monthly earnings from these years are converted to 1996 values. This is done by deflating them by the respective growth rates of the contribution wage sum (the same index which is applied for the adjustment of pension capital in the respective years). Then initial capital "Ks" (in 1996 values) are computed according to the formula shown above and indexed forward until the year of retirement in line with the growth of contribution wage sum (as the rate of return). The total pension in the transition period to the pure NDC pension scheme is calculated, using the same variables as for the pure NDC pension: P = (Ks + K)/G, where K-lifetime notional pension capital, based on contributions, is registered starting from 1996.

* The term "contribution wages" refers to wages that are subject to contributions.

It is important to note that the above formula makes use of contribution wages rather than actual wages. The contribution wage differs from the actual wage, for both individuals and the economy as a whole. This is due, first, to the ceiling on the wages on which social insurance contributions are payable. Second, in the 1990s, there was a high level of evasion and under-reporting of wages in the Latvian economy, which still continues today. Thus, the average contribution wage across the population as a whole is lower than the economy-wide average wage.

Rights acquired under the old system were converted to initial notional pension capital in the new NDC scheme, so that all insured persons who were not retired in January 1996 were immediately covered by the new scheme. Pensions granted before 1996 were not recalculated according to the NDC formula, and existing pensioners continued to receive their old law PAYG pensions.

### 3.1.2 Subsequent Changes in the First-Pillar Pension Arrangements

Although the main part of the NDC formula has remained unaltered since the reform was implemented in January 1996, there have been a series of changes in the other rules. These resulted from economic developments, problems experienced in implementing the reform law, and the political situation in the country. Politically, coalition government has been the norm in Latvia since independence, and a number of coalitions have been short-lived. There have been altogether 12 governments since independence in 1991 and the drafting of this study. It is customary for different parties in the coalition to have control of different ministries, which led to some fluctuations in policy.

Immediate problems arose due to the rules just explained for converting pre-1995 pension entitlements into "notional capital". With Ministry of Welfare officials fully occupied with the technical challenges of implementing the reforms, few resources were put into publicity efforts, and so there was low public awareness of the changes even among those very close to retirement age (World Bank, 2004: 32). Only in the course of 1996 (after the reforms were in place) did the SSIA begin an intensive public relations effort, using the media to explain the system. In the spring of 1997, materials were developed

for office staff, and classes were held. In the summer of that year, all Latvians of working age received their first statements showing their contributions to the new system. However, many people did not receive them in time to take this information into account in their retirement decisions. In many cases, even those who looked at this information did not understand the impact of non-compliance with the contribution requirement or the under-reporting of earnings on the new NDC benefit formula. These problems were especially acute during 1996–1999, the years for which each individual's average contribution wage was the basis for valuation of all his/her previous pension rights.

In addition, at the time the reform was launched, the SSIA's IT system was antiquated and inadequate. Benefits were often calculated by hand, with inconsistent treatment of individuals between different offices by staff attempting to grapple with a system they too did not understand well.

As a result of this,

- many of those retiring were unaware of how low their benefit would be, and, in particular, that they were ineligible for the guaranteed minimum benefit if they retired early. This had a particular affect on women taking the early retirement option at 55. For those who had been unemployed during the years before retirement, the pre-retirement wage calculation was particularly low; and
- on the other hand, there were people "in the know" who were able to manipulate the system to increase the contribution wages on which their notional capital was based, resulting in some very high pensions.

On 6 November 1996, a small ad hoc pension supplement was provided to bring newly granted pensions up to the level they would have been before the reform was implemented. On 22 May 1997, as a result of political pressure, the Government stipulated that from 1 June 1997 until 2000, anyone whose work record in Latvia was at least 30 years would receive, at a minimum, a benefit where calculation of initial capital (Ki) is based on the average contribution wage in the State.[54] Further, if a person who claimed pension in 1997 or in

[54] This affected all those people whose average individual wage used for calculation of initial pension capital ("Vi" in the formula set out in Box 1 above) was less than the average social insurance contribution wage in the state over that period.

1998 was registered as unemployed in years that were needed for calculation of initial pension capital, the average social insurance contribution wage in the state during the previous year was to be used instead in calculating his/her initial pension capital. Women taking the early retirement option (the right to retire from 55 onwards) were given a guaranteed minimum pension of at least 80 percent of the state social security benefit.[55] At the other end of the income scale, a ceiling was imposed on pension benefits, to last from 1997 until the end of 1999.[56]

In October 1997, the Government moved from the previous "backward-looking" indexation system to a forward-looking arrangement. In November 1997, pensioners were given what was in effect a double indexation, 4.1 percent for inflation which had already taken place, and 3.1 percent for inflation expected till the next indexation. In March 1998, the Government announced further increases. Pensions for old-law pensioners were raised by 15.87 percent, including 9.6 percent to make up for indexation not granted in 1995. Pensions for new-law pensioners were raised by 5.7 percent.

On 21 October 1998, the Law on State Pensions was amended 2 weeks before the Parliamentary elections, to provide that from 1 January 1999:

- Anyone who had been granted an old-age pension before 1997 but had continued to work and make contributions for at least 3 years was allowed to have his/her entire pension recalculated according to the new law.
- Additional indexing was extended to the pensions of those over the age of 80. The amendments prescribed that until 2000, all pensions that were lower than 3 minimum wages were to be increased semi-annually taking into account the CPI and the age of recipient.[57]

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[55] As previously explained, the law provided an early retirement for women only. Men could retire earlier only if they received a service pension or worked in hazardous circumstances where this had been guaranteed.

[56] This ceiling prevented a pension from exceeding the one that would be calculated for that individual taking into account the maximum (ceiling) of social insurance contribution earnings, set in the Law on State Social Insurance.

[57] The pension index was set as follows: I = Ic + Iv, where Ic is equal to the CPI and Iv is calculated as the CPI multiplied by 0.1 and the number of years by which the pensioner's age exceeds 80.

- Individuals over the age of 15 who were not covered by compulsory social insurance because they were not formally employed were allowed to join the first pillar on a voluntary basis.

In April 1999, the 1998 change in the indexing of pensions for those over age 80 was replaced with a new arrangement, giving a supplement equal to 10 percent of the pension for the oldest group of pensioners. The main motivation for this change was that it seemed to be less costly for the pension budget.

The balance of the social insurance budget deteriorated sharply in 1999 due to the combination of the concession to working pensioners, the extra indexation in 1998, and the Russian financial crisis. In July 1999, the newly formed Government put forward cost saving amendments to the Law on State Pensions. These called for:

- repeal of the amendments enacted in the pre-election period;
- a rapid increase of the retirement age to 62 years for men and women;
- abolition of early retirement; and
- suspension of pension payments to employed pensioners.

These amendments were adopted by the Saeima on 5 August 1999, but the left-wing opposition parties obtained a referendum on them. This caused something of a political crisis, and the Government called on people not to vote, meanwhile bringing forward new, softer amendments:

- the increase in retirement age was made more gradual: it was to rise by 6 months each year until it reaches age 62;
- the early retirement option was maintained and expanded to apply to men beginning at age 60. Those exercising this option would incur a benefit reduction of 20 percent, but only until they reached the statutory minimum retirement age;
- the option of re-computing pensions granted before January 1997 was eliminated. For those whose pensions had in the meantime been re-granted, the previous pension payments were aggregated (from that had ensued since January 1996) and were then divided by the remaining life expectancy, and the new pension then reduced by this calculated amount;
- the supplements for pensioners over 80 were abolished;

- pension indexation was restricted, with adjustments on account of movements in the CPI now taking place only annually rather than semi-annually; and
- working people over retirement age were allowed to receive a pension. However, its amount could not exceed 2 times the state social security benefit (60 LVL or 89 EUR in 1999).

These new amendments were adopted by the Saeima on 4 November 1999. Just 9 days later, on 13 November, the referendum on the earlier amendments was held. A full 94.2 percent of those who participated voted to overturn the earlier amendments, while only 5.3 percent voted to retain them.[58]

However, participation in the referendum fell below the required minimum, and on this basis the results were deemed invalid.[59] The political parties in power explained the low turn-out as an indication of widespread public trust in the governing coalition, while the opposition parties explained it as a result of the softening of the rules in the subsequent amendments and of the Prime Minister's having called on the public to boycott the referendum.[60] "In point of fact, the people of Latvia not participating in the referendum had thus voted for the increase of retirement age and other cost saving provisions." (Bite and Zagorskis, 2003: 43.)

The modified (November) package of reforms then came into force on 6 December.

As the next set of elections approached, the Law on State Pensions was again amended on 20 December 2001 (in force beginning 1 January 2002), this time as follows:

- those persons (women or men) who had brought up 5 or more children, or a disabled child, were given an option to retire 5 years earlier than the statutory minimum retirement age if they had an insurance period of not less than 30 years;

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[58] Ločmele, N., *Apstiprina oficiālos rezultātus*, Diena, 1999: 3.

[59] A total of 339,879 persons participated in the referendum. However, the participation rate was only 35.3 percent of the voter turn-out for the previous Saeima election and fell far short of the mandatory quorum of 50 percent.

[60] Ločmele, N., *Referendumam pietrūkst kvoruma*, Diena, 1999: 1–3.

- the indexing rules were liberalized for the future. From 2005 onwards adjustments would be based on the consumer price index plus 50 percent of the real growth of the contribution wage sum. However, less generous transitional rules were to apply until the end of 2005;
- from 2011, real wage growth will be given greater weight in the pension index. The portion of the real wage growth counted in this formula will increase to 50 percent for all pension amounts. The rationale for these differences in indexation goes back to the transitional arrangements set up in 1995. These had allowed some people to receive very high pensions as a result of manipulating the system – in excess of 1,000 LVL (1,477 EUR) – while others received minimal amounts. The freezing of the larger pensions was intended to reduce their real value to some extent. It has not led to any protests by those fortunate enough to have these benefits, perhaps because they are concerned that their previous actions during the transitional period might be investigated and the pensions taken away or reduced further in real terms;
- working pensioners were to be allowed to draw a pension not exceeding triple (instead of double) the amount of state social security benefit. This ceiling was to be gradually raised over the following 3 years and eliminated by 2005;
- further amendments were made to the transitional rules for the calculation of initial notional capital. For anyone with at least 30 years' insurance record, the average contribution wage in the state for 1996–1999 was to be used as the minimum contribution base for the calculation, even if the person's own average wage were lower. This is to apply to all those retiring during 2000–2009. Individuals granted a pension before the amendments came into force were entitled to have their pensions recalculated; and
- new guaranteed minimum levels for old-age pensions were introduced. The minimum level was increased in accordance with the length of an individual's insurance record, in order to provide an additional degree of fairness to those who had worked longest. The state social security benefit was multiplied by the factor of 1.1, 1.3 or 1.5, corresponding to years of service – less than 20, or 20 to 30, or more. When the state social security benefit increases, the guaranteed minimum pension also

increases automatically. In December 2003, the state social security benefit was increased to 35 LVL (52 EUR). Therefore, the current guaranteed minimum pension ranges from 38.5 to 52.5 LVL (that is, 57 and 78 EUR).

The most recent amendments, adopted on 19 February 2004 (in force beginning 10 March 2004) once again changed the formula for indexing pensions in payment:

- in years when the rise in the CPI exceeds 3 percent (rather than 5 percent as previously), pensions which do not exceed 5 times the state social insurance benefit must be indexed in April and October;
- in April pensions are indexed only according to the CPI, but in October small pensions (those that do not exceed 3 times the state social insurance benefit) must be indexed according to the CPI and 50 percent of the real growth of the contribution wage sum, instead of 25 percent as was set previously.

### *Constitutional Court Actions*

In addition to this series of legislative changes, there were also legal actions in Latvia's Constitutional Court, spearheaded by a group of pensioners. On 13 March 2001, the Constitutional Court ruled unlawful the link between entitlement to social insurance benefits and the actual payment of contributions by the employer. This meant that as of 14 March 2001, all benefits had to be calculated using the amount of contributions reported by the employer, whether or not the employer has actually paid them to the State Revenue Service. The effect is that the individual does not suffer if the employer falls into arrears or defaults on contributions; rather, that is a matter for the State Revenue Service's enforcement procedures.

On 19 March 2002, the Court also ruled that the restrictions on the pension amount paid to working pensioners infringed upon the Constitutional right to social security in old age. The restrictions were therefore abolished.

The combination of amendments and court decisions created severe administrative problems for the SSIA. Changes often had to be implemented

in very short time frames, putting pressure on agency staff. The development and testing of needed software often required more time than was allocated. The frequency of changes and tight limits for implementing them created stress and dissatisfaction on both sides – pension administrators and pensioners.

### 3.1.3 Summary of Situation as of June 2004

Below is a summary of the NDC first-pillar arrangement as it stood in June 2004, following all the various amendments and judicial rulings just described.

**Box 3**
**Summary of pay-go pension arrangements**

| | |
|---|---|
| NDC pension coverage | Compulsory for all employees and self-employed over age 15; voluntary for those who do not work.[61] |
| Eligibility for pension | Based on at least 10 years insurance record. |
| Contributions | 20 percent of contribution wages up to a ceiling, which currently is about 10 times the average wage (but see below for effect of second pillar).[62] |

[61] Starting in 1998, persons not covered by mandatory social insurance may join the state pension insurance scheme voluntarily. The main target groups for these new regulations are housewives, students, and unemployed persons.

[62] As described previously, the 20 percent is only a portion of the contribution received by pension budget (or 18 percent, in case of those who participate in the second pillar). The rest is regarded as a "tax" to finance other pension-related costs, including guaranteed minimum amounts and the loss of revenue to the first pillar caused by a diversion of contributions to the second.

| | |
|---|---|
| Pension calculation | NDC pension formula:<br>$P$ is $\frac{K}{G}$<br>$P$ is annual pension under the NDC pension scheme;<br>$K$ is accumulated life-time notional pension capital of the insured person that is recorded in the individual notional account (total amount recorded plus the annual increase of capital); and<br>$G$ is expected years for pension payout, based on projections of unisex life expectancy of the worker's age cohort, adjusted annually for new pension claims. |
| Initial notional capital | $Ks = Vi \times As \times 0.2$<br>where<br>$Ks$ is the individual's initial (notional) pension capital;<br>$As$ is the length of the individual's insurance record until 1995, inclusive; and<br>$Vi$ is the individual's average contribution wage during 1996–1999 (inclusive).<br><br>For all those retiring until 2009 with an insurance record of at least 30 years, the average contribution wage in the state for 1996–1999 is used as the minimum contribution base for the calculation of their initial pension capital, even if the individual's own average wage is lower. |
| Pension credit for non-waged periods | For time spent in military service, or at home taking care of children (for a maximum 1.5 years per child), contributions are made as transfers from the state budget, using 50 LVL (74 EUR) as the base for this calculation. For those receiving certain social insurance benefits (e.g., unemployment, sickness, maternity, work injury benefits), transfers within the social insurance budget are made from the corresponding special budgets (the employment budget; the disability, sickness and maternity budget; and the work injury budget), using the amount of the benefit as the contribution base. For disabled pensioners who are not working, contributions are also transferred from the disability, sickness, and maternity budget, but in this case they are calculated based on the assumption that the individual had earned 50 percent of the average contribution wage in the state in the previous year. |

| | |
|---|---|
| Retirement age | There is a gradual increase to age 62 in progress for the statutory minimum retirement age. For women, it increased by 1 year in 1996 and by 6 months each successive year. For men, it increased by 6 months each year, starting from 2000. Men reached the statutory minimum retirement age of 62 in 2003, but women will reach it only in 2008. In July 2005, the statutory minimum retirement age for women is 60.5 years. |
| Early retirement | Up to July 2005, people were able to retire up to 2 years early, so at age 60 for men and 2 years before the current point on the scale of increasing retirement ages for women. These rules were supposed to terminate in July 2005. However, in June 2005, the Saeima postponed the implementation of the new rules until July 2008. Until then, therefore, it will still be possible for people to retire up to 2 years early.<br>There is an actuarial reduction for early retirement, and in addition:<br>• the early retirement pension (including the guaranteed minimum pension) is reduced by 20 percent until the individual reaches the statutory retirement age; and<br>• those who retire early cannot receive a pension during any subsequent period of employment prior to reaching the normal pension age.<br>As part of the transition process, practically all the "special rights" to early retirement under the old system were phased out, by being converted to NDC capital. |
| Working after the pensionable age | Those who are over the pensionable age are allowed to combine work with a full pension, and they continue to make contributions and accumulate additional notional pension capital. The pension can be recalculated once every 3 years to take these contributions into account, if requested by the pensioner. The additional pension is calculated using the projected life expectancy for the person's age cohort at that time. |

| | |
|---|---|
| Minimum pension guarantee* | The size of the minimum pension depends on the length of an individual's insurance record. To determine the minimum, the state social security benefit is multiplied by the factor of 1.1, 1.3 or 1.5, corresponding to years of service – less than 20, or 20 to 30, or more.<br><br>* Those pensioners with less than 10 years' service whose age exceeds the statutory minimum retirement age by at least 5 years are entitled to the state social security benefit, financed from the state general budget. For those in need, there are also several kinds of social assistance benefits, payable by the municipalities. In general, if a person's income falls below the Guaranteed Minimum Income (GMI), which currently (2005) is 21 LVL a month (31.5 EUR), then municipalities must finance a benefit equal to this difference. |
| Service pension | Service pensions for special groups of professionals are calculated in accordance to the NDC pension formula. Previous regulations authorizing service pensions were terminated on 1 January 1999, but with a grandfather clause protecting current pensioners and those nearing retirement. Thus, over time, service pension will gradually be replaced by the pure NDC scheme. |
| Disability pension | Eligibility is based on a qualifying impairment, and an insurance record of at least 3 years.<br>The disability pension formula depends on the severity of the impairment:<br>For the disability of category I,<br><br>$P = 0.45 \times Vi + ASi / ASie \times Vi \times 0.1$<br><br>For the disability of category II,<br><br>$P = 0.4 \times Vi + ASi / ASie \times Vi \times 0.1$<br><br>where:<br>*P* is pension;<br>*Vi* is average contribution wage of the insured person for any consecutive 36 months over the last 5 years prior to the granting of the disability pension;<br>*ASi* is the length of the insurance record of the person; and<br>*ASie* is the longest possible insurance record from age 15 until the retirement age. |

| | |
|---|---|
| | For category III disability, the pension is equal to the state social security benefit (35 LVL, or 52 EUR at the time of this analysis).<br><br>At the statutory retirement age, those on disability benefit transfer to the old age pension, calculated according to the standard formula. However, if a person continues to be disabled, the amount of disability pension is maintained if it is higher than NDC pension.[63] |
| Minimum guarantees for disability | The minimum amount of disability pension is:<br>• for category I, 1.6 times the state social security benefit;<br>• for category II, 1.4 times the state social security benefit; and<br>• for category III, the level of the state social security benefit. |
| Survivor pensions | There are no spouses' pensions. There is a pension for surviving dependent children, based on the value of the notional capital in the deceased worker's account. For 1 child, the amount is 50 percent of the pension so calculated; for 2children, 75 percent; for 3 or more children, 90 percent but not less than 50 percent of the state social security benefit amount for each child. |
| Taxation | Since January 1997, pensions are subject to income tax. However, old age pensions granted before January 1996, when the new law came into force, are not subject to taxation. Pensions granted under the new pension law are taxed at the rate of 25 percent, with an annual tax exemption limit of 1,200 LVL (1,773 EUR). The annual tax exemption for category I and II disabled persons is set at 1,500 LVL (2,216 EUR) and for category III, at 1,440 LVL (2,127 EUR).[64] |

[63] During the period on disability benefit, contributions for non working disability pensioners continue to be made on the individual's half to the NDC scheme, by means of a transfer from the disability, sickness, and maternity budget. These transfers are calculated on the basis of 20 percent of half (50 percent) of previous year's average contribution wage in the country.

[64] In Latvia, a 25 percent income tax rate is applied to earned income that exceeds 21 LVL (31 EUR) per month, or 252 LVL (372 EUR) per year. In addition, there is an exemption for each dependant (with no limit on the number of children) equal to half the exempt amount, i.e., 10.50 LVL (15 EUR) per month or 126 LVL (186 EUR) per year.

| | |
|---|---|
| Indexation | Until 2011, in years when the rise in the CPI exceeds 3 percent, pensions whose monthly value does not exceed 5 times the state social security benefit must be indexed in April and October. In April, pensions are indexed only according to the CPI, but in October pensions that do not exceed 3 times the state social security benefit are indexed according to the CPI plus 50 percent of the real growth of the contribution wage sum, while pensions that do not exceed 5 times the state social security benefit are indexed only according to the CPI. Larger pensions are not indexed till 2011. From 2011, all pension amounts will be indexed by the CPI and 50 percent of the real growth of the contribution wage sum. |

*Information to participants* – Since 1997, participants have received annual statements of the notional pension capital accumulated during the reporting year. However, they do not receive cumulative statements, as the SSIA still does not hold all pre-1996 individual records. This is largely because development of the software and IT systems lagged behind implementation of the reform. Disagreement between the Government and the IT supplier resulted in early termination of one contract, and transition to a complete new IT platform is still incomplete (World Bank, 2004: 7). Thus, individuals have their initial notional capital calculated only at the time of their retirement, when they take their workbooks to the SSIA offices.

However, work on developing a longitudinal database is underway. Once it is complete, every scheme participant will also be provided with annual information on his or her total accumulated pension capital.

## *3.2 Implementation of the Private Pillars*

### 3.2.1 Voluntary Third-Pillar Savings Funds

Introduction of the two funded pillars was a more complex task. As previously explained, launch of the second pillar, originally planned for 1998, was postponed. Instead, the working group dealing with pensions under the

Latvia Welfare Reform Project decided to make the development work on the regulatory and institutional framework necessary for the third pillar into the pilot stage for the second pillar. This would also allow time for the development of capital markets and the accumulation of a reserve in the first pillar to offset the loss of contribution revenues.[65] A working group including specialists from the State Insurance Supervision Inspectorate (now part of the Financial and Capital Markets Commission), the Ministry of the Economy, and the Ministry of Welfare, with support from World Bank experts, drafted legislation for the operation of voluntary savings schemes, to be known as private pension funds (PPFs). The Law on Private Pension Funds was accepted by Saeima in June 1997 and came into force from July 1998.

The term private pension funds (PPFs) has a particular meaning in Latvia. These are defined contribution schemes without either a specific benefit promise or a requirement that savings be used to purchase an annuity at retirement.[66] With no benefit promise or target replacement rate, there is also no requirement for actuarial calculations. PPFs have the legal status of financial and credit joint stock companies. They accumulate and invest contributions made voluntarily by plan members in order to increase their retirement security in old age. They may be of two types: open funds, which can offer their services to everyone, and closed funds, whose members consist exclusively of employees of the founder (shareholder) of the fund. Only employers that conclude a collective affiliation contract with a pension fund may be founders (and thus shareholders) of closed PPFs, whereas only commercial banks and life insurance companies registered in Latvia may be founders of open PPFs.[67] Both the funds and the specific investment plans developed by them must be licensed by the FCMC.

One of the requirements to receive a license is that the PPF shareholders have no debts to the Government of either social insurance contributions

[65] However, as explained below in Section 4.1.1, all reserves had already been used in 1998, bringing the social insurance budget to deficit in 1999.

[66] Rather, as explained below, they may be freely withdrawn as a single lump-sum payment or a series of phased withdrawals.

[67] This applies only to those commercial banks authorized to take deposits of natural persons in Latvia.

or corporate income tax. If a social insurance debt is discovered, the State Revenue Service can require that the employer suspend contributions to the PPF until it is settled.

There is no minimum or maximum age set by regulators for scheme membership. Individuals can join either directly or, where the employer has concluded a collective affiliation contract with an open or closed pension fund, via the employer. If an employer introduces a PPF for employees, all of them must have the right to participate in the plan under objective criteria such as age or professional status (that is, not at the employer's discretion). When a participant leaves a job, he/she has the legal right to continue participation or to transfer the accrued pension capital to another PPF.[68]

A pensionable age must be specified in the pension plan, and it generally may not be lower than 55. There is a Government-approved list of professions for which earlier retirement ages may be allowed – for example, for professional athlete or airline pilot, the permitted pensionable age is 45; for radiologists in health care professions, it is 50. However, no special plans covering these professions have been created.

Members of PPFs have the right to the total amount of the accrued pension capital at retirement as a lump-sum payment or in phased withdrawals.[69]

If a PPF member becomes permanently or seriously disabled, the accumulated assets may be paid out earlier than the retirement age. This may also occur if the employer contributing on behalf of a PPF member declares bankruptcy, or if a member dies prior to the retirement age prescribed by the PPF plan. A member is also entitled to terminate membership with one PPF in order to transfer the savings to another plan or fund.

Until 2003, there were strict limits on the investments a PPF could make. For instance, foreign investments could not exceed 15 percent of a PPF's assets. Because these rules were impeding investment performance, they were

[68] However, the plan may provide that a member who reaches its specified retirement age can continue to make additional contributions.

[69] The excess of income over expenditure may not be withdrawn or paid out to shareholders in dividends. Rather, this entire amount must be included in the individual accounts of plan participants in conformity with the requirements prescribed by the Law on Private Pension Funds.

reduced significantly. The remaining limitations are similar to those for the second pillar but with some additional flexibility.[70] For instance,

- investments in a single piece of real estate may not exceed 10 percent of PPF assets, and total investments in real estate may not exceed 15 percent of such assets;
- investments in securities or money market instruments issued or guaranteed by one state, a local government, or an international financial authority may not exceed 35 percent of the pension plan assets;
- investments in the equity of one company may not exceed 10 percent of PPF assets;
- deposits in one credit institution may not exceed 20 percent of PPF assets; and
- investments in a single investment fund may not exceed 10 percent of PPF assets.

For the present, PPF assets may not be used for loans.[71]

Contributions equalling up to 10 percent of the annual taxable income of an employee are tax free.[72] This means that the employer does not pay corporate income tax (15 percent) or social insurance contributions (24.09 percent), and the employee does not pay personal income tax (25 percent) or social insurance contributions (9 percent) on such contributions.[73]

Until January 2005, the full PPF benefit (excluding capital gain, which is tax-exempt) was taxed. In accordance with amendments to the Personal

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[70] See Section 3.2.2. Law on Private Pension Funds, p.15, *www.fktk.lv*, visited on 29 June 2005.

[71] With Latvia's accession to the EU, the 2003 Directive on Institutions for Occupational Retirement Provision (the IORP Directive) will apply beginning September 2005; and this may mean further changes in the investment requirements. In addition, according to amendments to the Law on Private Pension Funds, starting from 13 January 2005 the 10 percent limit for each non-matching currency is not applicable for EUR investments.

[72] That is, the combination of PPF contributions plus any long-term endowment life insurance premiums.

[73] This tax relief is, however, conditional on the employer having no tax debts, as explained earlier.

Income Tax Law, since January 2005 only the portion of the benefit (pension capital) based on contributions made by the employer is taxable, while the share of pension capital accrued during participation in the PPF on the basis of an employee's contributions is no longer taxable.

### 3.2.2 The Funded Defined Contribution Scheme (Second Pillar)

The World Bank consultants working on the Welfare Reform Project warned that the delay in launching the second pillar posed a risk that the pension scheme surplus would be spent on current benefits. Such a scenario occurred in Latvia.

In early 1998, the Ministry of Welfare familiarized the Government with the general idea of a state funded pension system and a broad proposal for how this might be developed. Ministry officials described the need for this next step of the reform and outlined the principles on which the scheme would operate. Based on then current estimates, it recommended that the contribution rate to the second pillar be set in the range of 1–6 percent of the contribution base in the first years of operation. It urged that an effective regulatory framework and guarantees be established to protect funds transferred to the second pillar. It outlined a mechanism for administration and supervision of the second pillar, including the option for individuals to refund second-pillar savings to the first pillar at retirement (to be described further below). It suggested that second pillar be mandatory for persons under the age of 50 and that it be launched in 2000, assuming an appropriate legal framework was then in place.[74]

In July 1998, the Ministry of Finance, with assistance of the Ministry of Welfare and the World Bank consultants, drafted a paper entitled, "Economic Justification for the State Funded Pension Law". This paper was part of the package required for the submission of the draft Law on State Funded Pensions. The paper described the aim of this reform as two-fold:[75]

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[74] "Conceptual Outlines for the Creation of the State Funded Pension Scheme", presented in the Cabinet in the spring of 1998 (in Latvian – unpublished).

[75] Ministry of Finance, "State Funded Pensions – Economic Justification", 1998 (in Latvian – unpublished).

- to boost the level of future pension benefits by placing a portion of social insurance contributions in investments. The paper was explicit that the total level of contributions should not be increased; and
- to promote economic development in Latvia and, as a consequence, to improve the financing of social security and thus reduce the need for the social safety net.

Since this second-pillar FDC arrangement was being financed by a "carve-out" from social insurance contributions, the Ministry of Finance set out in the paper certain conditions that had to be met prior to its creation. It stated that, if the indexation of pensions in payment were restricted to 50 percent of the contribution wage growth, the launch of the FDC scheme could take place in 2000. If, however, full indexation were applied, this could take place only beginning in 2006. This delay was necessary in order to build up a surplus in the social insurance budget that would be sufficiently large to allow for a diversion of contributions to the second pillar without dragging the budget into deficit.

The analysis also concluded that there would not be sufficient resources in the social insurance budget to allow all insured persons to participate in the second pillar from the start. Therefore, it recommended that participation should be mandatory only for those below the age of 30 at the date when law took effect, with a free choice for those between the age of 30 and 50 as to whether or not to join. Those above the age of 50 would not be allowed to join. This was not only to limit the revenue loss to the public system but also because their investment period was too short to ensure a high replacement rate.

The launch of the second-pillar scheme, the paper stated, would promote the consolidation of the securities market in Latvia, have a positive effect on the entire financial system, and make a significant contribution to the national economy as a whole. According to the calculations presented, by 2007 accumulations in the second-pillar funds could total 160–390 million LVL.[76] The paper suggested that, through the pension funds, the state might gain access to credit at a lower rate of interest than that offered by international finance institutions.

[76] Ministry of Finance, "State Funded Pensions – Economic Justification", 1998: 16 (in Latvian – unpublished).

The paper recognized that, at the launch of the second pillar, private asset management companies would not be adequately developed. Hence the Law on State Funded Pensions provided that for the first 2 years of the scheme's operation, asset management would be in the hands of the State. The Treasury was to carry out this function.

The paper also analyzed the effects of different initial second-pillar contribution rates on the social insurance budget. It concluded that 2 percent of wages would be a reasonable starting point, rising to 5 percent by 2010.[77] This would cause the social insurance budget to go into deficit during 2002–2006. However, the paper projected that the state budget could be repaid fairly quickly.

**Table 7**
**Projected rates of real investment return and replacement rates [%]**

| Contribution rate | | Real rate of return, by contribution manager | | Retirement age [years] | Replacement rate |
|---|---|---|---|---|---|
| First pillar | Second pillar | State fund manager | Private fund manager | | |
| 20 | — | — | — | 62 | 45.0 |
| 20 | — | — | — | 65 | 54.0 |
| 20 | — | — | — | 68 | 65.3 |
| 14 | 6 | 2.3 | — | 62 | 46.9 |
| 14 | 6 | 2.3 | — | 65 | 56.9 |
| 14 | 6 | 2.3 | — | 68 | 69.7 |
| 14 | 6 | — | 5 | 62 | 60.5 |
| 14 | 6 | — | 5 | 65 | 75.5 |
| 14 | 6 | — | 5 | 68 | 95.6 |

*Source*: Ministry of Finance, "State Funded Pensions – Economic Justification", 1998: 14. (unpublished).

Assumptions on private investment returns were quite positive: the average real annual rate of return on investments made through the Treasury was

[77] That is, diverting 2 percentage points of the 20 percent of the pension contribution rate allocated to the NDC individual account, leaving 18 percent for NDC.

projected to be 2.3 percent, but for private fund managers it would be 5–6 percent. As shown in Table 7, these assumptions produced high replacement rates, especially for those retiring later. The paper stated that, since private managers would take additional risk and thereby achieve a higher rate of return, pensions would turn out to be higher by 29–34 percent. To quote, "Analysis of the income replacement level shows that participation in the scheme guarantees higher pension in the future and will encourage people to stay longer at work and to retire at a later age."[78]

On this basis, the paper concluded that having a first-pillar PAYG scheme and a second-pillar funded scheme operating in parallel would be more stable in the face of demographic and economic fluctuations, as well as in relation to political decisions. The paper recognized, however, that there was a "certain degree of mistrust" by the public of the financial and supervisory structures, because of recent memories of the collapse of Banka Baltija and the subsequent banking crisis. It would therefore be important to engage in careful, systematic activities to educate people and convince them that the social system was reliable and safe.

However, the launch of the second pillar did not take place in 2000 as proposed in the paper. Instead, it was delayed to 2001, as a result of two sets of events that together plunged the social insurance budget into a deficit from which it has not yet fully recovered.[79] These events were:

- the political decisions of October 1998 to make a concession to working pensioners and provide extra indexation of pensions;[80] and
- the 1998 Russian financial crisis, which caused a sudden sharp recession in Latvia, including rising unemployment and falling contribution revenues.

As one recovery measure, the implementation of the second pillar was postponed. The Law on State Funded Pensions, drafted by the Ministry of Finance in conjunction with the Ministry of Welfare, was finally approved by the Saeima in February 2000 and came into force on 1 July 2001. There

[78] Ministry of Finance, "State Funded Pensions – Economic Justification", 1998: 17 (unpublished).

[79] See below, Section 4.1.1.

[80] See above, Section 3.1.2.

was little debate or controversy among the public or the politicians, largely because the specific provisions of the legislation were not well understood and the long-term consequences were not much considered. While the transitional financing costs of establishing the second pillar – that is, the "hole" in public scheme financing caused by redirecting contribution revenues to the new individual savings accounts – has been pointed out in the Pension Reform Concept paper, this too received little attention during the deliberations on the legislation.

The final form of the FDC system differs from the original proposals in the 1995 Pension Reform Concept paper in several important ways. These differences also distinguish the Latvian second-pillar arrangements from those in many other CEE countries:

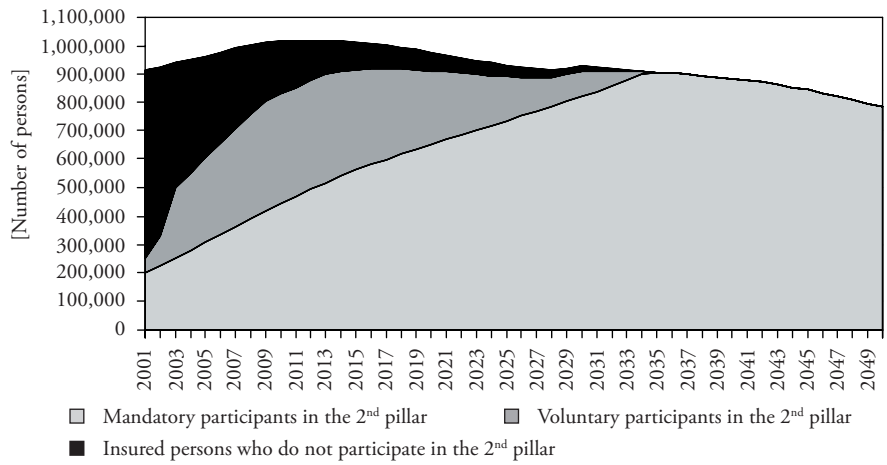
- private investment managers are not required to provide any minimum rate of return, nor does the state provide any guarantee;
- the individual has the option of returning his/her savings to the first pillar at retirement, in return for a pension calculated under a specified formula (the "refunding option");
- on a contributor's death, funds are returned to the first pillar and subsumed in the overall pensions budget, with a survivors' pension provided from the first pillar (the "inheritance gain"); and
- the portion of the contribution that would be eventually diverted to the second pillar was nearly doubled, that is, raised from the suggested maximum of 5–6 percent of the 20 percent NDC contribution to half that rate, or 10 percent.

This latter change was adopted during readings of the draft law in the Saeima, where representatives of Latvian financial institutions, citing the Pension Reform Concept (which had stated that "…later, depending on the increase in wages, contributions to the second pillar could be around 10–15 percent") insisted on increasing this ratio to 10 percent.

*Coverage* – During the lengthy period when the FDC system is being phased in, coverage is dependent on age, as explained above. For those with a one-time option to join the system (age 30 to 50 on the enactment date of the law), coverage becomes permanent, as with those who are mandatorily covered. Participation is terminated only when a person applies for a pension

and becomes a beneficiary, or on death. These rules mean that the FDC scheme will gradually expand to include everyone covered by state pension insurance. This should happen around 2035. (See Figure 5.)

**Figure 5**
**Number of social insurance contributors by categories of participation in the state funded pension scheme**



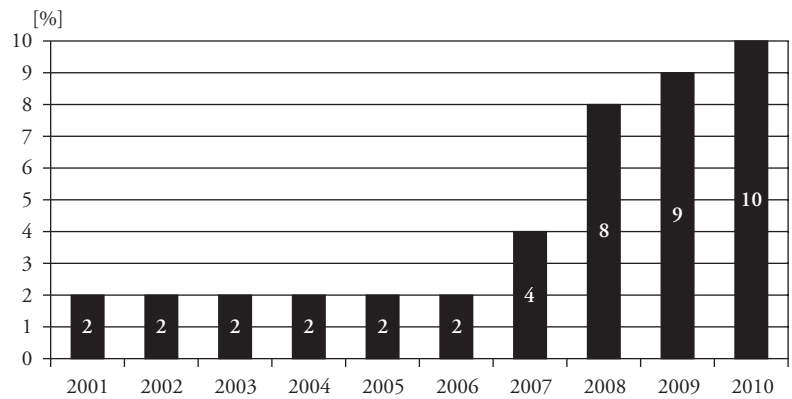

*Source*: Ministry of Welfare, *The state social insurance system in Latvia: Financial analysis*, 2003.

*Contributions* – Initially only 2 percent of each covered worker's wage will be diverted for investment. When second-pillar contributions rise to 10 percent (2010), the contribution rate to both pillars will be equalized (10 percent + 10 percent = 20 percent).

*Financial arrangements* – When social insurance contributions are collected by the State Revenue Service (in 2004, at the rate of 33.09 percent of covered wages), they are aggregated and distributed among all the state social insurance budgets, including the pension budget and the second-pillar scheme. Of the amount allocated to the state pension budget (in 2004, 25.51 percent) 20 percent (18 percent for workers who contributed to both pillars) is allocated to NDC pensions. The remaining amounts are allocated to disability and survivors' pensions, service pensions, funeral benefits, transitional commitments (to cover old-law pension liabilities and offset the diversion of revenues to the

second pillar), as well as minimum pension guarantees. In this process, all pension subsidies paid by the state budget (or transfers from other social insurance budgets) are proportionately allocated to the first and second pillars.[81]

**Figure 6**
**Contribution rate diverted to the state funded pension scheme**




*Source*: The Law on State Funded Pensions.

The SSIA does not play a role in contribution collection. Rather, its activities focus on provision of information, processing of applications, and distribution of social insurance contributions between the second pillar and the other social insurance schemes. In a contract lasting until 2006, the SSIA has outsourced the record-keeping function to the Latvian Central Depository (LCD). This decision was made because of the problems being experienced by the SSIA with its IT project when the second pillar began functioning (World Bank, 2004: 20). Using information provided to it by the SSIA, the

[81] As a result of the Constitutional Court Decision in 2001 (see Section 3.1.2), SSIA credits individuals' accounts with contributions even if the employer is in arrears with actual payments. If the State Revenue Service succeeds in collecting arrears, the relevant amounts are then transferred to the SSIA.

Depository keeps the records of FDC scheme participants and ensures that contributions are transferred to asset managers. Thus, the primary information on each participant's account is recorded with the LCD; and the second-pillar asset managers are not aware of the identities of individual participants. The LCD registers changes of asset managers and investment plans.[82]

*Benefits on retirement* - As the second pillar is considered part of the public pension system in Latvia, lump-sum payments from the second-pillar pension capital are not allowed. At retirement, the capital must be converted to an annuity. It is planned that the individual will have the choice of:

a) purchasing an annuity from an insurance company;[83] or
b) the "refunding" option, that is, transferring the capital to the first-pillar pension scheme, and receiving a benefit calculated according to a slightly modified NDC pension formula. In this case, the individual's pension capital includes both the notional pension capital (Kn) accrued in the first pillar and the financial capital (Kf) accrued in the second pillar.[84] Thus, the pension will be calculated as follows:

$$P = (Kn + Kf) / G$$

[82] The LCD is part of the Exchanges Division (*www.lcd.lv*) of OMX, the company that owns and operates the stock exchanges in Stockholm, Helsinki, Tallinn, Riga, and Vilnius (*www.omxgroup.com*).

[83] After independence was restored, Latvia began to set up national insurance companies that took over the liabilities of the Gosstrah (the Soviet state insurance monopoly). Starting practically from zero, the private insurance market was established within a very short time (for more, see Bokans, 2004). The Law regulating insurance activities was passed in 1993, and life insurance was separated from non-life insurance in 1994. The permanent insurance supervision authority was set up in 1995, and was replaced by the Finance and Capital Markets Commission in 2001.

[84] In fact, the State Funded Pension Law does not require a retiring worker to claim his/her second-pillar pension at the same time as the first-pillar pension. Rather, the person could continue to participate in the second pillar and receive the funded pension part later. In this case, under refunding option the accrued second-pillar pension capital is converted to pension in accordance with NDC scheme pension formula, using projected life expectancy (G) for age when pension is claimed.

Full details of how this will operate have not yet been worked out, as people with FDC pensions will not begin retiring until 2014.[85] As currently conceived, following the participant's application for an old age pension, the SSIA will instruct his/her asset manager to pay the capital in the individual account into an SSIA account, and will then inform the scheme participant of:

- this amount;
- the NDC pension this would provide under the refunding option; and
- the annuity that the participant could receive from an insurance company.

The SSIA will have to ensure equal treatment of workers and apply equal requirements to all the life insurance companies. If a participant chooses a life annuity, the SSIA will sign a contract and transfer the accrued pension capital to the company that the participant chooses. Decisions about the terms on which insurance companies will be able to sell annuities and the fees they will be allowed to charge have yet to be made.

**Box 4**
**Respective advantages of the "refunding" and insurance company options for obtaining an annuity at retirement**

From the perspective of individuals:

- *Advantages of "refunding"* –
  - Administrative costs should be lower for the NDC scheme than for a private insurance company.

[85] Two participants retired in 2004, both of whom had accrued special rights for early retirement as a result of having worked in hazardous conditions. Their capital, 113 LVL (167 EUR), was refunded to the first-pillar budget. SSIA, *Report on the State Funded Pension Scheme Performance in 2004*, 2005: 9. Several outlines for the annuities that a participant could receive from an insurance company have been set in Cabinet Regulations, i.e., "Standard provisions on life annuities insurance", issued in accordance with the State Funded Pension Law (in force since 19 March 2003). Second-pillar retirement benefits must begin to be paid in 2014 because, according to the law, persons who were age 30–50 on the enactment date could join the second pillar at their option. Thus, a person who was 49 years old on July 2001, when the Law became effective, will reach the statutory retirement age of 62 after 13 years, or in 2014.

  - Regular indexation of the pension would be guaranteed.
  - For women, unisex life expectancy tables would be used for the pension calculation, yielding higher benefits on average than would the use of separate life expectancy tables for men and women.
- *Advantages of the insurance company option* –
  - Potential for greater flexibility – Under the regulations which have been accepted by the Government (the Cabinet Regulations), "Standard provisions on life annuities insurance", the individual could opt to defer the start of annuity payments for up to 10 years and have different pension amounts paid in different periods (up to 3);
  - Potential for coverage of spouses – Insurance companies may offer the option of purchasing a joint annuity. This could improve living standards for surviving spouses, a group not covered by the first pillar.
  - Possible avoidance of political risk – since life annuities would be considered as individual property, a capitalized system might help to insulate a part of social insurance contributions from short-term political pressures.
  - For men, gender specific life expectancy tables would result in higher average benefits. (However, as the second-pillar arrangement is considered part of the public pension system under EU regulations, the gender inequality may have to be eliminated.)

From the point of view of the State:

- *"Refunding" advantages* –
  - In the short term, transfer of individuals' second-pillar capital back into the state pension budget would mean a faster increase of the reserves in the first pillar.
- *Advantages of the insurance company option* –
  - Avoids the risk of a major increase in state pension liabilities due to disproportionate numbers of women exercising their "refunding" option in order to obtain annuities calculated with unisex tables.
  - Avoids political risk that the refunded savings would be used for short-term purposes and unavailable to meet the increased long-term obligations that will result from refunding.

*Source*: Author's analysis.

As can be observed from the above, the availability of options is generally advantageous for individuals, since it allows them to choose the best annuity for their own particular circumstances. However, just to the extent that individuals are economically rational in exercising their options, the financial obligations of the state can be expected to increase. The state will have to finance the benefits of disproportionate numbers of higher cost pensioners (mostly women). From the author's point of view, part of the problem could be addressed by placing the refunded capital in a reserve fund, ensuring that it earns a rate of return equal to at least the capital index under the NDC scheme.

*Benefits on death* – As with the first pillar, there are no spouses' pensions. If a contributor dies before retirement, the balance in his/her account is transferred to the first-pillar NDC arrangement and used to contribute towards survivors' benefits for any dependent children. If there are no dependent children, the deceased person's savings simply become part of the budget of the public system.

There is a similar provision in the Swedish NDC system governing the treatment of "inheritance gain", where these resources are distributed to all surviving participants in each age cohort at the minimum pension age, in proportion to their share in the total notional capital of the cohort. However, in Latvia these savings are currently being regarded as a resource to cover the overall cost of transition to the new system.

*Asset management and administration* – For the first 18 months of operation of the second pillar, all assets accumulated therein were managed by the State Treasury. From the beginning of 2003, individuals could place their contributions with investment companies that are licensed by the Financial and Capital Market Commission (FCMC) and have an agreement with the SSIA.[86] People may choose only one asset manager and investment plan at a time, although they may change their asset manager once a year and change investment plans under the same manager twice a year. There are no charges for such switching. All investment funds are unitized: rather than buying

[86] The Finance and Capital Market Commission commenced operation on July 2001, consolidating supervisory responsibilities previously performed separately by the Securities Market Commission, the Insurance Supervision Inspectorate, and the Bank of Latvia.

individual investments, scheme members buy units in an overall fund which is made up of a portfolio of different investments. They must be "marked to market" each day – that is, valued according to the prices of the underlying securities.[87] Upon request by the SSIA, the LCD will also calculate the daily value of an individual's second-pillar investments.

In order to ensure that participants have a free choice of investment manager, the SSIA has a legal obligation to promote fair competition and to treat the funds evenhandedly. It sends out lists of available asset managers to all new participants in the second pillar but is prohibited from making any recommendations or expressing any opinions about any asset manager's operation.

Asset managers are required to provide the SSIA with their prospectuses and investment plans, as well as their regular reports on investment plan performance.[88] Each local SSIA office has information and reports available, and all material is also available on the Internet. Usage appears to be quite high.[89]

Those who do not wish to hand their contributions over to a private asset manager retain the option of placing them in the investment plan managed by the State Treasury instead. In addition, regulations require that the contributions of any new second-pillar entrant who has not chosen an investment plan within 2 months be placed in the State Treasury investment plan as the default arrangement.

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[87] The value of a unit is determined by the investment performance: it is the ratio between the value of assets at the time of calculation and the number of units registered at that same time.

[88] The SSIA requires that all asset managers report their investment returns and costs in a standardized form, and it makes this information available to all participants.

[89] According to information gathered by the SSIA unit that deals with the State Funded Pension Scheme, on average 1,173 persons per month are visiting the homepage of the SSIA (*www.vsaa.lv*) to receive information about the second pillar. The homepage of LCD, developed to provide news about the second-pillar performance (*www.manapensija.lv*), has been visited an average of 1,650 times per month. Count was taken on 30 June 2005.

*Administrative costs* – Until 2004, SSIA administrative costs related to the second pillar were covered by the state social insurance (pension) budget.

From 2004 onwards, administrative fees are being subtracted from the contributions of scheme participants when they first come to the LCD. The fees are capped at 2.5 percent of the annual total contributions paid by each participant. In reality, however, the average for 2004–5 is only 1.5 percent.[90]

Additional fees for asset management are not limited by law in Latvia. However, they must be shown in the fund's annual report to its members on its activities and performance. On average, in the first quarter of 2004, 1.1 percent of investment plan assets were used for management costs.[91]

*Safeguards and supervision* – Both the Law on Investment Companies and the Law on State Funded Pensions require strict separation of assets. The assets of each investment plan must be held in a custodian bank separately from the assets of other investment plans, the bank's own assets, the assets of the asset management company, and the assets of the bank's other clients. There are also extensive auditing and disclosure requirements, under the supervision of the Financial and Capital Markets Commission (FCMC). The managers of second-pillar assets must comply with the same capital requirements and limits on large exposures that apply to banks, and are liable for losses caused by company officials or authorized persons as a result of malicious, negligent, or illegal actions.

[90] This calculation is based on SSIA Annual Report (2004) and plans for 2005 expenditure provided by the SSIA unit on Funded Pension Scheme Administration. In 2004, the SSIA assumed that the maximum allowable rate would be charged (2.5 percent) on the forecasted level of contributions. In fact, second-pillar contributions greatly exceeded the forecast, thus creating a surplus for administration in 2005. Taking this into account, the rate of deduction for 2005 was set at 0.5 percent. Clearly this is unrealistic, resulting only from the unanticipated surplus in the previous year. Hence the average of 2 years used here – 1.5 percent – is a far more indicative measure.

[91] Data source: *www.fktk.lv*, visited on 3 August 2004. A 1 percent annual fee on assets will reduce worker savings by around 20 percent over a full career. Barr, N., "Mixed Pension Systems: Funding and the Role of the State", presented at the ILO Conference, "Recent Developments in Pension Restructuring in Central and Eastern Europe", Budapest, 9–10 December 2005, and Casey, 2004.

The FCMC licenses private asset managers, taking account of their length of experience and whether any disciplinary action has been taken against them. It also monitors their operation during the accumulation period, and will do the same for annuity providers during the payout period. Should the FCMC decide to withdraw or suspend the license of an asset manager, the assets held by all its investment funds will be transferred to the State Treasury or (with approval from the FCMC) to other asset managers chosen by the fund members. There has not yet been an instance of this, however. The Treasury department that is responsible for investment of second-pillar funds is not subject to FCMC supervision but does have to publish and follow an investment plan.

Custodian banks also supervise asset managers on a daily basis, in the course of executing their orders. They are required to inform both the asset manager and the FCMC (or the Ministry of Finance – in the case of the State Treasury) if the investment manager is not compliant with the legal investment restrictions or its own investment plan. The FCMC also supervises the custodian banks.

The Ministry of Welfare monitors the funded pension scheme as a part of the public pension system. The SSIA is required to submit an annual report on its operation, together with the opinion of a certified auditor, to the Ministry of Welfare, within a month after its approval by the SSIA board, and no more than 7 months after the end of the accounting year.

*Investment policy* – Following advice from the World Bank, the Latvian second-pillar funds were not required to offer any guaranteed rate of return on the FDC accounts. This policy contrasts with the arrangements in some other CEE countries.[92] However, the Law on State Funded Pensions strictly regulates the types of investments into which second-pillar assets can be placed, imposing a number of quantitative and qualitative restrictions. This too contrasts with the more flexible "prudent person rule" adopted in some other countries. Different rules apply to private pension managers and the State Treasury in its capacity as asset manager, with the rules relating to the

[92] For the example of the guarantee requirements in Poland, see Chłoń-Domińczak, A., "The political economy of pension reform in Poland", in Fultz, E. (ed.), *Pension Reform in Central and Eastern Europe, Volume 1, Restructuring with Privatization: Case Studies of Hungary and Poland*, Budapest: ILO, 2002: 32.

former being much more liberal. In comparison to neighbouring countries such as Estonia and Sweden, the Latvian approach is very conservative (Zilite, 2004: 112).

Currently the State Treasury has authority to invest assets only in Latvian State securities, term deposits with banks, mortgages, and certificates of deposit. Private asset managers are allowed to invest in Government and municipal securities, corporate debt and equity securities, open-ended investment funds, bank deposits, and even derivatives. The regulations also set qualitative restrictions: equity, corporate, and municipal debt securities must be listed on an official (or equivalent) stock exchange in an EU or European Free Trade Area (EFTA) country. There are no formal limits for investment in foreign assets. Investment is allowed in the EU, EFTA, and OECD countries with investment-grade credit ratings. However, the law sets a 70 percent currency-matching rule – that is, at least 70 percent of assets must be invested in securities denominated in the currency in which the liabilities are accounted. There is also a 10 percent limit for each non-matching currency.[93]

The diversification rules require that any one fund may not:

a) hold more than 30 percent of its funds in equities,
b) hold more than a proportion of its funds as assets from any single issuer, that proportion being:
   - 5 percent, in the case of equities;
   - 5 percent, in the case of investment fund units;
   - 10 percent in the case of corporate debt securities; and
   - 10 percent in the case of bank deposits.
c) with respect to any single issuer, own more than a certain percent of the total debt it has issued, this limit being:
   - 35 percent, if the issuer is a government or a multinational financial organization;
   - 15 percent, if the issuer is a bank;
   - 5 percent, if the issuer is a municipality; and
   - 5 percent, if the issuer is a private company.

[93] In June 2005, new amendments to the Law on State Funded Pensions came in force, specifying that the 10 percent limit for each non-matching currency is not applicable for EUR.

Investments are not permitted in real estate or financial instruments issued by the second-pillar asset manager itself, nor are managers permitted to make loans with the assets.

# 4. Early Post-reform Experience

## *4.1 Results and Problems with the Reform of the Public Pillar*

While it is still far too early to judge the impact of the comprehensive Latvian reform, some initial trends can be observed and these can be compared to expectations at the time the reforms were adopted. This section analyzes 5 such early trends:

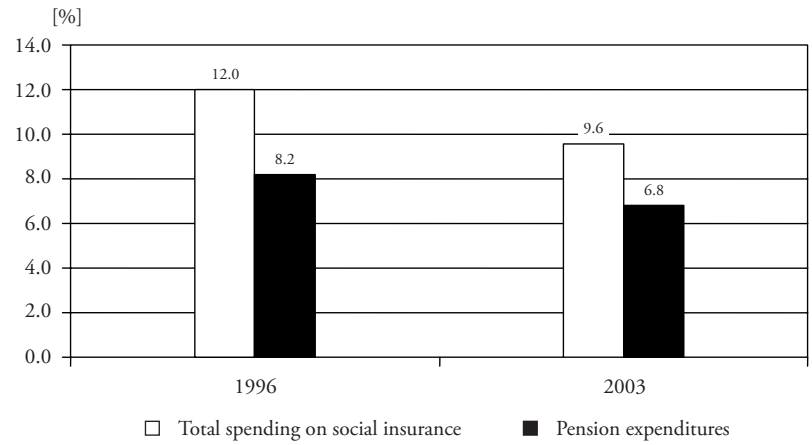
- pension spending and the financial balance in the social insurance budget;
- pension rights earned under the NDC arrangement;
- behavioural responses to the increase in the retirement age;
- redistributive effects of the reform; and
- public understanding of, and attitude toward, the reform.

### 4.1.1 Pension Expenditure and Scheme Financial Balance

In the wake of the reforms, state pension expenditures have decreased significantly as a percentage of the Gross National Product, from 8.2 percent of GDP in 1996 to 6.8 percent in 2003, or by 1.4 percentage points.

While the overall level of spending on social insurance is not particularly high, it is dominated by old-age pensions, reflecting the still low retirement age and large share of population over this age (see Table 1) in Latvia.

**Figure 7**
**Spending on pensions and other social insurance benefits [% of GDP]**




*Sources*: *Statistical Yearbook of Latvia*, 2002: 13 and 2004: 10; SSIA, *State Statistical Review*, 2004: Table 47, and 1997: Table 47; SSIA, *Annual Report on Operation in 2003*, 2003: Annex 4, pp. 1 and 7.

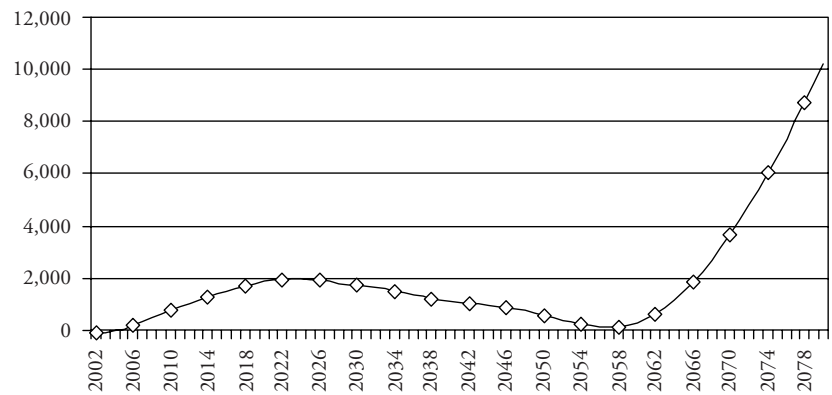
To a certain extent, this reduction in pension spending served to facilitate the decrease in social insurance contribution rates that was adopted along with the reforms (see Section 3.1.1). However, despite the contribution reductions, the social insurance budget was in surplus in the initial years of reform (1995 to mid 1998). By the beginning of 1998, the total accumulated reserve in the state social insurance budget was 26 million LVL (38 million EUR), or 0.5 percent of GDP.

However, this reserve was largely used up by the Government on the generous indexing of the old law pensions in May 1998, along with the other amendments to the pension law, especially those on the right of working pensioners to have their pensions re-calculated. The recession caused by the Russian economic crisis further weakened pension financing. As a result, since 1999 the social insurance budget has accumulated deficits, largely due to the pension budget, financed by a loan from the state budget. In 2002, the accumulated deficit reached 86 million LVL (127 million EUR), about 1.5 percent of GDP.[94]

[94] SSIA, *Annual Report on Operation in 2002*, 2003: 5.

Since then, the budget situation has been gradually improving, mainly due to the cost saving amendments made to the Law on State Pensions in late 1999. There has been no deficit in the pension budget since 2003, but the debt accumulated in previous years still remains and, by law, must be repaid. Projections show that this will be fully paid off by around 2006, after which the first-pillar pension scheme will again start to accumulate surplus.[95]

**Figure 8**
**Total assets of the Reserve Fund [million EUR] (Baseline with 3% interest)**




*Source*: Ministry of Welfare Model Projections, updated in summer 2004 (unpublished).

The Ministry of Welfare intends that at that stage, a formal Reserve Fund will be set up (as proposed in the original Pension Reform Concept paper, perhaps with revenues from the pension budget being handed over for investment to the same asset managers as are running the second pillar FDC funds). On the assumption of a 3 percent real net rate of return on these investments, this would be sufficient to cover budget gaps in unfavorable years, despite the diversion of

[95] At the beginning of 2005, the cash surplus in the pension budget has reached 62 million LVL (92 million EUR).

contribution revenues from the first to the second pillars.[96] However, having a high proportion of old age pensioners in poverty, while placing money into a Reserve Fund for the future, would surely be challenged by some politicians.

### 4.1.2 Pension Rights Earned under the NDC Scheme

The NDC rate of return is based directly on changes in the contribution wage sum, as discussed previously. This sum is affected a wide range of factors, including the level of wages paid, the ceiling on wages that are subject to contributions, net migration of working age persons, and the size of the grey economy.

The NDC rate of return can be calculated only from 1997, since initial pension capital is expressed in 1996 prices.[97] During 1997–2004, it was positively affected by two important factors. First, the ceiling on the contribution wage increased by more than 60 percent from 12,000 to 19,900 LVL per year. The pattern is shown in Table 8. Since inflation averaged only around 3.6 percent per year up to 2004, one can see that there has been considerable real growth in the contribution wage base.[98] (This growth benefits all workers, including those whose individual wages did not increase.[99])

[96] Net in the sense that investment management fees are not included in this estimate. If these are assumed to remain at their current level (current asset management charges come to 1.1 percent of accumulated assets), then the needed rate of return is approximately 4 percent.

[97] See Section 3.1.1.

[98] 2004 was a year of higher inflation, 6.2 percent.

[99] During 1995–2003, average net wages increased by 89 percent, from 73 LVL (108 EUR) to 138 LVL (204 EUR). In September 2004, the average net wage reached 149 LVL (220 EUR), while the average amount of an old-age pension increased over the same period from 32.60 LVL (48 EUR) to 65.21 LVL (96 EUR), reaching 70.93 LVL (105 EUR) in September 2004. The average wage from which social insurance contributions were actually paid increased from 83.07 LVL (123 EUR) in 1995 to 172.32 LVL (255 EUR) or 107.4 percent more in 2003. This reached 187.61 LVL (277 EUR) in September 2004.

**Table 8**
**Increases in Contribution Wage Base (NDC rate of return)**

| | |
|---|---|
| 1997 | + 3.0 |
| 1998 | + 12.0 |
| 1999 | + 11.7 |
| 2000 | + 6.9 |
| 2001 | + 8.4 |
| 2002 | + 4.5 |
| 2003 | + 16.5 |
| 2004 | + 17.5 |

*Source*: Annual decrees on the contribution wage and contribution wage index for the previous year, issued each April by the Ministry of Welfare.

Second, the portion of economically active persons that made contributions increased significantly, by 15 percent.[100] This was probably due to the general progress of the transition, but it may also have been encouraged by a social insurance system in which benefits are tightly linked to individual contributions, which has also been a major message propagated to the public since the pension reform was launched in 1996.

Overall, the average contribution wage increased by 38 percent in real terms during 1997–2004.[101]

However, for those receiving pensions during this same period, gross replacement rates were low. As shown in Table 9, the average old-age pension for both new law and old law recipients was around 34 percent of the average gross wage in both 2003 and 2004.

Moreover, the income gap between the working population and pensioners is gradually widening, partly because of an unfavourable wage profile of people approaching retirement (discussed further below), which exerts a significant

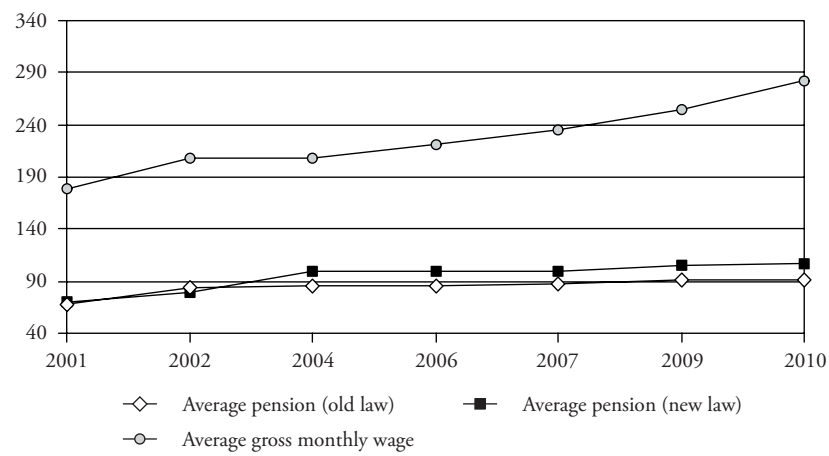
[100] That is, from 950,600 to 1,088,700.

[101] That is, from 111 LVL (164 EUR) in 1997 to 153 LVL (226 EUR) in 2004, or by 38 percent. Author's calculations.

effect on the initial pension capital, and also because pensions in payment are not fully indexed to earnings.[102] (See Figure 9.)

However, given that most pensions are not taxable, it may be more revealing to compare the average first-pillar pension and the average net (post tax) wage in the economy. Here the ratio is more favourable: 47 percent in 2003 and 48 percent in September 2004. It is not possible to calculate the actual income replacement rate at retirement, as statistics on the average last contribution wage prior to retirement for new pension claimants are not currently available.[103] However, the earning profile in Latvia suggests that wages are on a downward trend as the individual approaches retirement (especially for women). See Figure 10 and Hazans, 2003: 34.

**Figure 9**
**Dynamics of average pension and average gross monthly wage [EUR]**




*Sources*: SSIA, *State Statistical Reviews*, (respective reporting periods) Table 47; *Statistical Yearbook of Latvia*, 2002: 66, 67 and 2004: 58; *www.csb.lv*, visited on 2 August 2004.

[102] Partial wage indexation covered about 92 percent of all old-age pensions in 2003. Moreover, during 1996–2002, pensions were indexed only for changes in the CPI. It is important to recognize that, even with full 100 percent wage indexation, pensions would still remain low in relation to wages if the original starting pension was low, as is the case with those granted under the old law and many of those granted in the first years of the reform.

[103] The planned linking of the data bases of contributors and beneficiaries will solve this problem, among many other policy-monitoring difficulties in Latvia.

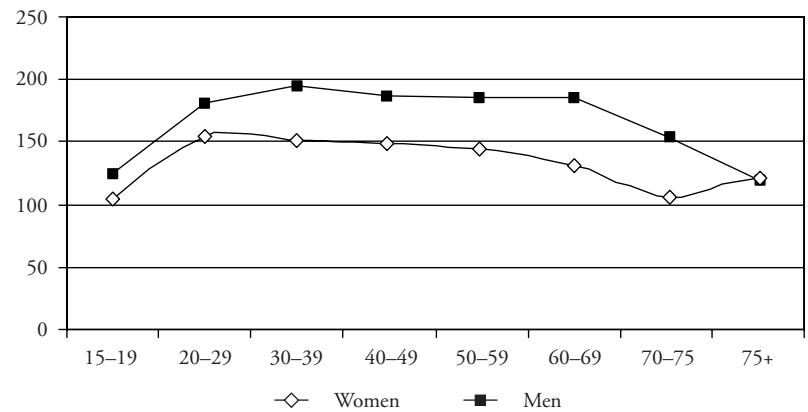
**Table 9**
**Comparison of pensions and wages**

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | September 2004 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Average | For persons with ≥ 30 years of service* |
| **First-pillar pensions in total** | | | | | | | | | | |
| Average pension/average gross wage in state | 39 | 36 | 39 | 42 | 40 | 38 | 36 | 34 | 34 | X |
| Average pension/average net wage in state | 49 | 48 | 53 | 57 | 55 | 52 | 51 | 47 | 48 | X |
| Average pension/average contribution wage in state | 41 | 38 | 42 | 46 | 44 | 42 | 41 | 38 | 38 | X |
| Average pension/minimum wage | 108 | 112 | 123 | 118 | 120 | 101 | 105 | 93 | 89 | X |
| **Newly granted NDC pensions** | | | | | | | | | | |
| Average *newly granted* (NDC) pension/Average gross wage in state | 40 | 38 | 40 | 39 | 37 | 32 | 36 | 35 | 38 | 45 |
| Average *newly granted* (NDC) pension/average net wage in state | 51 | 51 | 55 | 53 | 51 | 44 | 51 | 48 | 54 | 64 |
| Average *newly granted* (NDC) pension/ average contribution wage in state | 43 | 41 | 44 | 43 | 40 | 35 | 41 | 39 | 43 | 51* |
| Average *newly granted* (NDC) pension/minimum wage | 112 | 120 | 127 | 110 | 111 | 85 | 104 | 95 | 100 | 118 |

* An average pension at the end of September 2004 as a percentage of the average contribution wage for the first 9 months of 2004. Data on the average first-pillar pension for persons with 30 and more years of service are not available.

*Sources*: SSIA, *State Statistical Reviews*, (respective reporting periods) Tables 47 and 4; *Statistical Yearbook of Latvia*, 2002: 66–67, and *Statistical Yearbook of Latvia*, 2004: 58–59, *www.csb.lv*, visited on 2 August 2004. Statistics on 2004 wages are not yet available.

**Figure 10**
**Lifetime gross wages [LVL]**




*Source*: Professor Mihails Hazans, University of Latvia, prepared for this publication based on LFS data for 2002 (CSB).

Comparing the average pension to the final average contribution wage before retirement might therefore give a rather higher replacement ratio than that shown in Figure 9.

The growing gap between the welfare of workers and pensioners shown in Figure 9 is largely explainable by:

- the grey economy, which reduces the declared contribution base;
- the indexation of pensions in early years of reform only by the CPI;
- the low and irregular earnings of persons who approached the retirement age in the early years of the reform, thus affecting their initial pension capital; and
- the high portion of persons claiming early retirement and thus receiving low pensions.

A comparison of the average old-age pension to the minimum wage could also be revealing, but it is complicated by frequent changes in the latter. Overall, the minimum wage increased from 28 LVL (41 EUR) to 80 LVL

(118 EUR) between 1996 and 2004.[104] In 2003, the average old-age pension amounted to 93 percent of the minimum wage and, in 2004, to 89 percent. In after-tax terms, however, it exceeded the minimum wage by approximately 35 percent.

Comparing the average old-age pension to a conventional poverty threshold can also help cast light on its adequacy. In 2003, the average pension equalled 75 percent of average disposable household income per capita, or 87 LVL (129 EUR). Using a conventional "poverty line" of 50 percent of the average disposable household income per capita, it seems that the average amount of pension is thus sufficient to prevent poverty, as so defined, when a household consists exclusively of pensioners.[105]

Another important comparison can be made between the sizes of old law and new law pensions. In September 2004, about 66 percent of all pensioners were still receiving "old law" pensions.

Their pensions were on average over 16 percent lower than those of the new law pension recipients. The latest available data from the SSIA (December 2004) show rather higher pension amounts for newly granted pensions, 79.25 LVL (123 EUR) compared to 75.29 LVL (111 EUR), for all existing pensions (both old law and previously-granted new law pensions).

However, only 61 percent of pensions newly granted in September 2004 went to people with 30 or more years of insurance. At 94.79 LVL (140 EUR) or 51 percent of average contribution wage in the state, the average amount of these pensions was considerably higher than the overall average. This may illustrate the results that could be expected of the NDC scheme if there were reasonably full employment.

In reality, however, a high proportion of pensioners, especially in the rural areas, have started to draw their pensions at a relatively low retirement age because of the lack of opportunity for employment.[106] On average, recent

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[104] It was increased in April 1996 from 28 LVL (41 EUR) to 38 LVL (56 EUR), in 1998 to 42 LVL (62 EUR), in 1999 to 50 LVL (74 EUR), in 2001 to 60 LVL (89 EUR), in 2003 to 70 LVL (103 EUR) and in 2004 to 80 LVL (118 EUR). *Statistical Yearbook of Latvia*, 2004: 58.

[105] "Labour market and social policy in the Baltic States", *OECD Review*, DEELSA/ELSA 2002, 17: 61.

[106] This problem will be discussed further below, in Section 4.1.3.

retirees have comparatively short insurance records, only 31 years in 2003 and 30 years in September 2004, compared to 35 years for the whole population of old-age pensioners when the reform was being formulated in 1995.[107] The actual age of retirement remains low, on average 59.7 in 2003 and 60 in September 2004, for men and women (combined). About 17 percent of newly granted pensions were guaranteed minimum pensions, for individuals with only 23 years of insurance on average and whose average retirement age was 59 years.[108] These figures can be explained by the hardships of the transition economy. The minimum guaranteed pension is below the poverty line, except for those with long contribution records.

However, these figures refer only to the present. In the medium term, the level of hardship resulting from receipt of low minimum pensions can be expected to be moderate or even small, since it seems unlikely that many of the current middle age contributors will need minimum pensions when they retire.

### 4.1.3 Extending Working Life

The gradual increase in retirement age has improved the age dependency ratio significantly. In comparison with a no-reform scenario, in 2003 the ratio of people of pension age to people of working age was reduced from 1:2.4 to 1:2.9. This effect will continue in the future, so that by 2015, instead of being 1:2.0, it will be 1:3.0. However, the improvement will be smaller thereafter. By 2030 the age dependency rate without reform would be 1:1.17 and with reform 1:1.24.

The number of recipients of old-age pensions dropped from 497,000 in 1995 to 484,000 in September 2004, or by 2.6 percent. At the same time, the number of contributors increased from 982,600 (39.8 percent of the population) to 1,056,300 (46 percent) or by 7.5 percent.[109]

One important result that was expected of the NDC formula was a rise in the actual age of retirement, without the need for a further sharp rise in the statutory age of retirement. However, continuing high unemployment means

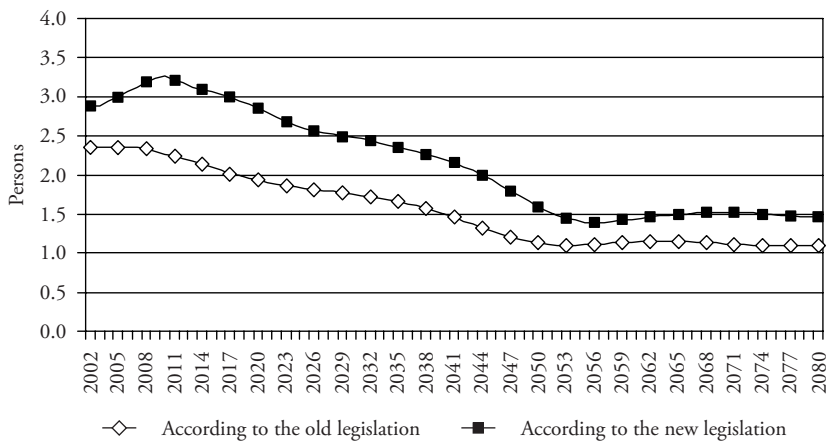
[107] This was almost identical to the unisex average of the EU 15 in the mid 1990s.

[108] SSIA, *State Statistical Reviews*, Tables 47 and 4, respective reporting periods.

[109] SSIA, *State Statistical Reviews*, (respective reporting periods) Table 47.

that so far there has been no significant increase in the number of people retiring late. Rather, many individuals continue to choose early retirement, as already noted, even knowing that they will receive a low pension because of the actuarial reduction plus the 20 percent penalty until retirement, and knowing too that during early retirement one cannot draw the pension at the same time as earning a wage.

**Figure 11**
**Working age population per population over working age**

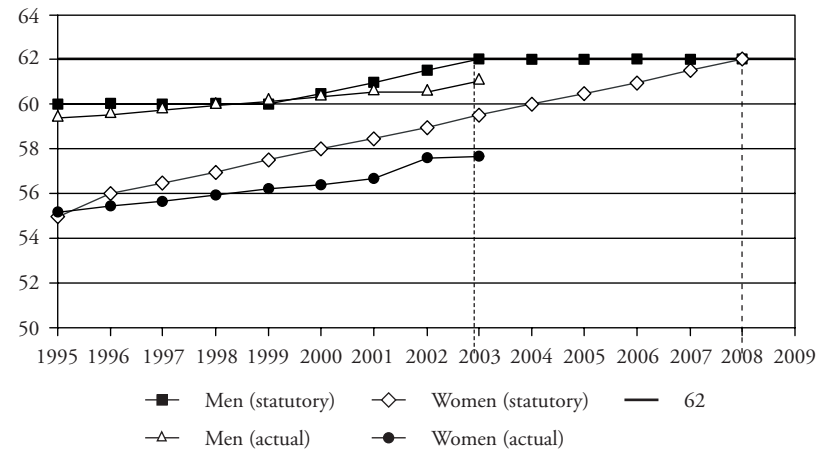



*Source*: Ministry of Welfare Model Projections, updated in summer 2004 (unpublished).

SSIA data show that, during September 2004, the average actual age at which a pension was claimed was 61.23 for men and 57.96 for women, compared to the statutory retirement age in effect at that time of 62 for men and 60 for women. The data in Figure 12 include individuals who retired under the special rules (for example, those with service pensions and pensions based on hazardous and arduous working conditions, who accrued special rights to early retirement before the reform). The share of these privileged pensions is not large and will gradually fade out during transition, since the new Law on State Pensions provides such advantages only temporarily.[110]

[110] Unfortunately, statistics showing the actual retirement ages of those with and without these special rights separately are not available.

**Figure 12**
**Dynamics in the age of retirement**




*Sources*: Law on State Pensions; SSIA, *State Statistical Reviews*, (respective reporting periods) Table 4.

Given the comparatively low pensions, it is not surprising that many of those who are over the retirement age are working. In 2003, the labour force participation rate for those aged 55–64 was 47.9 percent in Latvia, above the 44.6 percent in the EU-15. The average age of exit from the labour force was in the range of 62–63 while for the EU-15 it was about 61.[111] Thus, the employment rate of those in the 55–64 age group in Latvia was 44.1 percent in 2003, again above the EU-15 average of 41.7 percent. Greater numbers of older workers can be expected in the future due to such factors as: the gradual increase of the statutory retirement age to 62, the planned abolition of the early retirement option, the gradual phasing out of service pensions, and Latvia's pursuit of active labour market measures to encourage longer working life.[112]

[111] EUROSTAT, *Employment in Europe*, 2004, *http://europa.eu.int*, visited on 22 October 2004.

[112] At the time this study was completed, abolition of the early retirement option was to occur from July 2005 onwards. However, in June 2005 as the report was going to print, the Saeima postponed this change to July 2008.

However, it is important to recognize that early retirement can make economic restructuring more acceptable for many people. In the author's view, the abolition of the early retirement option has not been fully thought through in Latvia in terms of the limited extent of real employment opportunities for older workers. A 2001 survey of new pensioners' attitudes towards retirement found that 47 percent had decided to retire because they had no job and the pension was their only source of income.[113] (Unemployment benefit lasts only 9 months, after which the individual would need to depend on means-tested social assistance, payable by the municipalities at a lower level.[114]) Without further development of job opportunities and/or substitute arrangements like a partial pension carrying with it the right to work part-time, abolition of early retirement may result in increased spending on unemployment benefits and disability pensions. There may also be a slowdown of the growth of average pensions, due to an increase in number of unemployed job seekers and socially excluded people in the age groups nearing retirement.[115]

### 4.1.4 Redistributive Effects of the Reform

Along with the strong earnings-related principles in the first-pillar pension scheme, there are also several redistributive elements within the system. The bulk of the redistribution arises from the guaranteed minimum pensions, which were introduced in 1996 and then expanded in subsequent amendments to cover early retirement and to increase guarantees for persons with longer insurance records. In contrast with schemes where an earnings-related pension exists in parallel with a flat-rate minimum, under the Latvian first pillar the two are integrated and vary with years of service. Comparison is difficult because of the variations in the amount of initial notional capital and the

[113] Baltic Institute of Social Sciences, *Survey of new pensioners on their attitudes towards retirement*, 2001: 20.

[114] The guaranteed minimum income (GMI) is 21 LVL per month (31 EUR).

[115] Approximately two-thirds of the EU countries have special provisions for early retirement. OECD, "Monitoring the Future Social Implications of Today's Pension Policies", OECD Working Group on Social Policy, DELSA/ELSA/WPI, 1, 2003: 17.

NDC rate of return, but it is possible to provide some estimates. For example, the guaranteed minimum for someone with 30 years of service is 52.5 LVL (78 EUR). Assuming service of 24 years before 1996 and 7 years since, that person would have had to earn an average of 100 LVL (148 EUR) to build up a pension of that level (author's calculations). Anyone who earned less receives a subsidized pension. It would be fairer and more transparent if this form of redistribution were financed by the state budget through a temporary fourth pillar, as envisaged in the original Pension Reform Concept paper.

Second, there is some redistribution in favour of individuals with flat income profiles over their life cycle, as well as for those with interruptions in insured work during the contribution period. This is because the return on the accumulated notional capital is linked to overall contribution wage growth in the economy, rather than to the growth of each individual's own notional capital. The positive aspect of this is that such redistribution is favourable for women. Since their earnings are on average about 20 percent lower than men's average and they spend more time out of the workforce, the use of this overall average will mean that they will receive a better return on their contributions.[116]

Third, redistribution between men and women also arises because unisex life expectancy figures are used in the NDC pension calculation. Overall, the internal rate of return on contributions under the NDC scheme should favour women, as women at retirement age have a considerably longer average life expectancy than men.[117]

Fourth, according to CSB statistics, in rural areas the life expectancy of both genders is lower than in urban areas – by 2.4 years for women and by 1.6 years for men – causing redistribution from rural residents to city dwellers.

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[116] However, their benefit from child care periods will still be rather small due to the low contributions made on their behalf. During 1996–1999, these periods were credited only on the basis of the minimum wage and, from 1999 on, only on the basis of the flat amount of 50 LVL (74 EUR).

[117] According to the "G" values set by the government for pension calculation in 2004, women's life expectancy at 60 is 2.5 years longer than the unisex average, while men's is 3.4 years less.

Finally, there is redistribution as a result of the NDC scheme's "inheritance gain". Namely, the savings of those participants in the second pillar who die before reaching retirement age without leaving dependent children will accrue to the state pension budget as a whole.[118]

### 4.1.5 Acceptance of the Reform

During these early years of implementation, the reform's credibility has been shaken by several factors, the main ones being the general public's limited understanding of the principles and rules of operation of the new system and the frequency and inconsistency of legislative changes. This dissatisfaction has no doubt been exacerbated by hardships arising from the restructuring of the economy and the transition rules for calculating pensions during this period. The damaging effect of the transitional arrangements on the reform's credibility was also recognized by the Swedish and World Bank advisers. To quote:

> *The Latvian choice (recommended by the [World Bank] authors) weighted very heavily the first years after the passage of the law. For those having good years, this seemed fine. But for those nearing pension age and having bad years (e.g. spells of unemployment or non-payment of wages and contributions), these years weighted heavily in the final pension, in a way that was considered unfair. This ultimately led to Parliament-imposed changes. Since the earnings distribution was quite flat during the Soviet years (both with respect to age and skill level), a better choice from the start might have been to use some mixture of the economy-wide average wage and the individual's wage to value the capital.* (Fox and Palmer, 1999: 37.)

In addition, those with low pensions have been highly dissatisfied with pension indexation on a percentage basis, which means larger pensions in absolute terms for those with higher pensions. At the same time, those with high pensions have been dissatisfied with redistributive elements that still exist in the system, such as the minimum guarantees and rules that give generous indexation to low pensions.[119]

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[118] See Section 4.3.

[119] The higher income pensioners have argued that those who had been contributing only from the minimum wage were often working in the grey economy and gained from take-home cash from the under-reporting of their earnings.

Sociological research has shown that a proportion of younger people do not believe in the current social insurance system and consider it acceptable for the employer to make no contributions or to contribute only on the minimum wage (Bite, 2002: 150). Respondents generally fault both the employer and employee for this. However, some hold the opinion that, given the threat of dismissal, employees might not have much choice about whether to collude with the employer in non-compliance.

This research also found that people in general support the introduction of the NDC scheme, but this refers mainly to the pure NDC scheme of the future. There is still strong dissatisfaction with relatively low pension amounts arising from the calculation of the initial pension capital. Perhaps not surprisingly, only those who clearly gained from the reform accept the transition regulations. As time passes, the importance of the initial capital will decline, and total notional capital will depend more on actual individual earnings. However, some pensioners will no doubt still regard themselves as losers from the reform.

An additional focus of public dissatisfaction is the tax treatment of pensions. Pensioners are pressing for an increase in the amount of income that is not taxed, though the non-taxable minimum for pensions, established for 1996 and succeeding years, is already about 5 times higher than the standard non-taxable amounts for non-pensioners.

However, new pensioners are still disadvantaged relative to those who retired before the reform, since old-law pensions are not taxable at all.

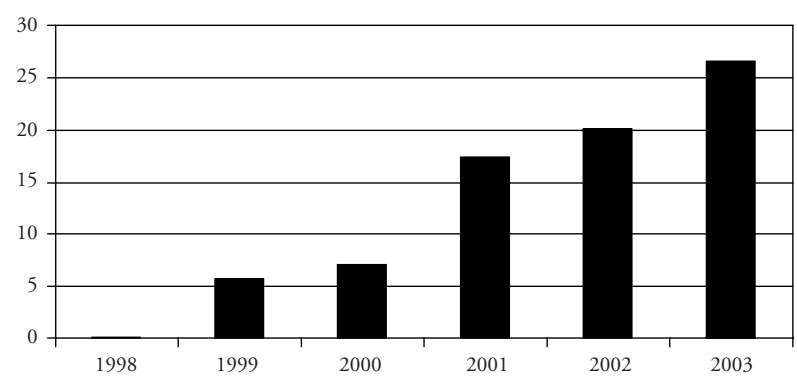
In an effort to promote public understanding, in 1997 the Ministry of Welfare and the State Social Insurance Agency both introduced public relation units that aim to provide better information about social security reform. Different media have been used to explain the reformed system to the general public. Sociological studies show that people have started to understand how important it is to pay social insurance contributions and their crucial link to future benefits. (Bite, 2002: 150.)

## *4.2 Transition to the Mixed System*

### 4.2.1 Introduction of Voluntary Savings Arrangements (the PPFs)

By the end of June 2004, 13 PPF plans had been established, comprising 4 open funds (Pensiju fonds Baltikums, the JSC Hansa atklātais pensiju fonds, the JSC Parekss atklātais pensiju fonds, the JSC Unipensija) and 1 closed fund (the JSC Pirmais Slēgtais Pensiju Fonds).[120] The latter was for employees of the 2 largest enterprises in Latvia, the telecommunications company, Lattelecom, and the State electric energy enterprise, Latvenergo. The number of PPF participants increased from just 167 in 1998 to 33,000 at the end of June 2004. However, this is still only just over 3 percent of social insurance participants in these plans, and less than 2 percent of the working-age population.

**Figure 13**
**Number of participants in pension funds [thousands]**




*Source*: *www.fktk.lv*, visited on 22 October 2004.

This low participation rate may be linked to the relatively low level of income in Latvia, as well as to the population's myopia: i.e., even those with

[120] As noted above, legislation covering the third (voluntary) pillar was passed in 1997 and took effect on 1 July 1998.

surplus disposable income are currently more inclined to spend money now than to save for the future. It is likely that the substantial tax load is also an obstacle for private savings, and advertising by the PPFs has been rather limited. However, the number of participants and the activity of PPFs are both gradually increasing.

At present, it appears that the voluntary third pillar is providing additional retirement savings mainly for middle and upper income households, rather than for the population as a whole.

As worker payments to the PPFs tend to be irregular, the average contribution is difficult to calculate. The individual contribution rate is averaging around 10 percent of the wage, at the ceiling for tax relief for PPF participants.[121] The Pension Fund Committee estimates that fewer than 1 percent of employers are paying contributions to the PPFs on behalf of their employees.

Private pension funds compete directly with life insurance companies, which provide long-term endowment policies. The tax regime for private voluntary insurance in Latvia has changed since the third pillar was introduced. Up to 1999, insurance premiums paid by employers for the benefit of their employees were tax free with no ceiling. In 2000, this advantage was eliminated, causing an enormous drop in the insurance market. After considerable lobbying by insurance companies, in 2001 the tax incentives were restored, although with ceilings (Bokans, 2004).

The number of persons who have reached the pension age stipulated in the pension plan and receive payments is not known. However, FCMC data show that in the sixth year of operation, there was an increase in the number of participants who had reached the retirement age, as well as in the amount of the paid-out pension capital.[122] The leading fund was the single closed pension one.[123]

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[121] Personal communication with Chair of Pension Fund Committee.

[122] The amount of the pension capital paid out in 2004 grew by 24 percent compared to the previous year. By the end of the reporting period, 484,300 LVL in pension capital had been paid out. Of this, 88 percent of total payments had been paid upon retirement while 12 percent, upon the death of participants. Source: *www.fktk.lv*, *Operation of private pension funds in 2004*, 2004: 70, visited on 10 October 2005.

[123] According to the Pension Funds Committee, in 2003 the accumulated pension capital paid by the closed pension fund to 283 recipients averaged 1,256 LVL (1,855 EUR) per individual; in 2000, it averaged 934 LVL (1,380 EUR), (personal email communication, 24 September 2004).

### 4.2.2 Introduction of the FDC Scheme

The introduction of the second-pillar FDC scheme was preceded by a substantial public relations campaign. The Government publicity emphasized the scheme's advantages. At that time, however, these advantages did not include a choice of investment manager.[124] The initial response by those with a one-time option to join the FDC scheme was quite limited. Between mid-2001 and end-2002, only around 8 percent of those in the 30–49 age range at the start date exercised this option.[125]

In 2003, when private investment management companies were brought in as managers for the FDC scheme assets, the situation started to change.[126]

Although there is no data available on the extent or costs of advertising, advertising and marketing efforts by these investment managers does not appear to have been excessive. By the end of 2003, around half of the assets had been shifted by scheme members to private investment companies. During their first year of operation, they had attracted 48 percent of all second-pillar participants, including approximately 90 percent of those who participate in the age 30–49 "voluntary" group.

As Table 10 shows, by the end of June 2004, around 55 percent of the working population had been included in the FDC scheme. A total of 187,000 (33 percent) joined on a voluntary basis. The share of participants in the State Treasury investment plan had decreased to 41 percent, and the State Treasury attracted only 7 percent of the "volunteer" group.

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[124] That is, the State Treasury was the only investment manager during the first 18 months of operation. It was subject to strict limitations on the investment opportunities and took a cautious approach.

[125] This is the age group that had the option of whether or not to take up second-pillar membership. For convenience, these are described below as the "volunteer" group. However, this is a one-off choice, as there is no going back to contributing solely to the first pillar.

[126] However, the State Treasury remained as an alternative option to the private managers and also the default manager for those who did not choose a specific investment manager.

**Table 10**
**Participants in the FDC second-pillar arrangement**

| Date | Total number of participants | Total number of "volunteer" participants |
|---|---|---|
| 30 June 2002 | 298,313 | 27,294 |
| 30 June 2003 | 402,576 | 91,461 |
| 30 June 2004 | 564,169 | 186,818 |

*Sources*: SSIA, P*erformance of the state funded pension scheme in 2002*, 2002: 9; and *Performance of the state funded pension scheme in 2004*, 2004: 13, *www.fktk.lv*, visited on 17 July 2005.

According to a 2002 survey (before the existence of private manager), people preferred private asset managers to the Treasury because they felt that this gave them the possibility of earning more retirement income (46.8 percent of respondents), and because they trusted private organizations (30.6 percent) and correspondingly lacked trust in the state run schemes (30.3 percent) (Zilite, 2004).

At the end of 2002, second-pillar net assets equalled 12.3 million LVL (18 million EUR), or 0.24 percent of GDP. By the end of June 2004, this figure had nearly tripled, reaching 35.5 million LVL (52 million EUR), or about 1.1 percent of GDP.[127] Modelling suggests that, assuming a 4 percent annual real gross return on capital (net of administrative expenses), these assets should reach about 1.3 billion LVL (1.9 billion EUR) by 2014, when the first cohort of participants in the FDC scheme are expected to retire.[128] This is about 40 times more than was accumulated as of July 2004. A higher rate of per capita wage growth or a higher average real rate of return would yield even larger assets. By the 2030s, when the FDC scheme will have been fully mandatory for all contributors, total assets are estimated to be about 60 percent of GDP.

[127] Data on GDP for January–June 2004, *www.csb.lv*, visited on 20 October 2005; *www.fktk.lv*, visited on 2 August 2004.

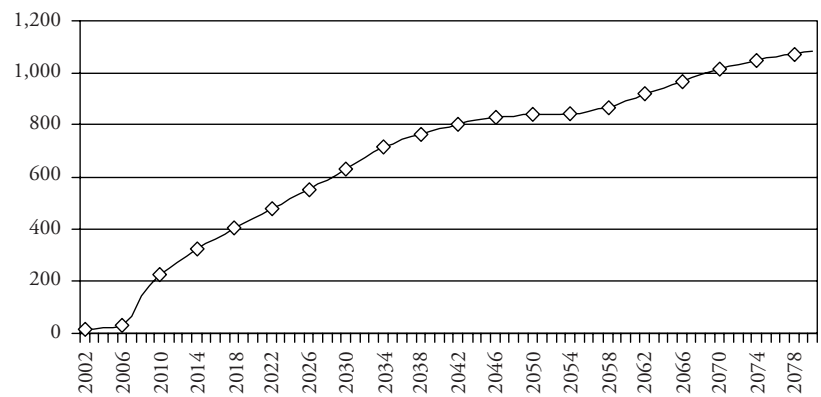
[128] This is a higher rate of return than has been achieved in average so far. See Figure 14.

## *4.3 Impact of the Private Pillar on the Public Pillar*

### 4.3.1 Impact on the Social Insurance Budget

The portion of contribution revenues diverted to the second pillar can of course no longer be used to finance current expenditure of the PAYG scheme. As of 30 June 2004, this diverted revenue amounted to 33 million LVL (49 million EUR).

**Figure 14**
**Contributions to the FDC pension scheme [million EUR, baseline*]**




* Number of voluntary participants until 40% of all under that cohorts.

*Source*: Ministry of Welfare Model Projections, updated in summer 2004 (unpublished).

While this loss of revenue is large and immediate, the reduction in the benefit obligations of the first pillar is quite gradual. That is, for a long period into the future, the NDC scheme will still have to pay pensions to participants who earned benefit rights before the second pillar was established. The social insurance budget must also cover the cost of the guaranteed minimum pensions.

Part of the contribution rate is considered as a "tax" to pay for the loss of revenue to the first pillar caused by the introduction of the second. When the second-pillar scheme was launched, this "tax" equalled about 0.2 percent

out of the 27.5 percent pension contribution rate. Today, with the reduction in the social insurance contribution rate, it is about 1 percent out of 25.5 percent.[129] These transitional financing costs will not disappear completely until all pensioners belong to generations contributing from their first day of employment to the second pillar at the full 10 percent rate, and drawing NDC pensions based purely on the 10 percent contribution rate. That date will be reached only in the 2060s.

In the very long term, the introduction of the second pillar becomes a fiscally neutral policy change, as benefit liabilities are also being transferred to the FDC scheme (and second-pillar savings will accumulate with which to meet them).

In addition to this direct loss of contribution revenues to the first pillar, there are also several other features of the second pillar that indirectly affect the first pillar's long-term equilibrium. These effects are both positive and negative. On the negative side, there will be a continuing gap between the growth of the contributions actually credited to the social insurance pension budget and the growth of total social insurance pension contributions (i.e., including contributions transferred to the second pillar). Simple calculations show that the latter is equal to the rate of return for the NDC pension capital (the growth in the contribution wage sum), which is used, according to the law, for both indexing the NDC pension capital and (partially) for the indexation of pensions in payment. This means that, in fact, the NDC pension capital "earns" a higher rate of return than the growth rate of contributions in the pension budget can ensure. According to SSIA statistics, in 2004 this gap between growth rates was 4 percent.[130] As the second pillar has only been operating since 2001, the imbalance does not yet affect the first-pillar equilibrium very significantly, but

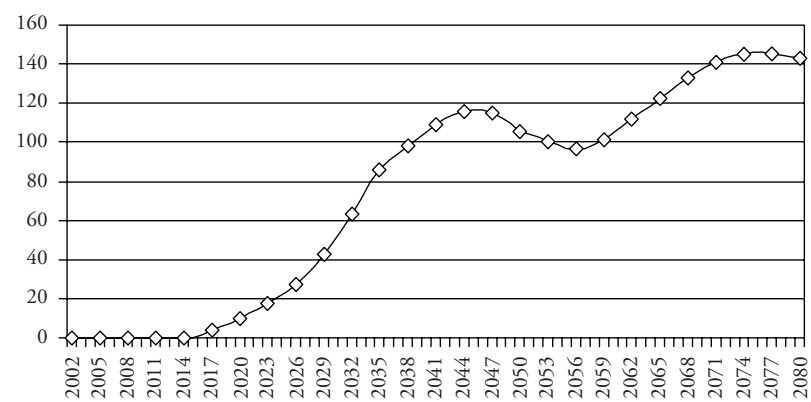
[129] Author's calculation. Contributions to the second pillar, minus transfers back to the first-pillar pension budget, were divided by the contribution wage base of the same year. (Contributions transferred back to the first pillar consist of refunded capital for some retirees and accrued capital of deceased participants.) Data source: SSIA statistics.

[130] Specifically, the social insurance contributions in the pension budget increased by 13.4 percent in 2004, while the rate of return of the NDC capital (contribution base) was set by the Ministry of Welfare at 17.5 percent. Thus, the gap between the growth rates was 4.1 percent. Author's calculation, using SSIA data on the state social insurance budget and Ministry of Welfare, *Decree on contribution wage and contribution wage index*, 2005.

eventually it will. This will have to be addressed by an increase in the implicit tax for the first pillar.[131]

On the positive side, the refunding option for the second-pillar participants at retirement should improve the financial position of the social insurance budget in the short run (although in the long run it will increase its liabilities, since annuities will have to be paid out). In addition, the inheritance gain from those who die before retirement without dependent children will help offset the transitional cost of introducing the second pillar. The total amount of inheritance gain transferred will depend on mortality levels and on the number of participants in the FDC scheme. Our projections suggest that in the 2040s, when the FDC scheme is mature, the pension budget should receive back annually around 15 percent of the amount contributed to the FDC scheme, which equates to 6 percent of the pension budget revenues, or 1.4 percent of the contribution base each year. However, part of this will be needed to finance survivors' pensions in cases where the deceased second-pillar participant had children.

**Figure 15**
**Estimated inheritance gain from the second pillar excluding survivors' pensions [million EUR, baseline]**

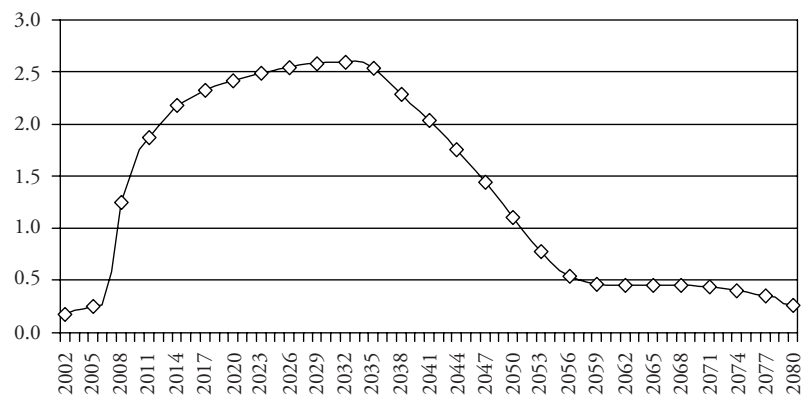



*Source*: Ministry of Welfare Model Projections, updated in summer 2004 (unpublished).

[131] This tax will have to increase in the future along with increase of the second-pillar contribution rate and the number of second pillar-participants.

The "refunding" option – that is, a worker's option to use his/her FDC capital to purchase a higher pension in the NDC scheme – will only become broadly available, as noted above, in 2014 (for the oldest cohort of participants), so there is almost no actual experience to draw on as yet, either in Latvia or elsewhere. For purposes of simplification, the simulations in the annex assume that all funds accumulated in the second pillar are used to purchase private annuities from life insurance companies (i.e., the refunding option is not used by anyone). However, alternative simulations with 50 percent or 100 percent take-up of the refunding option show that in the short term it could provide a significant inflow of revenues of the first-pillar pension budget. Since it will also substantially increase liabilities over the longer-term, in the author's view it would be useful to segregate these funds in a first-pillar reserve fund, separate from the State pension budget, thus making them available only for their intended purpose.

**Figure 16**
**Yearly costs of implementation of the second pillar [% of GDP]***




* Without payments of loans and interests from 2004

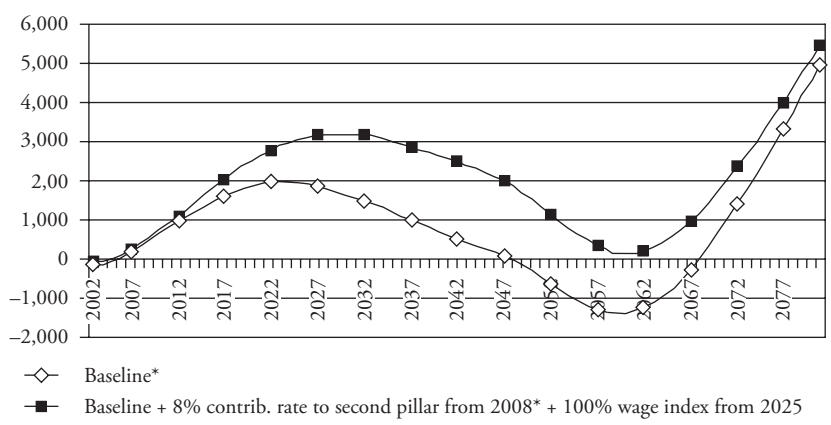
*Source*: Ministry of Welfare Model Projections, prepared in summer 2004 (unpublished).

Figure 16 shows the evolution of transitional financing costs over the next 80 years. It compares the projected costs of the first-pillar scheme (annual cash surplus/deficit of the state social insurance pension budget) with a "no

second-pillar" hypothetical situation. As can be seen, the highest costs are projected during the 2030s, when the second pillar will become mandatory for the entire insured population. This brings with it a substantial loss of contributions to the first pillar, while at the same time the liabilities to those who paid higher contributions to the first pillar (more than 10 percent) in the early years following the reform are not yet discharged in full.

On this basis, it seems that increasing the second-pillar contribution rate to 10 percent may turn out to be too costly for the first-pillar scheme. Simulations show that if it is done, the transition costs will have to be financed by Government debt during the 2050s. Debt financing for the first pillar would conflict with the objective of diversifying the demographic, economic, and financial risks for the system, and could threaten its sustainability.

**Figure 17**
**Total assets of the social insurance budget [million EUR]**




* Without payments of loans and interests from 2004.

*Source*: Ministry of Welfare Model Projections, updated in summer 2004 (unpublished).

Current financial circumstances underscore the need to keep the portion of contributions diverted to the second pillar at a low level. This is necessary in order to safeguard the social insurance budget and to give priority to financing of pensions for the present generation. If the gradual increase of the FDC contribution rate were to cease at 8 percent in 2008, instead of

rising to the anticipated 10 percent, modelling suggests that the first pillar could operate with no risk of needing to borrow. This would also allow room for improvement of pension levels under the first pillar, including pension indexation linked to the full wage index (100 percent of contribution wage sum growth) in the future.

However, since a large share of private administrative costs is fixed, lower contribution rates are likely to mean that more of each contribution is consumed by charges. Aggregate investment returns may also be lower because of the smaller sum invested.

Under recent simulations by the author and colleagues using a series of baseline assumptions (see Annex), overall spending on old-age pensions is estimated to increase from 6.8 percent of GDP in 2003 to 9.5 percent in 2070. This is a 40 percent rise over the 67 years of the projection. The bulk of the increase comes between 2030 and 2050, following a dip well below present rates in 2010. First-pillar spending falls only marginally during this time, and then falls substantially to 2070, while second-pillar spending climbs fast in the later decades.

**Table 11**
**Projected spending on social insurance [% of GDP]**

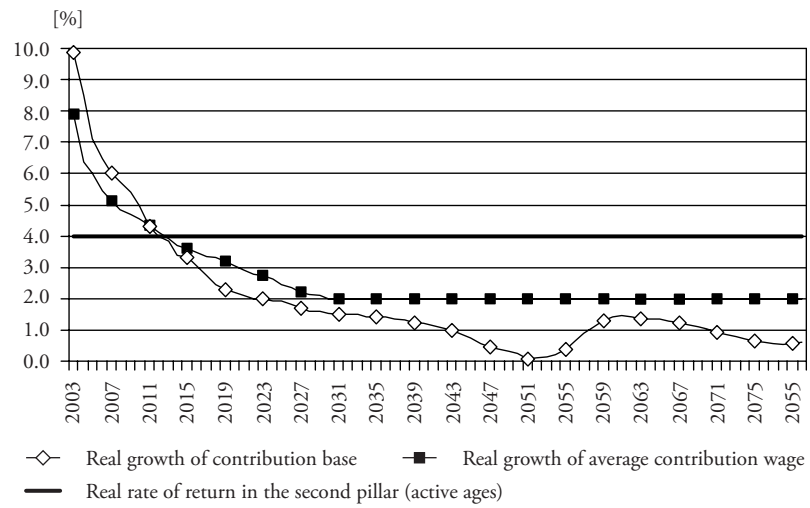
| | | 2002 | 2003 | 2010 | 2030 | 2050 | 2070 |
|---|---|---|---|---|---|---|---|
| Total spending on social insurance | | 10.3 | 9.6 | 8.7 | 11.1 | 14.9 | 15.5 |
| of which: Old age pensions | | 7.4 | 6.8 | 4.8 | 5.9 | 9.0 | 9.5 |
| of which: | first pillar | 7.4 | 6.8 | 4.8 | 5.6 | 5.8 | 3.9 |
| | second pillar | 0.0 | 0.0 | 0.0 | 0.3 | 3.2 | 5.5 |

*Sources*: Ministry of Welfare Model Projections, updated in summer 2004, originally published in *The State Social Insurance System in Latvia: Financial Analysis*, Ministry of Welfare, Riga, 2003; SSIA, *Annual Reports for 2002 and 2003* (2002: 10 and 2003: 1 and 7); and CSB, *Statistical Yearbook of Latvia*, 2004: 11.

However, the situation is highly uncertain due to several factors. First, no one knows whether, or to what extent, the FDC scheme participants will exercise the refunding option. Second, with defined contribution schemes (which lack specific benefit formulas) operating for both pillars, future replacement rates

cannot be known in advance. Further sources of uncertainty are economic performance and the demographic situation. The main economic assumptions used in our projections are shown in Figure 18, and the effect of varying the assumption on wage growth is shown in Figure 19. Our demographic assumptions and the impact of varying these are shown in Figure 20.

**Figure 18**
**Baseline assumptions used in modelling**

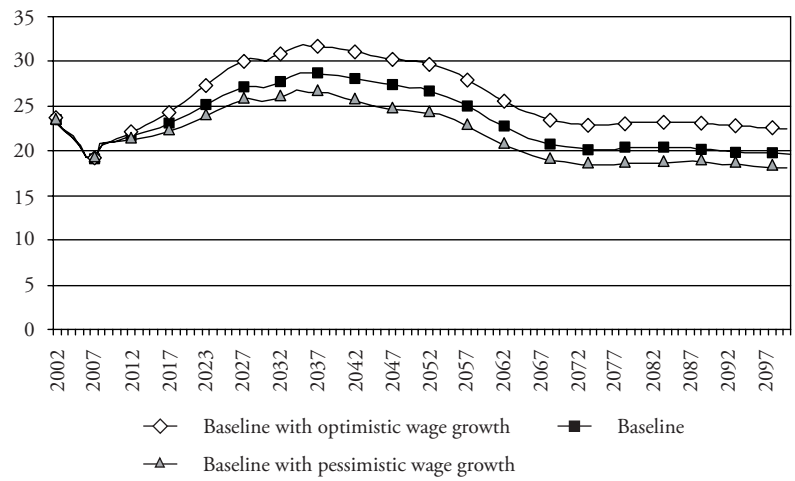



*Source*: Ministry of Welfare Model Projections on real growth of contribution base, prepared in summer 2004 (unpublished); baseline assumptions for real growth of contribution wage and real rate of return in the second pillar used for model projections (see Annex).

These simulations suggest that even under very unfavourable demographic and economic assumptions, the system can be stabilized by managing financial risk – that is, by adjusting the FDC scheme's contribution rate, if necessary, and developing proper reserves in the first pillar to deal with the prospect of a substantial budget deficit. The simulations also indicate that situation will gradually improve in the longer term, when the system reaches maturity and costs as a percentage of the contribution base reach the levels originally

planned (that is, about 20 percent, including the second pillar, with around about 10 percent going to the NDC part of the pension system). Given the prospect of large deficits on the horizon, the introduction of a reserve fund could help to balance the pension budget effectively, and therefore reduce the fluctuations around the originally-planned contribution rates.

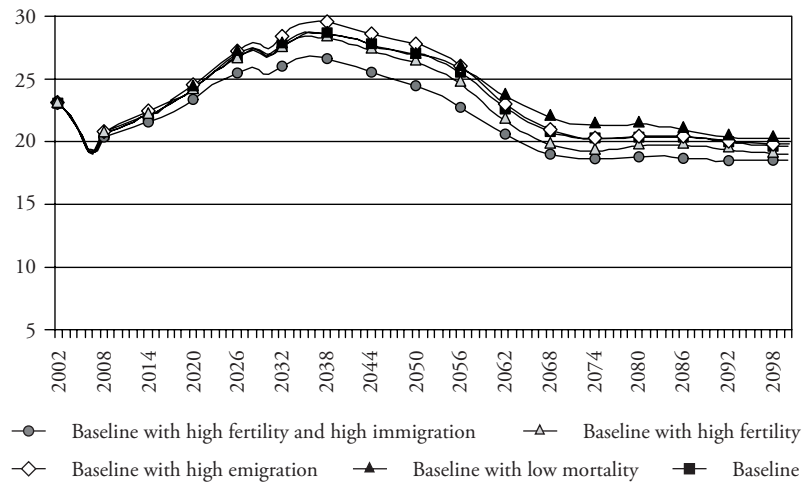
**Figure 19**[132]
**Total old age pension expenditures [% of contribution base]**




*Sources*: Ministry of Welfare Model Projections, originally published in Ministry of Welfare, *The state social insurance system in Latvia: Financial analysis*, 2003: 33.

[132] Under the baseline scenario used for this analysis, real per capita wage growth is assumed to be 4 percent until around 2015. It then moves progressively toward 3 percent in 2023 and continues to fall to 2 percent by 2030, where it remains thereafter. The more optimistic growth assumption is approximately 5 percent wage growth until about 2020 when it drops first to 4 percent, where it remains through 2045, and then to 3 percent for the remainder of the period. The pessimistic growth assumption is that wage growth drops below 3 percent from 2013 and reaches 1.2 percent in 2020, where it remains throughout. Given the information currently available for Latvia, it is difficult to know the extent to which underreporting continues, and thus how much potential remains for improving the rate of collection of social insurance contributions. The calculations assume that the proportion of the labour force making social insurance contributions will increase during the projection period by approximately 6 percent, i.e., to 90 percent in the 2050s.

**Figure 20**
**Total old age pension expenditures [% of contribution base]**
**(including contributions to the second pillar and guarantees)**




*Sources*: Ministry of Welfare Model Projections, originally published in Ministry of Welfare, *The state social insurance system in Latvia: Financial analysis*, 2003: 32.

### 4.3.2 Impact on Replacement Ratios

Because Latvia has a defined contribution system for both pension pillars, it is the benefit levels and hence the replacement rate – the pension as a percentage of the pre-retirement income – that take the strain of demographic and economic change. To put it another way, individual workers will bear the risk of negative economic and demographic developments, rather than the society as a whole. However, each individual's pension level under the new system is dependent on a number of factors:

- the actual age of retirement,
- the length of service record,
- the amount of contributions,
- changes in the average projected unisex life expectancy, and

- the growth of the contribution wage sum in the country, which determines the rate of return for the NDC pension capital and the level of pension indexation.[133]

As noted above, theoretical calculations during the reform process showed that, for people participating only in NDC and holding all other variables constant, in the initial years following the income replacement rate at the age of 60 should be at least 40 percent of pre-tax earnings. This applied to a person with a normal work career, participating only in the NDC first pillar. If the same person postponed retirement till age 65, the calculations showed that the replacement rate would be close to 60 percent of pre-tax earnings. Now that the reforms have been in place for a while, further simulations have been done (see Annex), on a baseline scenario with a number of variations.[134]

For the initial years, the replacement rate does indeed hover around 40 percent (see Figure 21). However, over the longer term, there are real risks to pension adequacy for both the first and second pillars. These risks arise from demographic ageing. The resulting decline in the number of contributors will affect rates of return under the NDC scheme and pose uncertainties about future rates of return in the funded second pillar as well.

Under the baseline demographic assumptions, it appears that the average replacement rate for the first-pillar pension scheme may decline in the future far below that originally envisaged, to 30–35 percent of average wages. This result is based on the following assumptions:

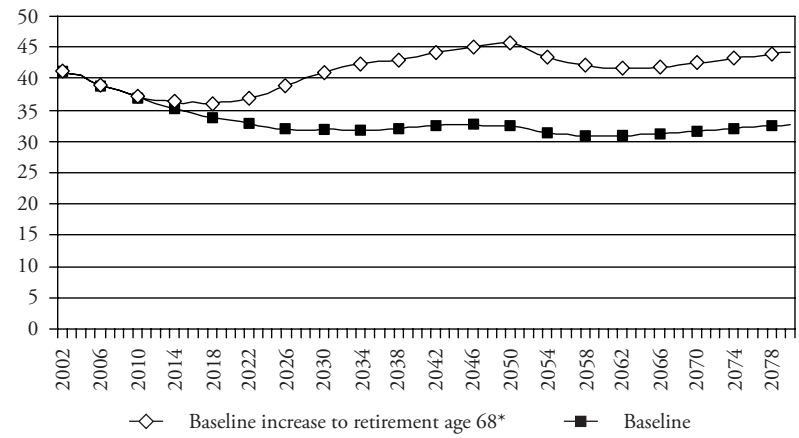
- the actual retirement age will increase moderately to 63 years;
- registered unemployment will remain comparatively high at 5 percent of the total economically active population;
- pensions will be indexed by 100 percent the CPI and 50 percent of the real growth of the contribution base; and
- life expectancy will increase by 2 years in the first 10 years of the projection and then by approximately 1 year per decade.

[133] The contribution wage sum is in turn dependent on the number of contributors and economic growth.

[134] As data about the average wage at retirement are not available yet, the average pension has been compared to the average contribution wage in the state as a whole, to give some indication of pension adequacy.

If the retirement age is still 62 in 10 years, but people live about 2 years longer, both the NDC and FDC pensions will be considerably lower. The rationale for this assumption is that there is little sign so far that the actual retirement age is being extended, and without much stronger employment growth it seems unlikely to happen.[135]

**Figure 21**
**Total replacement rate (first- and second-pillar pensions/average contribution wage)**




* Retirement age 68: for men – from 2024, for women – from 2028

*Source*: Ministry of Welfare Model Projections, updated in summer 2004 (unpublished).

One way to prevent this loss in benefit adequacy would be to enact a considerable increase in the statutory retirement age. This is illustrated in Figure 21. However, given the size of the expected labour force contraction, the current replacement rate could only be maintained if the actual retirement age rose within a few decades to approximately 68. Latvia is not alone in facing this dilemma: in many developed countries, the retirement age would to rise in the next few decades to no less than 73–74 years in order to keep their pension systems viable without other changes (Thomson, 1998 and OECD, 1988).

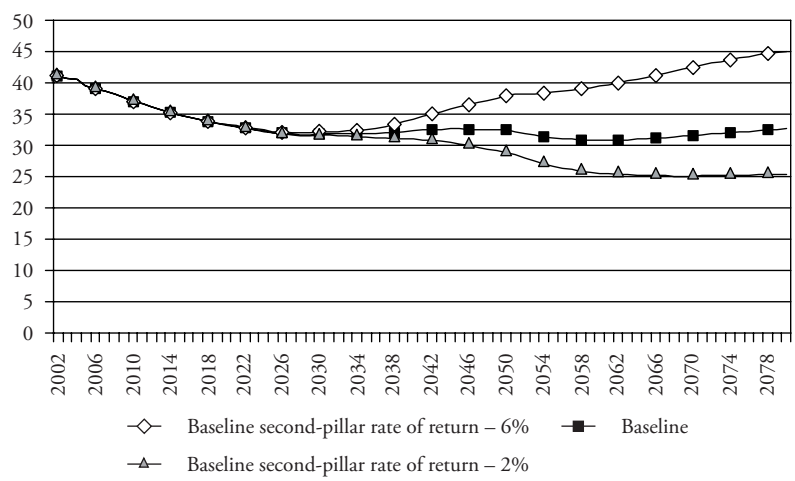
[135] See Section 4.1.3.

Unless Latvia's current unemployment problems can be solved, achieving a rise in retirement age may not be possible without causing strains elsewhere in the social insurance budget (the unemployment and disability funds). Nonetheless, it is important to make current contributors more aware of the impact that postponement of retirement can have on their level of income at retirement.

Introduction of the second pillar has the potential to increase future pension levels, but this depends on the second-pillar funds' performance, which will be largely dictated by returns on the world's financial and capital market and the level of administrative charges.

Assuming a long-run real rate of financial return of 4 percent net of administrative charges (baseline assumption, see Figure 22), while holding the rest of the baseline scenario constant (including a rather low retirement age), it would be possible to maintain the replacement rate from the 2 pillars combined at around 33 percent of the average contribution wage. If the rate of return is higher, the replacement rate could be gradually increased despite the adverse demographic factors. If it is lower, however, the replacement rate could fall considerably, as shown below.

**Figure 22**
**Total replacement rate (first- and second-pillar pensions/average contribution wage)***



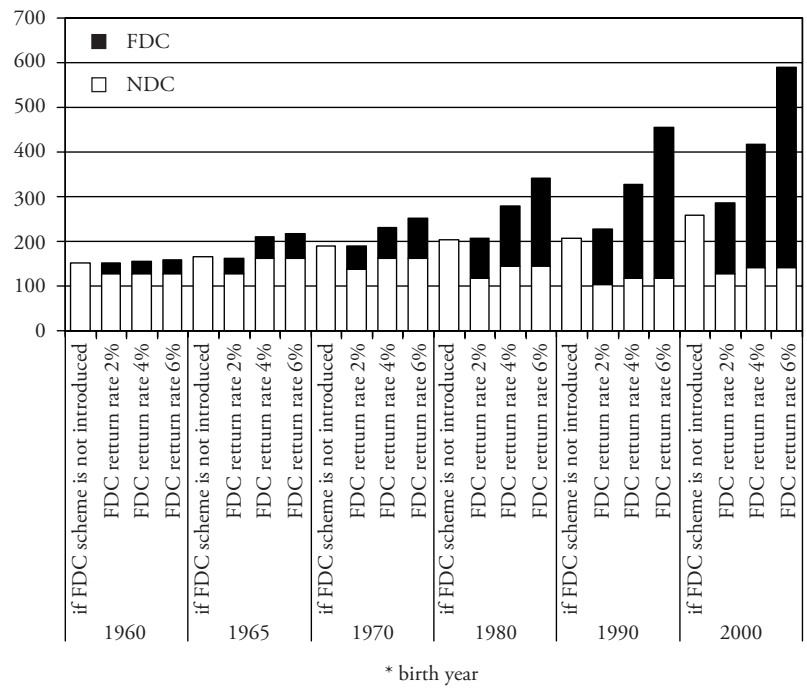

* Administrative costs are not taken into account in the assumed rates of return.

*Source*: Ministry of Welfare Model Projections, updated in summer 2005 (unpublished)

Figures 23 and 24 present projections of monthly pension amounts in Euros for different cohorts, depending on retirement age, participation in the second pillar, and the rates of return in both pillars.

As can be seen in both figures, younger cohorts that have the opportunity to accumulate FDC pension capital over a longer period of time will be able to gain a higher pension if financial markets perform successfully, and those who retire later will gain more.

**Figure 23**
**Newly monthly granted pensions (NDC and FDC) by cohorts* [EUR]**
**(with baseline assumptions about retirement age)**

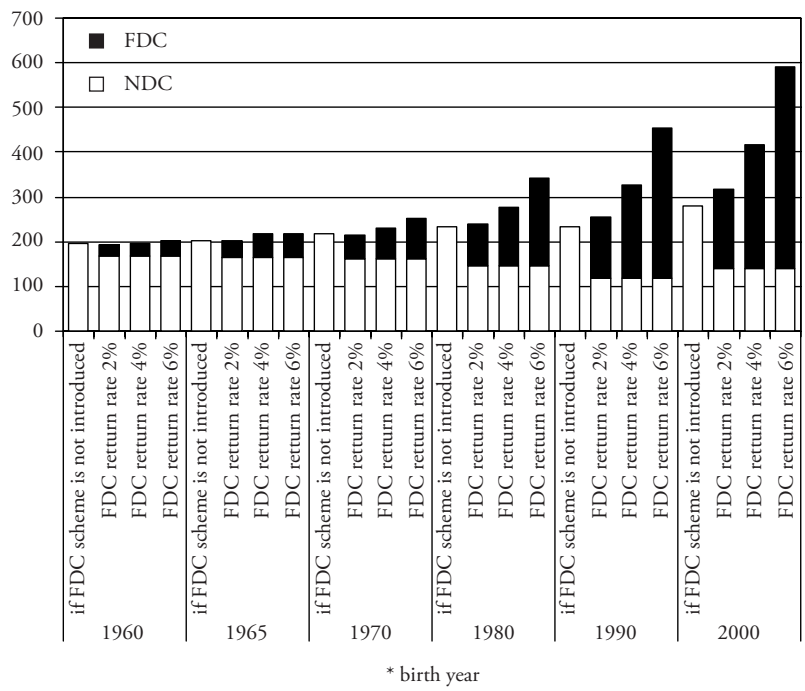



*Source*: Ministry of Welfare Model Projections, updated in summer 2005 (unpublished).

Since investment returns are highly volatile, there is a risk that, even if the average rate of return over a period of years is good, any one individual's

capital in the FDC scheme could be low at the particular time when he/she plans to retire. There is also the possibility that, because of the investment options chosen by the individual, he/she could end up with a lower pension than others with similar earnings and contributions. Participants could, in fact, find themselves in a much worse position than if they had participated only in the first pillar NDC scheme.

**Figure 24**
**Newly monthly granted pensions (NDC and FDC) by cohorts* [EUR]**
**(with retirement age – 65)**




*Source*: Ministry of Welfare Model Projections, updated in summer 2005 (unpublished).

## *4.4 Initial Performance of the Funded Pillars*

### 4.4.1 Performance of FDC Investments 2001–2005

As of June 2004, 18 months after the opening of the second pillar to private asset managers, 7 investment management companies offering a total of 17 investment plans were managing state FDC scheme assets.[136] 4 of these private asset managers are subsidiaries of Latvian banks (JSC Akciju komercbanka Baltikums, JSC Hansabanka, JSC Latvijas Unibanka, JSC Parekss-banka). One company was established jointly by the major insurance companies of Latvia.

Participants in the privately managed funds have been cautious in their choice of investment plans. As of 30 June 2004, more than half (51 percent) of them opted for conservative plans, and about 4 percent opted for balanced plans.[137]

Of the 46 percent of participants who opted for active plans, 44 percent were "volunteers" – that is, people in the age group with a one-off option to join the mixed system.

Data for end 2004, given in Table 12, show that about half of participants in the second pillar had opted for investment plans which might be considered as conservative (no investment in equities) and about half for active investment plans (investment in equities ≥ 15% and ≤ 30% of plan's assets). Few had chosen intemediate, balanced plans (investment in equities ≤ 15% of plan's assets). The level of active participation was higher among those who had joined the system voluntarily than amongst those who had been obliged to join – i.e., higher amongst people aged 30–49 than amongst people under 30. Half of those who had been obliged to join the second pillar were in the default fund, while only 1 in 20 of voluntary participants were there.

As Table 13 shows, the private asset managers have all chosen a more or less prudent investment strategy, with the majority of contribution revenues going

[136] As explained above, for the first 18 months of the FDC scheme, only the State Treasury was permitted to manage the assets.

[137] Data source: *www.fktk.lv*, visited on 22 October 2004.

into debt securities and other fixed-income securities. While the proportion of funds in these investments has dropped in the last 2 years, the proportion in time deposits with credit institutions has risen. By the end of June 2004, 64 percent of total investments had been in debt securities, and 31 percent, in time deposits with credit institutions. Thus, the high share of low risk investments was retained.[138]

**Table 12**
**Nature of participation in the FDC system, end 2004** [%]

| | All participants | Voluntary participants | Mandatory participants |
|---|---|---|---|
| Type of plan chosen | | | |
| active | 52 | 63 | 46 |
| balanced | 4 | 8 | 1 |
| conservative | 45 | 29 | 53 |
| – of which in default fund | 34 | 5 | 50 |
| Total | 100 | 100 | 100 |
| Total in a privately managed plan | 66 | 95 | 50 |

*Source*: SSIA, *Annual Report of the State Funded Pension Scheme in 2004*, 2004: 15.

**Table 13**
**Investment portfolio of the FDC scheme assets**

| | 31.12.2002 | | 31.12.2003 | | 30.06.2004 | |
|---|---|---|---|---|---|---|
| | [EUR] | [%] | [EUR] | [%] | [EUR] | [%] |
| Debt securities and other fixed-income securities | 13,676,665 | 75 | 27,137,470 | 73 | 32,692,019 | 64 |
| Shares and other variable-yield securities | 0 | 0 | 437,142 | 1 | 944,146 | 2 |
| Investment shares in investment Funds | 0 | 0 | 154,349 | 0 | 1,364,684 | 3 |
| Derivatives | 0 | 0 | 18,146 | 0 | 10,874 | 0 |
| Time deposits with credit institutions | 4,479,545 | 25 | 9,712,431 | 26 | 15,982,631 | 31 |
| **Total investments** | **18,156,210** | **100** | **37,459,538** | **100** | **50,994,355** | **100** |

*Source*: *www.fktk.lv*, visited on 22 October 2004.

[138] Under the law, investment plans need not comply with the diversification rules for the first 6 months of operation, if the plan's assets are less than 100,000 LVL (148,000 EUR).

There were also changes in the geographical distribution of investments. In 2002, all the FDC scheme assets were invested in Latvia, but by mid-2004 this had fallen to 85 percent. The remainder was invested in 17 other countries, including Finland, Russia, Estonia, Great Britain, and Luxembourg, as well as in securities issued by international financial institutions (particularly the Nordic Investment Bank and the European Bank of Reconstruction and Development).

**Table 14**
**Geographical distribution of investments**

| Placement | 31.12.2002 | | 31.12.2003 | | 30.06.2004 | |
|---|---|---|---|---|---|---|
| | [EUR] | [%] | [EUR] | [%] | [EUR] | [%] |
| **Latvia** | **18,156,210** | **100.0** | **33,182,129** | **88.6** | **43,085,590** | **84.5** |
| **Abroad,** incl. | **0** | **0** | **4,277,409** | **11.4** | **7,908,762** | **15.5** |
| International financial institutions | 0 | 0 | 714,610 | 16.7 | 1,480,323 | 18.7 |
| Finland | 0 | 0 | 2,245 | 0.0 | 1,380,566 | 17.5 |
| Russia | 0 | 0 | 549,186 | 12.8 | 730,935 | 9.2 |
| Estonia | 0 | 0 | 294,400 | 6.9 | 669,375 | 8.5 |
| Great Britain | 0 | 0 | 457,428 | 10.7 | 490,517 | 6.2 |
| Luxembourg | 0 | 0 | 65,612 | 1.5 | 488,774 | 6.2 |
| Poland | 0 | 0 | 554,030 | 13.0 | 466,449 | 5.9 |
| Germany | 0 | 0 | 602,935 | 14.1 | 421,594 | 5.3 |
| France | 0 | 0 | 58,090 | 1.4 | 338551 | 4.3 |
| Ireland | 0 | 0 | 0 | 0.0 | 328,907 | 4.2 |
| Lithuania | 0 | 0 | 185,610 | 4.3 | 287,291 | 3.6 |
| Sweden | 0 | 0 | 78,637 | 1.8 | 285,003 | 3.6 |
| USA | 0 | 0 | 390,871 | 9.1 | 157,869 | 2.0 |
| Kazakhstan | 0 | 0 | 94,396 | 2.2 | 145,910 | 1.8 |
| Netherlands | 0 | 0 | 80,573 | 1.9 | 117,852 | 1.5 |
| Norway | 0 | 0 | 36,162 | 0.9 | 59,880 | 0.8 |
| Japan | 0 | 0 | 32,061 | 0.8 | 31,115 | 0.4 |
| Mexico | 0 | 0 | 9,666 | 0.2 | 27,849 | 0.4 |
| Hungary | 0 | 0 | 70,897 | 1.7 | 0 | 0.0 |
| **Total abroad** | **0** | **0** | **4,277,409** | **100.0** | **7,908,762** | **100.0** |

*Source*: *www.fktk.lv*, visited on 22 October 2004.

Equities, at home or abroad, are a very small part of the pension funds' portfolio. This partly reflects the immaturity of the investment markets, since many listed Latvian companies have either failed or been taken off the exchanges after purchase by strategic investors. The corporate market is still heavily reliant on the banking system as the main source of credit and investment resources (World Bank, 2004: 10).

While it is still too early to evaluate the FDC scheme, some early indicators are worth noting. FCMC data show the net return on investment plans in the first 2 quarters of 2004 as 1.3 percent to 5.7 percent and, in 2003, 0.2 percent to 6.9 percent. However, from the participants' point of view, what matters is not simply the rate of return on investment, but the final outcome – the increase in the balance on the personal account and its relation to the contribution. To compute an internal rate of return which could show participants whether the funds are meeting their expectations, a special calculation was developed, termed the internal rate of efficiency. This is the internal rate of return (IRR) of a generated cash flow. The elements of the cash in-flow consist of all the contributions paid into the second-pillar account. The elements of the cash out-flow include all the payments made from the participants' savings together with the total sum of their claim at the end of the investigated period. From this relation an internal rate of efficiency can be derived as an imputed (artificially calculated) interest rate – the rate which would have yielded the closing capital stock if the gross contributions had been deposited, for example, in a bank account.[139] Table 15 gives estimates of the values of the IRR from the launch-date of the second-pillar scheme.

[139] The calculation of the IRR is described by Augusztinovics, M., R.I. Gál, A. Matits, L. Máté, A. Simonovits and J. Stahl, "The Hungarian pension system before and after the 1998 reform", in E. Fultz, as previously cited.

**Table 15**
**Performance of investment plans under the second pillar pension scheme, results on June 2004**

| Investment plans | Date of starting of operation | *Nominal* IRR from the Date of launching of investment plan [% per year] | *Real* IRR from the date of launching of investment plan [% per year] | Net assets on 30/06/2004 [EUR] | Market share of net assets [%] |
|---|---|---|---|---|---|
| | | Conservative investment plans (no investment in equities) | | | |
| Hansa pension plan "Stabilitāte" | 07.01.2003 | 3.05 | – 0.57 | 2,536,679 | 4.87 |
| Parekss Universal plan | 07.01.2003 | 3.35 | – 0.28 | 1,021,261 | 1.96 |
| LVA plan "Daugava" | 21.01.2003 | 3.19 | – 0.55 | 395,970 | 0.76 |
| Baltikums Conservative plan | 21.01.2003 | 2.29 | – 1.43 | 71,000 | 0.14 |
| Suprema/EVLI plan "Jūrmala" | 09.01.2004 | 1.28 | – 3.58 | 572 | 0.00 |
| **Conservative private investment plans in total** | | 3.12 | **– 0.51** | **4,025,482** | **7.72** |
| **State Treasury investment plan** | 07.09.2001 | 4.63 | **1.10** | **20,355,905** | **39.04** |
| **Conservative investment plans in total** | | 4.38 | **0.83** | **24,381,387** | **46.76** |
| | | Integrated (balanced) investment plans (investment in equities ≤ 15% of plan's assets) | | | |
| Optimus integrated plan | 07.01.2003 | 3.29 | – 0.34 | 1,725,607 | 3.31 |
| Optimus Latvija plan | 07.01.2003 | 3.31 | – 0.32 | 326,883 | 0.63 |
| LVA plan "Venta" | 25.11.2003 | 1.49 | – 3.19 | 12,923 | 0.02 |
| **Integrated investment plans in total** | | 3.28 | **– 0.36** | **2,065,414** | **3.96** |

| | | | | | |
|---|---|---|---|---|---|
| | Active investment plans (investment in equities ≥ 15% and ≤ 30% of plan's assets) | | | | |
| Hansa plan "Dinamika" | 07.01.2003 | 4.01 | 0.36 | 14,311,699 | 27.45 |
| Optimus active plan | 07.01.2003 | 3.30 | – 0.33 | 5,519,677 | 10.59 |
| Parekss Active pension plan | 07.01.2003 | 4.49 | 0.82 | 4,521,972 | 8.67 |
| Optimus Eiropa plan | 07.01.2003 | 2.99 | – 0.63 | 1,159,533 | 2.22 |
| Baltikums universal plan | 07.01.2003 | 4.10 | 0.44 | 123,143 | 0.24 |
| Suprema/EVLI plan "Rivjēra" | 25.06.2003 | 1.52 | – 2.62 | 15,053 | 0.03 |
| Suprema/EVLI plan "Safari" | 19.06.2003 | 4.73 | 0.45 | 23,180 | 0.04 |
| LVA plan "Gauja" | 05.11.2003 | 1.35 | – 3.19 | 15,702 | 0.03 |
| **Active investment plans in total** | | 3.90 | **0.25** | **25,689,960** | **49.27** |
| **Private investment plans in total** | | 3.76 | **0.11** | **31,780,842** | **60.96** |
| **All investment plans in total** | | 4.10 | **0.50** | **52,136,759** | **100.0** |

*Source*: SSIA Statistics Unit, October 2004 (unpublished data).

The IRR for all the FDC schemes is about 4.1 percent in nominal terms, while in real terms (taking account of inflation) it is only 0.5 percent. To put it another way, one unit of contribution has yielded only 1.0050 units at the end of the year. In comparison with the NDC scheme's performance, where the real rate of return from the launching of the scheme has been quite high, the first years of operation of the FDC pension scheme in general show very weak results.

The performance of the second pillar, and the resulting IRR figures, were heavily affected by several factors:

- ***Unexpected sharp increase in inflation during 2004.*** In June 2004, inflation was running at an annual level of 6.1 percent, considerably higher than in 2003 (2.9 percent), 2002 (1.9 percent) and 2001 (2.5 percent). The rise was mainly due to one-off factors: high oil prices, appreciation of the Euro, tax harmonization, increases in Government charges, and consumer uncertainties as EU accession approached. Ministry of Finance projections prepared on 4 November 2004 suggest that inflation should begin decelerating during 2005 and from 2006 should not exceed 3 percent.[140] Nevertheless, the significant increase in inflation in 2004 has worsened the real outcome of the 3 years of operation of the FDC pension scheme significantly. Thus, although there was comparatively good performance during 2001–2003 (when the nominal return on investments in a relatively low inflation environment was 4.9 percent in 2001, 5.8 percent in 2002 and 4.5 percent in 2003), currently the second-pillar participants are losing out in comparison with those who participate only in the first-pillar pension scheme.[141] Around one-third of private asset managers' investment plans commenced operation only in late 2003 or early 2004, so their performance was heavily affected by the increase in inflation.

[140] However, during the preparation of this analysis, the high inflation rate stabilized.

[141] Ratio of investment income/expenses to average value of net assets, taking into account that the second-pillar asset management was started in September 2001. (*www.fktk.lv*, visited in October 2004.)

- ***Differences between the State Treasury fund and private funds.*** The good news for those who joined the State Treasury is that, despite the requirement for a conservative investment policy, there was the 1.1 percent annual average positive real IRR. This is considerably higher than that for the private asset managers which was only 0.11 percent at the end of June 2004. The Treasury has of course been operating much longer (around 3 years), and it began operation in a period of more favourable market conditions and with much larger assets, since it was the sole asset manager. As the default scheme for any participant who does not choose an investment plan within 2 months of joining the second pillar, it continues to see a strong positive cash-flow into its funds.
- ***Different administration cost framework.*** The administrative costs of the State Treasury as the second-pillar asset manager were covered from the state budget during 2001 and 2002. This effective subsidy for the first years allowed the State Treasury to charge a lower asset management fee in 2003 and thereafter than private investment plans with a similar investment policy.

As the private asset managers are only now "getting up to speed", this early IRR calculation can be taken as no more than an indication of possible future trends. As such, however, it does demonstrate the need for caution about the risks of participation in the mandatory second pillar. Pension outcomes depend on rates of return over very long periods which may exceed half a century. They are highly sensitive to the particular patterns of ups and downs in the calculation period and, in particular, to years of negative returns close to retirement, when they apply to the entire stock of accumulated assets. This must raise some questions about the wisdom of the "volunteer" participants in the FDC scheme taking up this option, given that some of them do not have very long to go before retirement and the rate of return on the NDC scheme can be expected to be reasonably high for some years yet.

The introduction of the mandatory funded pension scheme is a step away from solidarity, because the risk of the profit or loss of the investment is fully on participants, with no minimum guarantees.

In addition, low-paid workers will accumulate a low level of capital and, given the administrative costs, may be in a more disadvantageous situation than

those who remain in the NDC scheme. In the longer-term, when more money is likely to be invested in higher risk securities by those participating in active investment plans, a guaranteed minimum rate of return might be demanded by participants. In the author's opinion, the mandatory nature of the FDC scheme justifies the introduction of explicit guarantees, and may eventually lead to their enactment. This would, however, bring higher costs and might discourage effective operation of the second-pillar investment plans.

One should be particularly concerned about education and advisory services for second-pillar participants closest to retirement age. Their choice of an investment plan may substantially affect their second-pillar capital at retirement, but no one from SSIA or elsewhere is available to advise them that conservative and balanced investment plans with lower investment risk could be a more appropriate choice for persons approaching retirement.[142] Thus, it could be advisable to create age-specific investment plans which shift assets into less volatile investments as people get older.

To enable people to plan properly for their retirement, there may also be a need for better information to be provided to participants about the benefits they can expect. Currently, participants receive an annual statement of their capital in the asset manager's funds, but no estimate of what this is likely to produce as pension. A standardized illustrative statement could be helpful.

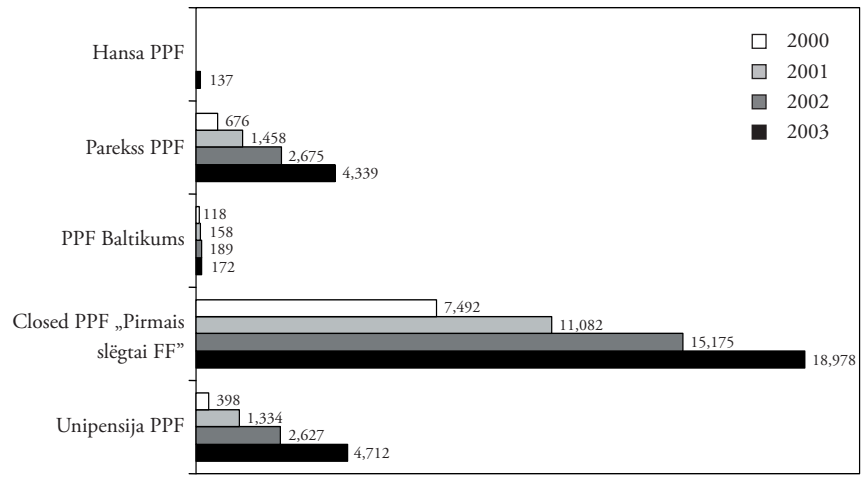
### 4.4.2 Performance of Voluntary Savings Funds (PPFs)

At the end of 2003, the pension capital accrued by PPFs accounted for 19.2 million LVL (28 million EUR), or about 0.3 percent of GDP. This is 37 percent higher than in the previous year and 5 times more than in 1999. By the end of June 2004, the pension capital had reached 22 million LVL (33 million EUR), or 0,7 percent of GDP. The largest market share in terms of accrued pension

[142] As previously explained, in order to ensure that participants have a free choice of investment manager, the SSIA is prohibited from making any recommendations or expressing any opinions about any asset manager's operation or the possible advantages or drawbacks to scheme participants.

capital (67 percent in 2003 and 60 percent in 2004) belongs to the single closed fund **with about 31 percent of all participants.**[143]

**Figure 25**
**Capital in Voluntary Savings Funds [million EUR]**




*Source*: Association of Commercial Banks, Pension Funds Committee, *www.pensiju-fonds.lv/doc/PFindustrija 2003.ppt*, visited on 28 September 2004.

Like the second pillar, the third pillar is mainly invested in debt securities. These constituted 12.1 million LVL (18 million EUR), or 55 percent of total third-pillar assets at the end of June 2004. The share of time deposits with credit institutions accounted for 27 percent. The volume investments in variable-yield securities had increased from 60,000 LVL (89,000 EUR) at the end of 1999 to 3.4 million LVL (5 million EUR) at the end of June 2004. The share of assets in these securities has increased accordingly from 1.5 percent to 16 percent.[144] This contrasts with the second pillar, where only 2 percent of the FDC scheme assets are in such investments.

[143] Association of Commercial Banks, Pension Fund Committee, *www.pensiju-fonds.lv/doc/PFindustrija 2003.ppt*, visited on 28 September 2004 and 10 October 2005.

[144] Data source: *www.fktk.lv*, visited on 28 September 2004.

In the first two quarters of 2004, foreign investments increased by 31 percent compared to the end of 2003, reaching 3.6 million LVL (5.3 million EUR). Of the third-pillar funds, 18.2 million LVL (27 million EUR), or 84 percent were placed in Latvia and 16 percent abroad.[145]

**Table 16**
**Geographical breakdown of pension plan investments**

| Placement | 30.06.2003 | | 30.06.2004 | |
|---|---|---|---|---|
| | [EUR] | [%] | [EUR] | [%] |
| Latvia | **21,549,869** | **87** | **26,845,492** | **84** |
| **Abroad,** incl. | **3,106,954** | **13** | **5,292,734** | **16** |
| Lithuania | 1,052,171 | 34 | 797,178 | 15 |
| International financial institutions | 0 | 0 | 769,482 | 15 |
| USA | 270,106 | 9 | 684,569 | 13 |
| Germany | 35,879 | 1 | 666,322 | 13 |
| Estonia | 810,157 | 26 | 547,616 | 10 |
| Poland | 397,818 | 13 | 497,523 | 9 |
| Luxembourg | 150,220 | 5 | 317,496 | 6 |
| Japan | 0 | 0 | 207,499 | 4 |
| Russia | 0 | 0 | 181,219 | 3 |
| Great Britain | 148,148 | 5 | 145,771 | 3 |
| Kazakhstan | 0 | 0 | 119,028 | 2 |
| Netherlands | 118,897 | 4 | 104,092 | 2 |
| France | 34,815 | 1 | 89,508 | 2 |
| Finland | 36,606 | 1 | 75,889 | 1 |
| Sweden | 0 | 0 | 53,195 | 1 |
| Norway | 31,387 | 1 | 36,347 | 1 |
| Ireland | 20,750 | 1 | 0 | 0 |

*Source*: *www.fktk.lv*, visited on 28 September 2004.

[145] Data source: *www.fktk.lv*, visited on 28 September 2004.

However, several problems still exist. First, PPFs compete with more flexible forms of saving such as bank accounts, life insurance endowments, and direct investment portfolios. None of these alternatives requires the owner to wait until age 55 before consuming his/her savings as the PPFs do. Yet from a policy perspective, pension saving is preferable because it is more likely to reduce the need for public income transfers to old people in the future.

Second, PPFs are not being used in the way envisaged by those who developed the first plans for reform (though current practice is consistent with the law). Benefits are taking the form of lump-sum payments or phased withdrawals, rather than annuities providing life-long monthly payments. While annuities insure against longevity risks, with lump-sums there is a risk that the beneficiary will outlive his/her savings. Lump-sums can be used to buy annuities from life insurance companies, but this is at the option of the individual beneficiary.

However, buying a life insurance policy directly may be more attractive to workers than investing in a PPF because there are fewer restrictions on what the insurer can provide.

If they have sufficient fixed capital and technical reserves, life insurance companies are allowed to guarantee a minimum return, to pay life annuities, and to include accident coverage. None of these options are open to PPFs under the existing law.[146] For workers with small savings, the purchase of an annuity may be prohibitively expensive. However, in the view of the author, the option should at least be offered by the PPFs.

## 5. Summing up

The designers of the Latvian reforms took it as a given that, in order to make the pension system sustainable, entitlements would have to be reduced in comparison to the amounts promised under the pre-reform system (World

[146] However, the Pension Funds Committee has suggested that the Law on Private Pension Funds might be amended during 2005 to include a provision allowing for a guaranteed rate of return and coverage of biometric risks.

Bank, 2004: 6). As shown, this has been achieved in parallel with a significant reduction of the social insurance contribution rate i.e., from 38 percent in 1996 to 33.09 percent. Thus, the scheme has been made sustainable at a significantly lower level of financing. This was facilitated by an increase in retirement age, the financing of non-contributory periods by the state budget, and new incentives to contribute to the pension system. The strong increase in the average contribution wage and the number of contributors during 1997–2004 is no doubt largely attributable to the overall success of the transformation from a command economy to a market economy. However, it is also consistent with the notion that contribution-based pension schemes provide an incentive to formally declare earnings and pay contributions.

Compared with the almost flat-rate pensions provided by the pre-reform pension system, the new system provides larger and hence fairer benefits for those who contribute more. It also provides minimum benefit guarantees during the transition period for people with low incomes and a significant past attachment to the work force, while giving both pensioners and contributors renewed assurance that this system is financially sustainable in the long-term. Workers have also received a substantial return on their contributions to the NDC system in the early years of the reform. If indeed there turns out to be a dramatic decline in Latvia's labour force, *any* design for the public pension system would have problems in achieving the long-term goals of the reform. From this perspective, the projections of falling replacement rates provided in this analysis should not be taken as a sign of failure of the reform package.

Since under the NDC arrangement the replacement rate depends crucially on the economic and demographic situation, if our baseline assumptions are too pessimistic, then the picture for future pensioners will be better. Latvia now has in place a National Action Plan for Employment that may help to address the pension financing imbalance by boosting the number of workers in the economy.[147] It is also within the realm of possibility that net migration flows will reverse, so that Latvia's population will grow rather than fall over the next half-century. It is also possible that, under conditions of a mature

[147] The EU Employment Strategy calls for yearly elaboration of a National Employment Plan. In 2004, this was termed the National Action Plan for Employment.

economy and improvements in health provision, people will start to retire later than assumed in model simulations, which will also boost their benefits.

However, the introduction of the NDC system in a transition economy has also increased the risk of poverty and exclusion for people who have no job opportunities and therefore will not be able to accumulate sufficient pension capital. Furthermore, there is a problem with the living standards of many current pensioners. Introducing the fourth pillar, providing transitional support as originally envisaged in the Pensions Reform Concept, would improve pension levels for people who are retired or approaching retirement. However, a financing source would have to be found and in the current situation this poses great challenges.

Given the projections of declining replacement rates in the first pillar, pensioners' living standards will depend increasingly on the combined performance of the 2 funded pillars. If a large part of the FDC portfolio is invested abroad, this will help to diversity risks to future pensioners compared to the NDC alone. However, the establishment of the second pillar boosted the costs of the reform. As shown, these extra costs can be handled if the second-pillar contribution rate is reduced somewhat. Yet, there also appears to be insufficient understanding in Government circles of the importance of strong monitoring of the privately managed state funded (mandatory) second-pillar pension scheme, in order to protect the incomes of retirees and prevent their savings from being eroded by high private administrative charges and inefficient investments. There needs to be a stronger regulatory and monitoring framework, a greater emphasis on the improvement of the financial literacy of participants, and an improved investment strategy by the second-pillar funds.

The very limited interest in voluntary savings under the third pillar also suggests that its importance in the new system has been under-estimated by both society and the Government. Given that the Government began its pension reform with the aim of shifting from full reliance on state aid to greater personal responsibility, it should do more to promote voluntary savings for retirement, through improving its tax policy, monitoring the third pillar, and supporting information campaigns covering all three pillars together.

As shown, the basic design of the pension reform has not been altered, but the transitional provisions have undergone regular amendments, as "political parties try to impress voters in the pre-election period and rush back to cost-

saving measures in the meantime" (Bite and Zagorskis, 2003: 63). Having endured this difficult period, it is likely that the basic design of the reform will continue to stand the test of time. Thus, the main tasks for the years to come lie in further legislation to address weaknesses and threats identified in this study.

There are 2 categories of possible actions, those that can be undertaken without adversely affecting the scheme's balance, and those requiring that additional resources be devoted to pension security. In the first category, potential improvements include:

- revision of the Law on State Funded Pensions in order to reduce investment restrictions;
- creating special pre-retirement age investment plans under the second pillar, to ensure that older workers' investments are not subject to high levels of volatility;
- educating the public about the 3-pillar pension system and improving workers' financial literacy;
- expanding the information in the annual statements on the NDC scheme to include an estimate of each worker's accumulated pension capital and to provide forecasts, thus helping individuals to plan for retirement;
- offering those participating in funded pension schemes, either voluntary or mandatory, professional retirement planning services; and
- requiring life insurance companies to use unisex rates in calculating annuities for second-pillar benefits at retirement (however, mechanisms would have to be put in place to prevent annuity providers from engaging in subtle forms of discrimination against women, given their longer average life expectancies).

In the second category of possible actions to improve the system – those with major fiscal implications – consideration should be given to:

- building up a properly segregated Reserve Fund, possibly managed by the second-pillar investment managers. However, as discussed earlier, this poses difficult trade-offs between increasing reserves and low pensions;
- redistribution of the second-pillar "inheritance gain" among the relevant cohort of contributors, rather than subsuming it in the state pension

budget as a whole. However, this would have a negative impact on the public scheme financial balance;
- further developing pension indexation to reflect full contribution wage growth, again a reform that would have to be financed with additional revenues;
- establishing the fourth pillar to provide transitional support for the system, as originally envisaged, paid for out of the state budget;
- setting a lower ceiling, perhaps 8 percent, on the contribution rate to the second pillar, a move that would strengthen the financing of the first pillar but provide lower second-pillar pensions and reduce economies of scale in the second-pillar management;
- introducing minimum guaranteed rates of return under the mandatory FDC scheme; and
- improving the laws regulating third-pillar provision (for instance, by requiring that savings be used to purchase an annuity).

Information campaigns covering all components of the reform must be continued, and should be supported by frequent opinion polls that can indicate the optimal content and target groups. Regular PR campaigns should cover all 3 pillars, as the underlying goal of the pension reform is to reduce state run old-age protection through stronger reliance on the other two.

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## Annex

### *Projection Scenarios and Assumptions*

The short-term baseline assumptions are based on the projections of macro-economic indicators by the Ministry of Finance. Medium-term assumptions are based largely on the advice of demographers from the University of Latvia and the Institute of Economics, Academy of Science. All values are expressed in real terms – i.e., in constant (2002) prices.

Simulations were carried out with a dynamic, birth-cohort-based macro simulation model, developed at the Ministry of Welfare to address a variety of the social insurance policy analytical requirements (sensitivity tests and policy simulations) for which alternative models are not well suited. This model is a tool for evaluating the impact of demographic and economic developments on

the social insurance system. While carried out with sophisticated systems, the projections are nevertheless educated best guesses, not predictions of the future.

**Box 5**
**Main assumptions for the baseline scenario**

| | 2004 | 2010 | 2020 | 2030 | 2040 | 2050 | 2060 | 2070 |
|---|---|---|---|---|---|---|---|---|
| *Macroeconomic* | | | | | | | | |
| Real growth of gross wages | 6.2 | 4.5 | 3.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Real growth of GDP* | 7.3 | At rate of real growth of the wage sum | | | | | | |
| Unemployment rate** | 8.5 | 6.9 | 5.4 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Real rate of return***: | | | | | | | | |
| – during the FDC scheme capital accumulation phase | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| – during the annuity phase | — | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| *Demographic* | | | | | | | | |
| Total birth rate | 1.276 | 1.400 | 1.516 | 1.539 | 1.563 | 1.586 | 1.610 | 1.633 |
| Life expectancy at birth**** | | | | | | | | |
| – male | 66.0 | 67.6 | 69.4 | 71.4 | 72.7 | 73.8 | 73.8 | 73.8 |
| – female | 77.1 | 77.9 | 78.8 | 79.8 | 80.3 | 81.1 | 81.1 | 81.1 |
| Net migration [thousands] | –1.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Social* | | | | | | | | |
| Growth rate of ceiling of contributions | At rate of real growth of wage | | | | | | | |
| Total social insurance contribution rate (as % of wage) | 33.09 | 33.09 | 33.09 | 33.09 | 33.09 | 33.09 | 33.09 | 33.09 |
| of which: | | | | | | | | |
| – contribution rate to the NDC scheme***** (as % of wage) | 20/18 | 20/10 | 20/10 | 20/10 | 10 | 10 | 10 | 10 |
| – contribution rate to the FDC scheme (as % of wage) | 2 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| index for the first pillar pension indexation (taking into account the pension amount in transition till 2011) | 100% CPI + 25% of the real | 100% CPI + 50% of the real growth of the wage sum | | | | | | |
| Retirement age *de facto* | | | | | | | | |
| – male | 61 | 62 | 62 | 63 | 63 | 63 | 63 | 63 |
| – female | 58 | 62 | 62 | 63 | 63 | 63 | 63 | 63 |

*Note*: * The calculation of GDP growth assumes that the ratio of wages to GDP will decline through 2009, as suggested by the historical national income statistics (trend – extension – method) and the projections of the Ministry of Finance. It is possible to assume a continued decline even after the year 2009 – the last year in the MoF projections. However, the ratio cannot continue to decline forever, because the wage component in GDP would become small and eventually disappear. Therefore, it is assumed that the wage component in GDP will stop declining beginning in 2010. From then on, GDP is assumed to grow at the rate of growth of the wage sum.

** Registered unemployed persons as a percentage of the total number of the economically active population.

*** The real long-run financial rate of return under the FDC scheme is assumed to be 4 percent a year, 1–2 percent points higher than the assumed real growth of wages (which in general determines the rate of return for NDC pension capital). It is difficult to know how many people will choose the "refunding option" from 2014 onwards, as there is no experience elsewhere. Therefore, for the calculations it is assumed that all savings are used to purchase annuities from life insurance annuities and that the annuities include a real return of 2 percent. *There are no assumptions about administrative costs and all financial rates of return in this analysis are assumed as net rates.*

**** Assuming that economic growth and prosperity will gradually lead to an improvement in life expectancy, a slight increase in the actual retirement age to age 63 in 2030 is projected for the long-term future. Since people are assumed not to postpone retirement past the age of 63 even though life expectancy is increasing, such a low retirement age will automatically hold down the yearly pension amounts and, accordingly, income replacement ratios. Certainly some will postpone retirement in the coming decades, which means that this assumption is very conservative.

***** The FDC scheme will be fully mandatory only in around 2035. Until then, there will be people who are not participating and are therefore paying at the full contribution rate of 20 percent to the NDC pension. At retirement, their NDC pension will be based on this full contribution rate. The assumptions show the contribution rate for the NDC pension scheme for both non-participants and participants in the FDC scheme.

A more detailed analysis, with different development scenarios, can be found in Vanovska, Stabina, and Pukinska, 2003.

Chapter 3

# Pension Reform in Lithuania

*Romas Lazutka*

## Abbreviations

| | |
|---|---|
| EU | European Union |
| EUR | Euro |
| GDP | Gross Domestic Product |
| ILO | International Labour Organization |
| ISSA | International Social Security Association |
| LFMI | Lithuanian Free Market Institute |
| LTL | Lithuanian lita (currency) |
| MSL | Minimum Subsistence Level |
| MSSL | Ministry of Social Security and Labour |
| PPF | Private Pensions Funds |
| SD | Department of Statistics |
| SODRA | Social Insurance Fund |
| UN | United Nations |
| USD | US dollar |
| WB | World Bank |

## Introduction

Like other countries in Central and Eastern Europe, Lithuania faced many challenges during the transition from a planned to a market economy. In a very short period, it had to restore an independent state, establish new state institutions, implement an unprecedented structural economic reform, and expose its economy to international competition. Lithuania's impressive recent economic growth, financial stabilization, and admission to the EU all form a solid basis for its future prosperity.

While the benefits of creating a democratic state are immense and undeniable, this endeavour has nevertheless involved huge social costs. Among these were, at the beginning of the transition period, an increase in the mortality rate and a decline in the fertility rate, a great loss of employment, and a rise in poverty and socio-economic inequality. In addition, the benefits gained from the transformation of the economy, as well as its social costs, were not distributed evenly throughout society. These drastic changes greatly increased the demand for social security, while at the same time tightly restricting the options for financing it.

The new economic and political environment created a need for the Government to reform the pension system. Runaway inflation and a substantial decrease in employment during 1991–93 threw the system's financing out of balance. It was an extremely difficult time for the Government to provide income security for retirees. However, when the macroeconomic shocks subsided, the Government succeeded in introducing a modern social insurance pension scheme. Nonetheless, the issue of its privatization appeared soon thereafter on the political agenda.

We can distinguish three main phases of pension restructuring since 1989. The first phase began in the immediate post-Soviet years with the adoption of the Law on State Social Insurance, which also provided for the establishment of an autonomous National Social Insurance Fund (SODRA). SODRA was given responsibility for both pensions and short-term social insurance benefits. This phase introduced a typical social insurance model for financing benefits through contributions and administrating them via a semi-autonomous body. However, pension benefits themselves were not reformed at that time.

The second phase started at the beginning of 1995. Several new laws on pensions came into force, modifying benefits as well as the conditions under

which they were awarded. This phase very clearly divided pensions into contributory and non-contributory, or state benefits.

The third phase of pension reform commenced in 2003. This consisted of a partial privatization of the social insurance system. Parliament adopted key legislation in 2003, and SODRA began transferring part of social insurance contributions to private funds in mid-2004. Unlike most other Central European countries, Lithuania made its private savings system optional for employees. Persons of any age who were covered by (full) social insurance were given the option to accumulate a part of their contributions in a personal account.[1]

The thrust of these changes will be analyzed below, with reference to their respective reform stages and their chronology.

# 1. Demographic and Economic Background

## *1.1 Population Development*

Lithuania experienced significant population losses during the Second World War and the post-war period. As a result of wartime deaths, emigration to the West and exile to Siberia, the population dropped from 3 million in 1939 to almost 2.5 million in 1950. Later, from 1950 to 1990, the demographic situation improved, with a population increase of nearly 1 million (Figure 1). This is attributed not to a higher fertility rate, which in fact was in decline, but to considerable immigration from Slavic Soviet Republics and, a slight drop in the death rate. However, the population decline since 1990 and a similar forecast for the future suggest that the demographic golden age is over.

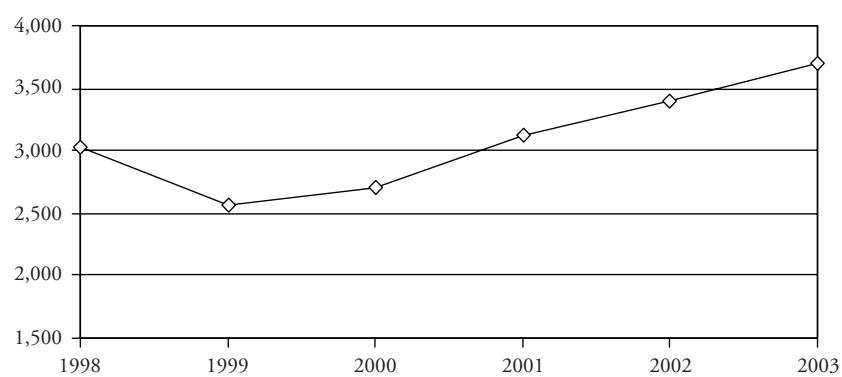
Because of the demographic upturn of 1950–1990, the Lithuanian population remains quite young in comparison with most other European nations. The working-age population (aged 15–60) comprises over 60 percent, whereas the remaining part is divided almost equally between children and retired persons. It

[1] In addition, a number of other minor changes that cannot be ascribed to one particular stage of reform have also been implemented.

is no surprise, then, that Lithuania has not yet joined the ranks of those European countries that forecast to experience the most dramatic demographic ageing.

What has caused this more favourable population structure for the Lithuanian pension system compared with neighbouring countries? Four distinctive features are important here: late industrialization, the Catholic Church, Soviet employment and family policy, and a relatively short life expectancy. Lithuania experienced rapid industrialization in the 20th century, relatively late by European standards. It was not until 1970 that the population was distributed equally between urban and rural areas. As for the influence of the Catholic Church, while Lithuania adopted Christianity late (1387), evidence of the Church's pervasive and enduring authority can be found in the fact that before 1990 Lithuania's birth rate was higher than that in any other Soviet European territory. Similarly, the broad network of childcare facilities, established as a result of the Soviet policy of requiring all people, both men and women, to work meant that working mothers could still have large families. Thus, because of these social factors and circumstances, the birth rate in Lithuania fell more slowly than in most other European countries.

**Figure 1**
**Lithuanian population [thousands]**

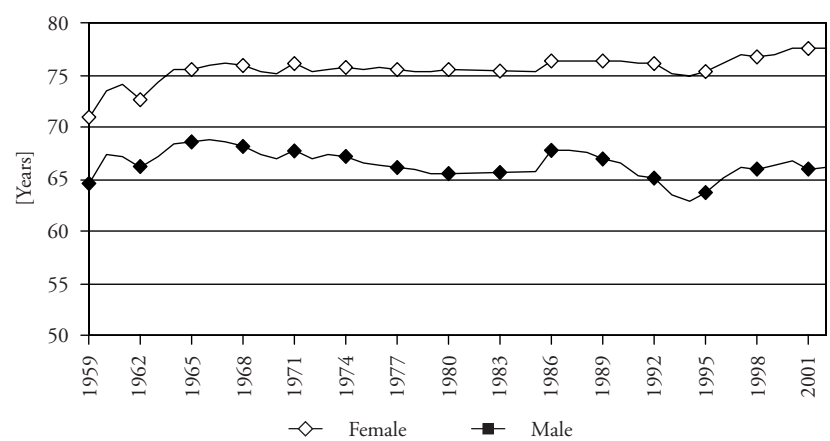



*Source*: Department of Statistics.

By contrast, life expectancy in Lithuania remains low. This is largely the result of its relatively low standard of living. The life expectancy of a female born in 2002 is 77.6 years, while that of a male is 66.2 (Figure 2). The average male life expectancy is low due to a high mortality rate among working-age men. At the age of 60, however, the difference between male and female life expectancy falls to 5.7 years (women – 21.8, men – 16.1) (Department of Statistics, 2003: 84). Due to such differences, the number of elderly Lithuanian women is almost double the number of elderly men.

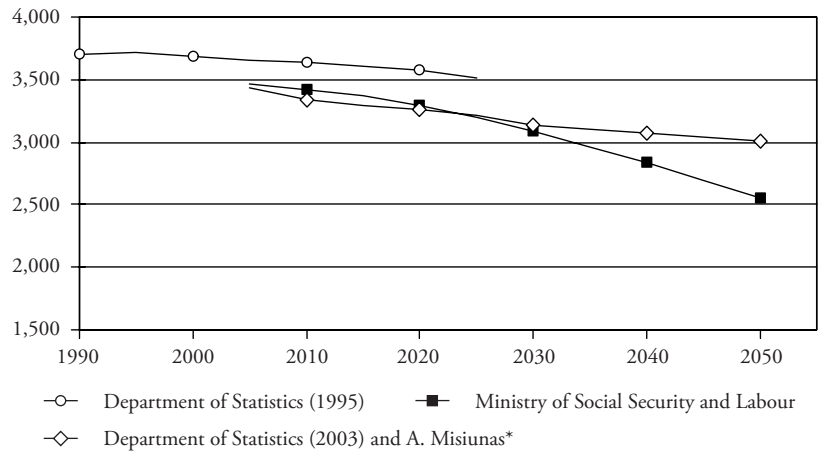
Despite a low life-expectancy, the population age structure changed unfavourably for the pension system. This was caused by a rapid decline in the birth rate. The rate of newborns per 1,000 persons dropped from 23.6 in 1950 to 15.4 in 1990 and 8.6 in 2002 (Department of Statistics, 2003: 65–66). Moreover, during the last few decades, the percentage of persons aged 60 and over has grown by nearly two-thirds (from 12 percent in 1959 to 20 percent in 2003), while the percentage of children under 14 has fallen from 27 to 18 percent. Naturally, such a decrease means a reduced working-age population in the near future. As a result, forecasts of the population composition for the coming decades are especially gloomy.

**Figure 2**
**Average life expectancy at birth [years]**




*Source*: Department of Statistics.

**Figure 3**
**Forecasts of the Lithuanian population [thousands]**



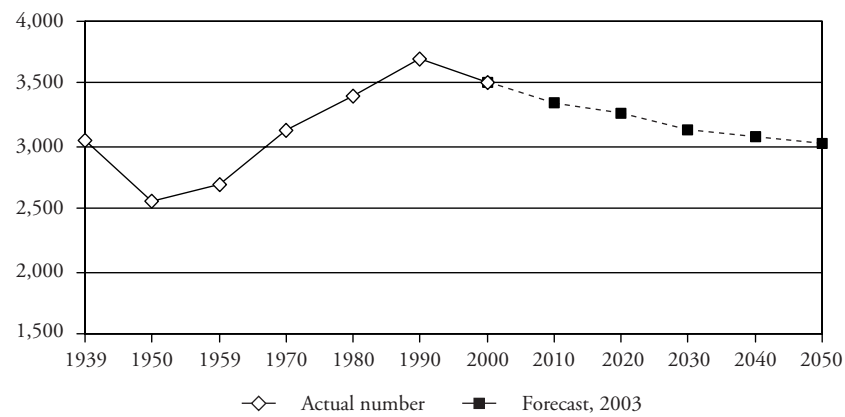

* Population forecast for 2004–2030 was made by the Department of Statistics. Misiunas extended it to 2050.

As early as 1995, the Department of Statistics forecast that the population would fall from 3.7 million to 3.5 by 2025 (Figure 3). However, the 2001 public census revealed that the actual population was almost 200,000 fewer than had been registered by national statistics. Thus, the 2003 forecast of the Department of Statistics is even more pessimistic, as it predicts that in 2030 there will only be 3.18 million persons living in Lithuania. If such a trend continues, one may expect to see the population fall to 3 million by 2050, that is, to the pre-war level of 1939 (Figure 4). It should be noted that the Ministry of Social Security and Labour forecasts a slightly slower decline in population by the years 2015–2025. Nonetheless, it predicts that by 2050 the figure may decrease suddenly (see Figure 3). This study is based on the last forecast made in 2003, which evaluated the latest developments in birth rate and migration.[2] As the negative effects of the transitional economic hardships

[2] Forecasts of the Department of Statistics and Misiunas are presented in Figure 3 and Figure 4. The key assumptions of the forecast are presented in Table 1.

diminish or come to an end during the next decade, the aggregate fertility rate is expected to rise. In addition, the decline in negative net migration is expected to remain insignificant. Likewise, future life expectancy should rise as a result of improved living conditions and positive lifestyle changes.

**Figure 4**
**Forecast of the Lithuanian population [thousands]**




*Source*: Population forecast for 2004–2030 was made by the Department of Statistics. Misiunas extended it to 2050.

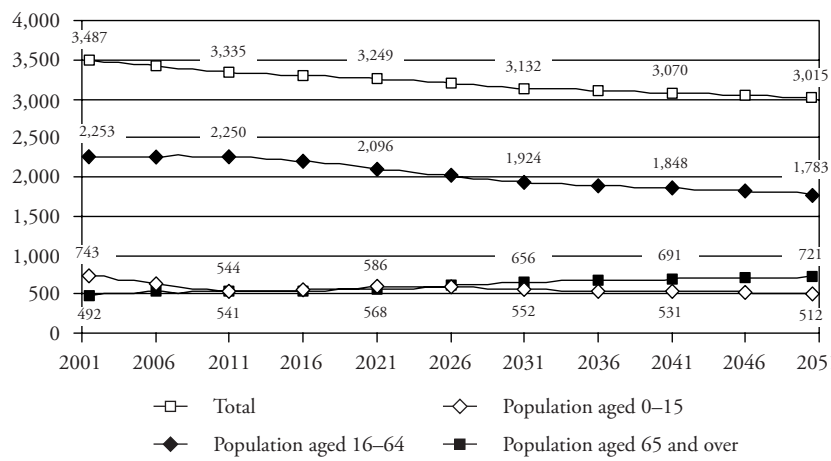
**Table 1**
**Demographic assumptions**

| | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |
|---|---|---|---|---|---|---|---|---|---|---|
| Fertility rate | 1.27 | 1.53 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 |
| Life expectancy (male) | 66.78 | 68.15 | 69.79 | 71.36 | 72.53 | 73.00 | 73.00 | 73.00 | 73.00 | 73.00 |
| Life expectancy (female) | 78.19 | 79.36 | 80.57 | 81.64 | 82.41 | 82.70 | 83.00 | 83.00 | 83.00 | 83.00 |
| Net migration [thousands] | –8.3 | –5.9 | –4.6 | –3.6 | –2.6 | –2.1 | –1.8 | –1.5 | –1.3 | –1.1 |

*Source*: Author's calculations.

This forecast offers little basis for optimism about pension financing (Figure 5). Within 50 years, the size of the working-age population may decrease by approximately 20 percent. The ratio of children is also likely to change, as will that of the elderly, although in the opposite direction. It is predicted that the number of children aged 0–15 years will decrease from 0.7 million to 0.5 million, while the number of persons aged 65 and over will increase from 0.5 million up to 0.7 million. Thus, the overall dependency ratio (children and elderly persons to working-age persons) will increase from 54.8 percent in 2001 to 69.2 percent in 2050.

**Figure 5**
**Forecast of the age composition of the Lithuanian population [thousands]**

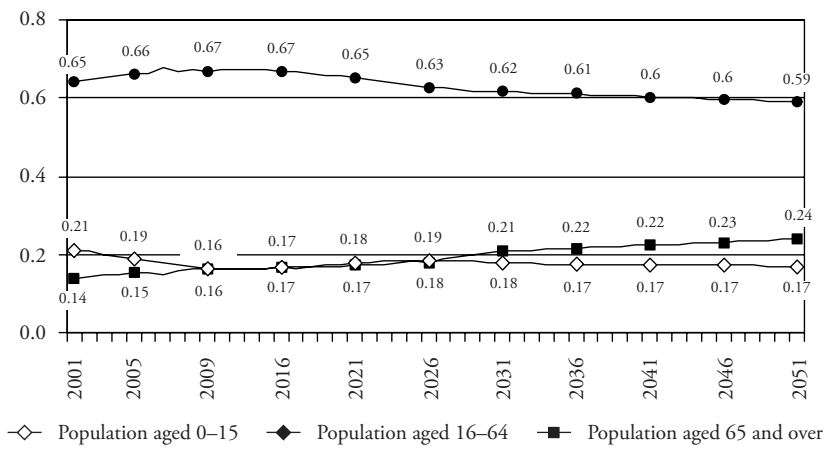



*Source*: Author's calculations.

The forecast also shows that the dependency ratio of elderly persons (the ratio of elderly people to those of working age) will increase from 21.8 percent to 40.4 percent during the same period (Figure 6). By 2010, the percentages of children and elderly persons within the total population will be equal (16 percent each). Later, the percentage of elderly persons will rise at a constant rate and, in 2050, will account for nearly one-quarter of the overall population.

All the forecasts of the population predict an overall decline (Figures 1–3). However, they show different rates depending on their assumptions. Moreover, because both the birth rate and migration patterns have changed rapidly since 1990, forecasters have found it difficult to calculate these crucial indicators, resulting in further divergence. It is hard to believe, however, that the current emigration and reduced fertility rate trends will prevail in the long run, although no one can agree for how long and to what extent these indicators will improve.

**Figure 6**
**Forecast of Lithuanian population age composition**




*Source*: Author's calculations.

J. Alho created a stochastic model of the Lithuanian population (Alho, 1998: 5, 8, 13–15). His forecast was based on the following principle assumptions:

- the fertility rate will remain constant at 1.35 until 2050;
- the mortality rate is defined on the basis of an observed decrease in mortality in the 1998–1999 period; and
- based on data and projections of notional welfare growth from the previous decade, the annual migration rate of 17,000 emigrants will gradually decline and immigration will begin; therefore, by 2006 net migration should be 0.0.

This forecast shows, with only a probability of less than 10 percent, that the population in 2050 may be higher than in 2000. It is far more likely that the population will instead drop by approximately 0.5 million, to 3 million. Meanwhile, the probability that the population will be less than 2 million in 2050 is far greater than 10 percent (Alho, 1998: 15–17). On this basis alone, one can argue that Lithuania will face problems related to a population decline.

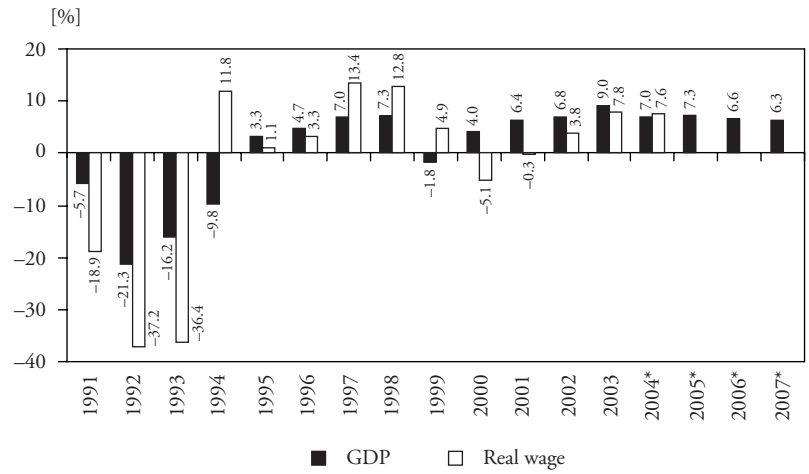
The probability of the population being between 2.1 and 3.1 million in 2050 is the same as the probability of having less than 2.2 million or higher than 3.5. In order to define the future population more precisely, we have to apply a larger interval, i.e., a relatively high probability of 80 percent, and say that population will fall within the range of 1.8 and 3.5 million. The uncertainty becomes evident when we look at 2020, when the interval of a relatively reliable forecast (80 percent) comprises over 0.5 million persons, i.e., it may be fewer or more than 0.5 million. Thus, the forecast for Lithuania's population is both gloomy and vague. Uncertain demographics may be difficult for different groups in society to reach consensus on proposed pension reforms. It may also create leeway for those arguing for or against reform to slant their estimates.

### *1.2 Economic Background*

During 1990–1995, the economic environment in Lithuania was highly unfavourable for the financing of pensions. The decline in GDP in all 3 Baltic states was approximately 30 percent higher than in all other Eastern and Central European countries. Lithuania remained in a state of near economic collapse from 1990 to 1994. Output fell by 21 percent, 16 percent, and 10 percent in 1992, 1993, and 1994 respectively (Figure 7).

Only after 1995 did the Baltic states region show signs of growth, and from 1995 to 1998 the Lithuanian economy improved. This upturn, however, was derailed by the Russian financial crisis in 1998, which caused local producers to lose customers in the Russian market. The Russian recession was the major cause of a 1.8 percent decline in Lithuanian GDP in 1999, and the Lithuanian economy on the whole contracted considerably. In 2001, the GDP still comprised only 69 percent of the 1989 level (see Katkus and Lazutka, 2000: 7).

**Figure 7**
**The decline and growth of GDP and real wages [%]**




* Forecast of Ministry of Finance for the years 2004–2007.

*Source*: Department of Statistics.

In contrast, since 2000, the Lithuanian economy has been growing, and recent growth has been particularly impressive. There have also been positive structural effects. The shrinking of the Russian market forced Lithuanian industry to redirect itself dramatically towards Western markets. As a result, a larger part of Lithuanian exports is now aimed at the European Union.

The economic decline of the early- to mid-90s was accompanied by enormous inflation. Prices rose twelve-fold in 1992 and almost tripled in 1993 (Table 2). As will be shown, this had a drastic effect on public finance and pension payments.

**Table 2**
**Inflation in 1990–2004 [%]**

| 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.4 | 382.7 | 1,162.6 | 188.7 | 45.1 | 35.7 | 13.1 | 8.4 | 2.4 | 0.3 | 1.4 | 2.0 | –1.0 | –1.3 | 3.0 |

* November 2004 to November 2003.

*Source*: Department of Statistics.

In 1993, Lithuania introduced its own currency, *litas* (LTL), and established a currency board in 1994. Initially the anchor currency was the US dollar (1 USD – 4.0 LTL), but since the beginning of 2002, the currency has been pegged to the Euro (1 EUR – 3.45 LTL).

Within 3 to 4 years of introducing a national currency and establishing a currency board, Lithuania had managed to curb inflation to 8.4 percent (1997). Since 1998, the annual rate of inflation has not exceeded 2.5 percent. During the last 3 years, despite rapid economic growth, there has been, in fact, deflation.

However, the introduction of a national currency caused great financial losses for many Lithuanians. Before the introduction of LTL in 1992, the Government promised to replace citizens' bank deposits with the new currency at a favourable exchange rate. Consequently, people did not hurry to spend their savings; in fact, some even increased their deposits. However, because there was huge inflation that year, most deposits were devalued. People were promised that their lost deposits would be replaced; even so, mistrust of the Government among the population became widespread. Four years later, in 1996, after being re-elected, the political majority continued promising to compensate for the lost deposits and adopted a law that called for using a privatization fund for that purpose. Unfortunately, in part because the resources needed to achieve this were enormous (estimated at 6 percent of GDP), this was not an easy promise to keep. Although successive governments have recognized the outstanding commitment to depositors, only a small amount of funds has been allocated for that purpose. By 2004, the amount for which depositors are still to be compensated is 1.7 billion, or 3 percent of GDP. Such state financial commitments have major implications for pension reform and, in particular, for the state's capacity to cover the transitional costs of pension privatization.

A core of sound and efficient banks and insurance companies is important for the handling of private pension contributions, the maintenance of individual records and accounts, the provision of robust and efficient custodial services, and the offering of reliable insurance contracts. The process of bank privatization was completed in Lithuania in 2002. However, the development of the banking sector was interrupted by a crisis in 1995, which was caused by imprudent and sometimes fraudulent management as well as by the lack of

regulation and of Government regulatory skills. In all Baltic countries during the early 1990s, supervisory systems were inadequate and prudential regulations were absent. Deficiencies in supervision and in the legal framework helped to diminish the quality of bank portfolios (Katkus and Lazutka, 2000: 27).

In 1995, the banking crisis cost a part of the population its savings. Consequently, mistrust of private financial institutions prevailed. Private funds that had not even been established were already in disrepute. The Government again committed itself to compensating for the lost deposits, which increased its liabilities and fuelled arguments against the privatization of the pension system.

Usually, income from the privatization of public enterprises is regarded as a desirable source of financing for pension reforms. Currently in Lithuania, large-scale privatization is near completion, although the state continues to retain its shares in some large infrastructures (electricity, railway, etc.). In absolute terms, Lithuania has generated 2.8 billion USD in revenue from privatization. This amount was nearly 10 percent of GDP in 2000, when pension reform was planned. However, Lithuania has acquired a large share of privatization funds for other purposes, e.g., for the restitution of property and compensation of bank deposits lost during the introduction of LTL and the banking crisis.

The public budget deficit and debt are important for pension reforms as well. Public debt is significant not only because it determines borrowing possibilities but also, as shown by Müller, because it determines the extent to which the World Bank could influence pension reforms in certain countries (Müller, 1999). Generally, the share of the Lithuanian Government in the economy is very small. Total public expenditure accounts for 30 to 33 percent of the GDP. Therefore, the reserves for managing public expenditure are also very scarce. Government debt remains insignificant (approximately 21–22 percent of GDP), since it started to accumulate from 0.0 in 1990. The 1998 Russian financial crisis had a negative effect on the Lithuanian Government budget, whose deficit exceeded 5 percent of the GDP in 1999 (Table 3). It was an exceptionally threatening year for both overall public finances and the pension system. However, since 2000 successive governments have introduced a relatively strict financial regimen, and it is expected that the public deficit will not exceed Maastricht requirements (3 percent of GDP).

**Table 3**
**General government net borrowing and general governmental gross debt [% of GDP]**

| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004* | 2005* | 2006* | 2007* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Net borrowing | –1.6 | –4.6 | –5.6 | –2.4 | –2.1 | –1.5 | –1.7 | –2.7 | –2.5 | –1.8 | –1.5 |
| Gross debt | — | — | –23.0 | –23.8 | –22.9 | –22.4 | –21.5 | –22.4 | –22.2 | –21.4 | –21.0 |

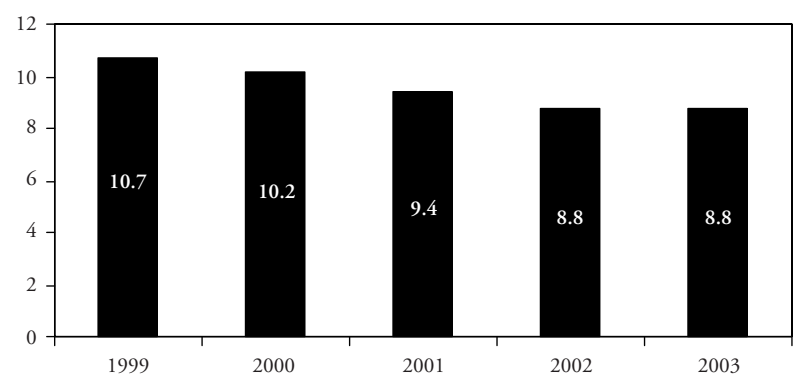
* Projections by the Ministry of Finance.

*Source*: Government, 2004: 21.

All areas of public spending in Lithuania are financed at low levels. The total expenditure on social security (including healthcare) comprises approximately 15 percent of GDP (Annex Table 1). Social insurance accounts for less than 9 percent of GDP, whereas all pension expenditure makes up only 7 percent (the remaining part of social insurance is allocated to short-term benefits). Since 2000, with a growing GDP, social insurance expenditure, including expenditure on pensions, has decreased (Figure 8).

Lithuanian tax revenue comprises an even smaller share of GDP than does expenditure. Among EU countries, Lithuania has one of the lowest tax burdens, with taxes comprising only around 28 percent of GDP. Total public revenue in 2000 was 30.2 percent of GDP.

**Figure 8**
**Social Insurance Fund expenditure [% of GDP]**




*Source*: Government, 2004: 26.

### *1.3 Labour Market Transformation*

During the first 5 years of the transition period, the Lithuanian labour market was completely transformed, a process which had highly negative effects on the pension system: with the reduction in the number of employed persons came a reduction in the means to finance it. The number of employed fell from 1,852,700 in 1990 to 1,643,600 in 1995. In 2000, it sank to 1,586,000, that is, to only 85.6 percent of the 1990 figure (Table 4).

**Table 4**
**Employment in Lithuania [average annual number, thousands]**

| | Labour force | Employed |
|---|---|---|
| 1990 | 1,852.7 | 1,852.7 |
| 1991 | 1,902.8 | 1,897.6 |
| 1992 | 1,879.3 | 1,855.2 |
| 1993 | 1,859.3 | 1,778.2 |
| 1994 | 1,740.7 | 1,675.0 |
| 1995 | 1,725.6 | 1,643.6 |
| 1996 | 1,783.5 | 1,659.0 |
| 1997 | 1,773.7 | 1,669.2 |
| 1998 | 1,769.8 | 1,656.1 |
| 1999 | 1,796.2 | 1,647.5 |
| 2000 | 1,790.9 | 1,586.0 |
| 2001* | 1,635.8 | 1,351.8 |
| 2002* | 1,630.3 | 1,405.9 |
| 2003* | 1,641.5 | 1,437.6 |

* Figures are not comparable to the previous years because they are revised according to the 2001 Census.

*Source*: Department of Statistics.

Employment in Lithuania decreased mainly due to the transformation of industries and the growth of the service sector. Correspondingly, the number of people working in the agriculture sector, which tended to grow before

1996, declined in 2000, although it still accounted for nearly one-fifth of all employed workers (Table 5). These changes also had a negative impact on the pension system. Farmers, for example, are insured only for the base pension, and the larger part of this group avoids participating in the system.[3] In the service sector, illegal employment and hidden wage payments without social insurance contributions are widespread.

The shifting of jobs to the private sector also had a negative effect on the social insurance pension system, since tax authorities and social insurance administration had less control over private companies. Public enterprises were privatized, and new private entities were established. By 1994, the private sector had over 60 percent of all jobs; in 2000, this ratio approached 70 percent (Table 5).

**Table 5**
**Employed population by economic sector and ownership** [%]

| | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|---|---|---|---|
| Industry, total | — | 28.8 | 25.7 | 22.4 | 21.3 | 20.2 | 20.1 | 20.1 | 19.9 | 20.2 |
| Building industry | — | 9.2 | 7.1 | 6.6 | 7.0 | 7.2 | 7.1 | 7.1 | 6.6 | 6.1 |
| Agriculture | — | 19.5 | 22.4 | 23.3 | 23.7 | 24.1 | 21.7 | 21.4 | 20.1 | 19.6 |
| Services | — | 42.5 | 44.8 | 47.7 | 48.0 | 48.5 | 51.1 | 51.4 | 53.4 | 54.1 |
| Public sector | 70.2 | 54.0 | 45.8 | 38.5 | 36.5 | 33.4 | 32.3 | 31.2 | 31.8 | 31.2 |
| Private sector | 29.8 | 46.0 | 54.2 | 61.5 | 63.5 | 66.6 | 67.7 | 68.8 | 68.2 | 68.8 |

*Sources*: Department of Statistics and SODRA, 2004.

In 1990, in Lithuania as in all of the Soviet Union, private economic activity was prohibited; therefore, self-employment did not exist. By 2000,

[3] Farmers and self-employed people with low income are insured only for the basic part of pension and make flat-rate contributions to the scheme. Employees and some higher-income categories of the self-employed are insured for full (basic and earnings-related) pensions and pay earnings-related contributions, which are much higher than the flat-rate contributions. Consequently, people insured for full pensions are the primary contributors to the pension scheme.

however, self-employed persons comprised approximately 15 percent of all workers, while a further percentage of workers were engaged in family businesses. Consequently, employees and civil servants accounted for only approximately 1,200,000, or 80 percent of the employed population (Table 6). Such a change has had an important impact on the overall pension system, as self-employed persons are not insured for the full pension and pay much smaller social insurance contributions.

Some former public sector employees found work in the shadow economy where they did not participate in the social insurance system. It is difficult to estimate what portion of employers hid part of their work force or their wages. However, the situation in Lithuania in this respect was not worse than in neighbouring countries. In a report written in 1998, the World Bank estimated that approximately 85 percent of contributions that ought to have been collected by law were actually collected, noting that "compliance in many Eastern and Central European countries is less than 80 percent, and compliance elsewhere in the former Soviet Union is often substantially lower" (World Bank, 1998: 282).

**Table 6**
**Population by employment status in 2000**

| | [Thousands] | [%] |
|---|---|---|
| Employers | 29.1 | 1.9 |
| Employees | 1,203.5 | 79.3 |
| Self-employed | 224.2 | 14.8 |
| Assisting family members | 55.4 | 3.6 |
| Others | 5.6 | 0.4 |
| Total | 1,517.8 | 100.0 |

*Source*: Department of Statistics.

According to data provided by the Labour and Social Research Institute, unofficial employment grew until 1994, reaching 380,000, or 22.7 percent of the total number of employed. Later, it declined to 230,000, or 14.5 percent of the employed (Institute of Labour and Social Research, 2001: 27).

Unfortunately, the shrinking of the shadow economy did not mean that the number of those covered by the social insurance scheme increased. Instead, the decline reflected the fact that many of those illegally employed had simply left the country to seek work abroad.

Why is illegal employment still so widespread in Lithuania? Among other prime reasons is the relatively high tax on labour. Social insurance contributions equal 34 percent of wages, and the effective income tax rate is 29 percent, which makes the total tax rate 63 percent of an individual's wage. Few other European countries impose such high taxes on earnings (see Annex Table 2). This problem has existed for almost 10 years.

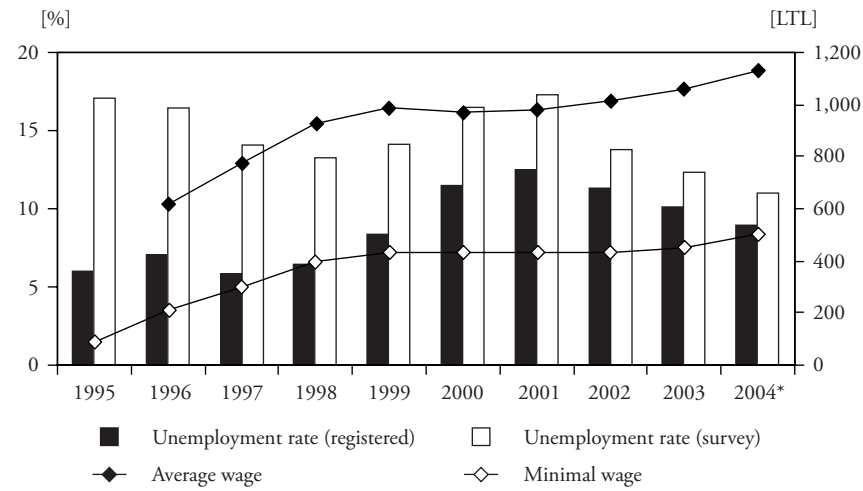
> *It seems that there is no more space for imposing a new tax burden on labour, otherwise the situation might be politically unacceptable. The same might be said for economic reasons, as any further increase in taxes on labour would make Lithuanian producers less competitive in international markets* (Government, 1995: 5).

Because employers must bear high costs in hiring workers while workers' take-home pay is low, both have incentives to operate in the shadow economy.[4] This means that qualified employees enjoy higher, albeit untaxed income in the short term; but their future security is at risk when they become old or disabled. Unskilled workers often do not even receive a higher illegal wage. Due to high unemployment, many agree to work for minimum wage. The FAFO Institute (Norway) conducted a survey that showed that as many as 60 percent of Lithuanian workers are afraid of losing their jobs (in comparison, corresponding estimates in Estonia are at 40 percent). In addition, temporary employment is very common in Lithuania: only 75 percent of workers have signed permanent labour contracts (FAFO, 2000: 52). One result for such uncertainty is that workers are forced to accept illegal employment. This in turn limits the Government's ability to strengthen pension financing by means of raising social insurance contributions.

[4] That is, their earnings after social insurance contributions and income taxes have been withheld.

Unemployment poses an additional pension-financing problem. After the transformation to a market-based economy, and as a direct result of it, the unemployment rate in Lithuania has remained high (Figures 1–9).[5]

**Figure 9**
**Unemployment rate and wage**




* Forecast of the Ministry of Finance.

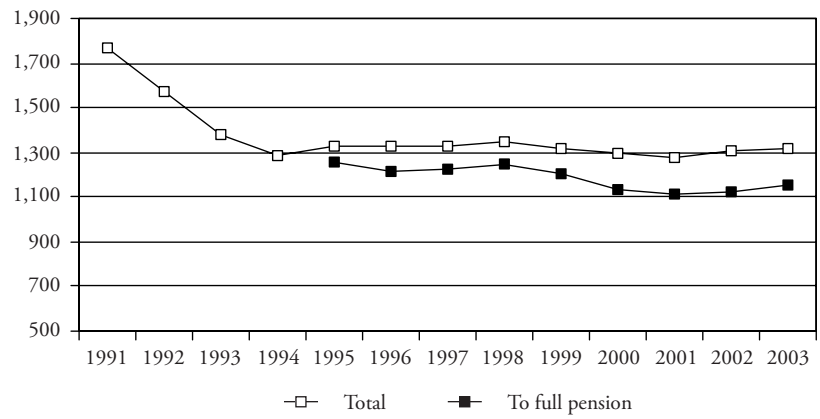
*Source*: Department of Statistics.

From the perspective of the pension system, these changes in the structure of employment served to offset Lithuania's comparatively good demographic indicators. For various reasons, the number of insured persons dropped from

[5] It should be noted that registration with the labour exchange is a compulsory precondition of receiving benefits from social assistance and healthcare services, and only those persons who are registered with the labour exchange and who are receiving unemployment benefits are credited with this period for purposes of qualifying for a pension. What is more, because of the very strict requirements for entitlement, benefits are paid to a relatively small share of the unemployed (approximately 12 percent in 2003). Thus, the majority of unemployed persons (i.e., those who do not receive unemployment benefits or are not registered with the labour exchange) are unable to increase their pension insurance record, which will have a negative effect on their future entitlement.

1,764,000 to 1,299,000 (Figure 10). The number of people paying social insurance contributions for a full pension fell even further.

**Figure 10**
**Contributors to Social Insurance Fund [thousands]**




*Source*: Social Insurance Fund.

In addition to the number of contributors, the level of wages is also important for the financing of social insurance pensions. At the beginning of the period (1991–1993), real average earnings decreased by more than twice the decline in GDP. Later, average earnings were boosted by pay raises for public servants and an increase in the minimum wage, although such actions by the Government only magnified the impact of the Russian crisis. Consequently, in 1999, national financial stability faced a serious threat. New governments introduced an austerity policy. Together with the decline in the private sector, this meant that wages were not increased despite economic growth (Figure 7 and Figure 9). In 2001, wages comprised only 30.8 percent of GDP, while profit and mixed income constituted almost the same share (Table 7).[6]

[6] This low percentage of wages is attributable, among other reasons, to the previously mentioned high taxes on wages. Other income is taxed at a much lower rate (since 2003, only 15 percent). Thus, instead of employment contracts that imply a high taxation rate on wages, various alternative contracts are used commonly.

**Table 7**
**Lithuanian GDP by income method [current prices]**

| | 1995 | | 2001 | |
|---|---|---|---|---|
| | [Mil LTL] | [%] | [Mil LTL] | [%] |
| Labour compensation: | 10,249 | 42.5 | 18,527 | 39.0 |
| Wage | 8,140 | 33.8 | 14,631 | 30.8 |
| Social insurance contributions | 2,108 | 8.7 | 3,897 | 8.2 |
| Profit and mixed income | 8,884 | 36.9 | 16,880 | 35.5 |
| Capital consumption | 2,106 | 8.7 | 6,599 | 13.9 |
| Indirect taxes | 3,139 | 13.0 | 5,904 | 12.4 |
| Subsidies | 275 | 1.1 | 412 | 1.0 |
| GDP | 24,103 | 100.0 | 47,498 | 100.0 |

*Source*: Department of Statistics.

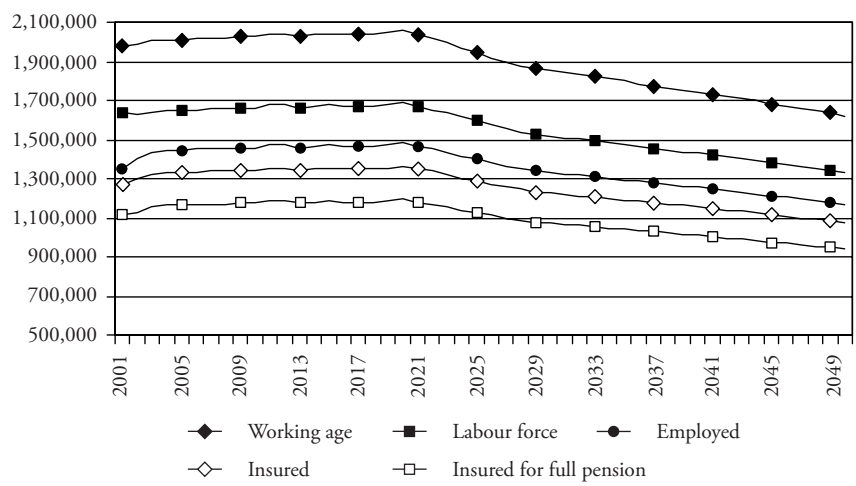
Another factor limiting the growth of wages was the low rate of labour unionization. Soviet trade unions essentially collapsed in 1990, and the remaining and new unions are very weak. Membership in trade unions barely exceeds 15 percent of the labour force, and collective bargaining effectively does not exist (OECD, 2003: 165). During a recent 3-year period (2000–2002), there were only 6 local strikes in industry and transport (Department of Statistics, 2003a: 159–160), a rather low amount in comparison to the several dozen strikes held during the same period by teachers, who were better organized. (Usually these strikes were held in response to the late payment of wages, because schools lacked sufficient funds.) What is more, the high level of unemployment, which consolidates the position of employers, made organizing difficult.

In accessing this situation, close observers often pay attention to the diminishing state role in the area of labour regulation (Gruzevskis, 2000: 69). It was not until 1996–1998 that the Government, with the aim of expanding social insurance contributions, undertook a policy of rapidly increasing the minimum wage. Aside from this, the Government does not possess any means of boosting wages in the private sector. Moreover, it is incapable of creating competition by increasing wages in the public sector due to the miserable

state of state budget finances.[7] Thus, during the economic transition period, the opportunities to increase pensions were limited by the faltering labour market's incapacity to supply the needed revenues.

Future negative demographic trends may exacerbate these labour market problems. However, in comparison with other countries, the retirement age in Lithuania is low (in 2003, 62.5 years for men, 59 for women). If the Government decided to increase the retirement age of both sexes to 65 gradually, it would offset the negative impact of population ageing for at least two decades (Figure 11). However, from 2020 to 2050 the number of persons insured for full pensions would still decrease by more than 20 percent, from 1,193,000 to 939,000 (Figure 11).

**Figure 11**
**Forecast of labour market indicators [number of persons]***



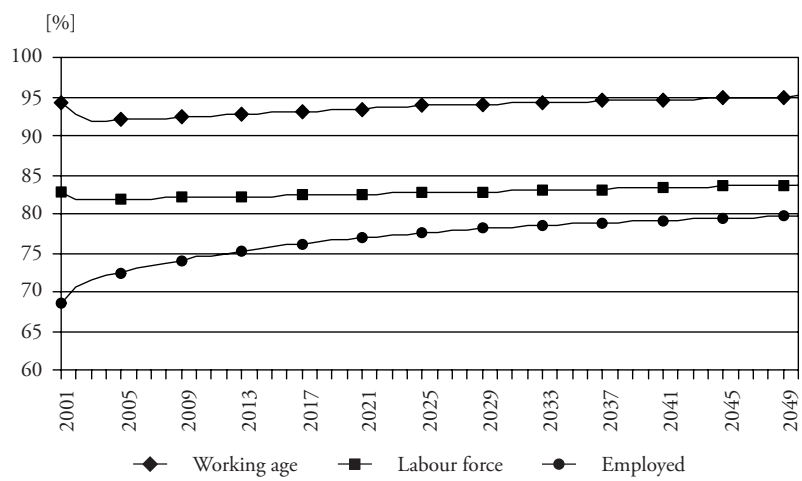

* *Forecast assumptions:* population, economic activity, employment, and insurance rates will remain constant at the 2001 level (economic activity rate, 82.8 percent; employment rate, 68.5 percent; and insurance rate, 94.2 percent); and the retirement age will be raised to 65 for males (during 2015–2020) and females (during 2010–2020).

*Source*: Author's calculations.

[7] In addition, as previously mentioned, public revenue in Lithuania is very limited.

When considering this situation, one ought to regard 3 factors as potential but currently non-utilized sources of pension financing: the relatively low retirement age, the low rate of employment, and the low participation in social insurance of those who are working. Increasing any of these 3 factors could help offset the negative impact of demographic factors on the pension system. On the basis of the previous population forecast (see Figures 5 and 6), it is possible to assess the changes in the labour market, i.e., to forecast the number of persons who will be employed and covered by social insurance.[8] Our projection assumes that the present high unemployment rate will drop progressively as the population continues to adapt to the economic structural changes. With the increase in employment, the number of pension contributors should also rise. These favourable economic changes may in turn alter the political situation, making it possible to increase the retirement age to 65 for men and women.

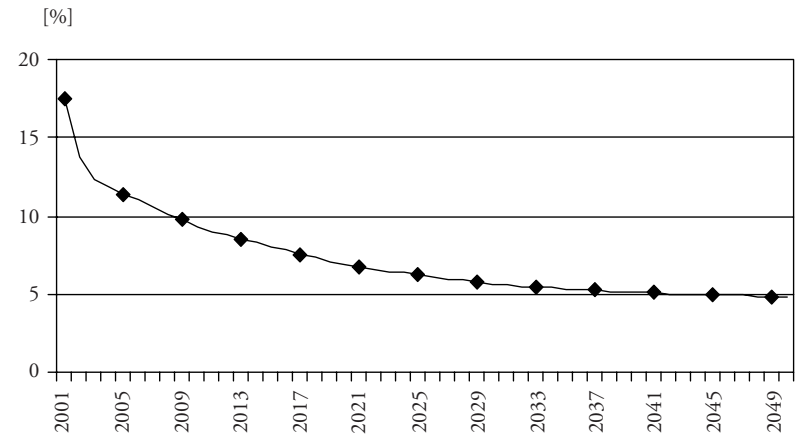
**Figure 12**
**Assumptions for forecast of labour market indicators**
**(activity, employment and insurance rates)**




*Source:* Author's calculations.

[8] The forecast assumptions are presented in Figures 12 and 13.

**Figure 13**
**Assumptions for forecast of labour market indicators (unemployment rate)**




*Source*: Author's calculations.

Of course, demographic ageing will not be altered by economic and legal changes. Our projection indicates that, during the 2001–2050 period, the number of persons of working age may still drop by 21 percent; the labour force by 17 percent; and the number of employed by 5 percent.[9] However, with longer working life and improved enforcement of the contribution requirement, the decrease in the number of insured persons may be far less marked, only in the neighbourhood of 2.5–3 percent, under this favourable scenario (Figure 14).[10]

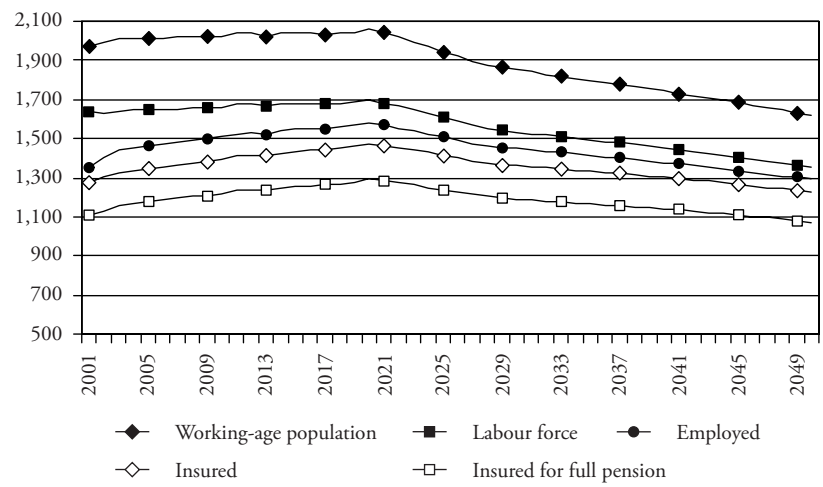
To sum up, in the early 1990s, the negative impact of demographic changes on the pension system was intensified by adverse changes in the labour market. Structural changes in the economy caused a rapid drop in employment in sectors where participation in social insurance was high (e.g., the public sector and industry). This increased the pension system dependency ratio. Low-paid

[9] Specifically, the working-age population is assumed to drop from 1.98 million in 2001 to 1.62 million in 2050; the labour force from 1.66 million in 2001 to 1.36 million in 2050; the number of employed from 1.35 million in 2001 to 1.29 million in 2050.

[10] The number of insured persons is projected to decrease from 1.27 million in 2001 to 1.23 million in 2050.

labour contributed a relatively small amount to the social insurance fund even with high contribution rates. Consequently, pension financing became expensive and the pension system was perceived as unattractive. These factors, however, were not broadly understood, nor were they perceived by the general public as the cause of low pensions.

**Figure 14**
**Forecast of labour market indicators [thousands]***




* *Forecast assumptions:* population economic activity rate will increase from 82.8 percent in 2001 to 83.7 percent in 2050; the employment rate will increase from 68.5 percent in 2001 to 79.7 percent in 2050; the ratio of insured persons will increase from 94.2 percent to 95.0 percent during the same period; and retirement age will be increased to 65 for males (in the period 2015–2020) and females (in the period 2010–2020).

*Source*: Author's calculations.

Looking to the future, a negative demographic trend is forecasted for the next half century. However, reduced unemployment and the shrinking of the shadow economy may partially offset the expected decrease in the working-age population. Even under this scenario, however, the growth of the pension-age population still requires attention by policymakers and greater resources for pension financing.

# 2. Substantial Elements of Pension Reform

## *2.1 The First Stage of Pension Reform (1990–94): Adaptation of the Soviet Pension Scheme to the New Political and Economic Environment*

### 2.1.1 Establishment of the Social Insurance Fund

The effort to create a new social insurance pension scheme in Lithuania was an integral part of the restoration of an independent state and the dismantling of the former Soviet centralized departments. By the autumn of 1988, Soviet authorities in Lithuania had already felt the strong effects of the broad public movement called Sajudis.[11] Leaders of Sajudis began openly declaring the need to re-establish a Lithuanian state independent from the Soviet Union. Prior to the declaration of independence, the Supreme Council adopted a Resolution Concerning the Transformation of the Social Insurance System of the Lithuanian SSR on 13 February 1990. The Resolution provided for the transfer of social insurance from the Soviet trade unions, which were subordinate to Moscow, to the Lithuanian authorities.

On 13 March 1990, the third day after the declaration of independence, the State Social Insurance Fund (SODRA) was established under the Ministry of Labour and Social Welfare and was charged with the administration of social insurance. SODRA and its local divisions began registering workers and employers, collecting contributions, and paying benefits. Its capacity to assume these functions quickly and effectively shows that the preparation for the establishment of the new social insurance institution had been thorough during the short struggle for independence.

On 23 October 1990, Parliament adopted the Law on the Basis for the Social Welfare System, which differentiated social insurance from social

[11] Sajudis was the main organized group in the struggle for an independent Lithuanian state at the end of the Soviet regime (1988–1990). Soon after, democratic political parties were established and gained their own role in the political process. As a result, after the Declaration of Independence on 11 March 1990, Sajudis lost its dominance.

care and social assistance and provided for an independent social insurance budget. In May 1991, the Law on the State Social Insurance of the Republic of Lithuania was enacted. This law provided for independent financing and administration of social insurance. Thus, since 1990, Lithuanian social policy has been oriented towards an institutional separation of social insurance, which is funded by contributions, from the remaining part of social protection, which is still financed from general revenue. In total, a 30 percent social insurance contribution rate was established for employers and one percent for employees, with 22.5 percent and 1 percent for pension insurance, respectively.[12] The administration of social insurance in general and of social insurance pensions specifically was shifted from the Social Department of Executive Committees of Deputies' Councils to the newly-established SODRA. SODRA's council consists of representatives of employers, employees, and the Government. The Government approves the contribution rate as well as the social insurance budget every year. The State Social Insurance Board and its local departments administer the Social Insurance Fund, keep records on participants, and pay benefits.

On 21 November 1991, SODRA was accepted as a full member of the International Social Insurance Association (ISSA), which provided its employees and other persons engaged in the social sector with the opportunity to learn from other countries. On 7 February 1992, SODRA proclaimed 23 March as The Day of Social Insurance. That date was chosen because it was the anniversary of Lithuania's adoption of its first social insurance law in 1926. Thus, this act linked modern social insurance to that of the independent Lithuania of 1918–1940.

During the initial stages of independence, there was no time for wide public debate or the development of a comprehensive model of the future pension system. The only thing that was clear to everyone was that the Soviet social security system was incompatible with a market economy and political

[12] The social insurance contribution rate was increased by 1 percentage point for employers and 2 points for employees in 1999. Currently, it is 31 percent for employers and 3 percent for employees. The division of the total contribution rate between separate social risks is flexible, i.e., it depends on the annual needs of financing social insurance benefits.

democracy, and reform was needed. To advance this view, the first laws were passed and institutional changes were made in 1990–1991.

The core ideas driving the reforms were to restore the insurance principle, strengthen the incentive to work, and adjust social transfers for inflation. The former Minister of Social Security and Labour expressed this view:

> *One of the probable motives of the decision-makers was to choose a system which would be more compatible with a market economy (as it seemed then), as opposed to a "socialist" one, underlining the right to receive social insurance benefits based on past contributions* (Medaiskis, 1995:115).

While it may sound paradoxical, it is true nevertheless that the creation of a pension system following the Bismarckian model was driven in part by an inability to avoid the Soviet legacy. The communist principle of paying "everyone for the work done" was followed by linking the size of pensions with each worker's former earnings and record of employment.[13] Regrettably, genuine autonomy for social insurance through participation of the social partners in scheme governance was not implemented due to the weakness of trade unions and employer organizations. A Tripartite Social Insurance Board was established, but it functioned only as a deliberative body.

A final factor that led to the decision to set up a contributory social insurance pension system is historical. As previously stated, during the interwar period of 1918–1940, a health insurance network and contributory pension scheme for some groups of civil servants were created following the German example.

### 2.1.2 Benefit Improvements in 1990

In contrast with these early changes in pension administration and financing, pension benefits were not reformed comprehensively for some years. However, in July 1990, only 4 months after the restoration of state independence and prior to its international recognition, the Government adopted some ad hoc changes in benefits. This was done mainly in the Act on the Improvement

[13] Overbye describes similarities between the Bismarckian and Soviet social welfare models (Overbye, 1994: 33).

of Pension Provision for the Population. Higher old-age benefits and lower retirement ages were granted to victims of the communist regime and the Second World War, disabled combattants, and mothers of children disabled from birth.[14] Higher disability pensions were granted to victims of the communist regime who became disabled while in prison or in exile, as well as to those disabled during the Second World War or military service.[15] Increased survivors' pensions were granted to the families of victims of the communist regime, to participants in the Second World War, to soldiers who had died while in prison, exile, or during the resistance struggle, and to their families.[16] In addition, the social pension was increased.[17]

Pensions for victims of the communist regime were granted by the heads of social provision departments in districts (towns) and paid by them from the social insurance and state budgets.

Due to the radical change in the political environment in 1990, merit pensions were also revamped. They were granted to persons who had been recognized for distinguished service by the new Government, while they were annulled for persons who received them for service to the former communist regime. Merit pensions were granted by the Committee of Merit Pensions under the Ministry of Social Security and were paid from state or local budgets (Resolution on Granting Merit Pensions).

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[14] For these groups, the replacement rate was 55–75 percent of past earnings, up to a ceiling; and the retirement age and/or work record was reduced by 5 years.

[15] In these cases, the pension amount was 75 percent of wages for persons with disabilities in categories I and II and 50 percent of wages for such persons in category III. The smallest pensions equalled 100 percent of the minimum wage for persons with disabilities in categories I and II and 50 percent of the minimum wage for those in category III. The size of pensions for victims of the communist regime and participants in, and victims of, the Second World War who later became persons with disabilities due to a related illness was 55 percent of earnings for persons with disabilities in category I and II and 30 percent of earnings for such persons in category III.

[16] The pension for each member of the family was 30–40 percent of the primary earner's benefit (depending on the cause of death), up to a ceiling.

[17] Specifically, benefits for persons of retirement age and for orphans were set at 50 percent of the minimum old-age pension; for persons with disabilities, they were 30–100 percent, depending on the degree of impairment.

As pensions had not been indexed for inflation during the communist period, all old-age, invalidity, and survivors' pensions were increased by a lump sum, determined according to the number of years a person had been receiving a pension.[18]

Looking through the laws enacted in 1990 and at the social rights stipulated by this legislation, one does not find cases where rights were restricted or the amounts of pension benefits were reduced (with the exception of merit pensions for agents of the former communist regime). On the contrary, the list of victims of the war and postwar period was expanded. These actions by the Government on behalf of so many people may be explained by the romantic ideals prevailing after the restoration of independence. However, the belief in a free society's power to increase the welfare of pensioners soon clashed with the reality of runaway inflation and economic recession.

### 2.1.3 Benefit Increases after the Hyperinflation in 1991–1994

As previously noted, inflation in 1991 reached nearly 400 percent, and in 1992 it exceeded 1,000 percent. Even in 1994, the inflation rate was still close to 45 percent. Thus, the Government's key pension challenge during this period was to adjust benefits in order to alleviate the hardship of pensioners. In 1991, flat-rate supplementary amounts were added to all pensions several times on an ad hoc basis; later, pensions were indexed by a percentage or other formula. The indexing, however, came very late. Whereas the highest rate of

[18] Pensions for victims of the communist regime and for participants in and victims of the Second World War were increased by 25 percent of the minimum old-age pension. Pensions for soldiers and the staff of institutions of internal affairs were increased by 20 percent, up to a ceiling. Pensions for those disabled from childhood due to an injury related to military operations during the Second World War were increased by 15 percent of the minimum old-age pension. Pensions for victims of the communist regime who became disabled while in prison, exile or during the resistance struggle and persons with disabilities from war and military service, depending on the category of disability, were increased by 100 percent of the minimum old-age pension for persons with disabilities of categories I and II and for those of category III, by 50 percent.

inflation was in 1991–1992, pensions were not indexed regularly until 1993, and then at a rate of 10–20 percent nearly every month (see Table 8).

Despite this indexation, inflation still caused the purchasing power of pensions to drop dramatically, to a quarter of the previous level during 1991–1993 (Figure 15). Even today, the average purchasing power of pensioners has reached only 60 percent of 1990 standards. Thus, during the period of post-socialist reform, pensioners have been forced to depend on the assistance of their grown children.

The first stage of the pension reform started with the belief that economic transition would proceed rapidly and with far less tumult than actually occurred. Initially, the economic situation in Lithuania, as in other Eastern and Central European countries, was rather satisfactory; and structural reforms were initiated with the expectation that the economy would not suffer, but instead would grow rapidly. Thus, when starting the post-communist reform of social security, the Government chose to preserve existing social rights or even to expand them.

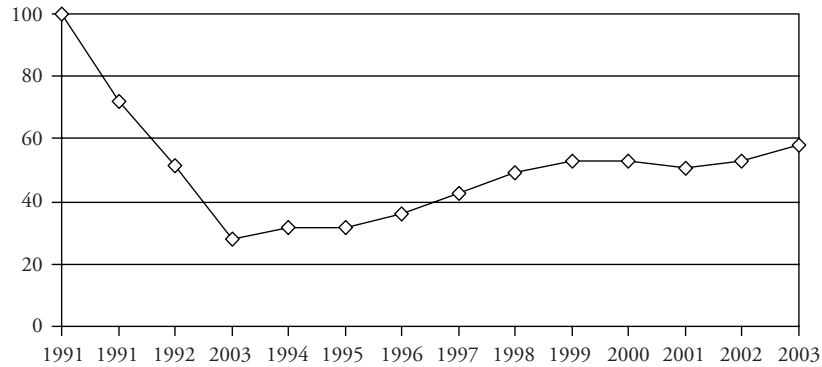
**Table 8**
**Indexation of pension benefits in 1991–1994**

| Months | 1991 | 1992 | 1993 | 1994 |
|---|---|---|---|---|
| I | | 200 roubles | 20% | 5% |
| II | | Formula* | | 5% |
| III | 85 roubles | 40% | 20% | |
| IV | | 30% | 20% | 5% |
| V | | 20% | 20% | 5% |
| VI | | 20% | 5% | |
| VII | 60 roubles | | 10% | |
| VIII | | 5% | | |
| IX | 120 roubles | | 10% | |
| X | | | Formula* | 10% |
| XI | | | 10% | |
| XII | Formula* | | 10% | |

* Following a specific formula, a set amount which depended on the level of the pension.

*Source*: SODRA.

**Figure 15**
**Purchasing power of average retirement pension 1990=100%**




*Source*: Department of Statistics.

However, economic restructuring was undertaken at the expense of traditional economic sectors and enterprises that funded the social insurance system. It was much more difficult to evaluate, and therefore tax, the productive activities of new enterprises. Thus, the rising private sector replaced large, old public enterprises as the principal financial contributor to social insurance, although in a significantly smaller way. SODRA officials often noted that social security contributions decreased proportionally to the rate of privatization of state-owned enterprises.

Problems with collecting contributions from the self-employed arose at the very beginning of the economic transformation. Self-employed people earning or officially declaring a low income were exempted from contributions until the beginning of 1995. Later, this exemption was abolished. Nevertheless, most self-employed as well as farmers failed to comply with the contribution requirement (only 850 self-employed persons were insured in 1994, while insured farmers totalled 130,000). As a result, most of the self-employed remain completely unprotected.

A surplus accumulated after the establishment of the social insurance fund, but this was spent within 2 years on the indexing of benefits (Table 9). The fiscal leeway for pension indexing was limited not only by the economic downturn but also by the withdrawal from social insurance by part of the

economically active population. Since the social insurance fund consists of contributions based on wages, the real value of social transfers should not have decreased more than the drop in their value. But, in fact, pensions decreased even more because of the decreasing number of active participants in social insurance. This was an additional burden on the weakest social layers, which were abandoned by those economically active people who had forsaken social solidarity.

**Table 9**
**Surplus/deficit of Social Insurance Fund [% of expenditure]**

| 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|
| 20.1 | 5.9 | 1.7 | 1.7 | 0.1 | –1.3 | –0.9 |

*Source*: *Valstybinis socialinis draudimas, statistika*, 1998: 14.

Thus, although the legal and administrative framework for the protection of pensioners had been formally created, in practice it was not implemented. The real value of the 1990 increase in benefit levels disappeared due to inflation in 1991–1992.

Due to the 1991 increases of all pensions by equal absolute sums, the disparity among pension levels was greatly reduced. In fact, pensions were flattened. In addition, the previous formula for calculating pensions compounded this effect. According to the law, pensions were related to wages and to the length of the insured period but with a benefit ceiling.[19] Because of inflation, all employees had already reached this ceiling by 1992. Therefore, all new pensioners claiming pensions from that time received the maximum pension. This attempt to reduce pensioners' impoverishment was understandable and justified. However, it contradicted the principle that a pension should replace lost earnings to a specified extent. In the new market economy, increasing wage differentiation was perceived positively, and the increasing compression of pension amounts seemed a pitfall to be avoided.

[19] For the old-age pension, the ceiling was 120 roubles if the pre-pension wage was higher than or equal to 240 roubles. This ceiling was not lifted and, during the introduction of national currency in 1994, was normalized at 1.2 LTL.

In conclusion, during the 5 years following the 1990 restoration of independence, the state succeeded in creating a pension system financed by contributions (SODRA); and this system ensured the payment of pensions during a difficult transitional period. All pensions were increased in nominal terms during the initial years. Furthermore, persons who suffered under the Soviet regime were given pension preferences. Later, the key challenge was to index pensions during periods of huge inflation. Perhaps this explains why there was no time left for the systemic reform of pension benefits (rules of entitlement and benefit calculation).

By 1994, economic conditions were completely different than in 1990. The decline of the economy, high inflation, rising unemployment, the large number of persons outside the social system, and the narrowing of options for financing pensions determined the nature of the 1995 pension reform.

## *2.2 The Second Stage of Pension Reform (1995–2002): Restructuring the Pay-As-You-Go Pension Scheme*

### 2.2.1 New Pension Benefit Formula and Entitlement Rules

In 1995, the Law on Social Insurance Pensions came into force. Responding to changes that had taken place in the first part of the decade, this law provided for strict conditions of pension entitlement based on contributions paid. This can be seen as a natural and necessary reaction to the widespread non-participation in social insurance. At that time, nobody doubted the suitability of the social insurance model, nor was there any discussion of the introduction of universal pension schemes, which would have offered important advantages in covering those living and working beyond the reach of pension collection agents.

The new law confirmed mandatory participation in the pension insurance scheme for all residents employed under labour contracts and for the self-employed, with the latter group insured only for the basic component of the pension. Their monthly contribution was flat rate and equal to half of the so-called basic pension. Individuals who were entitled to both old-age and disability pensions were allowed to receive only one, which they could choose. An old-age

pension was to be granted only if a person: (1) had reached the official retirement age; and (2) had a record of making contributions for at least 15 years.[20]

The 1995 law put in place a schedule for increasing the retirement age. It called for increases of 4 months per year for women and 2 months per year for men, until the retirement age reached 62 years and 6 months for men and 60 years for women in 2009.[21] The law does not require the termination of employment in order to qualify for a social insurance pension. However, full pensions are paid to working pensioners only if they are age 65 or over or if they earn no more than 150 percent of the official minimum wage. Those under age 65 who earn more are only entitled to the basic pension benefit component. In 2001, the increase in retirement age was accelerated (by 6 months per year for women and men) and regulations for working pensioners were tightened.

For disability pension entitlement, the length of the required insurance period was based on a person's age. Furthermore, the spouse and children of a deceased person would be eligible for a widow's or widower's pension or orphans' pension, respectively, if the deceased person fulfilled the contribution requirements for an old-age or disability social insurance pension.

The 1995 law also introduced a new pension formula. It included two parts, a basic pension and an earnings-related supplement. Basic pensions were almost flat, depending slightly on the length of a person's insurance record. The Government-set rate of the basic pension was related to the Minimum Subsistence Level (MSL) and could not be lower than 110 percent of the MSL.[22] The supplementary pension reflected each individual's work history and earnings. The pension formula was devised to ensure that the basic pension

[20] The minimum social insurance period providing the right to a partial old-age pension is 15 years, while the minimum period for a full basic pension is 30 years. If the person lacks the 30-year obligatory insurance period, the basic component is reduced proportionally.

[21] This retirement age is applied to nearly all pension schemes. An exception is made only for the State Military and Officials' Pension Scheme (covering police and military officers, public prosecutors, and intelligence officers). Here, retirement is based on a certain period of service rather than age.

[22] The MSL must be adjusted for inflation from time to time and is used as the basis to determine other social benefits as well.

was boosted for inflation and the supplementary pension reflected the general rise in wages. Thus, pensions would be indexed for both. The old-age pension formula was as follows:

$$P = B + 0.005 \times S \times K \times D$$

where:

*B* is the basic pension (or part of it, if the beneficiary does not have the obligatory social insurance period);

*S* is the length of a person's social insurance record of work under a labour contract;

*K* is the rate of the person's insured income, calculated by dividing his/her annual earned income by the average annual wage for the country. This figure may not exceed 5; and

*D* represents insured earnings, calculated as the average earned income from which pension insurance contributions are collected (as well as sickness, maternity and unemployment benefits). The State Social Insurance Board approves average insured earnings on an annual and quarterly basis.

The ratio 0.005 means that 0.5 percent of the average monthly wage of the employee is added annually to the supplementary component of the future pension. Thus, the supplementary part of a pension will serve to increase and differentiate pensions significantly as time passes.

For disability pensions, 3 groups were established depending on a person's residual working capabilities. People with the most severe disabilities comprise Group I. In most cases, they have no working capacity and are dependent on nursing. Group II also includes people with very serious disabilities. The disabled of Group III are considered to have limited working capacity. Disability pensions are calculated in the same manner as old-age pensions.[23]

[23] It was assumed that a person would work until his/her retirement age and earn as much as immediately preceding the disability. Both the years of a person's social insurance contributions and the years remaining until official retirement were included into the social insurance period. The amount calculated would comprise the disability pension for the disabled of Group II. A supplement in the amount of 50 percent of the basic pension would be paid to the disabled of Group I, and only half the disability pension of Group II would be paid to the disabled of Group III.

People disabled from childhood and who are unable to participate in the labour market were made eligible for a social disability pension payable from the state budget. This was set to equal the basic social insurance pension. The treatment of healthy persons who were not compulsorily insured because they did not participate in the labour market was stricter. After retirement, they would only be able to claim means-tested social assistance.

Widows' and orphans' pensions would be calculated in the same manner as pensions for the disabled in Group II. 20 percent of the pension would be paid to the spouse and 80 percent divided in equal parts among the orphans (in cases where there was only 1 orphan, she/he would be awarded 25 percent of the pension). Orphans who lost both parents would be awarded a pension for each.

After the introduction of social insurance pensions, many amendments were adopted. However, at this stage the basic features of the new system were clear. These are presented in Table 10.

**Table 10**
**Main features of the retirement pension scheme in 1995**

| Retirement age | Minimal insurance period | Pension formula | Max. benefit–min. benefit | Indexation | Social pension | Dual pensions |
|---|---|---|---|---|---|---|
| Gradually increasing to 60/62.5 (female/ male) | 15 years for partial pension and 30 for full pension | Flat-rate component (0.5% of monthly wages for each year of the insurance period) and earnings related component (10 best years of 15 previous wage and all years after 1994) | No formal limits (could be 10 times if wages and employment records vary significantly) | Consumer price index and insured income (wage) | Equal to the flat-rate component of the social insurance pension | Retirement social insurance pension is paid together with widows' and state pensions |

Pensions in payment were recalculated using the new formula. Those pensioners whose benefit increased as a result of the recalculation were paid a higher pension, but no benefits were reduced. After the recalculation, it turned out that almost half of all pensioners would have received a lower pension if they had not been protected by law. The other half received an increase. Thus, the recalculation of previously awarded pensions increased the average pension and required higher social insurance expenditure.

In addition to the Social Insurance Pension Law, several additional statutes have come into force since 1995:

1. state pensions, for:
   - victims of the Soviet regime and the Second World War;
   - officials and military personnel;
   - academics; and
   - pensions of honour.[24]
2. social pensions: originally these were supposed to be granted to persons who were not entitled to social insurance or a state pension. However, the law was loosened, and social pensions were extended to women who gave birth to 5 or more children and to persons caring for a disabled family member for a long time. As a result, some people receive more than 1 pension, while others receive none.

Hence, today both types of pensions, both 1 and 2 above, are to be paid together with social insurance pensions to the elderly and disabled who qualify for the latter. In addition, social insurance pensions for widowers are to be paid together with old age and disability pensions, a situation that has contributed to some people receiving multiple pensions. Such a system is costly and unfair, as it privileges people with higher education and those who engage in more civic activities (and thus have more political clout). Worse, these pensions

[24] These are so-called Category I and II pensions of the Republic of Lithuania. These are granted to distinguished artists, writers, national patriots, champions of liberty, and mothers of large numbers of children (10 or more). They are granted only at the discretion of a special government commission, which includes representatives from different political parties and social partners.

may make their recipients, who are privileged persons, less interested in the improvement of the overall pension system.

### 2.2.2 Results of the Second Stage of Pension Reform

Although the pension system designed in 1995 was relatively logical and coherent, problems quickly emerged due to certain conditions that had not been addressed by the reform. These problems were summarized succinctly in the 1997 Social Report of the Ministry of Social Security and Labour, which also proposed certain solutions (Ministry of Social Security and Labour, 1997: 64).

- The first problem was the Social Insurance Fund *budget deficit.* The Ministry proposed that this deficit be covered by the state budget.
- Second, there were significant gaps in the *coverage of the system.* Here the Ministry proposed to insure economically weak farmers by using financial resources from the state budget.
- Third, the *population was ageing*. The Ministry proposed that the retirement age for men and women be raised over a period of time to 65.
- Fourth, social insurance pensions were relatively low. The Ministry suggested that the worker participation in private pension schemes be supported, so as to provide supplemental pensions.

With the exception of the Social Insurance Fund budget deficit, these problems continue to exist and have been cited by proponents of pension privatization as a rationale for this type of reform. Thus, they will be examined in greater detail below.

#### *The Budget Deficit of the Social Insurance Fund*

In 1996, social insurance expenditure started to exceed revenue (Table 11). The Social Insurance Board was charged with setting financing priorities for the separate social insurance branches, and it has always given priority to paying pensions. Thus, the pension scheme was financed at the expense of short-term social insurance benefits. In addition, there were certain seasonal fluctuations

that were not reflected in the social insurance year-end budget data. Usually, social insurance revenue was lower at the beginning of the year – in January and February – and also in September, when economic activity slowed. Since the Social Insurance Fund had no reserves, these seasonal fluctuations created cash flow problems.

**Table 11**
**Social Insurance Fund budget surplus/deficit [% of GDP]**

| 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.7 | 0.4 | 0.1 | 0.2 | 0.0 | –0.1 | –0.1 | –0.1 | –0.8 | –0.3 | –0.1 | 0.2 | 0.2 |

*Source*: Social Insurance Fund.

Although this shortfall posed difficulties, its magnitude was actually not so large: the total deficit of the Social Insurance Fund in 1996 was only one percent of GDP. To cover the deficit, it would have been enough to increase the contribution rate by approximately 0.3 percentage points. No parliamentary resolution was needed to increase the rate, as the law empowered the Government to adjust it when approving the annual social insurance budget. At the beginning of 1999, a mission from the International Monetary Fund suggested just this strategy; and it was done at the end of the year. The reasons why this had not been done earlier were purely political. Neither Government nor Parliament wanted to put its fingerprints on such a proposal, and no one came forward to offer it. In this sense, the ruling parties and the opposition were in agreement. One can only speculate about their reasoning. Were they convinced that the contribution rate was already too high, or did they fear retaliation from voters who held this view?

The budget deficit had a very significant impact on SODRA's public image. For several years, Lithuanian newspapers had been publishing only negative articles about social insurance. Journalists criticized the authorities for low pensions and high contributions and insisted on stricter requirements for the collection of contributions and penalties for non-complying employers. They also criticized the use of contribution revenues for the construction of SODRA administration buildings.

On the other hand, a public opinion survey indicated that most people viewed the Social Insurance Fund more positively than any other public institution or than commercial banks. However, the politicians seemed to trust the mass media more than the results of sociological surveys. This made their coming out in favour of an increase of the contribution rate next to impossible.

Another logical means of addressing the pension-financing shortfall was to use state budget revenues. The Law on Social Insurance makes the state the guarantor of the social insurance budget. However, this approach was not even discussed publicly. If the Government had tried to cover the deficit, it would surely have been bashed in the press, and the resulting public outcry would have constrained its actions. Moreover, at that time, the state budget itself was in deficit.

Because of the revenue shortfall, the Social Insurance Fund did not transfer all the funds necessary for the payment of unemployment, sickness, or health insurance; and it was sometimes late in paying pensions. In 1997, it began borrowing from commercial banks (Table 12 shows SODRA's various debts during 1995–1998).

**Table 12**
**SODRA debts, at the end of the year [% of SODRA annual revenue]**

| | 1995 | 1996 | 1997 | 1998 |
|---|---|---|---|---|
| To pharmacies | 0.40 | 1.80 | — | — |
| To sanatoria | 0.11 | 0.23 | — | — |
| To the State Sickness Fund | — | — | 0.04 | 1.39 |
| To institutions paying pensions | 0.01 | 0.01 | 0.00 | 0.04 |
| To the state budget | — | 0.43 | 0.79 | 0.88 |
| To the Employment Fund | — | 2.48 | 1.55 | 1.39 |
| To insured persons | 1.10 | 1.38 | 0.34 | — |
| To commercial banks | 0.51 | — | 1.17 | 1.37 |
| Total | 2.13 | 6.33 | 3.89 | 5.07 |

*Source*: Social Insurance Fund.

The debts of the Social Insurance Fund and its loans from commercial banks were noisily reported in the media. In this atmosphere, the payment of owed benefits was deferred in favour of repaying loans with interest to commercial banks. Meanwhile, the contribution rate was not increased, since it would have been difficult to convince contributors that this increase would not last forever.

With the recent economic upturn, the deficit was eliminated in 2002 (see Table 11), and it now seems that the pension system may remain financially stable for several more decades.[25] However, such stability is dependent on a very low level of pension payment.

### *System Coverage and Retirement Age*

As described above, by 1997, the Ministry of Labour and Social Security had identified insufficient participation as one the system's four central problems. Yet in public discourse, neither the Ministry nor the Government placed much emphasis on the drop in contributors or the low portion of GDP devoted to pensions. In fact, the drop in contributors was dramatic: in 2003 the number of those covered by all types of social insurance comprised only 65.4 percent of the 1990 level.[26] As the social insurance system was obligated to provide pensions to all those who had worked during state socialism when there was full employment with revenues from a period when unemployment and non-compliance were high, financial difficulties were inevitable.

The loss of contributors created a need to increase the retirement age, as was done in 1995. Lithuania's Convergence Programme of 2004 highlighted

[25] Currently, the Government forecasts that expenditure for retirement pensions will account for 6 percent of GDP in 2030 and 7 percent in 2040–2050 (Government, 2004: 33).

[26] In Lithuania, the majority of employees are insured for full pensions and for sickness, maternity, unemployment, and work injury benefits (i.e., all types of social insurance), while self-employed people are mainly insured for the basic part of a pension only and not for the earnings-related part or for short-term benefits.

the need for yet another increase.[27] This document presented a forecast of the ratio of pension beneficiaries to contributors until 2050. It showed that if the pension age were not increased, this ratio would drop in the near term as a result of improved demographic indicators. However, by 2025, it would rise sharply to 113 percent. If the retirement age were instead increased to 65 for both sexes starting in 2010, the ratio would drop to 65 percent by 2025, and by 2050 it would again reach the level of 2002 (88.5 percent) (Table 13).

**Table 13**
**Number of pensions beneficiaries* per 100 contributors**

| | 2002 | 2025 | 2050 |
|---|---|---|---|
| Retirement age 60/62.5 | 86.1 | 81.3 | 113.1 |
| Retirement age 65/65 | 86.1 | 65.3 | 88.5 |

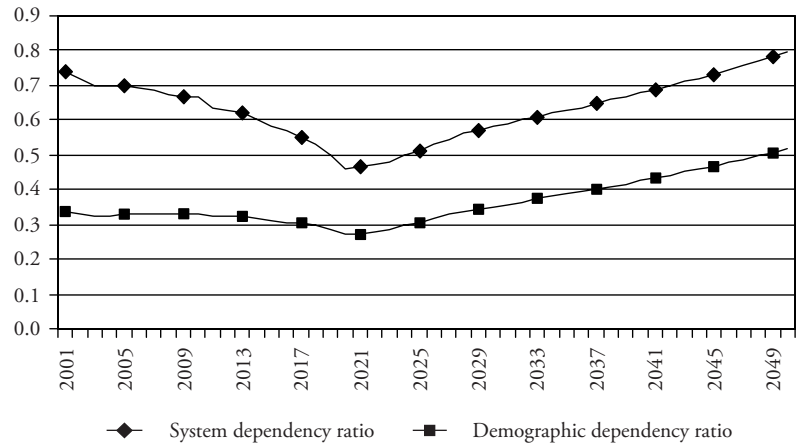
* Old-age, disability widows(-ers) and orphans' pensions.

*Source*: Government, 2004: 33.

These forecasts would have been slightly more favourable if only old-age and disability pensioners were compared with insured persons. This is because widows' and widowers' pensions are very low (they equal only 20–25 percent of retirement pensions), making the number of these beneficiaries less relevant for the financial balance of the pension system. Besides, it seems reasonable to assume a long-term increase in the economically active population and a decline in non-compliance with the contribution requirement. Based on these assumptions, our projections confirm that an increase in the retirement age would reduce the pension system dependency rate significantly during the first 20–25 years after implementation, and that it would later increase again to reach its present level and in 2045–2050 (Figure 16).

[27] As has each 2004 EU accession country, Lithuania prepared the Convergence Programme according to its agreement with the EU. In this document, the Government projected its main macroeconomic indicators and pledged to maintain sound public finances.

**Figure 16**
**Demographic (pension-age/working-age population) and system dependency ratios (retirement + disability pensioners/insured for full pensions)**

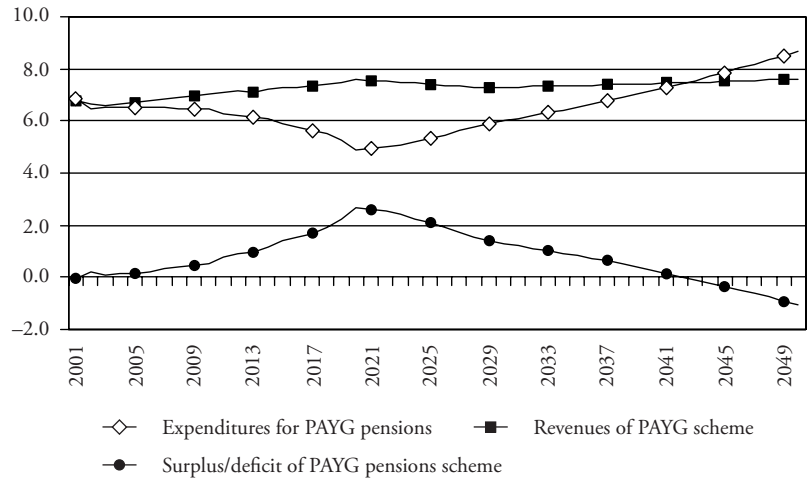



*Note*: *Forecast assumptions:* population economic activity rate will increase annually by 0.1 percent; the ratio of insured and employed persons will grow by 0.1 percent annually; the unemployment rate will decline by 0.2–0.1 percent and by 2050 it will be reduced by 4.8 percent; the retirement age will be increased to 65 for males (in the period 2015–2020) and females (in the period 2010–2020).

*Source*: Author's calculation.

In an optimistic scenario where the retirement age is increased, the rate of employment increases, and more workers come out of the shadow economy to participate in social insurance, the projections here show that the pension system might actually be financially leveraged for another 40 years. This is providing the average pension remains in almost the same relation to the average wage, thus keeping pension expenditure under 8 percent of GDP (Figure 17).

**Figure 17**
**Forecast of PAYG pension scheme revenues and expenditures without a significant increase in pension benefits [% of GDP)]**




*Note*: *Forecast assumptions:* population economic activity rate increases annually by 0.1 percent; the ratio of insured and employed persons grows by 0.1 percent annually; the unemployment rate declines by 0.2–0.1 percent and by 2050 it will be reduced by 4.8 percent; the retirement age will be increased to 65 for males (in the period 2015–2020) and female (in the period 2010–2020); the pension replacement rate slightly will increase from 32 to 34 percent during the next 50 year period.

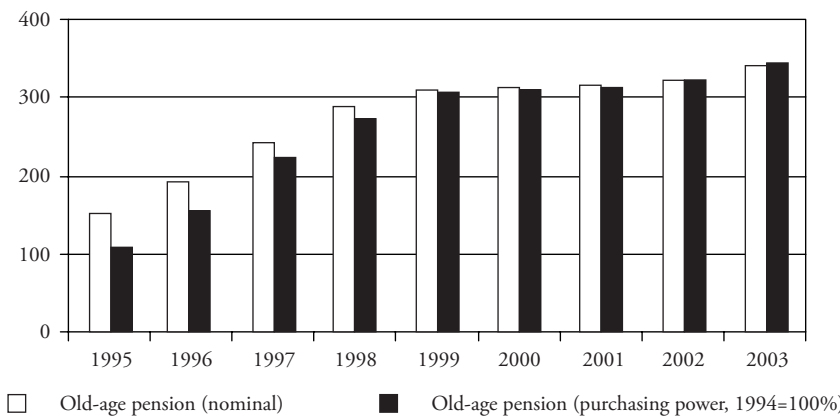
*Source*: Author's calculations.

### *Low Pension Benefits*

The modest size of pensions has remained a key social problem throughout the entire period since 1990. Although pensions were increased after the 1995 reform even at the expense of creating a deficit for the Social Insurance Fund budget, the problem of insufficient pension amounts was not resolved. Retirement pensions increased during 1995–1999, both nominally and in terms of their purchasing power; but over the next 3 years, they flattened out. In 2003, the average pension amounted to 340.5 LTL (Figure 18), or just

30 percent of the relative poverty level. This benefit level does not ensure decent living conditions for all elderly persons.[28] Social pensions granted to persons of retirement age were far lower (172 LTL in 2004, equal to the basic pension).

**Figure 18**
**Average pension for the non-working retired, nominal and real, 1995–2003 [LTL]**




*Sources*: Department of Statistics and SODRA.

Since 1995, pension increases have tended to coincide with statutory wage increases. This pattern was particularly salient during 1996–1998, when the Government increased the minimum wage rapidly (Figure 9) in order to raise revenue for the Social Insurance Fund. Yet, because of the similar pace of pension and wage growth, the relative position of pensioners, which had deteriorated dramatically in the early 1990s, has hardly improved. In 2003–2004, social insurance pensions were again increased slightly; however, the gross replacement rate (the average gross pension compared to the average

[28] The poverty rate among elderly persons' households was 18.8 percent in 2002 (the national average was 16.6 percent).

gross wage) is still about 32 percent. This is among the lowest ratios in the EU and falls well below the ILO Minimum Standard.

While some redistribution toward low-income workers remains in the pension formula, people who received half the average wage are still entitled to a retirement pension of only 46 percent of their earned income (Socialiniu Tyrimu Institutes, 2004: 30).[29] In Lithuania, this is not sufficient to avoid poverty in retirement.[30]

The current low level of pensions is especially problematic for women. Because of their lower wages and shorter employment records, women receive, on average, a pension that is nearly 20 percent lower than men's (Table 14).

**Table 14**
**Female-male average old-age pension ratio (January of each year)**

| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|---|---|
| Female [LTL] | 201.59 | 251.18 | 281.36 | 283.5 | 283.97 | 288.49 | 311.17 |
| Male [LTL] | 239.73 | 299.97 | 347.91 | 352.05 | 354.44 | 357.15 | 381.59 |
| Female/Male | 0.84 | 0.84 | 0.81 | 0.81 | 0.80 | 0.81 | 0.82 |

*Source*: Social Insurance Fund.

Projections done for this study indicate that there is some latitude for improving pensions without recreating the financial problems of the 1990s. If the previously described assumptions of increased employment and a hike in the retirement age materialize, it may be possible to increase the pension

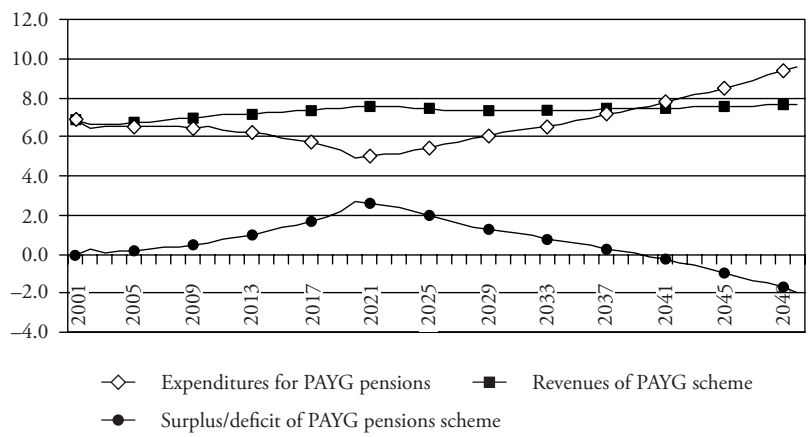
[29] There are two important redistributive elements in the formula. First, the base part of the pension (equal to 40 percent of the average pension) is linked only to the insurance record (length of service), not to wage levels. Second, the supplementary part of pension has a ceiling of 5 times the average wage. Earnings in excess of this ceiling do not cause any increase in the size of a pension.

[30] Insured income (the income from which contributions are paid) is used for the calculation of benefits. This income includes both wages and certain short-term social insurance benefits. However, the present study, for the purposes of simplification, treats insured income as wages in cases where this does not cause distortions.

replacement rate from 32 to 38 percent without financial difficulties for the next 3 decades (see Figure 19). After that, however, a deficit would re-emerge and expand rapidly.

It is interesting to note that, while the highest and lowest pensions differ substantially, (see Table 15), their replacement rates (here defined as the ratio of the average pension to the average wage) is nearly identical (22.8 and 23.5 percent, respectively).

**Figure 19**
**Forecast of PAYG pension scheme revenues and expenditures with increase in pension benefits [% of GDP)]**




*Note*: *Forecast assumptions*: the economic activity rate of the population will increase annually by 0.1 percent; the ratio of insured to employed persons will grow by 0.1 percent annually; the unemployment rate will decline by 0.2–0.1 percent and by 2050 it will be reduced by 4.8 percent; the retirement age will be raised to 65 for both males (in the period 2015–2020) and females (in the period 2010–2020); the pension replacement rate will increase from 32 to 38 percent during the 50 year period.

*Source*: Author's calculations.

However, those workers with low earnings and a lengthy insurance record (e.g., of 40 years) enjoy some redistribution. The replacement rate for

minimum-wage earners who have an insurance record of 40 years is double the replacement rate for the highest wage earners with the same insurance period (Table 15). However, even in this instance the highest pension is 5 times that of minimum-wage earners.

**Table 15**
**Differential of State Social Insurance Pensions***

| | | Maximum pension | Pension of average wage earner | b/a | Pension of minimum wage earner | c/a | Minimum pension | d/a |
|---|---|---|---|---|---|---|---|---|
| | | a | b | | c | e | d | f |
| Pension [LTL] | A | 1,138 | 338.0 | 0.297 | 224 | 0.197 | 101 | 0.087 |
| Wage [LTL] | B | 5,000 | 1,000 | 0.200 | 430 | 0.086 | 430 | 0.086 |
| A/B | | 22.8 | 33.8 | — | 52.1 | — | 23.5 | — |

* The highest, average, and minimum pensions are calculated for persons who have a social insurance record of 40 years. For average and minimum pensions, throughout their career recipients must have earned an average or minimum wage, respectively. For the highest pensions, throughout their career recipients must have earned a wage which was at least 5 times the national average. The lowest pension is calculated for a person who has only a 15-year insurance record and who received minimum wage throughout the period.

*Source*: Author's calculations.

From these figures, one can see that a key weakness of the Lithuanian pension system lies in its exceptionally low return on contributions paid, not only for high earners but for average and low-income ones as well. This is due primarily to the loss of employment and drop in compliance during the early transformation. In this situation, criticisms of the public pension system found a receptive audience in the general population, setting the stage for the partial privatization of social insurance in 2003.

## *2.3 Third Stage of Pension Reform (2003–2004): Partial Privatization of the National Pension Scheme*

### 2.3.1 Political Debates and Legal Provisions

The roots of this third stage of reform lie in the earlier period, and it is useful to look back briefly at some key events to put this stage in context. From the beginning of 1994, the non-governmental, libertarian Lithuanian Free Market Institute (LFMI) began advocating for private pensions.[31] In particular, one of its social security experts published a series of newspaper articles that were critical of social insurance.[32] This expert advocated a reform modelled on the Chilean pension system, which she characterized as ideal. The most commonly referred arguments in favour of the Chilean model were from the World Bank publication, *Averting the Old Age Crisis*.

For interest groups favouring private funds, the 1995 reform provided an opportunity to apply pressure on the Government. This pressure did not rely on any rational analysis of the pros and cons of public versus private pensions, but rather on the public's intense belief that the private sector was more capable of managing the pension system. It is little wonder that, after 50 years of Soviet economic control, such a belief prevailed in the mass media and politics, to say nothing of business (Guogis, 2000: 36–37).

The president of the largest Lithuanian business organization, the Industrialists Confederation, published several newspaper articles criticizing the social insurance system and calling for the passage of legislation to promote private funds (Lubys, 1995a, 1995b, 1995c). Confederation members drafted their own version of a law on supplementary, non-governmental pensions and presented it to the Ministry of Social Security and Labour. In this draft, they called for occupational pension funds that would be sponsored and managed by employers.

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[31] In its website (*www.lrinka.lt/About/Pasiekimai.phtml*), the Lithuanian Free Market Institute asserts that it takes pride in its collaboration with the CATO Institute, a libertarian US thinktank which actively opposes the social security system in the US.

[32] A. Morkūnienė joined the civil service later and spearheaded the privatization of the pension system.

At the beginning of 1996, the LFMI presented its own draft law on pension funds. It called for such funds to be organized as cooperatives owned and run by their members. The LFMI contrasted its project with that of the Confederation of Industrialists. According to Morkūnienė: "… the LFMI's draft was much more transparent and took into account the interests of pension fund participants, while the Industrialist Confederation's draft law clearly favoured the interests of employers" (2001: 3). The LFMI's suspicion of the motivation of the Industrialists Confederation was perhaps well-grounded, for soon after the adoption of the Pension Fund Law, which was not favourable to the Industrialists, the latter lost all interest in the pension reform. The Industrialists neither created pension funds nor participated in further discussions concerning privatization of social insurance. However, the content of the LFMI draft law was naïve at best. The draft law would have authorized private funds without any regulation of investments or protection for recipients. Most likely this draft law was meant simply to provoke the Government into putting the issue onto its agenda.

The World Bank played a rather active role in this period. In the autumn of 1994, it held its first conference on supplemental pension provision in Vilnius. It also made clarifications to the Government position on private pensions a condition for a structural adjustment loan, and it also financed a White Paper Initiative prepared by the Ministry of Social Security and Labour. The White Paper presented the financial weaknesses of the social insurance system and only in an appendix provided an overview of models of private funds (Government, 1995: 18–21). Similarly, World Bank experts did not recommend pension privatization explicitly. Instead, their reports provided the Government with information about private funds and urged it to develop its own perspective.

A number of key civil servants employed in the Ministry of Social Security and Labour and in the Social Insurance Fund had experience in cooperation with West European social insurance institutions along with ISSA experts. These individuals did not differ over the need to promote the social insurance system and perceived private pension schemes as strictly supplementary. The Lithuanian Democratic Labour Party (LDLP), with a majority in Parliament from 1992 to 1996, did not show any interest in pension privatization either.[33]

[33] Before the elections of 2000, the LDLP united with the less influential Lithuanian Social-Democratic Party and took over its name.

After the general elections in 1996, however, the Conservative Party (Lithuanian Motherland Union) gained the majority in Parliament. Before the elections, the party had signed a memorandum of collaboration with the Industrialists Confederation that imposed certain obligations on the Government to consult with employers on policy issues. Consequently, the Ministry of Social Security and Labour was criticized for its pro social insurance posture from both sides, as the experts from the World Bank were supporting the LFMI. Finding itself in something of a quagmire, the Government called upon the Ministry to establish a working group to discuss the issue with both proponents of private pension funds.

In 1999, following long discussions within the group, the Government prepared the Pension Funds Law. It was adopted later that same year and came into force on 1 January 2000. The law provided a legal framework for the establishment of funded pensions. Not a word was mentioned concerning compulsory participation in these funds, nor was anything said about the use of social insurance resources to finance them. In fact, the title of the law did not even include the word *private.* It authorized public institutions, as well as private ones, to establish fully funded pension funds. According to the law, pension funds would operate as financial institutions managing and investing contributions accumulated in personal accounts. The supervision of pension funds was handed over to the Securities Commission.[34] Every pension fund could operate several separate pension schemes, and employers could establish their own closed occupational pension schemes within a particular pension fund.

However, after the adoption of this law, not a single institution came forward to establish a pension fund. Perhaps this was because of the rigid rules imposed by the law. For example, it required pension funds to provide participants with a minimum yearly investment return (this requirement was lifted in early 2001). Most likely, though, the key obstacle was related to an unfavourable tax structure if compared with the one applied to life insurance. Contributions to individual accounts in private funds were tax-exempt up to 25 percent of annual personal income, while the benefits from pension funds were taxable. By contrast, life insurance products enjoyed non-taxable contributions up

[34] This was part of a larger delegation of authority to the commission for supervision of capital market institutions.

a higher limit as well as fully non-taxable benefits. Furthermore, a savings period of only 10 years was required in order to obtain tax exemption on life insurance, while pension fund participants could only expect a 50 percent tax exemption, provided that their funds were not withdrawn prior to retirement. Due to such differences, the life insurance market expanded rapidly, while the pension fund market remained a 0 set.[35]

In general, one may say that the Pension Funds Law represented a compromise between supporters of social insurance and its opponents. The supporters favoured the law because it did not threaten the existence of social insurance; it only established legal conditions for the operation of pension funds as financial institutions. For opponents, the law represented the first step towards broader privatization. In this sense, it was a kind of Trojan horse. As one vocal opponent of social insurance put it, "The establishment of voluntary pension funds was regarded as a test for the later introduction of mandatory private savings for old age" (Morkūnienė, 2001: 5). The next step was to provide financial capital for private funds, and social insurance was targeted as the source of such capital.[36] Essentially, the third stage of pension reform was designed to finance fully funded pension schemes.

In the autumn of 1999, the new Government of the same ruling Conservative Party came into power. It began discussing the introduction of mandatory private savings for old age. The main opponent of the social insurance system from the LFMI was invited to work as a social security advisor to the Prime Minister. She chaired a working group that was charged with preparing the Conceptual Framework for Pension Reform. The group's key objective was to introduce a compulsory funded pension scheme that would be managed by private funds without increasing the contribution rate of pension insurance. The Conceptual Framework articulated a very broad and attractive rationale for this:

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[35] That is, until the enactment of the 2003 law to finance these funds from social insurance.

[36] Advocates of pension privatization presented their key arguments related to high social insurance contributions. "Still there is too small a market for supplemental pension insurance in Lithuania, and this is another reason for the non-existence of private funds. The mandatory contribution rate is rather high (34%), wages are low, and there is practically no space for the supplemental insurance" (Morkūnienė, 2001: 5).

- to change the pension system in such a way that retired persons could receive higher income than currently received, although redistribution should be decreased instead of being increased;
- to leverage the social insurance pension system in such a way that it could operate in the near future without financial deficit; and
- to promote savings and reduce tax evasion.

The Conceptual Framework was approved by the conservative Government of Prime Minister Kubilius on 26 April 2000.

By 25 October 2000, the Kubilius Government endorsed a White Paper on Pension Reform. Devoting considerable attention to the analysis of the problems of the existing system, the paper gave 3 key reasons why reform was needed:

1. due to the sharp decline in system coverage, quite a considerable portion of the retired population in Lithuania would not be entitled to a state pension in the long run. The social insurance system mainly covers persons employed under contracts and receiving a permanent wage. It hardly covers self-employed persons, the vast majority of whom avoid social insurance contributions;
2. the low level of pension payments discourages compliance. The average net replacement rate is only around 40 percent. The system is redistributive, thus the replacement rate for high earners is even lower.[37] 2 key objectives of the pension system – protection against poverty and the compensation of lost personal income in old age – are mixed in one pension formula; and
3. the financial stability of a pay-as-you-go pension system basically depends on the ratio of persons paying contributions to those receiving payments.[38] For demographic reasons (the declining fertility rate since

[37] This claim, of course, captures only part of the picture. As shown in Section 2.2, the degree of redistribution depends heavily on years of work, with low-income workers with long careers receiving the largest redistribution.

[38] This argument for replacing pay-as-you-go with funded pensions, made in the World Bank's *Averting the Old Age Crisis*, has now been widely discredited. Today pension analysts of all political persuasions recognize that these same factors affect funded pensions as well.

> 1990 and a slight increase in average life expectancy) this ratio is declining. Changes in the labour market (the increased number of self-employed, non-employed, and unemployed persons) also reduce the ratio, as do widespread contribution avoidance and employment in informal markets.

During this period, the World Bank forecasted a 12.4 percent increase in the number of retired persons in Lithuania (from 712,000 to 800,000) during 2000–2050, whereas the number of working-age persons would drop from 2.236 million to 1.692 million (or by 24.3 percent). Thus, a reduced number of working-age persons would have to support a constantly growing number of retired persons (Government, 2000: 10).

Although the non-sustainability of the pay-as-you-go system was offered as a key rationale for replacing social insurance with individual private savings, the actual data in the White Paper did not present such a gloomy picture (Figure 7). On the contrary, it showed that as a result of a temporary improvement in demographic factors, the balance of the present system would become positive soon. Only from 2030 would there again be a deficit if the increase of retirement age were not accelerated.[39] And if the retirement age were increased by 6 months per year for both sexes until it reached 65, the social insurance pension balance would remain positive for decades (Figure 20).

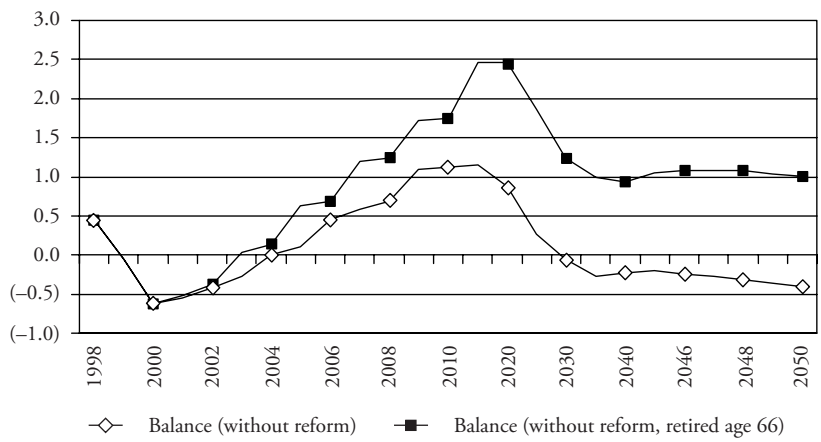
The forecast showed that, in the worst-case scenario, the pension system deficit would be only 0.5 percent of GDP. However, even this was used as an argument for privatization. The White Paper argued "for the benefit of its long term sustainability, financing methods of the pension system should be changed to introduce compulsory saving for old age". The paper advocated the World Bank's 3-pillar model, each to be financed in different ways. It stated as follows:

> *The Pillar II pension system, based on the principle of defined contri-butions and personal accounts, would ensure an additional pension that depended on*

[39] At the time of this forecast, the retirement age was being increased by 4 months annually up to 60 years for women and by 2 months annually up to 62.5 years for men.

*individual contributions. The pillar would be an intermediary one: compulsory like Pillar I (the pay-as-you-go social insurance system), but funded like Pillar III (voluntary supplemental private pensions). In addition, as a compulsory pillar, it would be administered privately and under strict regulation by the state. Compulsory savings, then, would become a part of social security system.* (Government, 2000: 17).

**Figure 20**
**Financial balance of social insurance pension system [% of GDP]**




*Source*: Government, 2000: 34.

In the autumn of 2000, Lithuania held general elections and a new coalition Government of Liberals and Social Liberals was formed. Not surprisingly, the new Government committed itself to preparing and implementing a new pension reform. On 14 January 2001, the Government of Prime Minister Paksas, the leader of the Liberal Party, approved its own Conceptual Framework for Pension Reform. Echoing the earlier Conceptual Framework that had been approved by the conservative Government in April 2000, it asserted that the main objective of the new pension reform was to:

*… change the pension system in such a way that persons of pension age could receive a higher income than before while ensuring that redistribution would not*

> *be increased but reduced, which would provide for the long-term sustainability of a system that included all citizens* (Government, 2001: 1).[40]

These positive benefits were not the only ones attributed to the reform. It was also widely assumed that the new pension system would have a positive long-term impact on the national economy, i.e., that it would promote national savings, curb tax avoidance, strengthen capital markets, and finance infrastructure growth.

Like the White Paper on Pension Reform, the Conceptual Framework called for the establishment of a three-pillar pension system.[41] It also emphasized that the Pillar I function of replacing lost income would be gradually reduced, with a commensurate transfer of revenues to Pillar II.

On 6 February 2001, the Government approved an Action Plan for the Preparation of the Pension Reform for 2001–2002.[42] This was followed by the preparation of a draft Law on the Pension Reform, which was presented to Parliament in late May 2001.

The draft law made participation in the new second tier mandatory only for persons under age 40. Persons between ages 40 and 50 could choose either to divert a portion of their contributions to the new private funds or remain entirely in the social insurance system.[43] For all those in the second tier, the

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[40] Even though there was no deficit just prior to the beginning of the reform, the deficit of the pension scheme was one of the main arguments used by advocates in promoting the introduction of the second tier.

[41] It stated that, "The aim of Pillar I is to ensure that each citizen is protected, at a minimum, against poverty, and is compensated for a portion of lost income due to old-age or incapacity to work. Pillar II guarantees old-age pensions, the size of which would correspond more closely to lost income. Pillar III provides conditions for insurance for those who would like to receive better protection in old age than they could receive from Pillar I and Pillar II. This pillar would be operated by pension funds and/or insurance companies" (Government, 2001: 1).

[42] At this time, it also stated that after passage of the Law on Pension Reform other laws related to the pension system would be amended and a system of supervision for pension funds would be established. Also, new administration procedures would be prepared in conjunction with the launch of a public information campaign (Ministry of Social Security and Labour, 2000: 98).

[43] In the course of reviewing the draft law, the Government lowered the age threshold for mandatory participation from 40 to 30.

draft law called for 5 percentage points of the contribution rate (i.e., 5 percent of the wage) to be diverted to mandatory individual savings accounts.[44] As the total pension contribution rate was 25 percent, this meant that the revenues allocated to the public pension system would be reduced by one-fifth. An explanatory note that accompanied the draft law stated that a further increase was anticipated in the contribution diverted to the second tier (Ministry of Social Security and Labour, 2000: 96). As the Government did not plan to increase the total contribution rate, this implied a further reduction in revenues for the public pension system. The effective date of the draft law was 1 January 2003, however, this was later delayed to 2004.

The draft law gave individuals the freedom to choose a private fund to invest their savings. The eligible funds had to fulfil all the same requirements laid out in the existing Law on Pension Funds, plus some additional ones. For example, the draft law established a minimal rate of return for second-tier funds; and it required, with some narrow exceptions, that a worker's entire savings be converted to a life annuity at retirement. It stated further that only life insurance companies (not private savings funds) could make this conversion and pay annuities to workers in old age.

Upon submitting the draft law to Parliament in May of 2001, the Government nominated the Social Affairs Committee as the key committee of jurisdiction and the Finance and Budget Committee as secondary. The latter backed the draft law; however, after long discussions, the former did not.

The differing opinions of the two committees are curious. One might have expected the Finance and Budget Committee to be critical of the proposal, given its high transitional costs and their implications for public finance.[45]

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[44] As explained earlier, prior to the reform employees and employers paid pension contributions of 25 percent of wages.

[45] As mentioned previously, the state had already assumed huge financial liabilities in indemnifying the population for property nationalized during the Soviet era and for lost deposits in banks, thus restricting its fiscal leeway to take on new obligations. Transitional financing costs constitute the "hole" in the financing of the public pension system resulting from diverting part of contribution revenues to the new private accounts. Despite this loss of revenues, the public system would still be liable for paying benefits to individuals who earned their rights in partial years. This shortfall must be met by borrowing, cutting benefits, or finding a new revenue source for the pension system.

However, the state of public finance was not the only determining factor in this case. The Committee, like the public at large, made a strong presumption that private pensions would be advantageous for Lithuania, even though costly. As for the Social Affairs Committee, Parliament's majority was on the brink of splitting up, and the ruling coalition already lacked sufficient support for pension privatization in that committee.

**Table 16**
**Key events in the decade leading to the partial privatization of social insurance (1994–2004)**

| | | |
|---|---|---|
| 1. | Emergence of pension reform interest groups | 1994–1995 |
| 2. | White Paper on Social Insurance in Lithuania (prepared by the Government with the assistance of the World Bank) | 1995 |
| 3. | Drafting of Pension Funds Law (and predecessor proposals) | 1996–1999 |
| 4. | Conservative Government approves the Conceptual Framework for Pension Reform | April 2000 |
| 5. | Conservative Government approves the White Paper on Pension Reform | October 2000 |
| 6. | Liberal and Social Liberal Coalition Government endorses new Conceptual Framework for Pension Reform | January 2001 |
| 7. | Liberal and Social Liberal Coalition Government approves Action Plan for the Preparation of the Pension Reform for 2001-2002. | February 2001 |
| 8. | Discussion of alternatives for resolving social insurance problems according to the Pension Reform Action Plan (as described above). | February–June 2001 |
| 9. | Liberal and Social Liberal Coalition Government presents the Draft Law on the Pension Reform to Parliament | May 2001 |
| 10. | Due to efforts by the Social Affairs Committee, Parliament rejects draft Pension Reform Law and suggests voluntary second tier. | June 2001 |
| 11. | Social-Democrats and Social Liberal Coalition Government approves and presents the first draft of the Pension Reform Law to Parliament. | September 2001 |
| 12. | Parliament returns the first draft of Law on Pension Reform to the Government. | May 2002 |
| 13. | Strategy Committee presents a new draft of the Law on Pension Reform to the Government. | August 2002 |
| 14. | Parliament approves the second draft of Law on Pension Reform. Participation in second tier is optional. | December 2002 |
| 15. | Parliament adopts secondary legislation for the implementation of pension privatization. | July 2003 |
| 16. | First round of contracting for participation in private funds (funds accumulated in individual accounts since 2004). | September–November 2003 |
| 17. | Beginning of second round of contracting for participation in private funds (funds accumulated in individual accounts since 2005). | January–July 2004 |
| 18. | Beginning of the transfer of social insurance contributions to private funds. | June 2004 |

In July 2001, the Liberal and Social Liberal Coalition split; and a new coalition of the Social Democratic and Social Liberal parties formed a new Government. While in opposition, Social Democrats had openly criticized the plans for privatization, but their criticisms were occasional and focused only on certain points. Once they formed a coalition with the Social Liberals, they were forced to tackle the issue as a whole. In the process, they questioned whether it was necessary to introduce mandatory private savings into the pension system. According to Morkūnienė:

> *Some of their key social experts proposed to offer better initiatives for voluntary provisions and called it a pension reform. For a while, Lithuania was thrown back into the debates on "voluntary or mandatory private pension provision" of 1998–1999, and a new working group was established, although without results. It was unable to issue a single opinion but instead presented alternatives to pension reform: for example, a mandatory savings pillar that meant splitting the social insurance contribution rate or the introduction of a voluntary supplement to the public pension scheme* (2001: 7).

Nevertheless, the Social Democratic and Social Liberal coalition Government approved the draft Law on Pension Reform and submitted it to Parliament in September 2001. As partners in the coalition, Social Liberals had endorsed the project to draft this law, and the Minister of Social Security and Labour, who was in charge of the project, continued to work in the new coalition. Therefore, it seemed likely that the Social-Liberals would back the law in Parliament. As it turned out, the main battle in Parliament broke out *inside* the Social-Democrat faction. There were extended, closed discussions among different groups of Social Democrats, while parliamentary readings of the draft law continued for 9 months. In May 2002, Parliament finally returned the draft to the Government. In doing so, it suggested that compulsory participation in the second tier be abandoned in favour of further incentives for voluntary savings in supplementary pensions.

In August 2002, the Strategy Committee decided to present a new draft of the Law on Pension Reform to the Government. In this proposal, participation in the second pillar was voluntary. The Government in turn submitted this draft to Parliament in November 2002. On 3 December 2002 the law was enacted by Parliament. Clearly, at this stage in the process, there was no disagreement among the major players.

Under this new law, all persons, regardless of age and who were paying contributions for the full social insurance pension, were allowed to choose whether to join the new private pillar or to remain solely in the social insurance system.[46] The law also provided for an annual open season (January to July) during which additional workers could shift to the mixed pension system, or those who had already joined could shift their savings to another private fund. However, the law prohibited returning from the mixed system to the public one; and no shifting of private savings among funds was allowed for 3 years, until 2007. In the first year of the reform, 2004, 2.5 percent of the earnings of each insured person who joined the mixed system would be diverted to the private savings scheme of his/her choice. By 2007, the rate would increase to 5.5 percent.

For those participating in the second tier, the earnings-related part of their social insurance pension will be decreased in proportion to the part of the contribution diverted to a private savings fund.

The key parameters of the new law are summarized in Table 17.

On the surface, dropping the requirement for compulsory participation in the second tier seemed to be a pragmatic compromise that enabled the opposing parties to end discussions without losing face. The opponents of pension privatization could maintain that the final decision was left to workers. Meanwhile, as free market promoters, the supporters could applaud the decision to increase private sector activity while still preserving each individual's right to choose. They claimed that once the advantages of the private pension system were understood by the population, they would abandon social insurance to the full extent permitted under the new law.[47]

[46] As most self-employed persons are insured only for the basic part of pension, they were not allowed to participate in the second tier.

[47] Nonetheless, during the initial stage of reform, libertarians criticized Parliament for its hesitation and unwillingness to institute compulsory participation in the pension reform (Steponaviciene, 2003).

**Table 17**
**Key parameters of the Pillar II**

| | |
|---|---|
| Participation in PPF | Voluntary for all employees, regardless of age (self-employed excluded). |
| Diversion of contributions to the second tier | 2.5 in 2004, 3.5 in 2005, 4.5 in 2006, 5.5 in 2007 percentage points of social insurance contributions. |
| Start of asset accumulation | July 2004. |
| Regulation of administration fees | Maximum 10 percent of contributions and maximum 1 percent of assets. |
| Benefits | Mandatory annuities with the exception of very low assets and part of assets above certain limits; separate mortality tables for males and females; assets inheritable during accumulation period, but not during payout period. |
| Participant mobility | Workers not allowed to change assets manager for the period 2004–2006. One change per year after year 2006. Free switching among different pension funds of the same assets manager. |
| Investment risk | Every assets manager must offer a "conservative" pension fund (investment only into assets of governmental and Central Bank's public bonds – Lithuanian and OECD). |
| Effect on the public pension benefit | Earnings-related public pension benefits will be reduced proportionally to the part of contributions transferred to the individual savings account of the private fund. |
| Requirements for the assets managers | Amount of own assets not less than 300,000 EUR. |

*Sources*: Pension Reform Law, 2002; Pension Accumulation Law, 2000.

## 2.3.2 Early Results of the Third Stage Pension Reform

### *2.3.2.1. Transition to the Mixed System*

Public response to the new law was strongly positive. By November 2003, 38.3 percent of those insured for full social insurance pensions had decided to join the mixed system.[48] By July 2004, this rate had risen to 47.6 percent of insured persons, or 549,200 (SODRA, 2004b).

[48] Here and below, the number of private scheme participants is compared with the number of those insured for full pensions, as only they are entitled to participate in the second tier. The Government describes the number of participants by comparing it with the total number of employed; thus, it makes up 36.6 percent.

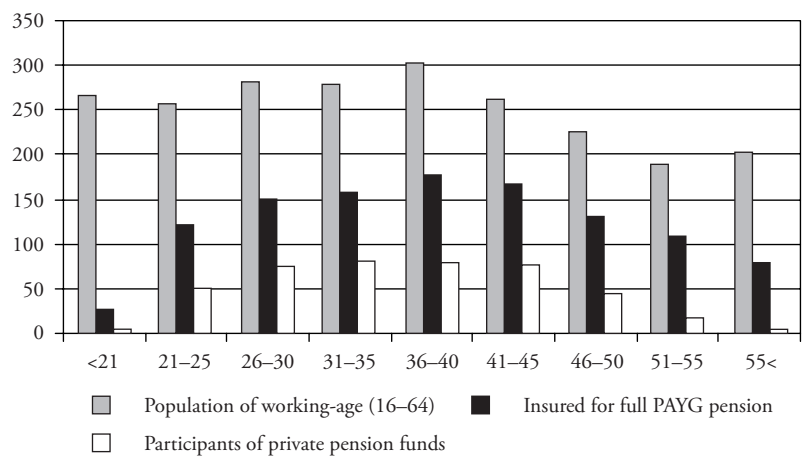
**Table 18**
**Participants in the voluntary second tier by age group, end of 2003**
**[portion of eligible insured persons]**

| Age | <21 | 21–25 | 26–30 | 31–35 | 36–40 | 41–45 | 46–50 | 51–55 | 55< |
|---|---|---|---|---|---|---|---|---|---|
| Participants [%] | 14.9 | 42.3 | 51.0 | 51.6 | 43.8 | 45.8 | 36.1 | 17.6 | 5.1 |

*Source*: SODRA, 2004b.

Over half of employed persons between the ages of 26 and 35 registered during this initial stage. These included significant numbers of both younger and older workers, as shown in Table 18. Even a portion of the 51–55 age group (over 17 percent of the insured) decided to join the mixed system.[49] As shown in Figure 21, the distribution of membership across age groups is quite wide.

**Figure 21**
**Number of participants in social insurance (first tier)**
**and private savings funds (second tier), end of 2003 [thousands]**

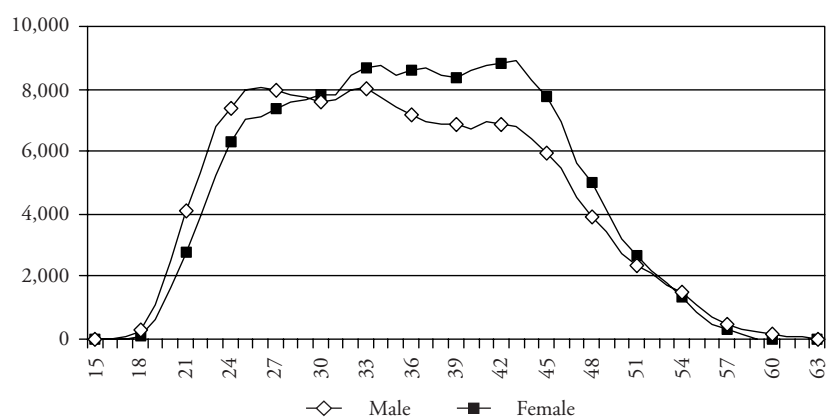



*Source*: SODRA, 2004b.

[49] This is despite significant disadvantages due to their short remaining work time, as will be explained.

The information campaign carried out by the Ministry of Labour and Social Security stressed that persons of pre-retirement age might be disadvantaged by joining the second pillar. These persons may not have enough time to accumulate private savings sufficient to offset their loss of public pension benefits. Because the retirement age for women is lower, the campaign stressed that older women had to be especially prudent in making their decision. Moreover, the use of different mortality tables in computing private pensions for men and women will leave women further disadvantaged. However, the first results of the reform showed that the number of women who decided to participate in the reform was actually higher than that of men. Even the portion of older women who had signed contracts with private funds exceeded the portion of their male counterparts (Figure 22).

**Figure 22**
**Number of participants in private funds by age, end of 2003**



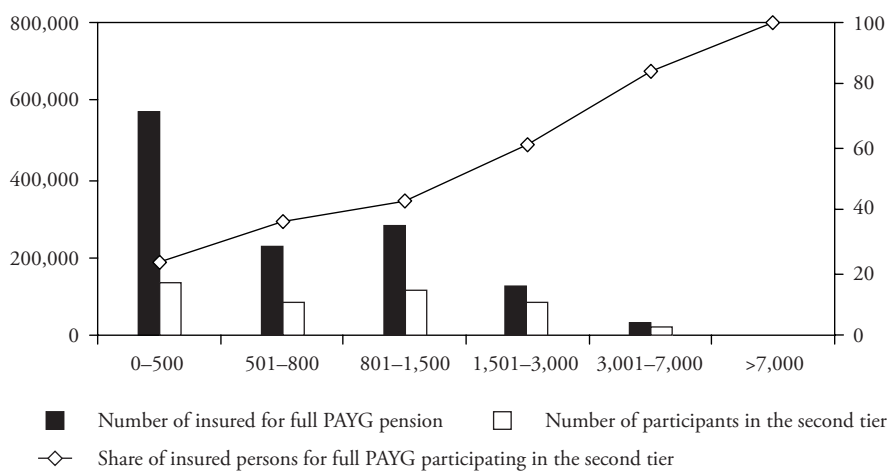

*Source*: SODRA, 2004b.

Compared to the rather wide distribution of participants by age, participation varies more significantly by earnings. Whereas only a small number of persons who earn less than minimum wage (500 LTL/month in 2004) decided to join the mixed system, nearly all those who earn more than 2.5 times the

average wage elected to do so (Figure 23). In general, participants earn about 30 percent more than the average wage.

During the deliberations on reform, one of the key arguments for mandatory privatization was Lithuanian workers' limited financial capacity to save amounts over and above the high social insurance contribution rate. Thus, it was feared that only those earning high wages would opt to establish private pensions under a voluntary supplemental system. Yet under the reform that was finally adopted, in which participation is voluntary but without any extra cost to workers, it has still turned out that high earners dominate the mixed system. Therefore, if there are eventual benefits to this reform, these will accrue to those in the upper social strata.

**Figure 23**
**Number of second tier participants by wage level**




*Source*: SODRA, 2004b.

Meanwhile, the financial burden of the reform rests on the population as a whole, which must somehow fill the "hole" in the financing of the public system.[50] If part of the missing revenues is replaced by subsidies from the

[50] For more about transition costs, see in Section 2.3.2.2.

state budget, people not participating in the second tier will cover its costs in the form of reduced public expenditures on education, health care, and so on. Without budgetary subsidies, the Social Insurance Fund will not be able to continue financing PAYG pensions at the current level, causing losses for pensioners. In both cases, persons who do not participate in the reform will nonetheless have to cover its costs.

Workers' decisions to join the mixed system were heavily influenced by the Ministry's information campaign, as well as by private fund advertising. Yet while promoting the advantages of private fund membership, the funds failed to mention the potential downside of participation for certain age and income population groups. Their advertising expenses averaged 3.4 EUR per participant (Poderys, 2004: 10–12). However, their total sales costs per member (Table 19) amounted to several times more, on average 16.3 EUR per participant.[51] These expenditures varied significantly by the type of second-tier fund. Life insurance companies on average spent 3 times more to sign one contract than did investment management companies. This might be because the latter were mostly established by banks, which had ample opportunity to offer pension funds to their clients in the course of conducting other business with them.

**Table 19**
**Expenses of asset managing companies on advertisement and the selling of contracts**

| | Total [millions LTL/EUR] | Average per one participant [LTL/EUR] |
|---|---|---|
| Advertising cost | 5.2/1.5 | 11.8/3.4 |
| Sales expenses | 24.9/7.2 | 56.4/16.3 |
| Total | 30.1/8.7 | 68.2/19.8 |

*Source*: Poderys, 2004: 10–11.

Unlike the advertising of asset management companies, the Ministry's information campaign was not indifferent to individual population groups. During its campaign, the Ministry repeatedly emphasized that the elderly and

[51] Fund managers employed agents who were responsible for making contracts with clients. The agents were paid according the number of clients they successfully solicited.

low-wage earners should weigh the benefits of participating in the reform. They stressed that, most critically, participation in private funds would reduce the amount of a person's future social insurance pension. Furthermore, they emphasized that elderly persons, even those with considerable income, might not have sufficient time to accumulate large assets.

In order to assist workers with this decision, the Ministry of Social Security and Labour created a pension calculator on its website. The calculator allows users to compare the size of a future benefit from a private fund with losses of the social insurance benefit. The calculator computes only the earnings-related (supplementary) part of the social insurance benefit – not the total benefit – and only beginning with the point in time that a worker would join the second tier. The calculator also estimates the extent to which the new private benefits will offset the reduction of the social insurance caused by joining the second tier.

The calculator makes use of the following variables: age, sex, wage level at the beginning of the reform and upon retirement, the rate of return on investments, the profit rate on annuities, and administrative charges levied on pension assets. All of these can be freely set by users of the calculator. However, one additional factor is used by the calculator and cannot be varied: this is the average growth rate of wages, which is fixed at 2 percent (Table 20).

**Table 20**
**Economic assumptions for future pension calculation** [%]

| | Pessimistic | Basic | Optimistic | Options of the participant for calculations |
|---|---|---|---|---|
| Investment real rate of return | 2 | 3 | 5 | X |
| Annuity real rate of return | 2 | 2 | 2 | X |
| Rate of average wage growth | 2 | 2 | 2 | 2 |
| Administration fees on contribution | 10 | 10 | 0* | X |
| Administration fees on assets | 1 | 1 | 1 | X |

* All administration costs could be covered by fees on assets without fees on contributions.

*Note*: X values may be chosen by the user of calculator.

As the calculator is constructed, the average wage growth rate influences the size of the public pension, whereas the pension fund investment return rate determines the size of the private one. Under pessimistic assumptions concerning private investment returns, it is striking that all males (except for very young ones) would still find participation in the second tier beneficial (see Table 21). Under optimistic assumptions, i.e., with a pension fund investment return of 5 percent, participation in the private system would be better for everyone.

**Table 21**
**Size of private pension compared with social insurance pension**
["+" Private pension is higher than social insurance pension;
"–" Private pension is lower than social insurance pension, percent]*

| Year of birth | Pessimistic assumptions | | Optimistic assumptions | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| 1950 | +12 | –3 | +22 | +3 |
| 1965 | +8 | –4 | +35 | +14 |
| 1985 | –2 | –10 | +43 | +24 |

* Personal wage from 1,100 LTL up to 5,500 LTL.

*Source*: Author's calculations.

Yet one is hard pressed to justify the assumption that the average wage will increase by only 2 percent annually. As shown previously, wages comprise a very small part of GDP in Lithuania. The average wage is 8 times lower than that for the EU-15. Therefore, there is every reason to forecast long-term growth of wages, in relation to both GDP and national income. For example, the Ministry of Finance forecasts that by 2007 the average wage will be increasing by 7 percent per year (Government, 2004: 12). Had this figure been used instead, the calculator would have produced quite different results.

In conclusion, it seems clear that workers were unable to make informed decisions on whether to join a private fund or not, due to the unknown size of the benefits which these funds will provide. Rather, the popularity of the second tier is attributable to the negative public attitude towards the social

insurance system, private funds' promotional activities, and the Government's information campaign, in particular the biased calculation of future private benefits.

#### *2.3.2.2 Impact of the New Private Tier on the Public System*

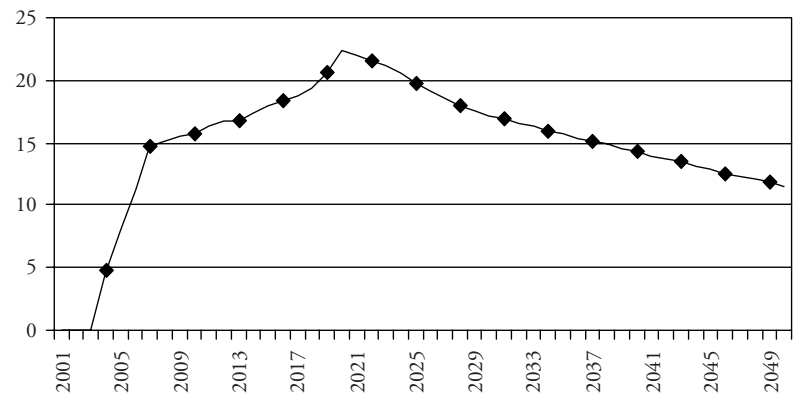
Even if the second tier were to produce benefits that are large enough to offset its members' losses of social insurance, a problem still arises in financing the existing benefit obligations of the public pension system. In 2004, the contributions diverted to the second tier equalled 4.7 percent of the annual spending for social insurance pensions (Ministry of Social Security and Labour, 2004: 3). The rate of diversion will more than double (from 2.5 to 5.5 percent) during the next 3 years. Thus, the cost of reform would reach 10.3 percent of the total cost of social insurance if the number of private fund participants holds steady. Undoubtedly, this number will increase, causing a commensurate strain on public pension financing.

Our projection indicates that the share of social insurance contributions to be transferred annually into private funds should equal 15–20 percent of the total annual cost of social insurance during 2007–2040 (Figure 24). If these funds were used to finance social insurance pensions instead, they could be higher by 15–20 percent. These are the hidden costs of the reform, which are being paid by the present generation of pensioners.

The Law on Pension Reform states that transition costs may be covered from the state budget, the State Reserve (Stabilization) Fund and/or SODRA. However, the Government has not specified how the burden will be allocated. Prior to the reform, the Ministry of the Social Security and Labour predicted that only 6 percent of insured persons would participate in the first open season for private fund membership; and it planned to allocate only 40 million LTL from SODRA and the Government budget in 2004. At the end of 2003, when approving the SODRA budget for 2004, the Government projected that approximately 28 percent of those insured for the full social insurance pension would participate in private funds. The amount designated for the filling the resulting hole in public pension finance equalled 110 million LTL. It was financed equally by SODRA and the State Reserve (Stabilization) Fund,

i.e., 55 million LTL each. By the spring of 2004, the number of private fund participants had reached 44 percent of the insured population. On 8 June 2004, the Government announced that 178.5 million LTL, or 0.33 percent of GDP, would be transferred from SODRA to private funds. Part of this sum (123.5 million LTL) would be covered by the 2004 SODRA budget, while the Government would fund the remaining part (55 million LTL) (Ministry of Social Security and Labour, 2003: 3).

**Figure 24**
**Projected annual transfers of social insurance contributions to the private funds [% of annual spending of the pay-as-you-go scheme]**




*Note*: *Assumptions*: Forecast is based on the assumptions of Figure 17. Additionally, participation rate in the private pension funds will increase from 38 percent in 2004 to 55 percent in 2010 and will be stable until 2050.

*Source*: Author's calculations.

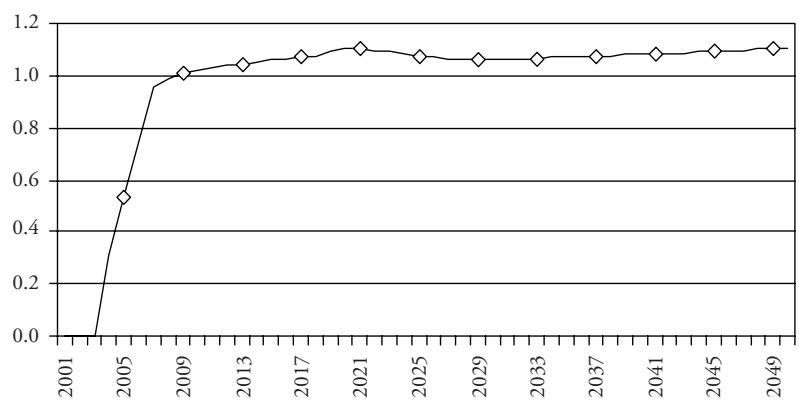
It is difficult to assess whether the inaccuracy of the early forecasts resulted from the reformers' ignorance of public attitudes or their desire to avoid admitting that the reform would require lots of money.

If the rate of the contribution diverted to the private funds rises from 2.5 to 5.5 as expected, transitional financing costs would equal 0.65 percent of GDP with the current number of private fund participants. If the number of

participants increases, these costs will rise correspondingly and may reach 1.1 percent (Figure 25).

In the long run, the reform will have a dual impact on the social insurance pension budget. The first impact, as just described, is felt immediately: the diversion of contribution revenues to private funds. This resulting hole in public pension finance will grow progressively and will continue for more than 4 decades. The second impact is longer term: when the second-tier members reach retirement age, pubic pension spending will fall due to their receipt of lower public benefits. The time lag between these two impacts is a lengthy one, spanning several decades. It is this time lag that creates the transitional financing costs.

**Figure 25**
**Forecasted annual transfers of social insurance contributions into private funds [% of GDP]**




*Note*: *Assumptions*: Forecast is based on the assumptions of Figure 17. Additionally, participation rate in the private pension funds will increase from 38 percent in 2004 to 55 percent in 2010 and will be stable until 2050.

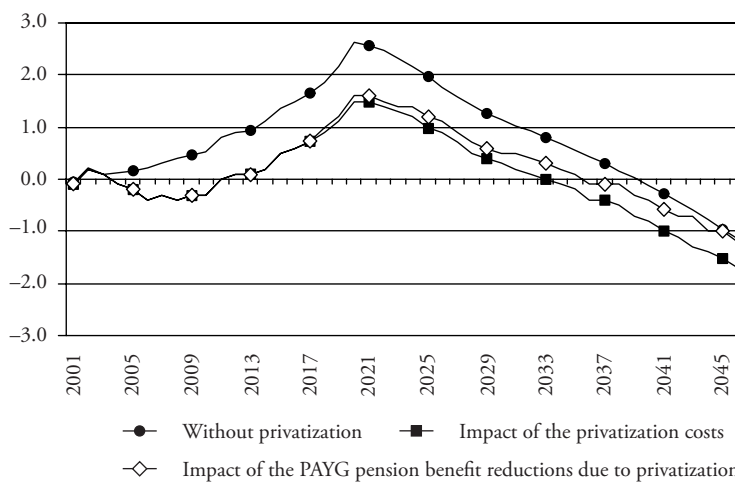
*Source*: Author's calculations.

Figure 26 provides a forecast of the future balance of the public pension scheme. It successful economic and labour market development. It shows that, without the partial privatization of the pension system, that system would have

an annual budget surplus that would rise for the next 20 years, accounting for approximately 2.5 percent of GDP in 2021. Over the next 20 years, the size of the annual surplus would then decrease gradually. By approximately 2050, the system would go into the red again, with the deficit reaching 2 percent of GDP.

The privatization changes this picture significantly. It will cause a revenue loss of 0.8–1.0 percent of GDP annually during the next 3 decades. Only in the fourth decade will the size of the annual loss start to shrink, to 0.6 percent of GDP. Due to reduced benefit payouts, a positive financial effect (reduced expenditures) will begin 15–20 years after the reform. However, this offset will remain insignificant for a long time. Only approximately after 40–45 years will the reduction in benefit payouts fully offset the drop in revenues.

**Figure 26**
**Forecasted social insurance budget surplus/deficit in 2001–2050 [% of GDP]**




*Note*: *Assumptions*: Forecast is based on the assumptions of Figure 17. Additionally, the participation rate in the private pension funds will increase from 38 percent in 2004 to 55 percent in 2010 and will be stable until 2050. Expenditures of social insurance pension scheme will start to decrease because of its partial privatization as of 2018, i.e., at that time participants of the private pension funds will start to retire and to extract reduced social insurance pensions.

*Source*: Author's calculations.

The White Paper on the Pension Reform indicated the difficulties of financing the reform, while the Pension Reform Conceptual Framework expressed the objective of long-term sustainability. Such an aspiration at this stage of reform planning (1990–2002) was very ambitious, as at that time the Social Insurance Fund budget was deficit-ridden. The implementation of the reform coincided with the economic upturn of 2003, and since then social insurance budget has been in surplus. Over the long term, however, the possibilities of financial stability have been greatly diminished.

From the point of view of workers, the most important aspect of the reform is that those who joined the second tier will lose a significant portion of their social insurance benefits, to be replaced by a private benefit whose amount cannot be known in advance and for which there is no state guarantee. Consequently, if the financial sustainability of the pension system is enhanced, this will have been achieved at the expense of workers' social security. This is not in line with ILO Convention No. 102, which says that the State must take responsibility for social security benefits, nor is it in the spirit of the Eurostat decision of March 2003 that those EU pension schemes for which governments do not guarantee payment risk for the majority of participants will not be considered social security programmes.

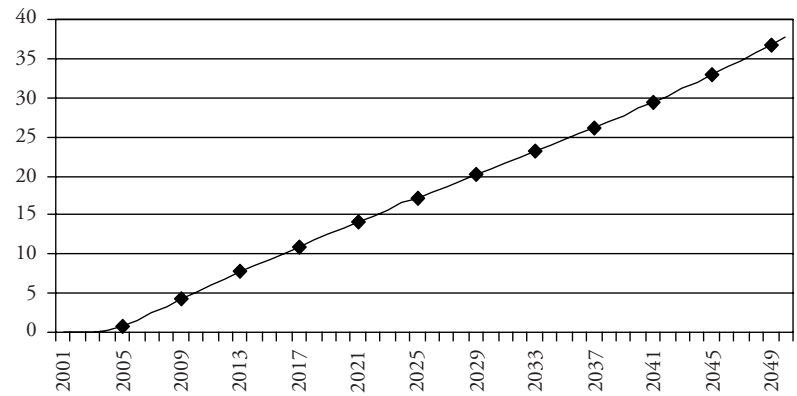
#### *2.3.2.3 Initial Performance of the Private Tier*

Because the diversion of contributions to private funds began only in mid-2004, no data yet exists on how they are being invested. Thus, it is only possible to make some educated guesses about the future diversity and concentration of the market.

Given the relatively large portion of workers who joined the second tier voluntarily in the initial period, it seems reasonable to expect a continuing but more gradual increase in members in the future. Our projection assumes that second-tier members will increase gradually to 55 percent of those insured for the full social insurance in 2010 and, after that, will level off and remain constant. It also assumes that the wages from which contributions are withheld will increase by 8 percent per year at the beginning of the period and, by the end, by 5 percent. Finally it assumes that the real rate of return on capital

will be 4 percent. On this basis, 50 years into the reform, accumulated assets would reach almost 40 percent of GDP (Figure 27).

**Figure 27**
**Forecasted accumulation of assets of private funds [% of GDP]**

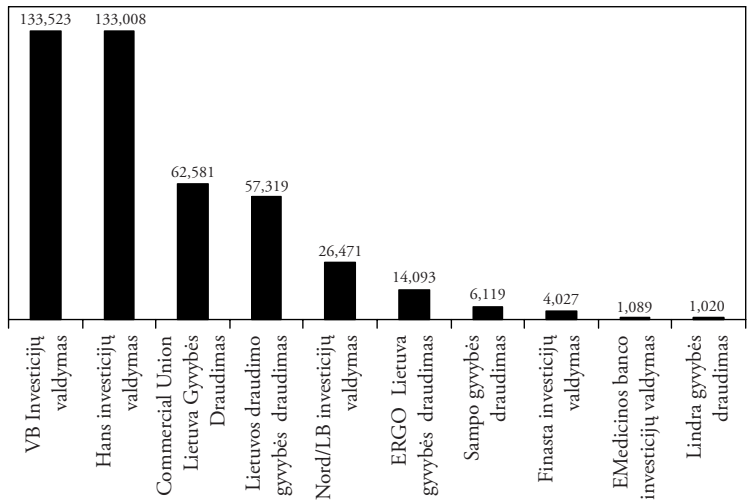



*Note*: *Assumptions:* annual rate of return – 4 percent; participation rate – 55 percent of participants of second tier pay-as-you-go scheme; contribution rate – 5.5 percent of wage.

*Source*: Author's calculations.

After the first round of contracts was signed, it was clear that the new private savings market was highly concentrated. With 10 asset managers registered in Lithuania, 2 of these – both daughter companies of the largest banks engaged in asset management (Vilniaus Bankas Investment Management and Hansa Investment Management) – each acquired 30 percent shares of the market. Two life insurance companies – Commercial Union Lithuania Life Insurance and Lithuanian Life Insurance – captured 14 and 13 percent of the market respectively. The remaining companies captured the remaining 13 percent (Figure 28).

**Figure 28**
**Distribution of participants by pension asset managers, 1 January 2004**




*Source*: Poderys, 2004: 3.

During the initial sign-up period, asset managers competed fiercely for members. This held down the administrative fees that are deducted up-front from monthly contributions. The legal ceiling on such fees, 10 percent of the contribution, is a rather high rate. However, most asset managers established only a 1–2 percent administration fee. Less visible, the administration fees levied on accumulated pension assets were not affected by competition. Here most pension funds charged the maximum rate permitted by the law, 1 percent of the accumulated assets.

Administration fees are crucial determinant of the size of future pension benefits. During a 40-year period, if a fund charges the maximum fees permitted by law, this will reduce a worker's pension assets by about 21 percent (Table 22). Even if competition continues to keep the up-front fees at 2 percent of contributions, total fees may still reduce assets by 15 percent.

**Table 22**
**Impact of administrative fees on pension assets**

| | Legally permitted | Actual in 2004 |
|---|---|---|
| Up-front fee [% of contribution] | 10.0 | 2.0 |
| Management fee [% of assets] | 1.0 | 1.0 |
| Reduction in assets [%] | 21.1 | 15.5 |
| *Assumptions:* | | |
| *Wage growth [% annually]* | *2* | *2* |
| *Rate of return [% annually]* | *4* | *4* |
| *Contribution history [years]* | *40* | *40* |

*Source*: Author's calculations.

Workers who opted to join the second tier may choose among funds with various levels of risk. The law requires every pension asset manager to establish at least two funds with different levels. One of them must be conservative, i.e., invested only in bonds. In reality, however, all assets managers offer several types of funds (investment only in bonds, only in equities, and in bonds and equities in different proportions). Nearly 19 percent of participants have chosen conservative funds; approximately 80 percent preferred mixed funds, whereas only 1 percent elected to join share funds, which bear the highest level of risk. The Securities Commission found this pattern of public decision-making to be over-cautious. It evaluated workers' decisions by comparing the ratio of public bonds and equities in their chosen funds to the remaining number of years before their retirement. According to this criterion, 64 percent of second-tier participants were classified as highly conservative; 35 percent, as prudent; and only 1 percent, as excessively risky (the investment risk criteria of the Securities Commission are presented in Table 23). Thus, in the Commission's view, funds participants decreased their own chances of receiving higher pensions because of their excessive caution.

As investments will begin to be made only in the second half of 2004, one must rely on the Securities Commission survey of the plans of assets managers to predict future investment patterns. This survey suggested that only 20

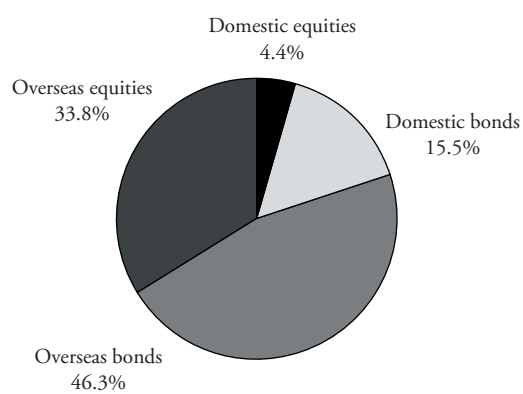
percent of total assets will be invested in Lithuania, while the remaining 80 percent will be sent abroad. Investment in bonds (both domestic and foreign) will account for approximately 60 percent, and investment in shares, 40 percent (Figure 29).

**Table 23**
**Risk groups by investment strategy and remaining zears before retirement (evaluation by Securities Commission)**

| Investment strategy | Too conservative (insufficient risk) | Prudent (moderate risk) | Too aggressive (excess risk) |
|---|---|---|---|
| Solely in bonds | 5 or more years to retirement | Less than 5 years to retirement | — |
| 2/3 of assets in bonds | 10 or more years to retirement | 5–10 years to retirement | 5 or less years to retirement |
| Equal parts of assets in equities and bonds | 35 or more years to retirement | 10–35 years to retirement | 10 or less years to retirement |
| Solely in equities | — | More than 35 years to retirement | 35 or less years to retirement |

*Source*: Poderys, 2003: 6.

**Figure 29**
**Planned investments of pensions assets**




*Source*: Poderys, 2004: 9.

Prior to the reform, one argument in favour of pension privatization was the need to increase investment in the national economy. However, as it turns out, only around 4.4 percent of pension assets are planned for investment in shares of Lithuanian companies.

Another objective of the reform was to the increase in the number of active participants in the social insurance pension scheme. Supporters argued that giving workers the opportunity to transfer a portion of their contributions into personal savings accounts would create an incentive to participate in social insurance for those working in the shadow economy. However, a look at the actual numbers suggests that this incentive is meaningless. The amounts diverted to private accounts equal only 10 percent of the total contribution to social insurance that a worker would have to pay when entering in the formal economy. In other words, 90 percent of their contribution would go to the state, not the private sector. What is more, employers, not employees, typically make the choice of illegal employment; and the reform does not impinge on their incentives. Moreover, the self-employed, a group which has a notoriously low compliance rate, were largely excluded from the new private tier.

In fact, the first years of reform did see a modest expansion in the number of insured persons – by 2.5 percent. However, the beginning of the reform coincided with a rapid economic upturn, decreased unemployment, and a slight growth of employment. Most likely, these are the true factors that explain this small increase.

## 3. Conclusion

Pension reform in Lithuania began in 1990, when the new Government established a Social Insurance Fund separate and autonomous from the state budget. During this initial stage (1990–1991), radical changes were made in the administration and financing of pensions. The principles driving these early changes were three-fold: to re-establish the insurance principle, to strengthen work incentives, and to protect pensioners from inflation.

The transformation of the economy and labour market during these early years (1990–1994) posed new challenges for the pension system. The second stage of reform, in 1995, was shaped by economic decline, high inflation, rising

unemployment, and non-compliance with the contribution requirement, all of which increased the difficulty of financing pensions. The changes in this period related pension benefits more closely to previously earned income. The net replacement rate of old-age pension for a full-career, average-wage earner was maintained at approximately 40 percent.

The main thrust of the third stage of pension reform was partial privatization of the system – that is, the transfer of a portion of social insurance contributions into private funds. All political parties in power supported moving in this direction, although with varying levels of enthusiasm (Liberals showed the greatest support, Social-Democrats the least). The actual implementation of the reform was undertaken in 2004 by Social Democrats as the major partner in the coalition with Social Liberals. They chose to implement reform gradually, beginning with a small diversion of contribution revenues but putting in place a plan under which this would rise rapidly. They also supported making the new system voluntary for workers.

Ironically, all the parties involved in designing the reform argued for its necessity by referring to current problems that it cannot solve. The final legislation is quite narrow compared with what was planned at the beginning of the deliberations. Its main thrust is expressed in the Lithuania Convergence Programme of 2004, as follows:

> *The key objective of the pension system reform is to establish a pension-accumulation pillar which would provide the population with the opportunity to individually accumulate a portion of social insurance contributions for retirement pensions* (Government, 2004: 34).

While debates concerning the wisdom of partially privatizing the pension system lasted longer and were more contentious in Lithuania than in many other countries, the country did not avoid this policy direction in the end. Moreover, Lithuania finally took action just at the time when the early results of those countries that privatized several years earlier are beginning to become known. These results are mostly negative – high private administrative costs, negative real returns on worker savings, and oligopolistic private savings industries that eschew competition. It is important that the Government now take these results into account and, where action has already been taken, make needed corrections. The main priorities for future action are three-fold:

- the Government needs to tighten the legal limits on private administrative costs, which allow for substantial erosion of worker savings;
- the Government needs to educate citizens better about the pros and cons of the choice between systems, including the correction of misleading information on the Government's website; and
- the financing of pension reform transitional costs restricts the Government's options in meeting its obligations to pay current pensions. Lithuania lacks a clear strategy of how to deal with this conflict. The Government needs to open a public debate on the true transitional financing costs of privatization and develop a public consensus on how these costs should be met.

## Legal Acts

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Pension Accumulation Law, 2002.
Pension Reform Law, 2002.
Resolution Granting Merit Pensions, 1990.

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# Annex

**Table 1**
**Public social spending [% of GDP]**

| | Total | Of which: transfers to households | Pensions | Of which: old-age pensions |
|---|---|---|---|---|
| Austria | 27 | 19 | 16 | 9.9 |
| Belgium | 25 | 17 | 11 | 7.4 |
| Czech Republic | 19 | 13 | 9 | 6.4 |
| Denmark | 30 | 19 | 12 | 6.8 |
| Estonia | 16 | 11 | 8 | 6.3 |
| Finland | 27 | 18 | 12 | 7.0 |
| France | 29 | 19 | 14 | 10.6 |
| Germany | 27 | 17 | 13 | 10.5 |
| Greece | 23 | 17 | 14 | 10.2 |
| Iceland | 18 | 10 | 8 | 3.8 |
| Ireland | 16 | 10 | 5 | 2.5 |
| Italy | 25 | 19 | 17 | 12.8 |
| Latvia | 17 | 13 | 10 | 8.3 |
| *Lithuania* | *15* | *10* | *8* | *4.7** |
| Luxembourg | 22 | 16 | 11 | 8.0 |
| The Netherlands | 24 | 16 | 11 | 6.2 |
| Norway | 27 | 18 | 13 | 6.0 |
| Poland | 23 | 18 | 14 | 8.0 |
| Portugal | 18 | 12 | 10 | 6.3 |
| Slovak Republic | 14 | 13 | 9 | 5.2 |
| Spain | 20 | 14 | 11 | 8.1 |
| Sweden | 31 | 21 | 14 | 7.5 |
| Switzerland | 28 | 20 | 15 | 11.2 |
| Turkey | 12 | 7 | 6 | 4.2 |
| United Kingdom | 25 | 18 | 14 | 9.8 |
| United States | 15 | 8 | 7 | 5.2 |

* Data on Lithuania from the Department of Statistics; data for other countries from OECD, 2003: 52. This table is intended to provide only a rough comparison, as computation methods may differ between the two sources.

**Table 2**
**Income tax and social insurance contributions for an average production worker in 2000**

| | Income tax | Employee contribution | Employer contribution | Total of tax and contributions (Col.1+2+3) |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| | | [% of gross wage] | | |
| Belgium | 28 | 14 | 33 | 75 |
| Hungary | 20 | 13 | 41 | 73 |
| France | 13 | 13 | 41 | 68 |
| Sweden | 25 | 7 | 33 | 66 |
| *Lithuania* | *29* | *3* | *31* | *63* |
| Latvia | 25 | 9 | 27 | 63 |
| Italy | 19 | 10 | 33 | 62 |
| Germany | 22 | 20 | 20 | 63 |
| Finland | 26 | 8 | 26 | 59 |
| Austria | 9 | 18 | 32 | 59 |
| Slovak Republic | 7 | 13 | 39 | 58 |
| Czech Republic | 11 | 12 | 35 | 58 |
| Estonia | 22 | — | 33 | 55 |
| Netherlands | 8 | 29 | 16 | 52 |
| Poland | 6 | 25 | 20 | 52 |
| Spain | 12 | 6 | 30 | 49 |
| Turkey | 14 | 14 | 19 | 48 |
| Greece | 3 | 15 | 28 | 46 |
| Denmark | 32 | 12 | 0 | 44 |
| Portugal | 6 | 12 | 23 | 42 |
| Norway | 21 | 8 | 12 | 42 |
| Luxembourg | 12 | 14 | 14 | 40 |
| US | 18 | 8 | 8 | 33 |
| UK | 15 | 8 | 10 | 33 |
| Ireland | 16 | 5 | 12 | 33 |
| Switzerland | 10 | 11 | 11 | 33 |
| Iceland | 21 | 0 | 5 | 26 |

*Source*: OECD, 2003: 77.

# Part II

# PERSPECTIVES ON THE BALTIC CASE STUDIES

## Pension Reform in the Baltics: Expectations and Early Experience

*Elaine Fultz*

## The Missing Pillar

*Mária Augusztinovics*

## The Political Economy of Pension Privatisation in the Baltics

*Katharina Müller*

# Pension Reform in the Baltics: Expectations and Early Experience

*Elaine Fultz*

This volume analyzes pension reform in the Baltic countries during 1989–2004. It traces the initial steps that the new governments took to restructure their pension systems after regaining independence, the impact of the early economic shocks of transformation on the schemes and those who depended on them, subsequent reforms designed to stabilize financing and bring benefits into closer relation to each worker's past earnings and contributions, and, finally, after the turn of the century, the scaling down of the public pension systems in favour of privately-managed individual savings accounts (pension privatization).

At the outset of the project, we planned to provide an overview chapter comparing the three reforms in the same format as the studies themselves. However, as work progressed, it became clear that this approach would be unwieldy, while failing at the same time to highlight certain key points of comparison. The difficulty lay partly in the lack of direct comparability in the data across the countries and partly, notwithstanding broad similarities, in the numerous differences in the details of the reforms.

Instead, this chapter offers a more limited set of observations that compares expectations with early experience in implementing the reforms. This perspective will, we hope, help to make the patterns in the Baltic experience stand out from the details, provide useful feedback for pension policy makers and their social partners by showing how practice departed from expectations, and inform the policy deliberations of other governments, thus facilitating regional learning and progressive improvement in the design of reforms.

In identifying expectations, the chapter applies a varied standard. Most commonly, the references the expectations of policy makers who advocated the reforms or the literature they cited or relied on. However, the chapter also focuses on striking differences between the requirements of law and actual practice, as well as between the early results of the Baltic reforms and what one might have expected on the basis of the previous experiences of Hungary and Poland.

Like the point-by-point comparison that was originally planned, this effort too was sometimes frustrated by lack of cross-country comparability in the data and by extensive variation in the details of the countries' experience. In a few cases, additional sources were drawn on to round out the analysis.

Two qualifications are important at the outset. First, while this analysis draws heavily on information presented in the three studies and sometimes describes the authors' perspectives, the conclusions drawn are entirely my own. Second, the period under examination was one of extraordinary change in the Baltic countries, as elsewhere in Central Europe.[1] Given the dramatic evolution of events and understanding in the first 14 years of transformation,

[1] For example, the early economic shocks of transition proved to be deeper and more sustained than predicted by governments or international organizations that saw in "shock therapy" the optimal means of moving from state socialism to market economy. The processes that put state property in private hands often produced very different distributions of wealth than governments and their international advisors expected. In the area of pensions, the notion that shifting to capitalized savings systems could avert an old age crisis was widely credited and acted on, only to be displaced by a realization that demographic ageing will affect all types of pension schemes, however financed. See Section 5.

it would be wrong to interpret the observed gaps between expectations and experience as a sign of naiveté. These gaps more often reflect the swift rate of change and the rapid foment of ideas that ensued.

With these caveats, five striking reform outcomes are examined below. These involve: (1) workers' preference for the new individual savings options under the partially privatized pension systems; (2) workers' response to new financial incentives to extend working life, delaying the day they begin collecting a pension; (3) early investment patterns and rates of return in the new privately managed individual savings systems; (4) the role of international actors in the three reforms; and finally (5) the authors' updated projections of benefit levels and pension financing costs in the post reform period.

*(1) Preference for the individual savings options*: All three Baltic governments created new avenues for individual retirement savings by diverting a portion of public pension contributions to privately managed accounts. These reforms were adopted in close sequence: Latvia, in 2000; Estonia, in 2001; and Lithuania, in 2002. In creating the new second tiers, governments extended the option to join or not to certain groups of workers, as had been done by the Hungarian and Polish governments in their own pension privatizations the late 1990s. In these previous cases, both government estimates had both fallen far short of actual worker preferences for the new private systems.[2] Although this pattern had been well documented when the Baltic governments passed similar laws, two of the three governments made similar underestimates.

In Lithuania, the government predicted that only six percent of those offered the option would join in the first year of implementation.[3] In fact 38 percent joined and, by July 2004, the rate had risen to 48 percent. In Estonia, the government predicted that in the first three to four years 50 percent of

[2] In Poland, the government estimated that 50 percent of the optional group (age 30–50) would make the shift, whereas actually 63 percent did so. In Hungary, the government estimated that 800,000 of the optional group (all current workers) would switch in 1998, but 1.4 million actually did. Fultz and Ruck (2000), p. 15.

[3] In Lithuania, all workers, both current and future, have this option. Lazutka, Section 2.3.2.1, this volume.

those allowed would join.[4] In fact, 55 percent joined within three years and, within four years, 62 percent.[5]

Among the reasons for this higher-than-expected appeal, both studies describe as decisive certain actions taken by governments themselves.[6] According to Leppik and Võrk, the Estonian government's promotional campaign changed the "optics" of the reform, successfully portraying the additional 2 percent contribution required of each worker opting for the private tier as a bargain: "You pay 2 percent, the state pays 4."[7] It is surprising indeed that the only country to require such an extra contribution attracted the largest fraction of optional joiners.

Lazutka emphasizes the importance in Lithuania of the "pension calculator."[8] This was a program that the Ministry of Social Security and Labour put on its website to enable workers to compare the benefits they could expect from the new private system with what they would receive from the public one. The program contained a fixed, low estimate for future wage growth (just

[4] In Estonia, the optional group included all current workers but excluded new labour force entrants. Leppik and Võrk, Section 3.2, this volume, and Leppik (2005).

[5] In Latvia, at the World Bank's suggestion, the government assumed that 50 percent of the optional group would join the second tier and that 10 percent per year would join in the initial years, so, by 2025, 40 percent. In the first year, 8 actually percent joined. Vanovska, personal communication, 13 January 2006.

[6] The other explanatory factors include public mistrust of the government, aggressive advertising by private pension funds eager to attract new clients, an information asymmetry that left workers able only to compare the known weaknesses of the public systems with abstract claims of superior performance by the private ones, and a snowball effect where some workers joined the new systems because they saw others doing so.

[7] Leppik and Võrk, Section 3.3, this volume. They say that this change of optics was aided by a kind of group pressure, where many persons opted to join the second pillar because their friends and family had done so, as well as by transparent and efficient scheme administration in the early period of implementation.

[8] In addition, Lazutka attributes the larger-than-expected group of joiners to the unrealistically low estimate made by the Ministry of Social Security and Labour. He suggests that the Ministry may have set the estimate at just 6 percent in order to understate the expected losses of contribution revenues to the public pension system due to the diversion of funds to the private one. Lazutka, Section 2.3.2.2, this volume.

2 percent per year) that made benefits from the public system look far less attractive.[9] Unlike other factors in the program, the rate of wage growth could not be adjusted, making it impossible for users of the calculator to compare the public and mixed pension systems under different assumptions about future wages. This restriction biased the comparison of the 2 systems.

In both analyses, the composition of the optional group reveals some striking patterns. In Estonia, the average woman's benefit under the private scheme is projected at just 66 percent of the average man's benefit, as compared to 76 percent when both tiers are combined.[10] Yet among those eligible to join the private tier, women outnumbered men 55 percent to 45.[11] In Lithuania, where the law permits private funds to use separate life expectancy estimates for men and women in computing benefits (a practice which diminishes women's benefits compared to men's), women still opted for the private tier in greater numbers.[12]

In addition, some cohorts of older workers joined the private system in greater numbers than younger ones, despite the shorter time available to them to accumulate private savings to offset their losses of public benefits. In Estonia, those in the 42–46 age group joined in much larger numbers than those in their 20s and 30s.[13] Leppik and Võrk attribute this to the pressure of a

[9] This fell far below the Finance Ministry's estimate that 7 percent wage growth would be achieved by 2007. Lazutka, Section 2.3.2.1, this volume.

[10] Leppik and Võrk, Figure 36 and following text, this volume. They project the replacement rates for the private pillar alone at 12 percent for women and 18 percent for men, making the woman's private benefit 66 percent of that for men on average. They also project that the average replacement rate in Estonia will fall from 40 percent today to 36 percent for men and 30 percent for women in 2035 (see Section 5). Thus, both sexes are projected to lose ground overall; and the average loss for women is greater in the private system.

[11] Leppik and Võrk, Figure 19, this volume. Their projection assumes a continuation of the current gender wage gap in Estonia, about 25 percent. Should this gap diminish in the future, the relative disadvantage of second tier membership to women as a group would be lessened.

[12] Lazutka, Figure 22, this volume.

[13] Leppik and Võrk, Figure 20, this volume.

tighter time limit for older workers to make their decisions. In Lithuania too, middle aged women joined in greater numbers than younger women.[14]

The larger-than-expected number of joiners has raised the cost of pension privatization, causing more contribution revenues to be diverted to the second-tier savings schemes and thus enlarging the 'hole' in public pension financing that governments and taxpayers must somehow fill. As the governments adopted privatization laws without a strategy for covering its long-term costs, the issue how to deal with this hole remains open in all 3 countries. It will be returned to in Section 5.

*(2) Sticks and carrots for delayed retirement* – All 3 governments made efforts to increase the age at which workers would start collecting their pensions. These efforts had two dimensions, one based on statutory requirements and a second, on financial incentives. In the mid to late 1990s, all three countries phased in higher national pensionable ages (the earliest age at which full retirement benefits become available under law). See Table 1. These increases are now in place for men but still in progress for women. As a result, the pensionable age has risen by 2 to 3 years for men and, for women, will rise by 5 to 8 years. Estonia and Latvia will eventually equalize the pensionable age for men and women, while in Lithuania a gender gap of 2.5 years will remain.

**Table 1**
**Statutory increases in the pensionable age**

| Country | Pre-reform retirement age | | Year of change | Year of completion of change | | New final retirement age | |
|---|---|---|---|---|---|---|---|
| | Men | Women | | Men | Women | Men | Women |
| Estonia | 60 | 55 | 1994, 1998* | 2001 | 2016 | 63 | 63 |
| Latvia | 60 | 55 | 1996 | 2003 | 2008 | 62 | 62 |
| Lithuania | 60 | 55 | 1995, 2001** | 2003 | 2006 | 62.5 | 60 |

* Schedule of increases was modified and pension ages of men and women equalized.

** Schedule of increases was accelerated.

*Source*: Lazutka, Section 2.2.1; Leppik and Võrk, Section 2.1; and Vanovska, Section 3.1.2 and Box 3, this volume.

[14] Lazutka, Figure 22, this volume.

Second, all 3 governments created new incentives within the public pension system for workers to delay retirement. In Estonia (2001), the government provided a 10.8 percent benefit increment for every year of work beyond the pensionable age.[15] In Lithuania, the government initially (1995) provided a 4 percent increment; and in 2004 it increased the increment to 8 percent.[16] In Latvia, the new Notional Defined Contribution (NDC) system automatically adjusts public benefits to reflect the remaining life expectancy of the retiring cohort. Thus, with life expectancy increasing over time, workers who wish to obtain the same wage replacement rate as earlier cohorts will have to retire later. As Vanovska relates, Latvian officials expected this formula to produce an increase in the actual age of retirement without need for further statutory increases.[17]

While the behavioural response to these measures is in the expected direction, it is rather weak. As Table 2 shows, in all 3 countries the average age at which workers actually start to collect a pension falls significantly below the pensionable age.

**Table 2**
**Gap between pensionable age and average actual retirement age**

| Country | Year | Pensionable age | | Average actual retirement age | | Difference | |
|---|---|---|---|---|---|---|---|
| | | Women | Men | Women | Men | Women | Men |
| Latvia | 2004 (Sept.) | 60 | 62 | 58 | 61.2 | 2 year | 9 months + |
| Lithuania | 2004 | 59 | 62.5 | 58.4 | 61.4 | 8 months | 1 year + |
| Estonia | 2001 | 58 | 63 | 57 | 61 | 1 year | 2 years |

*Sources*: Vanovska, Section 4.1.3, this volume; Lithuanian Ministry of Social Security and Labour, statistical unit (personal communication, 27 January 2006); and Leppik and Võrk, Section 3.1, this volume.

[15] Leppik and Võrk, Section 21, this volume. This increment exceeds the actuarially fair adjustment. Thus, just to the extent that it is used, it will raise rather than decrease pension financing costs. There is, however, still a benefit for society to delayed retirement in the form of additional contributions to GDP by older workers.

[16] Ministry of Social Security and Labour, personal communication, 2 February 2006.

[17] Vanovska, Section 4.1.3, this volume.

This gap has 2 causes. First, few workers have responded to the new incentives. In Estonia, in 2002 and 2003 combined, fewer than 200 persons took advantage of the delayed retirement increment.[18] In Latvia too, the number who delay receipt of a pension has hardly increased under NDC.[19] Rather, the average work career for recent pensioner cohorts is actually shorter by 4 years than it was for all old-age pensioners when the NDC system was enacted in 1995.[20] In Lithuania, close observers report that few people took advantage of the increment, even after it was doubled.[21]

Yet the limited use of these credits does not imply low workforce participation rates by older persons in the Baltics. In fact, these rates are the highest among the new EU member states and exceed the EU–15 average.[22] In the Baltics, however, older workers typically start to draw their pensions at the earliest possible date and continue to work. We can conclude that they apply a high discount rate in evaluating the new increments: they prefer the simultaneous receipt of earned income and a pension today to larger pension later, at a time when they will have no earned income.[23]

A second factor contributing to the gap shown in Table 2 is unemployment. After increasing the pensionable age, all 3 governments created new options for early retirement. Lithuania expressly restricted this option to the unemployed, whereas in Estonia and Latvia the benefits of early pensioners are suspended for months in which they work. See Table 3.

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[18] Leppik and Võrk, Section 3.1, this volume. They rightly point out that this could be partly because the increment is not used until a worker actually starts to collect a pension. Thus, there may be more people who have postponed their retirement but who are not yet visible in the numbers.

[19] Vanovska, Section 4.1.3, this volume.

[20] Specifically, persons retiring in 2003 had an average of 31 years of insurance, compared to 35 years when the reform was being formulated in 1995. Vanovska, Section 4.1.2, this volume.

[21] Lithuanian Ministry of Social Security and Labour, personal communication, 2 February 2006.

[22] World Bank (2005), Chart 3.

[23] In addition, according to Leppik and Võrk, recent Estonian microeconomic studies show that poor health frequently prompts withdrawal from the labour market.

**Table 3**
**Early retirement options in the Baltic countries**

| Countrz | Year of enactment | Provisions for early retirement |
|---|---|---|
| Latvia | 2000 | Both sexes* permitted to retire up to 2 years early, with a permanent actuarial reduction in benefits plus a temporary 20 percent reduction. Benefits are suspended during any periods of work in early retirement. |
| Lithuania | 2004 | For long-term unemployed, a permanent reduction of 0.4 percent for each month of early retirement, so 12 percent for three years. |
| Estonia | 2000 | Retirement permitted up to 3 years early with a permanent benefit reduction of 4.8 percent for each year of early retirement, or 14.4 percent for three years. Benefits are suspended during periods of work in early retirement. |

* Women had been provided an early retirement option earlier, in 1996.

*Sources*: Vanovska, Section 4.1.3, this volume; Lithuanian Ministry of Social Security and Labour, statistical unit (personal communication, 30 January 2006); and Leppik and Võrk, Section 2.1, this volume.

In Estonia, 20 percent of all new pensioners retired early in 2003 and, of these, 80 percent were unemployed prior to retirement.[24] Even in Latvia where there are substantial penalties for early retirement (i.e., a temporary 20 percent benefit cut on top of permanent actuarial reduction), a 2001 survey found that nearly half (47 percent) of new pensioners were retiring early anyway because they were out of work and had no prospect of income other than their pension.[25] (No figures are available for Lithuania due to the recent enactment of the option.) Thus, it appears that high levels of unemployment have made early retirement a practical necessity for many older persons in the Baltics, despite attractive financial incentives to delay drawing their pensions.

In sum, the observed gap between the rising legal pensionable ages and the actual average ages at which Baltic workers start to collect a pension has 2 sources: a short time horizon on the part of older workers in assessing the delayed retirement increment and the existence of significant numbers of unemployed older persons that draw their pensions early from economic

[24] Leppik and Võrk, Section 3.1, this volume.

[25] Vanovska, Section 4.1.3, this volume.

necessity. While it is still too early to draw firm conclusions, these patterns raise doubts as to whether making the pension system actuarially neutral with respect to a workers' age of retirement will help to increase the *actual* retirement age. They also cast doubts on the effectiveness of increasing the legal pensionable age when there is unemployment among older workers. These issues too will be returned to in Section 5.

*(3) Risk diversification and private rates of return*. In explaining their proposals to partially privatize their pension schemes, all 3 Baltic governments pointed to a need to diversify the risks to workers' retirement security.[26] The diversification strategy assumes that public pension schemes are more heavily exposed to risks of political mismanagement and demographic ageing, while private savings accounts are more heavily exposed to risks of poor economic performance.[27] Multipillar systems are said to protect workers by mixing the risks, that is, by balancing one type of risk against the other.[28]

In the early implementation period, risk diversification has been limited. In Latvia, government bonds account for 64 percent of second-tier savings and, in Lithuania, an estimated 60 percent.[29] Thus, the bulk of contributions are back in government hands where they are subject to risks similar to those confronting the public scheme. In Estonia, worker investments are more diversified, with 36 percent in equities or mutual funds investing in equities.

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[26] The risk diversification strategy is formulated in World Bank's now well-known study, *Averting the Old Age Crisis* (1994).

[27] In the years following the World Bank's 1994 study, much analysis has demonstrated that both types of systems are vulnerable to both types of risk, though they are felt through different mechanisms. Private savings arrangements perform poorly under conditions of demographic ageing due to reduced demand for savings on the part of a smaller work force, which must buy the assets of the retiring generation when they purchase annuities. They are also negatively affected when weak or corrupt governments are unable to regulate private funds effectively. Public schemes, on the other hand, are affected by poor economic performance, since low productivity may cause wages to stagnate, reducing contribution revenues; inflation may erode real benefit levels; and high unemployment may deprive the public scheme of contributors.

[28] World Bank (1994), p. 23.

[29] Vanovska, Table 12, and Lazutka, Section 2.3.2.3, this volume.

Even here, however, a quarter to a third of worker savings is still invested in government bonds.[30]

In Estonia, where no government bonds have been issued since the establishment of the second tier, private funds buy the bonds of other European governments.[31] In Latvia and Lithuania, it is domestic government bonds that make up the bulk of private investment portfolios. This means that the governments are borrowing back a large portion of the contribution revenue they diverted to private funds. This circular flow of funds back go the governments helps to fill the hole in public pension finance that results from the diversion in the first place. Yet as the funds flow back, there is a major leak in the form of private asset management fees.

Applied year after year to a worker's entire accumulation of savings, asset management fees can be set at rates that appear quite low but, over time, reduce savings substantially. For example, a 1 percent annual asset fee can be expected to reduce a worker's accumulated savings over a full career by about 20 percent. In the Baltics, asset management fees equal or exceed this benchmark. In Latvia, the average annual average asset management fee is 50 percent higher, 1.5 percent. In Lithuania, it averages 1 percent; and in Estonia, it ranges from 0.75 to 1.5 percent. In all 3 countries, the private funds subtract a number of other fees from workers' savings as well.[32]

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[30] Leppik and Võrk, Figure 26, this volume, and personal communication with L. Leppik (15 February 2006). At the end of 2004, government bond investments accounted for 30 percent. At the end of 2005, they fell to 24 percent.

[31] While this means that these savings are exposed to the same the risks of government mismanagement and demographic ageing as are the public schemes, Leppik and Võrk hold that distribution across many different European governments nevertheless provides some degree of protection for workers.

[32] In Estonia, there is also a subscription fee of 1–3 percent, and redemption fees, about 1 percent. Leppik and Võrk, Figure 26, this volume. In Latvia, up-front fees are around 1.1 percent of monthly contributions. Vanovska, Section 3.2.2, this volume. In Lithuania, up-front management fees are currently in the range of 1–2 percent. Lazutka, Table 21, this volume. The potential for significantly lower fees is exemplified by Sweden, where central administration and wholesale fund management result in levels of around 0.3 percent of assets. Barr, Nicholas, book review of *Keeping the Promise of Social Security in Latin America, Economic Development and Cultural Change,* February 2006, forthcoming.

Since private funds do not normally count all fees when measuring their own investment performance, our project supported the development of a methodology for this purpose.[33] Taking the worker's perspective, it asks the simple question: What rate of return accounts for the balance in the individual account compared to the total amount paid to private managers?

Using this methodology, Vanovska finds that the Latvian individual savings system produced an average annual real return of 0.50 percent in its first 3 years of operation.[34] This consisted of a return of 1.1 percent earned by the State Treasury in its role as a fund manager, compared to an average of 0.11 for all privately managed funds. Thus, the government returns exceeded those of the private funds tenfold. In addition, conservatively managed (those with no investments in equities) produced twice the returns (0.51 percent compared to 0.25 percent) of actively managed plans (those with 15–30 percent in equities). Moreover, the 1.1 percent real return on capitalized savings fell significantly below that of the public NDC system, which during 1997–2004 increased by 38 percent in real terms, or nearly 5 percent per year on average.[35]

Using the same methodology, Leppik and Võrk calculate that during the first 2-plus years of the second-tier saving scheme operation Estonian workers' average real returns were 2.2 percent.[36] (This seemingly higher rate is partly attributable to different fee structures in the 2 countries.[37])

No calculation was possible for Lithuania, given the short period of operation of the second-tier scheme.

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[33] Augusztinovics et al. in Fultz (2002), Section 3.4.

[34] Vanovska, Table 14 and surrounding text, this volume.

[35] Vanovska, Section 4.2.1, this volume.

[36] Leppik, Section 3.3, this volume.

[37] That is, Latvian firms deduct monthly up-front membership charges which are not permitted in Estonia. These front-loaded charges have a greater impact on worker savings in the early life of the scheme, while the asset management fees being levied in both countries have a greater impact as assets accumulate over time. In addition, Latvia experienced higher inflation around the period of the calculation which was not accompanied by an increase in gross returns, causing real returns to drop. It is also worth noting that the investment portfolios differ in the 2 countries, which substantially larger numbers of workers opting for higher risk investments in Estonia.

In sum, risk diversification is so far limited in the Baltics, and the returns being earned by workers are lower than predicted.[38] While diverging from expectations, these patterns are, however, similar to other Central European countries that have privatized their pension systems.[39]

*(4) International influences.* The extent to which CEE pension reforms were shaped by international actors is a point of debate in recent pension literature. Some studies of CEE pension reforms show that the World Bank played an active role, with its officials heading teams that drafted pension privatization laws or shepherding them through the political process (e.g., Poland, Croatia), while in other cases the Bank exerted influence through loans and technical assistance for pension reform (Bulgaria).[40] The picture that emerges from these studies is more nuanced. While the World Bank's influence is clearly reflected in all 3 countries' adoption of its three-pillar pension model, in 2 of them the Bank was not a leading player (Estonia, Lithuania). There, according to our accounts, the reforms were largely orchestrated by domestic actors; and other international organizations were more actively involved than the Bank in pension policy deliberations.

In Estonia, Leppik and Võrk report that the World Bank provided no active support for pension reform prior to the government's adoption of its Conceptual Framework calling for the three-pillar model. Afterward, the Bank provided only one advisor on the proposed third pillar and sponsored one national seminar on the second one. By contrast, the European Commission

[38] The World Bank has recently recognized that, "… contrary to expectations, in many countries with multipillar systems, pension funds remain poorly diversified …". World Bank (2006b), p. 2.

[39] In Hungary, the mandatory individual savings funds that make up the second tier of the pension system earned an average annual return of 3.75 percent over their first six years of operation, compared to an average inflation rate of 6.6 percent. In Poland, the average pension saving in the second mandatory tier increased in value by 20.3 percent during December 1999 – June 2004, while inflation increased by approximately 24 percent. ILO conference, "Recent Trends in Pension Restructuring in Central and Eastern Europe," Budapest, 9–10 December 2005.

[40] Müller (2003), Sections 8.2, 9.1, and 9.2.

cited the need for the three-pillar model in several accession reports.[41] As the authors point out, this is surprising in light of the lack of any common EU policy on pension financing. The IMF was active as well in Estonia and initially supported the three-pillar model. However, in the course of the debate it shifted its position to caution the government that the high transitional financing costs of the second pillar could be economically destabilizing. Yet a third international organization, the Council of Europe, exerted some indirect influence through its main social security instrument, the European Code of Social Security. The Code, modelled on ILO Convention 102, served as a benchmark for benefit adequacy in the Estonian reform debate.[42] Further surprises can be found in private insurance funds' opposition to the second tier and trade unions' active support for it. Thus, the political economy of the Estonian reform looks like a game of musical chairs, with the World Bank on the sidelines of public deliberations while other organizations assumed unusual roles or positions.

In Lithuania, the World Bank sponsored a conference on voluntary supplemental pensions, required clarification of the government's position on private pensions as a loan conditionality, and financed a White Paper on pension reform which examined the weaknesses of the public pension system. However, Lazutka reports that it did not make any explicit public recommendations for pension privatization, nor was it a major presence in the long Lithuanian debate over this move. A more dominant role was played by the Lithuanian Free Market Institute (LFMI), an NGO supported by the Cato Institute, a libertarian think tank in Washington, D.C. has long sought to dismantle social security in the US.[43] Lazutka describes how, through a series of critical newspaper articles in the mid-1990s, the LFMI planted the seeds of public discontent with the state pension system. These articles portrayed the Chilean pension system as ideal for Lithuania. The author was

[41] Leppik and Võrk, Section 2.3, this volume.

[42] ILO Convention 102 sets minimum standards for social security. The ILO takes an active role in assisting governments that are planning to ratify it and in monitoring their compliance, as well as in monitoring compliance with the European Code of Social Security.

[43] Lazutka, Section 2.3.1, this volume.

soon appointed head of a working group on pension reform at the Ministry of Social Security and Labour. There she played a central role in designing the Lithuanian pension privatization and in steering it through the tortuous course of approval by Parliament.

In Latvia, the World Bank participated directly in the design of all 3 pillars; and it brought Swedish experts to assist the Latvian government in a three-way partnership.[44] What is striking here is that, despite this close involvement, the final Latvian reform deviates significantly from the Bank's recommendations. Two instances are noteworthy.

First, the extensive preparatory work done by Latvian experts with World Bank support was largely disregarded in the legislative process. In the final stages of deliberations, the Parliament responded to pressure from representatives of national financial institutions by doubling the portion of contribution revenues to be diverted to the second tier in the future.[45] Vanovska's projections show that, to fill the resulting gap in public pension financing, the government will have to resort to borrowing, an action that conflicts with the reform's objective of increasing national savings.[46]

Second, the Parliament initially adopted the Bank recommendation for a "big bang" conversion to the NDC system.[47] Under the rules of this rapid conversion, all workers were given pension credit for their entire work history prior to the reform based on the wages they earned during just four years, 1996–9. The use of earnings in this brief period as a surrogate for an entire career created major winners and losers, allowing some people to manipulate the system to receive enormous pensions while leaving others without basic support. The uproar and the loss of confidence brought on by these inequities

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[44] Vanovska explains that the Bank made specific recommendations for the launching of the new public Notional Defined Contribution scheme, assisted in drafting the second-pillar law and justification, and supported the government's working group on the third pillar.

[45] That is, it increased it from the suggested 5 or 6 percentage points to 10 percentage points of the old age contribution rate in 2010. Vanovska, Section 3.2.2, this volume.

[46] Vanovska, Section 4.3.1, this volume.

[47] Vanovska, Section 3.1.1, this volume.

led to a cascade of legislative changes by Parliament. These changes altered the strict relation of contributions to benefits that is the essence of NDC, placed a high guaranteed minimum under the notional capital benefit, and based pension indexing in part on length of service. This left the NDC system significantly altered.

Since Estonia and Lithuania adopted pension privatization later than Latvia, the Bank's more limited visibility is consistent its growing caution concerning privatization.[48] Yet in the end, this did not change the main outcome: all 3 countries adopted three-pillar systems. This is consistent with Müller's observation that privatization tends to occur when influential local actors articulate Bank's messages in ways that are appealing to the public.[49]

*(5) Benefit adequacy and privatization costs* – The studies show that pensions in all 3 countries were eroded significantly by inflation in the early 1990s, and replacement rates have since recovered only modestly. Compared to the high levels of the Soviet system (50–100% of wages), the average pension now stands at or below 40 percent of the average gross wage. See Table 4.

**Table 4**
**Average pension as % of average wage (gross and net), 2003**

| | % gross wage | % net wage |
|---|---|---|
| Estonia | 34 | 43 |
| Latvia | 38 | 48 |
| Lithuania | 32 | 40 |

*Source*: Leppik and Võrk, Figure 37; Vanovska, Table 9; and Lazutka, Figures 2–3, this volume.

[48] This caution is reflected in the Bank's independent evaluation of its policy advice on pension reform (see World Bank, 2006a). This study finds that the prerequisites for success often did not exist in both CEE and Latin American countries: transparency, revenues to cover transitional financing costs, and a small number of efficient banks willing to undertake reforms, among other factors. Caution is also reflected in a new Bank analysis of the performances of private pension systems in Latin America, which suggests eliminating mandatory membership in the second tier (see Gill et al, 2006).

[49] Müller, as previously cited, Section 3.2.

In explaining their decisions to partially privatize their pension systems, all 3 governments pointed to the adequacy of future benefits as a major concern. In Latvia and Lithuania, government concept papers portrayed privatization as a means of obtaining a higher level of pensions.[50] In Estonia, the government's Conceptual Framework called for tightening pension eligibility standards in order to avoid a reduction in future wage replacement rates.[51] Given the countries' early experience in implementing these reforms, what level of future benefits does it now seem reasonable to expect?

Two of the studies make less favorable projections than those offered earlier. In Latvia, government calculations released in 1995 showed that the replacement rates for those retiring at age 60 would equal or exceed 40 percent of gross earnings in the years following the reform.[52] A subsequent government policy paper on the second tier indicated that it would increase pensions by 29–34 percent.[53] By contrast, Vanovska's current projections show that the combined replacement rates (first and second tiers) will shrink considerably in subsequent years, falling to about 32 percent in 2035.[54]

Similarly, Leppik and Võrk project that by 2035 the current replacement rate will fall to about 36 percent for men and 30 percent for women (first and second tiers combined), with further losses subsequently.[55] This is well below the minimum standard of 40 percent provided by the European Code of Social Security, which served as a benchmark for benefit adequacy in the Estonian reform deliberations. On this basis, Leppik and Võrk conclude that the introduction of the second pillar will be unlikely to prevent the average replacement rate of statutory pensions (including both the first and second pillars) from declining.[56]

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[50] Lazutka, Section 2.3.1, and Vanovska, Section 2.3, this volume.

[51] Leppik, Section 1.3.2, this volume.

[52] At the time, an ILO report to the government argued that the 40 percent target replacement rate was too low, since spells of unemployment would prevent many pensioners from attaining it. ILO (1995), p. 57.

[53] Vanovska, Section 2.2.2, this volume.

[54] Vanovska, Figure 21, this volume.

[55] Leppik and Võrk, Figure 37 and surrounding text.

[56] According to a broader comparative analysis of European countries by the World Bank, their old age dependency ratios are expected to double (Lithuania) and to increase by approximately 2.5 fold (Estonia and Latvia) between 2000 and 2050. This places them among the EU member states with largest proportional increases (5th, 6th, and 8th in terms of the magnitude of the expected increase). World Bank EU8, as previously cited, Chart 9.

(Lazutka does not present a baseline scenario for long-term replacement rates in Lithuania, due to the absence of a set pension indexing rule or any experience with second tier investment returns. However, he highlights the low current level of Lithuanian pensions, averaging just 32 percent of gross wages.)

Both studies discuss the possibilities of mitigating these declines by improving the indexing of public pensions. On its face, this is an appealing option, since the indexing formulas currently used in the Baltic countries do not fully reflect wage growth.[57] Thus, with each passing year, partial indexation is widening the economic gap between the working and retired populations. Given the current low levels of Baltic pensions, this downward ratcheting poses a clear threat of increased poverty among the elderly.

As a method of financing such improvements, the studies note the coming accumulation of substantial operating surpluses in the public pension systems. These surpluses will result in part from expected improvements in the ratio of workers to pensioners, coupled with the Baltics' strong economic performance. All 3 countries are projected to experience such improvements during the next 2 to 3 decades, after which demographic ageing will cause the ratios to decline. On the horizon for few other European countries, this near-term easing of demographic pressures will contribute to a substantial build-up of reserves:

- In Estonia, annual public pension surpluses are projected to begin around 2010 and continue until 2060 (the end of the projection period), by which time the public system will have accumulated a surplus equal to 40 percent of GDP.[58]
- In Latvia, surpluses of recent years are projected to continue and grow until 2025, by which time the cumulative public pension surplus will equal 2 billion EUR.[59]

[57] Latvia and Lithuania use a combination of inflation and wage indexing, while Estonia uses the arithmetic average of the annual increase in inflation and the increase in social tax revenues. Vanovska, Box 3; Lazutka, Section 2.3.2.2, and Leppik and Võrk, Sections 2.1 and 3.4, this volume.

[58] Leppik and Võrk, Figures 28 and 30, this volume.

[59] Vanovska, Figure 8, this volume.

- In Lithuania too, the annual surpluses now being registered are projected to continue, peaking in 2021 at 2.5 percent of GDP. Thereafter they will decline gradually to zero in 2040.[60]

Since these surpluses are projected to rise and accumulate in rough correspondence with the declines in replacement rates, it is not in principle unreasonable to consider using them to help avoid this.

When one looks at the pension systems in their entirety, however, this option appears more difficult. As a result of privatization, all 3 public systems are missing large amounts of contribution revenues that have been diverted to the new individual accounts. The resulting holes in public pension financing are substantial, in the range of 1.1–2.0 percent GDP per year for the next 50 years. See Table 5. Moreover, in all 3 countries, the second-tier laws were enacted without a long-term strategy for compensating for the lost public pension revenues, nor is there a broad agreement today in any country on how this should be done. See Table 6. In this situation, there are 2 competing needs that the surpluses could be used to address.

[60] Lazutka, Figure 26, this volume.

**Table 5**
**Revenue losses to public pension systems from privatization**

| | Share of pension contribution diverted to second tier | Approximate average annual loss to public pension system | Pattern of losses to the public system over time |
|---|---|---|---|
| Estonia | 20%* | 1.1 of GDP | 0.75 percent of GDP in 2005, rising to 1.3 percent of GDP in 2035 and then remaining constant until 2060 (end of projection period). |
| Latvia | 7.8%, rising to 39%** | 2.0 of GDP | 0.5 percent of GDP in 2006, rising to 2.6 percent of GDP in 2035 and then declining slowly to 0.5 percent per year in 2055. |
| Lithuania | 10%, rising to 22%*** | 1.1 of GDP | 0.65 percent of GDP in 2007, rising to 1.1 percent of GDP in 2008 and remaining constant until 2050 (end of projection period). |

* 4 percentage points of the 20% social tax

** 2 percentage points of the 25.5% contribution rate in 2004, rising to 10 percentage points in 2010. In Latvia, the contribution rate is computed on a yearly basis: it was 25.51 percent in 2004 and 25.26 percent in 2005. Since the rates cannot be known in advance, this calculation is based on the ballpark assumption of a steady rate at the 2004 level.

*** 2.5 percentage points of the 25% contribution rate, rising to 5.5 percentage points in 2007.

*Sources*: Leppik and Võrk, Figure 29; Vanovska, Figure 16; and Lazutka, Figure 25, this volume.

**Table 6**
**Strategies for covering the public scheme revenue losses due to privatization**

| | | |
|---|---|---|
| Estonia | Social Security Reform Commission | In the short run, favoured the use the country's stabilization reserve.* In the long-run, favoured transfers from the state budget or issuance of government bonds (debt). |
| | Pension privatization law | Silent on financing mechanism. |
| | Government | Currently using existing first-pillar reserves and transfers from the state budget; subsequently plans to use the stabilization reserve.* |
| | Opposition parties | Favour state budget financing. |
| Latvia | Law on Social Insurance | Provided cuts in public pension spending and a portion of the contribution rate in excess of the 20 percent that is credited for NDC benefits (currently about 1 percentage point of the 25.5 percent rate.).** |
| | Law on Funded Pensions | Amended by Parliament in final stages of consideration to double the portion of the pension contribution to be diverted to the second pillar, from 5 to 10 percent. Silent on financing mechanism. |
| Lithuania | Pension privatization law | Lays out 3 options – state budget, stabilization reserve, and pension surpluses – but does not specify which the government should use or what balance to strike among them. |
| | Government | In 2004, government used state budget revenues and operating surplus of the public pension scheme (SODRA) in equal shares. |

* The Estonian government formed a stabilization reserve in 1997 as a buffer fund to soften the effects of possible macroeconomic shocks and to finance major structural reforms. By the end of 2003, the reserve totalled 3.5 percent of GDP.

** Vanovska states that this extra contribution may considered a "tax" to offset the revenue loss from privatization.

*Sources*: Leppik and Võrk, Section 3.4; Lazutka, Section 2.3.2.2; and Vanovska, Section 2.3 and Figure 17 and surrounding text, this volume.

As shown by the studies, these needs create difficult trade-offs. Without a long-term strategy for covering the costs of privatization, the coming surpluses provide an obvious option for filling the "holes" in public pension finance due to contribution revenues being diverted to the second tier. Yet this use would prevent the surpluses from being used for increasing the current low replacement rate (Lithuania) or avoiding the declines in replacement rates that are on the horizon (Estonia and Latvia). As Leppik and Võrk note,

> *Possible modification of the state pension index could in turn increase transition costs, while maintaining the current index would result in a substantial decline in the replacement rate*.[61]

In Latvia, there is also discussion of placing the coming public scheme surpluses in a demographic reserve fund. However, unless additional resources are devoted to pension financing, this too would allow replacement rates (for both tiers combined) to decline.

The studies are timely in bringing these issues into focus at a point when a revised understanding of the impact of demographic ageing on pension financing can contribute clearer discussion of them. Namely, there is now agreement among experts of all persuasions that the increased pension costs of demographic ageing cannot be averted by shifting from pay-as-you-go pension schemes to capitalized savings.[62] Rather, all types of pension systems, whether pay-as-you-go or funded, are mechanisms for transferring a portion of current GDP from active members of society to inactive ones. As such, all types of schemes will come under stress when the ratio of workers to pensioners decreases. As the World Bank has explained,

> *In the end, both [types of] schemes require a subsequent generation to fulfill the generational contract, either in the form of current contributions (in unfunded schemes) or through the purchase of accumulated assets (in funded schemes). Money put aside for retirement alone does not change this fact, and even the idea of investing in demographically younger countries (i.e.,*

[61] Leppik and Võrk, Section 4, this volume.

[62] This claim was put forth in the World Bank report, *Averting the Old Age Crisis*, as previously cited.

*emerging markets) can probably help only at the margin to cope with an ageing population.*[63]

With the notion that a shift to private pensions could avert an old age crisis now discredited, the genuine strategies for coping with its pension costs have also come into clearer focus. These include –

- increasing national employment rates to offset the expected decline in the worker/pensioner ratio. Extending the working life of older persons can help to achieve this, as can raising employment rates for youth, women, persons with disabilities, and other social groups with lower rates for workforce participation. Allowing increased immigration can also have this effect;[64]
- strengthening enforcement of the contribution requirement, thus plugging the leaks in pension financing due to work in the grey economy and chronic underreporting of wages;
- reducing national debt in order to create fiscal space for increases in pension spending;
- raising national productivity levels in order to make the increased pension costs easier for societies to bear; and
- investing now in the goods, services, and infrastructure that societies with expanded elderly populations will need.

The Baltic countries' strong economic performance in recent years gives them an advantage in pursuing several of these strategies. Their current employment rates are among the highest of the new EU member states.[65] Recent per capita GDP growth rates are double those of the other new EU member states and even further ahead of the EU–15 average.[66] Government

[63] According to Robert Holzmann and Robert Palacios of the World Bank social protection sector, World Bank SP Discussion Paper No. 0114, June 2001, p. 3.

[64] However, the possible longer term impact of immigration must also be taken into account, i.e., an increase in demographic dependency.

[65] These rates are in the range of 61–63 percent. Only Slovenia exceeds the Baltic rates. EUROSTAT (2005).

[66] That is, during 1999–2004. World Bank, EU8, as previously cited, Chart 11.

deficits are low in Latvia and Lithuania, and Estonia has been running a significant budget surplus.[67] To maintain and build on these advantages, the governments will need to place high priority on the first strategy above, that is, increasing overall employment levels.[68] At the same time, their relatively low levels of pension spending and public debt provide fiscal space to spend more on the elderly if so decided.

With these genuine strategies clearly on the radar screen, the issues of benefit adequacy raised by these studies merit serious discussion. Key reference points are provided by the minimum benefit standards of ILO Convention 102 and the European Code of Social Security. As the studies make clear, providing decent pensions for the current and coming generations while covering privatization costs would require additional resources. Thus, the discussions of the study findings could provide an occasion to review the planned scope and cost of the new private savings tiers. Yet altering the second pillars is not a necessary precondition to ensuring decent pensions in the Baltic countries. With their economic dynamism and low current spending levels, the countries have the resources to reach and maintain minimum standards of pension adequacy while covering the costs of privatization, if that is their political will.

To provide workers with ample advance notice of any pension policy changes, the discussions should begin soon. To ensure the sustainability of agreements reached, they should be open to all those within an interest in the future economic security of the elderly.

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# The Missing Pillar

*Mária Augusztinovics*

This study includes three valuable, detailed chapters, those of the recent pension reforms in the Baltic states. All three countries reformed their existing public, PAYG schemes significantly and carved out of them a private, funded pillar. A few years earlier, two other CEE countries, Hungary and Poland, did the same – their stories were told in a previous ILO study (Fultz, 2002).

These reforms solved a few problems, created some new ones, but – and this is the point to be made in this brief note – they did not address a fundamental problem of the present and the coming era, namely the effect of underemployment on old-age income security in the future. As a basis for developing this argument, first a brief overview is provided.

Considering important details, it is safe to say that there are no two identical sets of solutions among the five reforms. Several lists of country-specific variations could be compiled on issues like the new pension formula, valorisation of past contributions, indexation of pensions in payment, decreasing or increasing contribution and/or replacement rates, the treatment of "transitional generations" (i.e. those who had already acquired pension rights in the pre-reform system but continue their working life in the new one), the legal status and regulation of the private pillar, the mode of carving it out from the public one, the state guarantees regarding annuities to be expected from it, and on many similar matters decisive in reforming and partially privatising a pension system.

Still, when one looks broadly across the five pension systems, the most striking features are not these divergences but rather the strong similarities

among them. These similarities relate to the pre-reform situation, the basic, underlying goal to be achieved by reform and the major, structural setting of the new systems.

The pre-reform pension systems in all five countries had been public, PAYG schemes. Having been originally designed more or less earnings-related – with country-specific upper and/or lower limits on benefits, with briefer or longer periods of accounting for pensionable income – they were all employment-based and thus severely strained by a dual pressure in the early 1990's generated by the transitional economic crisis. On the one hand, employment – and the number of contributors with it – dropped dramatically. On the other hand, early retirement assured the major escape route from unemployment, it was facilitated and encouraged by loosened eligibility criteria and other measures thought to be temporary at that time – hence the number of beneficiaries increased no less sharply. Under this dual constraint the system dependency ratios jumped to previously unseen levels and the financial balance of the pension systems deteriorated.

In most countries these conditions required a severe curtailment of pension benefits. In order to protect the poorest segments of pensioners as far as possible, pensions became more and more equalised, less and less reflecting labour performance in previous active age. All this occurred at a time when income differentials on the labour market widened drastically. Some countries increased, others decreased the contribution rate thereby making the financial strain on the pension system less or more intense. Contribution collection has become more difficult and contribution evasion by "black" or "gray" employment has come to constitute a serious problem.

Anyway, even the originally designed earnings-benefit link was seriously impaired during the 1990's in every Central-Eastern European (CEE) country at the micro as well as at the macro level.

In addition to the objective conditions that weakened or destroyed this linkage, it was a wide-spread belief that only an insurance type, "actuarially fair" pension system would be compatible with the emerging free-market economies. "At that time," (1995) "nobody doubted the suitability of the social insurance model, nor was there any discussion of the introduction of universal pension schemes…" (Lazutka, this volume). Controversies evolved around the public-private dichotomy but even opponents of privatisation did not question

the necessity of tying benefits more strongly to previous contributions in the public scheme.

Thus, the fundamental, common concept has been to strengthen the employment-based insurance component of the pension system, to achieve or at least better approach a close contribution-benefit link, with or without privatisation. After several stages of the reform process, after having considered and rejected competing blueprints with regard to privatisation, that is what all five countries intended to achieve in the final stage of their pension reforms.

Privatisation was seen by many as the best way to achieve this goal and it was strongly supported by the international financial institutions (the World Bank and the International Monetary Fund). It was hoped to serve other attractive purposes, too: relieve the financial burden on the public pillar, enhance economic growth by vitalising the financial markets, reduce contribution-evasion, and similar desirable goals. In the international pension literature the debate is still going on about the credibility of these expected achievements, yet privatisation was evidently in the interest of strong financial corporations, banks and insurance companies. The most radical reformers advised total, Chilean-type privatisation but this was rejected by a wide alliance of various social partners and finally by governments, too. None of these reforms were "substitutive" types, that is, a full substitution of public by private pensions, as occurred in Chile (Müller, 2003). In all five countries the public scheme survived and remained the dominant pillar of the mixed (two-pillar) system, although reformed to a smaller or larger degree towards the desired social insurance model.

The major indicator of the type of a public pension scheme is the pension formula, i.e. the set of rules that determine a retiring individual's first pension benefit. Proportions among individual benefits may be distorted later by discretionary indexation but the intended relationship is cemented in the pension formula. A highly simplified, abstract model of it can be written as:

$$\mathbf{P_i = B + E_i \geq M,} \text{ if and only if } \underline{\boldsymbol{C}} \leq \underline{\boldsymbol{A}}_{\mathbf{i}}$$

$\mathbf{P_i}$ is the first (entry) pension of a person named "i";
**B** is the flat sum component (in some countries called "basic pension");
$\mathbf{E_i}$ is the earnings-related component, specific for person "i";
**M** is the minimum pension guaranteed;

$\underline{\boldsymbol{C}}$ is the a set of properties legislated as eligibility criteria; and
$\underline{\boldsymbol{A}}_i$ is the set of such properties characteristic of person "i".

Obviously, the flat sum component **B** and the minimum guarantee **M** – if they exist – represent explicit redistribution as they are supposed to be independent of past contributions. Of these two redistributive components, **B** is typically the same legislated sum for everybody. This is not the case, however, if the sum of **B** is also contingent on individual factors, for example, by years of service. Then the individual would not see as readily why he/she gets less or more than other people and the aggregate cost cannot be predicted by the number of new retirees as it depends on the composition of the retiring cohort. On the other hand, the minimum **M** implies raising all pensions at the lower end of the benefit range to a set threshold. Thus, the amount of this subsidy varies from individual to individual, making it even less transparent and harder for pension authorities to account for the aggregate and group-specific costs of the guarantee (i.e. how much had to be added to those pensions which would have otherwise fallen below the statutory value of **M**).

The earnings-related component $\mathbf{E}_i$ may be either redistributive if it favours lower earnings and/or less years of service (even if in some, usually marginal details it is "pervertly" redistributive favouring higher-earning groups), or intends to be proportional if it defines the first (entry) pension strictly in proportion to past contributions. The two best-known ways of proportionality in public schemes are the German-style point system and the more recently invented NDC (Notional Defined Contribution) method. Contrary to wide-spread belief they are practically, qualitatively the same except that NDC tries to mimic private funded schemes and is therefore more circumvent and probably much more costly in terms of continuous administrative burden.

The point system relates an insured person's annual labour-market performance (time spent employed and wage earned) to the national average and comprises this information into a single indicator, a so-called "pension point". The whole year at average wage values one point, proportionally less or more time and/or wage return proportionally smaller or larger fractions of a point. At retirement – or at any time before it, for that matter – there is nothing else to do than to add up points collected over the working career,

thereby the relative life-time accomplishment has been determined. (Points may be called by other names, e.g. pension insurance coefficients in Estonia.)

NDC is recording and cumulating contributions in nominal national currency units month by month on a personal "account". The money, however, is not invested, the pension scheme is PAYG. Exactly therefore, as there are no market-generated returns on the "capital", the latter has to be continually valorised by – i.e. adjusted to – the average nominal wage increase. (Any other method of valorisation – e.g. adjusting with only a fraction of the wage increase – may be considered as a manipulation of the "capital", hence contradicts to the "true" NDC principle.) Anyway, by this adjustment the "capital" becomes as relative (weighted against the national average) as the German-style "points" are, except that at each point of time it is expressed in contemporary currency units – an unnecessary nicety unless some reason requires it to be added up with capital on a "real" capital account recorded in a private fund.

It can be proven by simple arithmetics that the two methods return even quantitatively the same result if valorisation in the NDC scheme is tied to the changing value of the same indicator (e.g. average wage or the average annual contribution base), which serves as denominator in the point system. It is often contended that only NDC systems reflect the demographic factor while point systems do not. The truth is, however, that demography affects the working of both systems only in a slightly different way. NDC includes age-specific projected life-expectancy in the pension formula, i.e. differentiates according to the age of the retiring person at retirement and the resulting variation is then preserved until death. Point systems, on the other hand, can calibrate the cash value of a point according to actually prevailing demographic and economic conditions after retirement, all over the long retirement span. Therefore, point systems are in fact more flexible in this respect than NDC.

With respect to the pension formula in the first pillar, of the two "pioneers" of privatisation, Hungary seems to be less and Poland more radical: hardly any change in the public pillar in Hungary (a few redistributive elements of the extremely complex pension formula are to be phased out until 2013), while drastic switch to NDC in Poland. In both countries, however, indexation of pensions in payment – and in Poland also valorisation of the notional capital during accumulation – have been set below the full level of the average wage bill growth what is a strong measure of redistribution among various age-

groups. Among the "second-generation" Baltic reforms, the NDC-oriented country, Latvia legislated differentiated indexation rules for different ranges of the pension benefit – which does not seem to be quite compatible with the NDC principle. Estonia and Lithuania inserted a flat sum component in their formula while they both opted for specific versions of the point system in the earnings-related component. The minimum pension guarantee, however, has been sustained in all countries.

Summing up one could say that redistribution has nowhere been completely eliminated from the public pension pillar, nevertheless, the contribution-benefit link has been tightened in each of these countries to a larger or lesser extent.

The strongest link that ties public pensions to employment is, however, not the "cleanliness" of the earnings-related nature of the formula and indexation that define the benefit; it is rather the set of eligibility criteria $\underline{\boldsymbol{C}}$ which includes the minimum number of years served in addition to the statutory age. The notation here is indeed highly simplified as the set is often different for types of pension (e.g. old-age or disability or survivor's), differentiated by gender, sometimes by type of work (e.g. miners on underground work would be required less years of service) and, eventually, by other properties. Anyway, the expression $\underline{\boldsymbol{C}} \leq \underline{\boldsymbol{A}}_i$ in the stylised formula above tries to indicate that person "i" needs to satisfy all requirements relevant to him/her within the set in order to be eligible to the pension described by $\mathbf{P}_i$ in the formula.

The eligibility criteria are as varying from country to country as other items within the pension formula. That much, however, can be said that generally at least 15 years of pension insurance record are required even for reduced pensions – in some cases even for a reduced value of the flat sum component or the minimum guaranteed pension – and 30–40 years qualify for the full pension. Thus, these criteria divide the elderly population into two distinct groups: those who qualify for public pension (no matter how little or by what formula) and those who do not because of a poorer than required employment record.

There are no similar thresholds for deriving annuities from the newly launched private pillars but there exist other rules. Poland and Latvia made membership in the private scheme mandatory for younger workers and – wisely – excluded elder workers who will not have sufficient time to accumulate

satisfactory capital in the private funds. Thus, they limited the option of individual decision to 20 birth cohorts (age 30–49 at the time of the reform) which is supposed to simplify and will certainly shorten the transition period. Hungary and Estonia made membership mandatory only for new entrants to the labour market and let all those who were already insured join the mixed system voluntarily. This results in approximately 40 transitional cohorts (including people quite near to retirement) and may lead to complications in the future when those who joined above the age of 50 will retire and find out that they have lost rather than gained. Lithuania stands out within CEE by a British-style, voluntary opt-out from the public scheme, i.e. with a "carved-out" private scheme which is not mandatory for anyone.[1]

In all five countries, including Lithuania, joining the mixed system even voluntarily, has been generally designed as a one-way street: once a person has joined, there is no way back to the "pure" public scheme, at least not until retirement. This is a rather inexplicable constraint, putting the private financial sector in a comfortable "no-risk" situation but preventing individuals from reversing a decision that eventually turns out to be wrong for them, particularly considering the fact that joining the mixed system results in the loss of a certain part of the public pension benefit.[2]

With respect to benefits, in contrast to the rather complex pension formulae in public pillars, the carved-out private pillar is *per se* called "defined contribution" and usually considered entirely free of redistribution as it rests on a standard actuarial equation. In reality this is not quite true, as the

[1] Interestingly, however, the proportion of those who opted out has been roughly the same as of those who had the choice of switching in other privatising CEE countries. Thus, the future coverage of the Lithuanian private scheme will depend on the behaviour of future entrants to the labour market. If an overwhelming majority of them will decide to sign up for the mixed system, then 20–30 years from now the Lithuanian system will not significantly differ from that of the other countries.

[2] In 2004, Hungary was already forced to open up a narrow way back for some retiring groups whose losses would have been around 25 percent as their personal accounts in the private funds amounted to almost nothing, yielding negligible private annuities to compensate the loss in the public benefit. Others, however, who are obviously in the same situation and will face the same loss in the coming years, are still obliged to pay their contributions to the private funds.

equation includes arbitrary discount rates and questionable projections of life-expectancy. In addition, two entirely identical contribution careers might yield different annuities in retirement, depending on the performance of the individual funds, on complex risk-sharing guarantee networks and most of all, on the momentary financial market situation at the time of retirement.

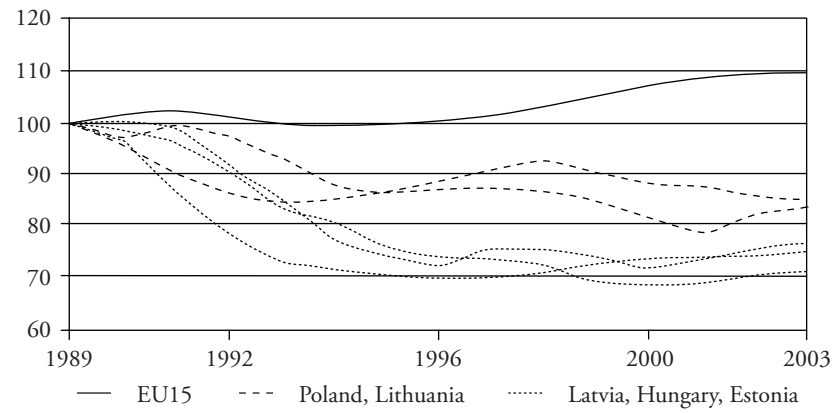
That much, however, is sure that no or little contribution will certainly result in no or negligible real personal capital in the private pillar. Those who do not qualify for public pension would not make up for the lack of it by annuities from the private pillar. In this sense, the reformed public pillar and the newly launched private pillar are – notwithstanding all paradigmatic and practical distinctions – twins: they are both employment-based, deriving their source of finance from labour income and allotting benefits more or less according to careers on the labour market.

* * *

Ironically, however, the move towards reinforcing the contribution-benefit link in the pension system which would have been socially, economically and morally desirable in the era of practically full employment, has been accomplished at times when underemployment is a major – and seemingly enduring – problem of these societies.

In the recent one and a half decade, the former EU consisting of 15 countries struggled with recession and a stagnating emloyment, then finally managed to gain a modest 10 percent increase in the number of total employment. The CEE countries, on the other hand, have not been able to recover from the initial transition shock of loosing 15–30 percent of jobs, although by 2003 the GDP had already surpassed its 1989 level in Hungary, Poland (quite significantly) and Estonia. Latvia and Lithuania have not yet hit that mark but their economies suffered the most severe blows: in 1995, respectively in 1994, at the bottom of the transitional crisis their GDP was less than 55 percent of the 1989 level and has been considerably increasing since then. The recovery of production, however, did not "trickle down" to employment, the latter is still hovering around or even below the crash-level of the mid-1990's.

**Figure 1**
**Total employment, 1989 = 100**




*Source*: ESE.

The unemployment rate is a poor indicator of the problem. Unemployment is an artificially defined, bureaucratic term, often a plaything for politics and/or statistics. It may be shown to be improving when employment is actually decreasing or vice versa. The true indicator is the employment ratio, the proportion of employed in the working-age generation.

The employment ratio has become chronically low in Continental Europe. This has been a matter of grave concern for quite some time. "Since the mid-1980s … the total level of net job generation has fallen far short of supply … low levels of unemployment among adult male workers combines with huge populations of excluded or marginalized workers." (Esping-Andersen, 1996) "…the full-time equivalent (FTE) employment rate in Europe lies now around the same level as it was in 1985 … Europe might enter a phase of jobless growth." (Ducatel and Burgelman, 1999) The Lisbon strategy has placed employment in the focus of economic policy efforts but it is already obvious that the ambitious target of increasing the employment ratio to 70 percent by 2010 will not be achieved.

The situation is much worse in most Cental-Eastern European countries, including the pension-privatisors discussed in this note. Interestingly, the employment ratio in the three Baltic countries is not too far from the 64 percent

EU15 average, but Hungary and Poland belong to the worst European cases with their 56, respectively 53 percent employment ratios of the population aged 14–64.[3] (Data from KSH.)

Turning the figures inside out, it could be said that approximately 35–45 percent of the active-age population is presently not employed. Some of them are still at school, some already in retirement. Cross-country comparable data are, unfortunately, not available but these two groups combined can certainly be not responsible for the large proportion of those without employment. Some are actually working on the black labour market – they could even be considered "employed" but they certainly do not pay taxes and social security contributions.

There are good reasons to assume that a large segment of the non-employed working-age people still consists of those – mostly unskilled, low-paid – workers who had lost their job during the initial shock in the early 1990's and have been unable to find lasting employment ever since. This implies that they have not paid pension contributions over the recent, long period while their pre-1990 working careers could not have been long if they are presently middle-aged. Other significant segments consist of victims of further job-destruction accompanying the restructuring of the economy who are too "old", say, above 50–55 years of age, or young but not sufficiently educated to benefit from job-creation in the rising branches and activities.

Prospects for the future are not too rosy either. Notwithstanding, flexible labour market instruments and compromises about lower wages, internationally a growing number of experts contends that employment levels are due to decrease further at least in the industrialised countries. E.g. "… we are set on a firm course to an automated future and will likely approach a near-workless era,… Unused human labour is the central overriding reality of the coming era and the issue that will need to be confronted and addressed head-on by every nation …" (Rifkin, 2004). While there is a dangerous scare mongering going on about demographic trends, about the "terrible" consequences of the decline of the working-age population, these trends actually may or may not ease the tension. They will not if the demand for labour shrinks simultaneously.

[3] This group-specific difference is not well researched. That much, however, can be taken for granted that it has little (if anything) to do with pension reforms.

"…countries currently experiencing a crisis in youth employment ... should not expect demographics to come to the rescue …" (Korenman and Neumark, 1997)

If this is indeed the global or at least the European prospect, CEE countries cannot hope to be exceptions. Even under a much more optimistic scenario, however, building on the assumption that "sustainable growth" will result in the recovery of employment, the recovery cannot be but slow and underemployment of the working-age population will remain with us for a long time to come.

Anyway, the lost periods of work-careers of the generations hit by the low-employment era can never be redeemed. These generations will arrive at the threshold of the statutory retirement age without a sufficient insurance record for eligibility to an acceptable public pension and – needless to say – without a noteworthy sum of capital in the private pillar. Mass poverty in old age is in sight.

This is the problem not addressed by the pension reforms discussed in this note. If anything, they aggravate it by tightening the eligibility criteria and the contribution-benefit link. The flat sum component and the minimum pension guarantee in the pension formula – if they exist – are no solutions as they are also subject to eligibility criteria and might sink below subsistence level.

It is a widely accepted perception that instruments of the welfare state other than the pension system should handle the problem. E.g. in Latvia, "The state social security benefit (currently 35 LVL, or 52 EUR) was introduced in 1996 to replace the previous social pension. It is a residence-based benefit for persons who are not entitled to a social insurance pension. The benefit is financed from the state budget and can be granted to persons who are at least 5 years older than the statutory minimum retirement age, disabled persons who are older than 16 (including those disabled since childhood), and dependent children of a deceased person, if he/she had not paid social insurance contributions." (Vanovska, this volume). Similar state-financed social allowances exist in all countries under different names and with different coverage.

Means-tested benefits, however, are not only expensive in terms of the bureaucratic procedure and humiliating for those who are in need of it; experience demonstrates that they often do not reach some of the target groups. Moreover, and this is the major point with respect to pension reforms, they ruin the most cherished goal, the proportional appreciation of the working

career in the old-age pension, entrenched by so many well-intentioned rules of the pension reforms.

Let us consider a simple arithmetic example limited to the public pillar of 4 persons with different social security records:

**Table 1**

| | Mr. α | Ms. β | Mr. γ | Ms. δ |
|---|---|---|---|---|
| Years of service at average wage | 40 | 20 | 5 | — |
| Pension for 1 year at average wage | 10 | 10 | | |
| Old-age pension | 400 | 200 | — | — |
| Means-tested social allowance | | | 100 | 100 |
| Surplus over "free" benefit | 300 | 100 | — | — |
| Yield of 1 year of service | 7.5 | 5.0 | 20.0 | ∞ |

*Note*: Figures in national currency units, except for the first row.

Apparently Mr. α and Ms. β are treated by the pension system in complete proportionality: twice as much work at average wage (contribution) yields twice as much pension. However, they both could receive 100 social allowances – equal to pension for 10 years of service – if they have not worked a day. Thus, the first 10 years of work were fruitless, do not yield anything. It is not true that they receive 10 units for each contributing year, they receive less. Moreover, since these useless 10 years weigh differently in their entire career, the proportion between the gains is also spoiled: Mr. α receives more for 1 year than Ms. β. Among those who contributed at all, Mr. γ fares best in terms of returns on a year although he does not receive old-age pension at all, while the yield for Ms. δ is infinite (100 for 0.0 years).

The moral of this simple story is not that old people rejected by the earnings-related pension scheme should not be supported, neither that income in old age should not reflect employment-related contributions. The moral is that the entire system of old-age income security must be designed consistently in a society where having a job is a privilege rather than an obligation.

The trouble is not that Mr. γ and Ms. δ receive 100 each – they must survive. The trouble is that only they are supported from some source other than the pension scheme while Mr. α and Ms. β are not, they had to provide

for their old age entirely by their own earnings-related contributions. Hence, some of their contributions are lost in this sense (so are the 5 years of Mr. γ, by the way) what contradicts to the intensions of the pension reform, creates counter-incentives to working and contributing. The additional trouble from the macroeconomic point of view is that while old-age incomes of Mr. γ and Ms. δ originate from general taxation levied on a wide tax-base, including VAT, taxes on capital income, etc., the pensions of Mr. α and Ms. β are levied exclusively on wages, increasing the cost of labour, letting employers and governments keep complaining about restrained competitiveness.

There are only two ways out of this situation. (1) Revert the reforms of the public scheme, cram Mr. γ and Ms. δ back into it by loosing or even eliminating eligibility criteria and making minimum pension unconditional. The system will be less transparent than it has ever been and more costly in terms of earnings-related contribution rates. Not an attractive solution. (2) Let old age on its own right be eligible to elementary subsistence and let every single day of work in active age yield additional income in old age. Eligibility criteria and minimum guarantee to this supplementary pension are unnecessary even in this case, but the system becomes more transparent and less costly in terms of earnings-related contributions than it ever had been. This is an attractive solution.

The name of the game in pension parlance of the second solution is a two-tier public scheme: one non-contributory residents' pension and one mandatory, contributory, supplementary work-related pension depending exclusively, fully proportionally on past contributions.

Let us consider the previous 4 persons in such a different setting:

**Table 2**

| | Mr. α | Ms. β | Mr. γ | Ms. δ |
|---|---|---|---|---|
| Residents' pension | 100 | 100 | 100 | 100 |
| Years of service at average wage | 40 | 20 | 5 | — |
| Work-pension/year at average wage | 6.15 | 6.15 | 6.15 | 6.15 |
| Work-related pension | 246 | 123 | 31 | — |
| Total pension | 346 | 223 | 131 | 100 |

In this example the 6.15 yield of 1 year of contributing service has been calculated in such a way that the total cost of the system should remain the same 800 that it was in the previous example. This results in Mr. α receiving somewhat less, Ms. β. and Mr. γ somewhat more. Naturally the calibration could be adjusted to the previous pension of Mr. α so that nobody should lose, that would require 7.5 per year and would be a bit more costly. Irrespective of the calibration, however, proportionality would be restored in the sense that 1 year of work at the same wage – or even 1 day for that matter –yields the same for everybody.

Advantages? There are no lost, fruitless years of work for hard-working people. It is worth working even occasionally when permanent jobs are scarce – the so much desired incentive to contribute is restored. Mr. γ and Ms. δ do not have to apply for social assistance, repeatedly begging at the local authorities' offices and providing several documents of their needs and non-existent income. Administrative expenses of means testing are eliminated. Finally, but very importantly labour costs are reduced as only 400 work-related pensions have to be financed from earnings-related contributions rather than the previous 600 old-age pensions. "…labour as a factor of production should not be burdened further with financing tasks that are not linked to employment." (Schmähl, 2000)

One could argue that there is a disadvantage, too: if basic subsistence in old age is guaranteed anyway then some people would prefer leisure to work in their active age. Well, free-riding exists and could not be avoided entirely by any scheme, not even now when the benefit is not called residents' pension but a means-tested social allowance. These people, however, need to live on something in active age, too and the promise of a far-away residents' pension would not feed them at, say, age 25 or 45. Besides, on today's labour market, as it was argued above, the lack of jobs is the major problem rather than the lack of incentives. Neither does it seem that the prospective lack of pension rights keeps people from working in the black economy – they will pop up for basic social support when old, no matter what the name of that support will be.

A non-contributory, universal, flat sum pension is, of course, not a novel idea. Surprisingly, it can be traced back in time as far as to 1697, then followed inter alia through Beveridge to contemporary pension-reform debates in many countries (Schmähl, 1993). Recently the necessity of such benefits seems to

have become inevitable in all CEE and FUS countries because of the effect of the wide-spread underemloyment on present and future pension claims (Müller, 2005).

As a curiosity, the Hungarian Parliament adopted a Resolution (not law) in 1991 which envisaged a three-pillar system for the future: Pillar One would have been a non-contributory flat sum benefit on citizens' right, Pillar Two a public, supplementary, mandatory, contributory, work-related scheme and Pillar Three would have consisted of voluntary private funds. Later controversy over privatisation consigned this Resolution to oblivion: only Pillar Three was launched in 1994.

It should be noted that a two-tier public system does not need two separate institutions, two boards and administrations. With today's IT technology, a single institution can manage to run two tiers and this would be much less expensive than the local bureaucracies presently testing means. What matters is transparent book-keeping to secure separate finance. And the question is of course the source of finance for the non-contributory pillar. There are several possibilities, involving different effects. General tax revenues of the budget would be less transparent. A more transparent ear-marked tax could be progressive, linear, or – horribile dictu – flat sum, mandatory in working age on residents' obligation.[4] The horizon is wide, the means and ways of solidarity can be broadly interpreted.

It should also be noted that the structure of the work-related public pension, although important in other aspects, is immaterial from this point of view: it could be NDC or point-style, supplemented or not by the already created private schemes. What it should not be is redistributive. Thinking on the solutions to the unsolved problem does not need to turn everything upside down, to annihilate what has already been achieved if it is good.

Pension-reforming CEE countries missed the opportunity to adjust their old-age income security systems to the major social and economic problem of the present and future, underemployment on the labour market and the

[4] Even the non-employed live on something in their working-age years. Whoever is supporting them – the central or local government, the church, the well-earning spouse – should realise that income in old age must be paid for during working age, i.e. their support should be topped up by the mandatory, ear-marked tax to be paid for old-age income.

danger of mass poverty in old age expected to result from it. The drive for and debate on privatisation took minds off the deeper, more basic problem. Much remained to be done – the sooner the better.

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# The Political Economy of Pension Privatisation in the Baltics[1]

*Katharina Müller*

## 1. Introduction

In recent years, Latvia, Estonia and Lithuania followed the regional leaders – Hungary and Poland – in a major paradigm shift in old-age security. This paper looks at the political economy of pension privatisation in the Baltics. The analysis is largely based on the country studies prepared by Inta Vanovska, Lauri Leppik and Andres Võrk, and Romas Lazutka, while also considering other available studies on the Baltic pension reforms. In methodological terms, it draws on the author's previous work on the political economy of pension privatisation in Eastern Europe and Latin America (Müller, 1999, 2002a, 2002b, 2003).

This paper has three main parts. In the section following this brief introduction, a summary account of the process of pension privatisation in each of the Baltic states is presented, which is subsequently analysed from a comparative point of view. As a matter of conclusion, the last section of the paper aims at drawing some comparative lessons for the Baltic region as a whole.

[1] Comments by Mária Augusztinovics, Elaine Fultz and Romas Lazutka are gratefully acknowledged.

# 2. Pension Privatisation in the Baltics: the Cases of Latvia, Estonia and Lithuania

## *2.1 Privatising Pensions in Latvia*

Latvia was the first of the three Baltic states to embark on a paradigm shift in old-age security. Its commitment to a three-pillar model dates back to 1995. In 1996, it was the first country in the world to introduce a Notional Defined Contribution (NDC) scheme covering all insured.[2] When its prefunded second tier entered into force on 1 July 2001, Latvia was the third country in Central and Eastern Europe (CEE) after Poland and Hungary that implemented partial pension privatisation.[3]

### 2.1.1 The Making of Pension Privatisation

Even before regaining independence, Latvia had begun restructuring its pension system with a series of parametric reforms, which – in a context of hyperinflation and profound economic crisis – failed to produce the expected results. Instead, the country witnessed a shrinking number of contributors, a rising number of pensioners and increasing pension expenditure. Moreover, efforts to protect real benefit levels had led to a flattening of the benefit structure. There was increasing public dissatisfaction with the failure to relate benefits to past earnings, as well as with the poor material conditions of pensioners.

In 1993, the right-wing Latvian Way won the parliamentary elections, catapulting many representatives of financial and business circles into

[2] In 1995, a similar first-tier scheme had been introduced under the Dini reform in Italy, but those insured with more than 18 contribution years were exempted from the new benefit formula (Ferrera, 2005).

[3] Actually, Latvia was the first post-socialist country to feature a commitment to the much-propagated three-pillar model. Hungary's and Poland's commitments followed only a year later (in 1996). The latter countries featured a much speedier implementation of the second, prefunded tier, however.

government (Bite, 2002). The position of Welfare Minister was filled with Jānis Ritenis who had worked for private insurance companies while in exile in Australia. He drafted a pension reform concept fully based on a private insurance model, meeting with strong resistance from trade unions, the Pensioners' Federation and left-wing parties. However, his move had launched the idea of a prefunded private scheme in the country, which started gaining credence in political circles.

In 1994, Minister Ritenis presented a new pension reform concept, developed with the assistance of a World Bank expert. Cooperation with the Bank had started the year before, with Latvia's request for a loan to fund the Latvia Welfare Reform Project (LWRP), a major undertaking including but not limited to old-age security. Ritenis' new concept was rather closely modelled on the Bank's three-pillar proposal, published in *Averting the Old Age Crisis* (World Bank, 1994). However, beyond a first tier based on a public PAYG scheme, a mandatory prefunded second tier and a voluntary third tier, it also comprised a transitional fourth tier, that would use privatisation proceeds to pay a pension supplement to those who could not join the second tier.[4] The new draft was sent to parliament in late 1994 and formally accepted in February 1995. By that time, however, some new ideas had already developed.

In the fall of 1994, the World Bank had asked Sweden, where parliament had just approved a systemic pension reform proposal, for assistance in developing Latvia's new pension scheme. As the Swedish Social Insurance Board (SSIB) was interested in supporting reform in the Baltic country, Swedish and Latvian teams of experts were formed. The Swedish team included experts that had worked on the country's own reform, while the Latvian team consisted of representatives of the Ministry of Social Affairs and the Social Insurance Fund. As a first result of Swedish-Latvian cooperation, the envisaged first-tier design was questioned. In the search for alternatives, the newly developed Swedish NDC model was selected.

[4] This fourth tier was quietly dropped from the reform agenda later, as it was not clear if the proposed financing source, privatisation revenues, would be adequate (Zilite, 2004).

With further Swedish assistance, a new draft law "On State Pensions" was prepared and submitted to parliament in July 1995. The law fundamentally redesigned Latvia's PAYG scheme. It was approved in just 4 months (November 1995) and came into force in January 1996. Hence, both legislation and implementation were prepared in an extremely short period of time which, in the context of Latvia's weak institutional capacity, led to strong reliance on external experts and World Bank staff. It also led to the adoption of transition rules for the new NDC system that were highly arbitrary and created many horizontal inequities among similarly situated persons.

While the launch of the mandatory prefunded second tier had originally been planned for 1998, the pensions working group in the LWRP decided to postpone its starting date for several years and to introduce the third tier first. It was hoped that this would allow time not only for the development of the regulatory-institutional framework and the Latvian capital market, but also for the accumulation of a reserve in the first tier: the benefit reductions introduced by the 1995 first-tier reform were thought to offset the envisaged loss of contribution revenues to the second tier.[5] Third-tier legislation was drafted by a working group of specialists from the State Insurance Supervision Inspectorate, the Ministry of Economics and the Ministry Welfare. The resulting "Law on Private Pension Funds" was accepted by parliament in June 1997 and came into force in July 1998.

As regards second-tier legislation, the Latvian government agreed on a draft law "On State Funded Pensions" in early 1998. In July 1998, the Ministry of Finance presented a paper on its implementation. It proposed launching the second tier in 2000, while also pointing out that making this tier compulsory for all workers would create an unmanageably large revenue loss for the first tier. Hence, participation should be mandatory only for those below the age of 30, optional for those between 30 and 50 and not allowed for those above age 50 – the Polish model (Müller, 1999). The contribution rate should initially be as low as 2 percent and be increased to 5 percent by 2010. Due to insufficient development of private pension funds, asset management should be the responsibility of the Treasury during the first 2 years of the scheme.

[5] Contrary to expectations, however, the social insurance budget was in the red from 1999 to 2002.

The "State Funded Pension Law", drafted jointly by the Ministries of Finance and Welfare, resembled the Finance Ministry's concept rather closely. However, it postponed the launch of the second tier to mid-2001, given that the Russian financial crisis had produced a severe recession and soaring unemployment in Latvia, and the social insurance budget had plunged into deficit due to a number of amendments softening the benefit reductions that would otherwise have occurred as a result of the first-tier design. Moreover, the final level of second-tier contributions, to be reached in 2010, was increased to 10 percent. Exclusive asset management by the Treasury was limited to the first 18 months of the new scheme, while from 2003 the insured were allowed to switch to private investment companies. Finally, under the so-called "refunding option", the insured may return their accumulated funds to the first tier upon retirement, in order to receive a pension under the NDC scheme, should this be more advantageous.[6] The "State Funded Pension Law" was approved by the Latvian Parliament in February 2000 and entered into force in July 2001.

### 2.1.2 Comparative Analysis

The above account of the making of pension reform in Latvia, based on Inta Vanovska's chapter, reveals a number of features familiar to scholars of the political economy of pension privatisation, while also exhibiting some differences.

Private pensions first entered Latvia's political agenda in 1993, when a business-friendly government came to power and even the Minister of Welfare had a private insurance background. An outsider to the prevailing Bismarckian school in post-independence pension policy making in Latvia, Ritenis was a natural advocate of a paradigm shift. Although his first pension reform concept,

[6] In a similar vein, Mexico's 1997 pension privatisation granted the insured a choice at the time of retirement between the higher of two pensions, one based on the individual account and the other calculated according to the rules of the pre-reform PAYG system (Mesa-Lago and Müller, 2002).

based on private insurance, met with strong criticism, it effectively prepared the ground for pension privatisation in Latvia. This seems to confirm the earlier findings that individual policy makers often matter in market-oriented reforms and that the ideational setting can play an important role in enabling the paradigm change in old-age security (Müller, 2003).

It soon turned out that Ritenis was also a suitable local ally of the "new pension orthodoxy" (Lo Vuolo, 1996), as represented by the World Bank.[7] Following Latvia's request for a loan, the Bank had a rather substantial impact on pension policy making in this Baltic state. Among other things, this included assistance in the drafting of Ritenis' second pension reform concept, rather closely modelled on the Bank's three-pillar approach, some differences – such as the proposed but never realised fourth tier – notwithstanding. Although the envisaged first-tier design was soon changed towards an NDC scheme, reflecting the influence of Swedish advisors, the overall structure of Ritenis' proposal, accepted by parliament in 1995, does not seem to have been challenged in subsequent years. It is remarkable that in spite of constant government changes, it served as a roadmap for pension reform until all three tiers of the new Latvian pension system were in place in 2001.[8] Even the fact that Latvian policy makers opted for a piecemeal sequencing of the respective legislation – with the first tier legislated in 1995, the third tier in 1997 and the second tier in 2000 – did not derail the Baltic state's move towards a paradigm shift in old-age security, thus reflecting a high degree of cross-party consensus.

[7] Since the early 1990s, the new pension orthodoxy has been giving major impulses to radical pension reform in Latin America and Eastern Europe. It may be considered what Haas (1992) has called an "epistemic community", i.e. a network of professionals in a particular domain and with a common policy enterprise, sharing faith in a set of normative and causal beliefs, having shared patterns of reasoning and using shared discursive practices (see also Adler and Haas, 1992).

[8] It should be noted that in other areas of social policy-making, notably health policy, the short duration and relatively high volatility of governments and coalitions in Latvia proved to be a major obstacle to comprehensive reform (Müller et al, 2005).

Compared with the actor constellations predominant in most cases of pension privatisation,[9] it seems remarkable that it was the Minister of Welfare who took the lead in promoting pension privatisation in Latvia. However, a similarly harmonious cooperation between the Minister of Labour and the new pension orthodoxy could be observed in Bulgaria's pension privatisation, where the Minister of Labour in question had served on the managing board of a private pension fund and was thus no less of a stranger to the financial services industry than Latvia's Ritenis (Müller, 2003). Moreover, while Ritenis had provided the basic blueprint for systemic pension reform in Latvia, it was the Ministry of Finance that took the lead in second-tier design. Although this intra-government actor entered the Latvian pension reform arena only after the Ministry of Welfare, the Finance Ministry was clearly committed to pension privatisation, as pension privatisation perfectly matched its overall efforts to decrease the role of the state in the economy and to boost macroeconomic indicators.

However, the deliberate delay in legislating and implementing the second tier shows that there was a flip side to the economic factors and considerations driving pension privatisation in Latvia. The Finance Ministry feared that the envisaged second tier would not be feasible in the context of the worsening financial situation of the Social Insurance Fund. Moreover, poor capital market development was perceived as a constraint to the swift introduction of a mandatory prefunded tier. The resulting sequencing of the introduction of the three-pillar scheme resembles the approach to be observed in the Croatian and Bulgarian cases (Müller, 2003).

It may come as a surprise that unlike Ritenis' 1993 proposal to privatise old-age security in Latvia, that had met with strong resistance, the paradigm shift policy makers decided to embark upon appears to have stirred little debate or controversy among the Latvian public. It has been argued that the legislation and its short- and long-term consequences were not well understood

[9] While strongly encouraged by international financial institutions, the radical paradigm change in old-age security is mostly advocated by the Ministry of Finance, staffed with neoliberally trained economists. This important ally of the new pension orthodoxy often faced intra-government opposition from the Ministry of Labour, committed to Bismarckian and/or Beveridgean traditions (Müller, 2003).

(Vanovska, 2005). However, it should also be noted that Latvian reformers had built some cautious elements into their version of the World Bank's three-pillar model: initially, only two contribution points were redirected to the second tier, conservative asset management by the Treasury is an option for those mistrusting private financial institutions after a major banking crisis, and the insured may switch back to a purely publicly provided pension upon retirement. Finally, it should also be noted that the prefunded second tier was legislated when the first-tier scheme had plunged into the red. This only added to the discredit that post-independence social security had accumulated in Latvia, starting with the unpopularity of flat-rate benefits in the early 1990s when people felt inclined towards earnings-related benefits, followed by the outrage at the arbitrary results of the NDC tier's transitional rules and, finally, the concern about the precarious material conditions of pensioners. In this sense, the Latvian case seems to confirm the "benefit of crises" hypothesis popular with some scholars of the political economy of policy reform.[10]

### *2.2 Privatising Pensions in Estonia*

Estonia was the second Baltic country to embark on partial pension privatisation. Its commitment to a three-pillar model dates back to 1997. The prefunded second tier was legislated in the autumn of 2001 and entered into force in mid-2002.

#### 2.2.1 The Making of Pension Privatisation

In 1994, when the post-independence macroeconomic crisis started to subside, temporary rescue measures in the pension system – notably much-criticised flat-rate benefits, a reaction to very high inflation – gave way to

[10] A "benefit of crises" (Drazen and Grilli, 1993) is diagnosed when situations of perceived emergency persuade opposing groups to agree upon unpopular measures. Crises can break stalemates and may facilitate the demolition of political coalitions that had previously blocked reform.

more systematic approaches to old-age security in Estonia. This was the very moment when pension reform came to be widely debated in the country. Issues of concern, mostly raised by pensioners' organisations, were low benefit levels, the fairness of the benefit formula and the increase and/or sharing of the social tax burden among employers and employees. It soon turned out that there were no easy solutions to these demands, partly because of conflicting views of social partners and partly due to the stringent currency board arrangement adopted by Estonia, which came with a balanced budget doctrine and very limited state borrowing. Hence, none of the six draft pension laws presented to parliament between 1994 and 1997 was successful.

Only an initiative started in May 1997 eventually helped to overcome the pensions' stalemate. The incoming minority government, led by the Coalition Party, appointed a Social Security Reform Commission headed by the economic advisor to the Prime Minister and including experts from the National Social Insurance Board (ENSIB) and the Ministry of Finance. After less than a month of deliberations, the commission presented a Conceptual Framework for Pension Reform. The document, approved by government in June 1997, proposed a three-pillar model for Estonian old-age security, with a reformed first PAYG tier, a mandatory prefunded second tier, and a third tier offering life insurance products and voluntary private pension accounts. The document proposed that the paradigm shift should not be undertaken in a single step, but start with first-tier reform, followed by third- and second-tier legislation.

The principles of reform were not challenged by the opposition, so the minority government managed to obtain approval for both first- and third-tier legislation in April and June 1998, respectively. The March 1999 elections brought about a government change, however, with a new coalition government representing a broad political spectrum, ranging from the national-conservative Pro Patria Union and the liberal Reform Party to the social democratic Moderates. Yet, far from bringing radical pension reform to an early end, with second-tier legislation still pending, the new government decided to stick to the broad reform outline elaborated by the previous government and promised to finalise the process of pension reform that Estonia had embarked upon.

The Social Security Reform Commission was restructured and now included both the Minister of Social Affairs and the Minister of Finance, with

the former acting as a chairperson. Simultaneously, trilateral consultations between the government and social partners were started. Only after nearly 2 years of debate on the details of second-tier design – not on the pros and cons of the paradigm change – a compromise could be reached in January 2001, mainly on the contributions to and participation in the newly created second tier. While the government had originally envisaged redirecting half of the 20 percent mandatory social security contribution to the second tier and making these 10 percent payable by employees, the commission proposed a "carve out and top up" approach: 16 percent would continue to go to the first tier, 4 percent were to be redirected to the second tier, and an extra 2 percent was to be paid to second-tier accounts by those insured that would opt for membership in the second tier. Concerning participation in the second tier, the original government plan had envisaged to make it compulsory for all insured under 50 years of age, while the commission proposed optional participation regardless of age.

It should be noted that the second-tier plan was strongly defended by the Minister of Social Affairs, a social democrat and main spokesperson for the reform, while the Minister of Finance, leader of the liberal Reform Party, had originally been a supporter of the radical 10 + 10 approach but later turned more cautious towards the reform, due to the high transition costs it entailed.

The specific features of the compromise – in particular the top up, unique in CEE pension privatisations, and the optional participation – can be traced back to the positions of the political parties involved. Topping up contributions was seen as a necessary condition by social democrats who felt that retirement benefits could only be increased if extra resources were pulled into the system. The increase in contributions met with resistance from the liberals who, in response, insisted that membership in the second tier should be voluntary in order to let individuals choose whether to pay a higher contribution or not.

Yet, when the plan was presented to the public, trade unions and financial institutions – an otherwise unlikely alliance – called for compulsory participation in the second tier. Hence, liberals agreed to mandating participation for new entrants to the labour market. The strongest critics of this move were insurance companies, fearing the competition of compulsory funds in their voluntary business.

Second-tier legislation was sent to parliament in April 2001 and approved in September 2001. A few months later, Estonia witnessed another government crisis. The new coalition government was formed by liberals and the Centre Party, former critics of the reform but now keen to share power. Thus, with yet another government endorsing the reform, the second tier entered into force on 1 July 2002.

### 2.2.2 Comparative Analysis

Lauri Leppik's and Andres Võrk's account of the making of pension privatisation in Estonia challenges existing explanations for pension privatisation (as in Müller, 1999). Not all features of the Estonian reform process are unfamiliar when compared with reform experiences elsewhere, however.

Although the World Bank's direct influence in the reform process was rather limited, Estonia does not feature a "home-grown" model, developed in isolation. A close look at the 1997 blueprint for systemic pension reform shows that Estonian pension reformers were strongly influenced by the new pension orthodoxy in both the reasoning and the preferred reform model, which drew heavily on the Bank's 1994 report *Averting the Old Age Crisis*. Estonia's external debt was very low in the 1990s and the government did not seek to take any structural adjustment loans for pension reform from the Bank, but the internalisation of the new pension orthodoxy's ideas by national actors is obvious. One important channel for the transmission of ideas has been regional learning: the decision to embark on pension privatisation was shaped by similar reform decisions made in peer nations (Brooks, 2001). Partial pension privatisation in Poland and Hungary triggered a regional contagion effect from the Baltics to the Balkans, comparable only to the impact of the "Chilean model" in Latin America (Müller, 2003). In the case of Estonia, the reform agenda followed by its Baltic neighbour – Latvia, whose commitment to a mandatory prefunded tier dates back to 1995 – was also relevant.

As regards intra-government actors, earlier research had shown that the Ministry of Social Affairs, responsible for the existing old-age security schemes, was often reluctant to engage in structural pension reform, and that radical pension reform did not proceed when the Ministry of Social

Affairs was the only relevant pension reform actor (Müller, 1999, 2003). In Estonia, the Minister of Social Affairs played an extraordinarily active role in the preparation of partial pension privatisation, but the Ministry was not represented in the Social Security Reform Commission that elaborated the crucial 1997 Conceptual Framework for Pension Reform. Hence, it can be argued that the Estonian Ministry of Social Affairs only came on board when the basic paradigmatic decision had already been made.

Experts from the Ministry of Finance did participate in this early setting of the Estonian reform course, however. This is consistent with the earlier observation that the Finance Ministry is usually an important advocate of the paradigm change in old-age security (Müller, 1999, 2003). The Estonian Finance Minister's later caution about transition costs matches not only the advice given by the IMF to Estonia at the time, but also the Slovene experience, thus, showing that there is a flip side to the economic considerations that potently pushed pension privatisation elsewhere (Müller, 2002a, 2002b). Whereas the Slovene Minister of Finance effectively vetoed pension privatisation in his country, this did not happen in Estonia, where a fiscal stabilisation reserve was at hand to buffer transition costs in the first few years.

As regards other actors, it is interesting to note that Estonian trade unions were supportive of pension privatisation, as were social democrats. This is unusual, but not exclusive to Estonia: earlier findings on the political economy of pension reform had already pointed out that left-wing parties and trade unions do not always join the ranks of reform opponents (Müller, 2003). As social partners had been rather active participants of the pre-1997 pension debate in Estonia, winning them over certainly increased the political feasibility of the paradigm shift. In this context, the trilateral consultations started between the government and social partners in 1999 helped to build a consensus on the reform decision already made by the government 2 years earlier.

The degree of political consensus achieved by the advocates of pension privatisation in Estonia is also highlighted by the fact that 7 different political parties were directly involved in either the preparation or the implementation of the paradigm shift. Successive Estonian governments did not feel the urge to abandon their predecessors' pension reform concept, but instead followed the general principles of the 1997 reform outline. The coalition implementing

the second tier in 2002 was the third following the one which had adopted the reform plan in 1997. The degree of consensus on systemic pension reform in Estonia is even more striking given that the 1997 Conceptual Framework was prepared in less than 1 month, leaving consensus-building for later stages of the reform process.

### *2.3 Privatising Pensions in Lithuania*

Pension privatisation took longer to take off in Lithuania than in most other EU accession countries.[11] Having been proposed for the first time in 1994, the respective law entered into force only a decade later. While Lithuanian policy makers first experimented with voluntary supplementary pension funds, they eventually chose a mixed model, entailing a prefunded second tier with optional participation, funded by mandatory contribution diverted from the first tier.

#### 2.3.1 The Making of Pension Privatisation

It was due to the activities of three institutions that private pensions were put on the Lithuanian policy agenda in the mid-1990s: (1) the Lithuanian Free Market Institute (LFMI), closely related to the CATO Institute; (2) the Industrialists' Confederation, Lithuania's largest business organisation; and (3) the World Bank.[12] While the first proposed a Chilean-style approach, the second advocated supplementary occupational pension funds, sponsored and managed by employers, and the third is well-known for its three-pillar model, widely publicised from 1994 onwards. The LFMI must be considered a local

[11] With the exception of Slovakia, where pension privatisation started only in 2005, and the Czech Republic and Slovenia, two countries that have disregarded the paradigm shift so far (Müller, 2002a, 2002b, 2005a, 2005b).

[12] The CATO Institute, a neo-conservative US think tank, features such prominent advocates of pension privatisation as José Piñera, the father of the Chilean reform.

ally of the new pension orthodoxy, while the World Bank has certainly been one of the most active advocates of the ideas generated by this international epistemic community (Müller, 1999, 2003). The Industrialists' Confederation, in its turn, appears to have been more committed to a traditional corporatist agenda, typical of Continental Europe and clashing with the individualistic approach to private pensions followed by the new pension orthodoxy.

All three advocates of private pensions coincided in their criticism of the Lithuanian social security scheme, whereas the Ministry of Social Security and Labour and the Social Insurance Fund (SODRA) remained committed to the model of social insurance that had only just been set up in the country's post-independence years. After the Conservatives had taken power in 1996, however, the Industrialists' Confederation was able to increase its political clout, and the Ministry was obliged to join a working group with the local advocates of private pensions. As a result of lengthy discussions, legislation on voluntary third-tier funds was passed in 1999 and came into force in 2000. This rather cautious decision represents a political compromise not only between the defenders of social security (which remained intact) and the advocates of pension privatisation (who saw the move as a first step towards broader privatisation), but also between the different approaches followed by the advocates of private pensions: the new funds were to be supplementary, but following a predominantly individualistic (not corporatist) approach.

The Lithuanian third tier failed to arouse the interest of the financial services industry. Before the voluntary scheme had even started, the mandatory approach to private pensions was taken up by the Conservative government in the autumn of 1999. This time, the more radical faction of lobbyists for private pensions was taken on board: Audronė Morkūnienė, the LFMI's vocal advocate of pension privatisation back in 1994, was appointed social security advisor to the Prime Minister and chair of a working group to prepare a compulsory prefunded tier. While this first move towards pension privatisation was clearly positioned outside the relevant Ministry of Social Security and Labour, that had been opposing the radical move, Morkūnienė should later be appointed Deputy Minister of Social Security and Labour (Morkūnienė, 2004), thus making her way right into the formerly opposing portfolio. In October 2000, the government endorsed a White Paper on Pension Reform, making it clear that Lithuania was heading towards a World Bank-style three-pillar model.

In spite of the subsequent government change, with the Liberals and Social Liberals taking over from the Conservatives in November 2000, Lithuania's political commitment to partial pension privatisation was not revoked. However, after a draft law "On Pension Reform" had been sent to parliament in May 2001, envisaging a mandatory prefunded second tier starting from 2003, Lithuania witnessed a last attempt by the pro-social security faction to put the brake on the radical pension reform: unlike the Finance and Budget Committee, the Social Affairs Committee, headed by a trade unionist, refused to back the draft law, which was subsequently rejected by parliament. Instead, a voluntary prefunded tier was proposed.

After a centre-left coalition government of social democrats and social liberals had taken over in June 2001, a new working group started fresh discussions on the reform path to be followed in Lithuanian old-age security. With the social democrats, outspoken critics of pension privatisation had come to share power, whereas the social liberals continued to endorse pension privatisation. Eventually, Lithuania headed towards yet another compromise: the introduction of the second, prefunded tier would imply a partial shift of mandatory social security contributions, but only if the insured decided to join this tier. All insured – regardless of age – would be free to opt for or against joining the prefunded tier and, thus, splitting their pension contributions. Moreover, the percentage points to be diverted from the first to the second tier were to be lower initially than previously planned (2.5 instead of 5 percentage points), but with 5.5 percentage points would be slightly higher by 2007 than in the original plan. The respective legislation was finally adopted in December 2002, and the new system came into force in 2004.

### 2.3.2 Comparative Analysis

The above account of the making of pension privatisation in Lithuania, based on Romas Lazutka's chapter, reveals a number of familiar features in the political economy of pension reform, while also exhibiting some characteristics rarely observed elsewhere.

Putting private pensions on the political agenda is typically an initiative of the new pension orthodoxy and her local allies (Müller, 2003). As elsewhere,

the World Bank, a prominent actor within this global epistemic community, was not acting alone in Lithuania, but relied on a local ally – the LFMI, a market-oriented think-tank. Typically, the discourse in favour of the shift to funding sets out to usurp the term "pension reform", as only pension privatisation is considered to deserve the label "reform" (Müller, 1999: 37).[13] Moreover, it is not limited to highlighting the perceived advantages of private, prefunded pensions, but is also aimed at discrediting the existing social security system. This pattern can also be observed in the Lithuanian case, where criticisms focused on SODRA's 1996–2001 deficits, the low level of retirement benefits and payment arrears. The precarious financial situation of SODRA, coupled with a persistent fiscal deficit, did not turn the Ministry of Finance, unreceptive to any debt financing of transition costs (Lindeman, 2004), into a major player in the reform arena, however. Contrary to this, in other cases of pension privatisation this portfolio had often proved to be one of the most ardent advocates of this radical move and an important local ally of the World Bank (Müller, 2003).

As to other intra-government actors, the Lithuanian Ministry of Social Security and Labour initially showed the typical Bismarckian-Beveridgean stance, defending social security and opposing the move towards mandatory prefunding. As elsewhere, this Ministry proved too weak to prevent pension privatisation, however. In 1999, it was a social security advisor to the Prime Minister who was appointed chair of a working group to prepare a compulsory prefunded tier, not a representative of the Ministry of Social Security and Labour. Such efforts at circumventing intra-government opposition have also been observed elsewhere (Müller, 2003). Later, however, the Ministry appears to have turned into an important locus of reform, especially after Audronė Morkūnienė, one of the most prominent advocates of pension privatisation in Lithuania, was appointed Deputy Minister of Social Security and Labour. This, in its turn, again confirms that committed individuals matter when it comes to market-oriented reforms (Müller, 2003).

Pension privatisation has often been rather detached from party politics, as both conservative and left-wing governments have embarked on the paradigm

[13] For this use of "reform" in the Lithuanian case, see, e.g., Medaiskis and Morkūnienė (2004: 156) and Morkūnienė (2004).

shift (Müller, 2003).[14] This general finding is only partially true for the Lithuanian case, however, as private pensions were ignored by the left-wing party ruling Latvia until 1996. Only the right-wing government that followed seriously took up and debated the existing proposals. While the Conservatives have thus been key to putting pension privatisation into practice, they first decided to experiment with voluntary supplementary pension funds, before considering mandatory prefunding from 1999/2000. Eventually, however, partial pension privatisation was legislated by a centre-left coalition. The radical proposal survived two government changes, one in 2000 and another in 2001, thereby highlighting the degree of political consensus achieved by the advocates of pension privatisation.

However, the comprehensiveness of the political consensus was put into question when the Lithuanian parliament rejected the draft law "On Pension Reform" in June 2001, following a row between the Social Affairs Committee and the Finance and Budget Committee. This divergence of approaches towards pension privatisation can be seen as a proxy of the usual conflict between the Ministry of Welfare and the Ministry of Finance – i.e. a conflict to be observed in the executive, not the legislature (Müller, 1999, 2003).

As elsewhere, however, the "traditional" social security faction failed to prevail, the compromise achieved in terms of membership to the second tier notwithstanding. This compromise – full optionality – is similar to the reform concepts discussed in Estonia and adopted in Argentina a decade earlier (Mesa-Lago and Müller, 2002), but Lithuania has been the only post-socialist country as yet to put it into practice. Almost 50 percent of all insured had joined the mixed system after only 6 months, in reaction to an advertising campaign by private pension funds, a partially biased information campaign by the Lithuanian government, and the negative public attitude towards the social insurance system that had developed over the 1990s. As noted above, SODRA's 1996–2001 deficits, the low level of retirement benefits and

[14] As pointed out by scholars of the political economy of policy reform, market-friendly reforms have not always been carried out by neoliberal governments, but also by "unlikely" left-wing or populist administrations. This phenomenon has been called the "Nixon-in-China syndrome" (Rodrik, 1994).

payment arrears effectively had been used by critics to discredit the existing PAYG scheme. In this sense the Lithuanian case also seems to confirm the "benefit of crises" hypothesis. Although the often concomitant change in actor constellations cannot be observed, SODRA's conspicuous crisis (itself a result of political decisions, as pointed out by Lazutka) helped to prepare the ground for the radical paradigm shift.

## 3. Conclusions: the Baltic Reforms in Comparative Perspective

Latvia, Estonia and Lithuania entered their new eras of independence with identical old-age security systems, inherited from the Soviet period. They also faced very similar transition-related challenges: the severe economic turmoil surrounding the collapse of the Soviet Union, leading to extremely high inflation rates and deep recession in all three countries. Today, after almost 15 years of sovereign pension policy, the 3 Baltic states show a convergence of approaches: in terms of their overall pension design, Latvia, Estonia and Lithuania shifted from single-tiered PAYG schemes to mixed systems, containing a prefunded second tier, thus following the reform model now dominating the CEE region (Casey, 2004).

This paper tried to shed light on the political economy of these second-generation reforms by presenting and analysing summarised accounts of pension privatisation in Latvia, Estonia and Lithuania. This final section will highlight parallels and differences in the Baltic reform processes, drawing some comparative lessons for the Baltic region as a whole.

All 3 Baltic states started their post-independence period with a series of early parametric changes to their inherited PAYG schemes, aimed at moving from their Soviet-style pension schemes towards modern, Bismarckian systems of social insurance. However, the severe economic crisis and hyperinflation of the first post-independence years discredited these early reform efforts almost immediately. The flat-rat compensatory payments, chosen by policy makers in order to ease benefit administration in a context of high inflation (Leppik and Männik, 2002) and to support the most vulnerable groups of beneficiaries (Medaiskis, 2002), led to an extreme compression of the benefit

structure. This met with considerable dissatisfaction among pensioners and the public at large, who had expected the post-Soviet years to come with more differentiation and higher benefits than in the past (Müller, 2002c).

After this traumatic experience with PAYG schemes unable to cope and parametric reforms proving to be extremely short-lived (Zilite, 2004), policy makers in the Baltics felt attracted by a radically different approach – the promises of the new pension orthodoxy, publicised from 1994 onwards, just as the post-independence crisis started to subside. The above accounts show considerable differences in the respective agenda-setting processes, however. In Latvia, a Welfare Minister with a private insurance background joined hands with the World Bank, leading to an early commitment to the three-pillar scheme (1995). In Estonia, the internalisation of the new pension orthodoxy's ideas by national actors and regional learning resulted in a speedy commitment to the three-pillar model in 1997. In Lithuania, a free-market think tank, a business organisation and the World Bank all proposed private pensions in the mid-1990s, but it was not until the year 2000 that consensus on partial pension privatisation had been built.

Clearly, there were three different, not mutually exclusive channels for the new pension orthodoxy to take her ideas to the Baltics: direct World Bank involvement (rather strong in Latvia, rather weak in Estonia, with Lithuania somewhere in between), reliance on extraordinarily committed local allies (Ritenis in Latvia; Morkūnienė in Lithuania), and learning from regional peers (Estonia with Hungary, Poland, and Latvia) and role-models (Latvia with Sweden). The fact that overall, direct World Bank involvement was considerably weaker in the Baltic states than in most other cases of pension privatisation can be explained by the fact that Latvia, Estonia and Lithuania did not inherit any external debt from the Soviet Union and remained less indebted until the end of the 1990s (Lago, 2001; World Bank 2005). Moreover, from a "global politics of attention" perspective (Orenstein, 2003), it may not come as a surprise that the Bank should have concentrated its efforts on the regional innovator, Latvia, "serving as a model for other countries in the region" (World Bank, 1997: 10).

There are further differences as to the role of intra-government actors in the reform process. Elsewhere, pension privatisation was mostly advocated by the Ministry of Finance, while the Ministry of Welfare tended to oppose the

move towards mandatory pre-funding (Müller, 1999, 2003). Effectively, the Lithuanian Ministry of Social Security and Labour initially opposed the move towards mandatory pre-funding, but proved too weak to prevent it when the Prime Minister joined hands with the most important local ally of the new pension orthodoxy. The Ministry of Finance has not been a major player in the Lithuanian pension reform arena. In Estonia, the Minister of Social Affairs was very active in the preparation of partial pension privatisation, but had only come on board once the basic paradigmatic decision had been made. In comparison, the Ministry of Finance did participate in the early setting of the reform course, adopting a more cautionary approach only later, when the fiscal impact of transition costs became visible. In Latvia, however, it was clearly the Minister of Welfare who took the lead in promoting pension privatisation, with the Ministry of Finance featuring prominently in second-tier design later. To sum up, the usual ideational distinctions between the Ministries of Welfare and Finance proved to be less clear-cut in the Baltics than elsewhere (but see Müller, 2000a, 2000b). In this context, it is interesting to note that transition costs were of considerable concern to the Ministries of Finance in all 3 Baltic countries, thus pointing to the flip side of the economic considerations driving pension privatisation in many places.[15]

All 3 Baltic reform cases show an extraordinarily high degree of cross-party consensus on a potentially very controversial reform approach. Once the decision on the mandatory prefunded tier had been made in Latvia, Estonia and Lithuania, multiple government changes could not alter or derail the reform course.[16] In Latvia and Estonia, three-pillar blueprints, approved by the

[15] In Lithuania and Estonia, the existing currency board arrangements restrained recourse to central bank financing. Moreover, in Lithuania pension privatisation competed for financial resources with the so-called "savings restitution programme", which was politically very sensitive. Finally, in Latvia and Lithuania social insurance budgets featured deficits in 1999–2002 and 1996–2001, respectively. This was not the case in Estonia, where there is also a fiscal stabilisation reserve at hand to buffer transition costs in the first few years.

[16] Poland also featured a high degree of cross-party consensus on pension privatisation, when the reform project was continued after the 1997 elections (Müller, 1999). It should be noted, however, that the Baltic reform projects had all survived multiple government changes before their implementation was completed.

respective governments early on (in 1995 and 1997, respectively), highlighted the commitment made and the roadmap to be followed. In Lithuania, a similar commitment to a prefunded second tier was achieved in 2000 and only briefly challenged in the summer of 2001. Even the fact that Latvian and Estonian policy makers opted for a piecemeal sequencing of the respective legislation and implementation – with the first tier deliberately legislated first, the third tier second and the second tier last[17] – could not derail the envisaged move towards a paradigm shift in old-age security, in spite of short-lived governments. This deliberate unbundling strategy is in striking contrast with the "big bang" strategy of reformers elsewhere that bundles up the politically sensitive reforms of the PAYG scheme with the more visible and popular introduction of individual pension fund accounts (Müller, 2003), thus intending to lower the political cost of reform by increasing its complexity through "obfuscation" (Pierson, 1994: 21). In the Baltics, the relatively late start of the mandatory prefunded tier largely reflected concerns that the existing financial markets would be unable to cope, thus highlighting once again the reverse of the macroeconomic logic behind pension privatisation.[18, 19] Political consensus did not come without compromise, however. It should be noted that pension privatisation in the Baltics was characterised by a series of concessions in terms of reform design, especially in Latvia and Lithuania, and by comparatively low contribution rates to the second tier, at least initially. Clearly, second-generation pension privatisation, as featured by the three Baltic states, resulted in a softening of the much-propagated three-pillar approach.

Finally, the Baltic cases – especially Latvia and Lithuania – seem to confirm the "benefit of crises" hypothesis: the shortcomings of their social

[17] A similar order resulted de facto from the protracted political process in Lithuania.

[18] Baltic securities markets are small and developed relatively late, with the Vilnius Stock Exchange opening in 1993, the Riga Stock Exchange in 1995 and the Tallinn Stock Exchange in 1996, and Latvian and Lithuanian debt markets are dominated by government bonds (Katkus, 2004).

[19] Similar concerns about the state of the capital market and financial sector development were perceived as a constraint to the introduction of a prefunded second tier in the Czech Republic and Slovenia (Müller, 2002a, 2002b).

security systems (financial deficits, low replacement rates, payment arrears) plus the discredit the public schemes accumulated with the unpopular flat-rate emergency benefits in the early 1990s (GVG, 2003), effectively helped interested actors to prepare the ground for the radical paradigm shift.

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