

***The Quest for Pension Reform: Poland's Security through  
Diversity***

*By: Marek Góra and Michael Rutkowski*

Working Paper Number 286

January 2000

# The Quest for Pension Reform: Poland's Security through Diversity

Marek Góra and Michal Rutkowski<sup>1</sup>

## Abstract

All over the world, pension systems have financing difficulties that need to be addressed. There are three ways of dealing with pension systems problems, namely subsidisation, rationalisation and reforming. Opposite to the first two, the latter one means a deep change of system fundamentals.

The new system is a way of income allocation over life cycle. The system is entirely based on individual accounts. Individuals have two accounts each. At the day of retirement amounts accumulated in each of the accounts are annualised. Pensions depend on two factors: (a) accumulated capital, and (b) age of retirement. Such old-age pension system provides its participants with high security thanks to diversification of risk between two markets, namely the labour market and the capital market, and full link between contributions and benefits. Minimum guarantee is financed by the state budget. The new system is less exposed to typical problems of that markets. Additionally, it is more resistant to political pressures. Additionally, the new system is expected to create the following externalities: change of savings structure in favour of long term savings, less incentive for early retirement, and less incentive for hiding income.

The old Polish old-age system was terminated on 31 December 1998 – a new one called "*Security through Diversity*" was introduced on 1 January 1999. The new system covers people up to 50. The most important feature of the new system is its separation within social security. In particular, a separate contribution is paid for old-age. One part (5/8) of that contribution goes to a notional defined contribution 1<sup>st</sup> pillar individual account, the other part (3/8) goes to fully funded 2<sup>nd</sup> pillar individual account. Both elements of the system work along defined contribution regime. People between 30 and 50 have an option to pay entire contribution to 1<sup>st</sup> pillar individual account, people below 30 have their old age contributions automatically divided between the accounts.

Keywords: old-age pensions, individual accounts, defined contribution, income allocation.

---

<sup>1</sup> Marek Góra and Michal Rutkowski are "Security through Diversity" authors and reform team leaders.

## **NEW OLD-AGE PENSION SYSTEM IN POLAND:**

### **"SECURITY THROUGH DIVERSITY"**

The new Polish old-age pension system came into force on January 1, 1999. It replaced the previous monopoly of a traditional continental European defined benefit pay-as-you-go scheme, whereby all pensions were paid out of current tax revenues, with a three pillar system in which the sources of future pensions financing are diversified. Of the three pillars the first and the second are mandatory pillars with benefits closely linked to lifetime contributions made. The first pillar (5/8 of mandatory contribution) is predominantly notional defined contribution pay-as-you-go, although it has a small Demographic Reserve Fund in it, which is fully funded. The second pillar (3/8 of mandatory contribution) is a defined contribution fully funded pillar served by private pension funds. Both mandatory pillars are closely linked to each other: the same defined contribution principle, individual accounts, the same retirement age, benefits in a form of annuities, minimum pension guarantee based on both pillars' accounts. All participants of the mandatory part of the system are subject to the same rules governing the contribution collection and benefit calculation. As opposed to this, the additional voluntary fully funded third pillar provides for significant differentiation in organisational principles and participation forms, which means that in the entire old-age pension system the magnitude of reallocation of income over life cycle can be adjusted to individual preferences.

Each of the pillars is exposed to different types of risk. The pay-as-you-go pillar is exposed to the risks of population-ageing, increasing unemployment and political pressures, whereas the funded pillars (second and third) perform better in the face of these risks, but are vulnerable to financial market downturns or prolonged inflation. The new Polish system diversifies risk. – "Security through Diversity" stands for risk diversification – each of the two parts of mandatory contribution work for future old-age benefit in a different way.

The new scheme is introduced gradually. Those born before 1949 stay in the old system (no choice of entering the new one); those born after 31 December 1948 are required to adopt the new system. Among them those born in 1949 through 1968 will have an option to choose either one or two pillar version of the new system (one or two individual accounts), while those born after 31 December 1968 will have to transfer 3/8 of mandatory retirement contributions to a chosen pension fund – which means splitting contributions between two individual accounts.

Beginning from 1<sup>st</sup> January 1999, the responsibility to generate funds for employee's old-age rests jointly on an employer and the employee, which means the obligation to pay contributions is divided between them. Wages and salaries were grossed-up in order to avoid net change in anybody's social security burden.

---

<sup>2</sup> Marek Góra and Michal Rutkowski are "Security through Diversity" authors and reform team leaders.

A ceiling on individual contribution base was introduced. People are mandated to participate in the pension system up to 30 times the monthly average wage per year. Above that ceiling income is contribution free.

The first pillar, as it is the case in Sweden and Latvia, is based on a notional defined contribution principle, where the pension paid depend on: (1) the contributions made, index-linked to contribution base (wage sum), and (2) average life expectancy for men and women. Thus the later a person retires, the larger the annual pension paid. The fully funded Demographic Reserve Fund is to smooth first pillar revenues fluctuations.

The first pillar of the new system being based on individual accounts is not a continuation of the previous system. Everybody covered by the new system in spite of his or her age “retired” of the old system on 31<sup>st</sup> December 1998. – Pension rights earned under the previous system have been calculated as of the old system closing date (31<sup>st</sup> December 1998) and translated into zloty. Such "start-up capital" will appear on individual accounts (together with appropriate interest) by 2003.

The second pillar is served by open pension funds (joint stock companies) of employees’ choice. This second pillar started on 1<sup>st</sup> April, 1999 and those for whom splitting old-age contributions between the 1<sup>st</sup> and 2<sup>nd</sup> pillar accounts was compulsory – those born in 1969 and later – must have chosen a pension fund for their second pillar savings by the end of September 1999. Those born before 1969 had to make their decision before the end of December 1999. The decision to join the second pillar is irreversible. The transition cost of 2<sup>nd</sup> pillar implementation is covered by revenues from privatisation.

The funds, in the second pillar are obliged to diversify their risk, and clear limits are set out as to where they can locate their investments – 40% in quoted stock, 5% in foreign shares, 10% in the secondary stock market, 10% in National Investment Funds (NFIs), 10% in National Bank paper and 15% in municipality bonds. Employees can only invest in one fund and, once the money is invested, it will be difficult to change to a new fund. Given this restriction, ensuring good access to information about the funds will be very important.

In a voluntary third pillar, contributions are paid into life assurance, pension and investment funds and employee funds. Companies are permitted to set up employee pension funds and mutual assurance funds on a voluntary basis. Contributions are paid from income after tax but benefits are tax free. There are, however, incentives in the third pillar to encourage employees and employers to set up group pension schemes.

Widespread occupational privileges in the Polish pension system have been eliminated for people covered by the new system. For some groups working in harmful conditions "bridging pensions" will be introduced as a way of financing the termination of work before the retirement age. Bridging pensions entitlements are linked to type of work conditions. A special Medical Commission prepared a list of such conditions (for instance under earth, under water).

One of the most important features of the new Polish old-age pension system is its separation from other elements of social security. There is no social security contribution in Poland any more. Instead of that, there are separate contributions financing each of social security elements. The most important is the separation of the old-age contribution (19.52 percent of the contribution base), that entirely goes into individual account, or accounts if the contribution is divided between the accounts-pillars. Other social security contributions such as disability, sickness, and so on, are kept outside the three pillar system that is solely an old-age pension scheme.

## Table of contents

<b>1. Recent performance of the pension system.....</b>	<b>8</b>
<b>2. The struggle for pension reform .....</b>	<b>11</b>
<b>3. A description of the pension system .....</b>	<b>15</b>
3.1 <i>Financing and operations .....</i>	<i>15</i>
3.2 <i>The contribution rate.....</i>	<i>16</i>
<b>4. The reformed first pillar.....</b>	<b>17</b>
4.1 <i>The accumulation phase .....</i>	<i>17</i>
4.2 <i>The benefit-distribution phase.....</i>	<i>18</i>
4.3 <i>Relating benefits to lifetime contributions.....</i>	<i>19</i>
4.4 <i>The demographic reserve fund.....</i>	<i>19</i>
4.5 <i>A new role for the social insurance administration (ZUS).....</i>	<i>20</i>
<b>5. The second pillar.....</b>	<b>20</b>
5.1 <i>Pension-fund regulations in the accumulation phase.....</i>	<i>21</i>
5.2 <i>Funded pension benefits.....</i>	<i>21</i>
5.3 <i>Regulation and supervision.....</i>	<i>23</i>
5.4 <i>Pension fund operations.....</i>	<i>23</i>
<b>6. The third pillar .....</b>	<b>27</b>
6.1 <i>The new occupational pension plans.....</i>	<i>27</i>
6.2 <i>Regulation, supervision and taxation.....</i>	<i>29</i>
<b>7. Special cases and other benefits .....</b>	<b>29</b>
7.1 <i>Sector privileges.....</i>	<i>29</i>
7.2 <i>Uniformed services pensions.....</i>	<i>30</i>
7.3 <i>Other benefits financed from the social security fund.....</i>	<i>30</i>
<b>8. Financing the transition.....</b>	<b>30</b>
8.1 <i>Switching from the old system to the new.....</i>	<i>31</i>
8.2 <i>Short- and medium-term financial consequences.....</i>	<i>31</i>
<b>9. Preliminary conclusions and lessons for other countries .....</b>	<b>34</b>
<b>10. References .....</b>	<b>35</b>

# The quest for pension reform: Poland's *Security through Diversity*

Marek Góra and Michal Rutkowski<sup>3</sup>

All over the world, pension systems have financing difficulties that need to be addressed. There are three ways of dealing with pension systems problems. The most affluent countries, especially in the European Union, have tended to opt for continued subsidies to pensions from general revenues. Countries that cannot afford large subsidies have exercised a second option: trying to rationalise their pension systems by seeking more revenues and reducing spending. The third option is fundamental reform, which is the only way of achieving a sustainable solution. But it needs a coherent vision for the new pension system's design.

Following the Chilean and other Latin-American pension reforms, it is often asserted that fundamental reform implies replacing a monopoly of a pay-as-you-go, defined-benefit system with a fully funded mandatory defined-contribution system. From the perspective of central and eastern European countries, this reform option, despite numerous advantages, has two essential flaws. First, it does not really *diversify risks*. A funded monopoly merely replaces a pay-as-you-go monopoly. Secondly, because of transition costs, this option is difficult to implement in countries with a sizeable pay-as-you-go system, as in most central and eastern European countries.

This is why Poland, followed yet another reform option. The essential concept is that the pay-as-you-go monopoly needs to be replaced with a *multipillar* system. Future pensions financing

---

<sup>3</sup> *Security through Diversity* team leaders. Marek Góra has been Director of the Office for Pension Reform of the Polish government since October 1997 and was previously Deputy Director (October 1996 to September 1997). Michal Rutkowski is Sector Leader for Social Protection in Europe and Central Asia for the World Bank and former Director of the Office for Pension Reform of the Polish Government (October 1996 to September 1997). We would like to thank Edward Whitehouse of Axia Economics for editing the paper, the entire *Security through Diversity* team for their brilliant work and Nicole La Borde for her excellent assistance. The views and opinions presented in the paper are those of the authors and should not be attributed to the World Bank, or any other institution or government.

will be diversified. Labour and capital markets will play equally important roles through the pay-as-you-go and funded parts of the system. About 50 per cent (initially 62.5 per cent) of the mandatory retirement system will be financed through pay-as-you-go, while the other 50 per cent (initially 37.5 per cent) will be funded. Since each of the pillars has different types of risks (Table1), the system's overall risk will be well diversified. Of course, pay-as-you-go and funding both offer individuals a measure of certainty about their future, but neither method can insure against common aggregate shocks. One should not 'put all the eggs in one basket'.<sup>4</sup> Finally, both pillars will operate in a defined-contribution-type framework. The aim is a transparent system, with pension based on lifetime income, fully adjustable to changing circumstances.

**Table 1. Risks with different types of pension financing**

<i>Risk</i>	<i>Pay-as-you-go</i>	<i>Funded</i>
Ageing	Exposed	Not exposed
Unemployment	Exposed	Not exposed
Political bargaining	Exposed	Less exposed
Financial market crisis	Not exposed	Less exposed
Inflation	Less exposed	Exposed

The Polish pension reform is still in the making. The first set of reform laws, including the law on organisation and operation of pension funds, passed in mid-1997. The second set of laws, including the law on the new pay-as-you-go pensions from the Social Insurance Institute, was accepted by the Government in April 1998 and is now being debated in parliament. The new multipillar pension system, consists of a notional defined-contribution, pay-as-you-go first pillar, a mandatory defined contribution, privately-managed, funded second pillar, and voluntary employee pension plans in the third pillar. The multipillar system is now set to begin on 1 April 1999. Licensing of pension funds began on 1 August 1998. Executive regulations for this process are ready.

This paper looks at parts of the reform specific to Poland, but draws more general conclusions. We look at the motivation for reform, the struggle of progressively minded experts and politicians to advance the reform agenda, the architecture of the new system, and issues arising during the transition. The final section offers tentative conclusions and lessons for other countries.<sup>5</sup>

<sup>4</sup> See, for example, Barr (1998), chapter 9 and James (1998).

<sup>5</sup> For an overview of reforms in other transition economies, see Rutkowski (1998).

## 1. Recent performance of the pension system

The crisis of the Polish pension system had much in common with the problems in other countries' pay-as-you-go defined-benefit schemes, such as a worsening demographic-dependency ratio. But it was augmented by a particularly inefficient set of special rules, both typical of most former centrally planned economies (such as low retirement age and widespread sector privileges) and specific to Poland (such as generous disability provisions). Moreover, in the early 1980s and later in the early 1990s, additional privileges and special rules were added with little or no (in the 1980s) thought to the fiscal consequences. Difficulties appeared in ensuring the financial sustainability of the Social Insurance Fund (FUS). Consequently, the contribution rate grew rapidly from 25 per cent in 1981 to 38 per cent during 1987-1989, up to the present level of 45 per cent. This was caused by

- a sudden increase in the number of new pensioners, especially in 1991 (Figure 1a)
- a decrease in the number of contributors as a result of a decline in employment (1b)
- growth in the real value of pensions relative to real earnings (1c)

Expenditure on retirement and disability benefits grew, from 12.6 per cent of GDP to 15.4 per cent by 1994. In countries with a similar income *per capita*, spending does not normally exceed 8 per cent of GDP, and in the European Union, 11 per cent. Demographic forecasts showed a further deterioration in the ratio of contributors to beneficiaries after 2006 (Table 2). In the absence of reform, projections show a small decline in spending to 14 per cent of GDP by 2000, but then a rapid increase to 22 per cent by 2020. By 2050, projected spending is 27 per cent of GDP. OECD forecasts for its member countries show a similar rise, but from a substantially lower base: 8 per cent of GDP in 1990, 13½ per cent in 2020 and 18 per cent in 2050.

Not surprisingly, the crisis of the Polish pension system became apparent not only to social security professionals, but also to the public and politicians.

Table 2. Demographic estimates and projections, 1985-2020

	1985	1990	1995	2000	2005	2010	2015	2020
Pension age (m)	4.5	4.9	5.3	5.6	5.7	6.1	7.0	7.9
Working age (m)	21.8	22.0	22.6	23.6	24.7	24.8	24.0	23.3
Ratio (%)	20.6	22.3	23.5	23.8	23.1	24.6	29.0	33.9

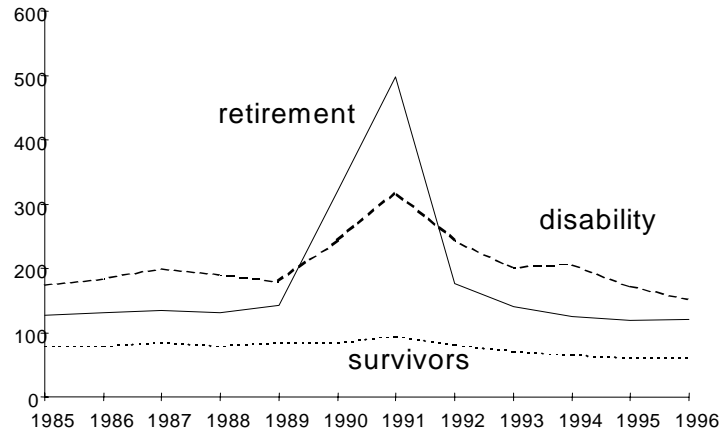
Source: unofficial projections from GUS



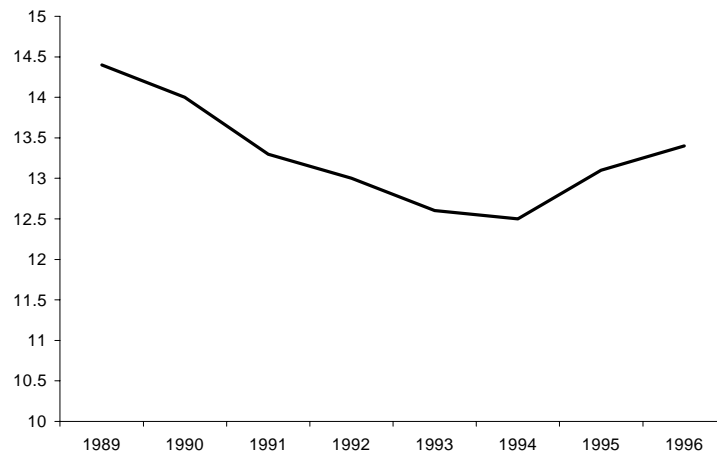


Figure 1. Recent developments in the Polish pension system

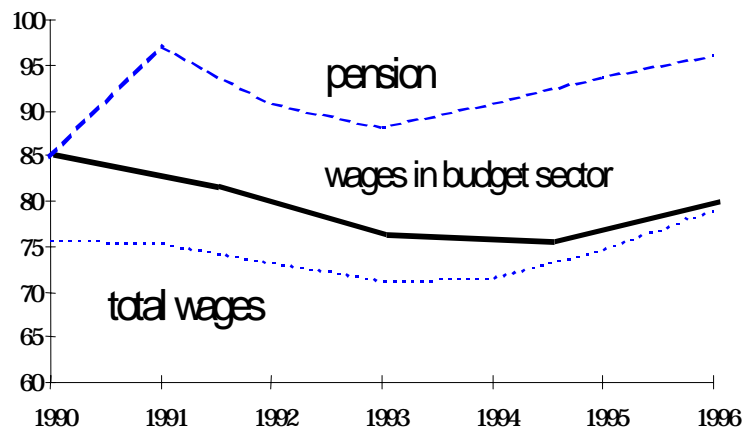
1a. Number of new entrants to the pension system, 1985-96 (thousands)



1b. Number of contributors, 1989-96 (millions)



1c. Real pensions and real wages, 1990-96 (1989=100)



Source ZUS statistics, analysis and forecasting department

## 2. The struggle for pension reform

The most contentious point in the pension-reform debate among professionals since 1989 was whether the system should remain a pay-as-you-go monopoly. Three groups emerged, roughly reflecting the world-wide division of opinion. One group, the ‘rationalisers’, argued that mere the defined-benefit pay-as-you-go system should be cut back, but remain in the same form. A second group, the ‘reformers’, argued that the system should be fundamentally changed: reformed: either towards a fully funded system or a multipillar system. But both of these groups, until the early 1990s, were overshadowed by those who believed that short-term preventive measures — such as under-indexation of benefits — would be sufficient (the ‘non-reformers’). However, by 1992-93, this last group was on the verge of extinction.

The rationalisers’ argument was that a package of reforms to the pay-as-you-go system would stop the increase in pension costs, particularly under high economic growth. This package would include consistent price (or approximate price) indexation of benefits, increasing the real pension age from the very low levels of 59 for men and 55 for women and extending the calculation base period. However, even with these reforms, the system would be on the edge of financial sustainability. A significant, adverse macroeconomic change would cause serious disruption or even a breakdown of the system. Moreover, the system would not be immune to the demographic change expected after 2006. There was a broad agreement — involving both the rationalisers and the reformers — that these reforms should introduced as quickly as possible.

However, the reformers argued rationalisation alone would be neither *sufficient* nor *desirable*. Social-insurance reform should, if possible, not simply be associated with cuts and stringency, but with new opportunities for a generation with many working years before it. New horizons will show not only clouds of change, but also rays of new opportunity, which would make the reform more politically acceptable. Rationalisation would not be *desirable* because the crisis affects all single-pillar, pay-as-you-go pension systems. Pay-as-you-go is decidedly more subject to labour-market, economic, political and demographic pressures than funded systems.

Reformers argued for a social-insurance system with new opportunities for its participants and have a stabilising mechanism, to resist demographic and macroeconomic pressures. This requires a move from defined benefit to a defined-contribution system and the introduction of a funded component in the pension system. The first, pay-as-you-go pillar of the new system should be downsized and made more transparent, by introducing a closer link between individual

contributions and individual benefits. In the second pillar, contributions would be invested in an individual account to generate a return. Finally, the existing third pillar for additional, voluntary savings would be developed.

The debate between rationalisers and reformers became quite heated after 1991.<sup>6</sup> Initially, this had little impact on politicians. However, growing difficulties in paying pensions put pressure on decision-makers. Backward-looking wage indexation of benefits meant that financial tension sharply increased periodically. This was reflected, above all, in the inability to prepare a budget without a dramatic choice between a huge rise in the budget deficit — undermining recently recovered macroeconomic equilibrium and reversing disinflationary trends — and major spending cuts on important programmes. The successful defence of macroeconomic discipline by successive ministers of finance meant there was no choice in practice. It became necessary to under-indexation benefits periodically. With the help of so-called supplementary budget legislation, it was technically possible to limit the expected rise in retirement and disability pensions.

Pensioners and their representatives naturally opposed this policy. It became a major political burden and accounts for the sharp fall in support for the post-Solidarity government, and its eventual collapse in 1993.

The post-communist opposition that won the elections promised, among other things, a return to ‘fair’ benefits. However, the new government faced not only the same difficulties as before, but also some new ones. Public protests had been accompanied by formal appeals to the constitutional tribunal and the tribunal repeatedly ruled in favour of those who questioned the amended regulations. The new parliamentary majority could have formally overruled the verdicts of the tribunal. Nevertheless, in most cases it did not, feeling bound by its election promises. The verdicts of the tribunal came into effect and the state’s unpaid debts to pensioners grew rapidly, forming a significant part of public-sector debt.

The constitutional tribunal consistently ruled the practice of repeated temporary suspension of the state’s commitments to pensioners as unconstitutional. At the same time, it clearly stressed that this did not preclude the possibility of a permanent change in the regulations, provided there was appropriate legislation. Thus, it was only when legal and political factors prevented *ad hoc*

---

<sup>6</sup> The description of the debate is based on Hausner (1998).

manipulation of the pension system that the warnings of experts and the idea of major reform was taken seriously.

The coalition pact of the SLD-PSL government, which assumed office in the autumn of 1993, included a very general commitment to reform the social-insurance system. The idea was to improve the existing system rather than change it radically. Therefore, the plan was geared more towards protecting accrued rights than limiting them.

Only in June 1994 was the idea of radical reform — introducing a new mandatory funded pension — suggested, in the ‘Strategy for Poland’ economic programme. The government and parliament accepted the strategy presented by the deputy prime minister and minister of finance (G. W. Kolodko<sup>7</sup>). But no action followed in the pensions area, because of an immediate dispute with the minister of labour (L. Miller) over the plan to change the pension indexation rules, replacing price with earnings uprating.

The heated debate between the minister of finance (the ‘reformer’) and the minister of labour (the ‘non-reformer’ turned ‘rationaliser’) lasted a year and a half (from mid 1994 to the beginning of 1996). It was not only about indexation, but also about their competing visions of reform. The ministry of labour set out a plan for limited rationalisation and reorganisation of the pay-as-you-go system, with a marginal role for the funded pillar. The plan consisted of

- reducing the growth rate of pensions paid to the uniformed sector (police, army, *etc*), by moving to the same indexation rules applied to other employees
- gradually increasing the contribution rate to the agricultural system
- introducing new rules for disability qualification
- gradually increasing the retirement age

These proposals, adopted by the government in May 1995, were then put out for public consultation. However, the minister of finance regarded them as insufficient, so an alternative model was prepared, based on the Chilean reform. It envisaged the replacement of the pay-as-you-go system with a fully funded plan and the introduction of a minimum state pension. However, this programme was never submitted to government. It was presented only with the intention of stimulating a debate that might produce alternatives to a modified pay-as-you-go system. It largely

achieved this goal: public-opinion research showed the ministry of labour's plan was perceived as conservative and that people expected reform that is more decisive.

After the consultation process, the government recommended a revised programme giving a greater role to the funded segment in the autumn of 1995. This was submitted to Parliament for debate at the end of 1995, but the minister of finance remained opposed. The debate took place in April 1996, by which time a new prime minister (W. Cimoszewicz) and a new minister of labour and social policy (A. Baczkowski) were in office. The latter was also appointed the first plenipotentiary for pension reform. He strongly supported fundamental pension reform, and so announced in parliament that the government's programme still needed final 'touches'. In particular, he announced his intention to develop the idea of funded pensions, which had been included in the opposition's plans (Solidarity's proposed solution).

Because of Miller's opposition, price indexation of benefits was only introduced in the autumn of 1996, when Miller was no longer the minister of labour. The successful passage of the bill through parliament was critically helped by personnel changes at the ministry. Baczkowski put a great deal of effort into getting this bill passed to clear the way for fundamental reform.

The change in the cabinet meant there were now reformers in both essential posts of labour and finance minister. They began to co-operate closely. Baczkowski held a unique position in the government because he had originally been a member of the Solidarity. In 1992, while still an activist, had been deputy minister of labour. He demonstrated his excellent negotiating skills during the post-communist coalition (SLD-PSL) government, and became chairman of the tripartite commission on socio-economic affairs, established at the beginning of 1994.

Quarrels in the governing coalition had caused some members of the SLD leadership, including the prime minister to establish a dialogue with the opposition and awarding Baczkowski a ministerial post was a good way of winning their trust. With the support of the prime minister, the finance minister and the encouragement of the opposition, he began work on a completely new reform program. However, for political reasons, it was presented merely as an update and an expansion of the previous proposal. The office for pension reform — a team of experts assembled by Baczkowski — prepared the programme. The authors of this paper acted as deputy director and

---

<sup>7</sup> See Kolodko (1996).

director, respectively. The new pension reform programme, ‘Security through Diversity’ was published in February 1997, three months after the shocking, sudden death of Mr. Baczkowski.

*Security through Diversity* was wholeheartedly embraced by Baczkowski’s successors, Jerzy Hausner (February-September 1997) and Ewa Lewicka, who took over in September 1997 after the return to power of the Solidarity-based coalition. Their sincere conviction in pension reform and their professional and political efforts made it possible for reform to proceed.

### **3. A description of the pension system**

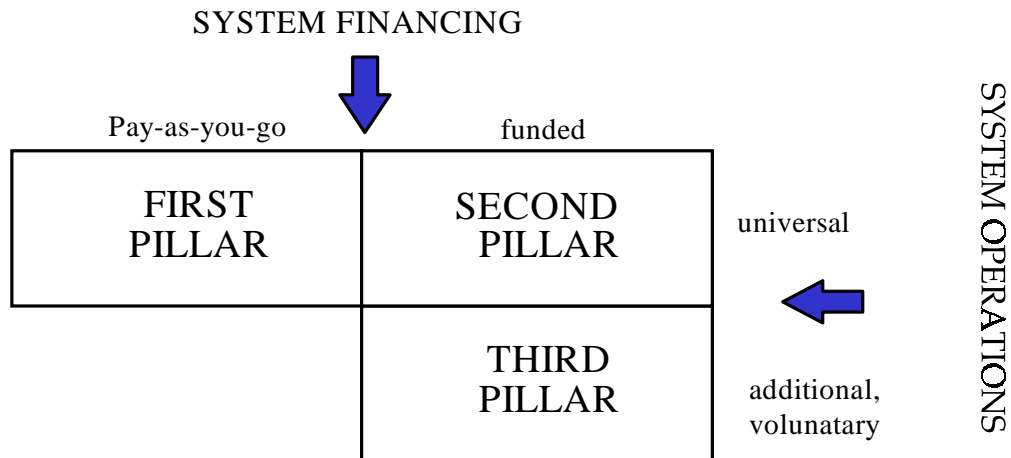
#### **3.1 Financing and operations**

Under the new system, pension benefits will consist of three pillars. The first and second pillars will be universal and mandatory, the third voluntary. The first will be pay-as-you-go financed, the second and third funded. Figure 2 summarises the differences in the financing and operations of the three pillars of the new system.

The fundamental concept underlying the reform is that security comes from diversification of sources of pensions, hence ‘security through diversity’. The first and second pillars are linked to the labour and capital markets respectively. The rate of return in the first pillar is the rate of growth of the wage bill, in the second and third, the rate of return on investments. Since these are not perfectly correlated, a system based on two markets is more stable than one based on a single market. The long-term target is that half the system will be funded, and half pay-as-you-go. This reflects a desire for diversification and not any fiscal or political constraint limiting the degree of funding.

The current pay-as-you-go system will be downsized and converted to a ‘notional defined-contribution’ system, forming the new first pillar. In both the first and the second, funded pillar, contributions will be registered in individual accounts, and the pension benefit will depend on contributions paid, not contributions that were due.

#### **Figure 2. Financing and operation of the new pension system**



### 3.2 The contribution rate

Under the current system, contributions of 45 per cent of earnings plus subsidies from the general budget finance retirement, disability, and other benefits, such as injury, sickness and family payments. Over half of contributions — about 24 percentage points — finance retirement pensions. In the reformed system, nine percentage points of the contribution will be diverted to mandatory funded pensions. This is equivalent to a fifth of the total contribution, or 37½ per cent of the retirement-pension contribution. The rest of the contribution will continue to finance pay-as-you-go benefits. The individual’s notional defined-contribution account will be credited with 15 percentage points of the contribution. This and the final 21 percentage points will finance pay-as-you-go benefits.

The employer currently pays the entire 45 per cent contribution. Under the new system, the contribution rate will be unchanged, but both employers and employees will contribute. They will pay equally for old age and disability insurance, injury will be the responsibility of the employer and sickness of the employee. Employees’ earnings will be grossed up to reflect their new liability, so the system will be neutral but should make benefit financing more transparent to employees. After the reform, the total contribution rate therefore falls to 45/(100+employee contribution).

Table 3 shows the structure of contributions to the new system. Each part of the contribution will be allocated to separate funds within the social-security fund (FUS). Each sub-



fund will prepare its own actuarial forecast, improving the transparency and the sustainability of the system.

**Table 3. Social-security contribution rates**

<i>Contribution</i>	<i>Rate (%)</i>
Old age (employer/employee 50/50)	19.52
second pillar (employees)	7.3
buffer fund	1
Disability and survivors (50/50)	13
Sickness (employee)	2.45
Injury (employer)	0.81-8.12

One aim of the reform is to cut the contribution rate from its current, very high level. It is hoped that the defined-contribution element in both pillars of the mandatory system will make it easier to cut contributions in the future. There will be no accrued rights other than those derived from contributions paid by the individual.

The reform introduces an upper limit for contributions, set at 250 per cent of average earnings. Furthermore, the contribution will be reduced by 7 per cent if the appropriate amount is paid to a third pillar, employee pension plan. This will make it possible for employers to reward their employees with payments to their third pillar accounts without additional cost.

Public opinion showed support for reform. Some 73 per cent of people agreed that pensions should be closely related to contributions and the length of time they were paid, and 68 per cent that pensions should be derived from employee contributions, accumulated over their working life.

This support for funding led to a relatively large contribution to the funded sector: 9 per cent of earnings, compared with 6 per cent in Hungary and 2½ per cent in Sweden. Another reason for favouring a relatively large contribution is to dilute the impact of administrative charges for managing pension funds.

#### **4. The reformed first pillar**

##### **4.1. The accumulation phase**

Employer and employee contributions will be registered in the individual's ZUS account. These contributions will then be uprated in line with growth of the aggregate wage bill (*i.e.*, the

product of growth in average wage and growth in employment). The sum of uprated contributions, ‘virtual’ or ‘notional capital’ will then form the basis for the individual’s pension.

Each participant will receive information about his or her virtual capital account balance. ZUS will provide standardised estimates of the pension value under different assumptions of retirement age.

People who started their working life before 1999 have ‘initial capital’ added to their accounts in recognition of pension rights accrued under the old system. For people under age 50, initial capital will be calculated to deliver the same pensions benefit as the old formula (adjusted for age), as if everyone retired on the last day of the old system.

Indexation in line with the wage bill is designed to give contributions paid in early years similar weights in determining the overall pension value as those paid just before retirement. However, there has been debate over whether a lower level of indexation, between prices and wage bill growth, should be used initially, as a way of reducing pension costs and the pension contribution rate. Once the system is mature, the aggregate wage-bill index makes the system more stable than, for example, average-wage uprating, because the wage-bill is both the growth in contribution revenues and the growth in pension liabilities.

#### **4.2. The benefit-distribution phase**

The system will have a minimum pension age of 62 years for men and women. This policy was also controversial. Some conservative politicians were attached to a more traditional view of women’s role in society and proposed differential pension ages of 60 for women and 65 for men.

Each additional year of work and contributions will be rewarded with a clear increase in the value of pension benefits. For example, a person who retires at 66 instead of 65 (with 46 years of service) will receive 9 per cent higher pension benefits. If the same person were to retire early at the age of 64, his or her pension benefits would be 8 per cent lower.

The virtual capital in the individual’s account will be converted to an annuity based on average life expectancy at the time of the award. Consequently, the value of the pension will automatically fall as life expectancy increases, again increasing the stability of the system.

The new system will have a guaranteed minimum pension, set at the same level as the current system, and indexed in the same way as other pension benefits. It will be paid from age 65

to people who have contributed for a minimum of 25 years. This benefit will top up pensions (the sum of both first and second pillar) to the minimum level. It will be financed from general revenues, not from contributions to the pension system. This policy is designed to separate the redistributive role of the system from the lifecycle reallocation of income. It means that the financing of minimum pensions will be on broader base — including capital and transfer as well as labour income — than the rest of the pension system.

Benefits in payment in the first pillar will be indexed to consumer prices, unless real wages are falling, in which case they will be uprated in line with nominal wages (*i.e.*, cut in real terms). Regulations, however, allow for more generous uprating of pensions should economic performance and the system's finances allow.

Virtual capital is simply an account of rights. There is no money in the account: is not equivalent to a bank or pension-fund account. Thus, there is no allowance for virtual capital to be inherited by the heirs of people who die before pension age.

#### **4.3 Relating benefits to lifetime contributions**

The benefits in many pay-as-you-go systems are related to earnings only over a short period. In the current Polish system, the period is ten out of the last 19 years of work. If a person worked any longer than this period, the amount or duration contributions did not affect the pension value. The result is redistribution from people with longer working lives to people working for a shorter period, and from people with flat age-earnings profiles (generally manual workers) to people with steeper earnings paths (generally professional and managerial workers). The new system ensures that contributions count throughout the working life, and so removes undesirable redistribution.

#### **4.4 The demographic reserve fund**

The notional defined-contribution system is notional in the sense that funds are not built up: it is still a pay-as-you-go system. Thus, at any time it is dependent on the cohort of workers paying for the benefits of the cohort of pensioners, and so is vulnerable to demographic shocks. To stabilise the contribution rate in the system in the face of demographic fluctuations, reserves will be set aside. Reserves will be built up when a large, 'baby-boom' cohort is working, and drawn down when it retires.

The reserve system is equivalent to partial funding of the pensions' systems first pillar. The 'buffer fund' will consist of any surplus in the first pillar, privatisation revenues and, temporarily, one percentage point of total contributions. Interest, and any extra revenues of ZUS, will be added to the fund. The aim is to ensure that the pension system is entirely self-financing, will not need subsidies from the general budget and that contribution rates will remain relatively stable in future.

#### **4.5 A new role for the social insurance administration (ZUS)**

The role of the social insurance administration must also change to reflect the reforms to the pension system. Its new role will include

- Maintaining the old pension system for people aged over 50 when the new system is introduced
- Keeping records of individual's notional defined-contribution accounts
- Collecting contributions for the first pillar
- Managing the sub-funds of the social security fund, such as old age and disability, and preparing actuarial analyses
- Supervising the (contracted out) management of the demographic reserve fund
- Calculating and paying out first-pillar pensions
- Collecting second-pillar contributions and transferring them to the pension fund chosen by the worker
- Maintaining the central database of second-pillar participants

ZUS needs substantial restructuring to meet the challenge of the new pension system. This modernisation has begun, but the bulk of the task must be completed by the end of 1998, a formidable target.

### **5. The second pillar**

Nine percentage points of the social security contribution will be diverted to a pension fund chosen by the participant. Contributions will be collected, one half due from employers, one half from employees, by the social insurance administration (ZUS) and then transferred to the fund. After 2 to 3 years, it is expected that approximately 10-12 funds will operate in the second pillar, although the number of funds is anticipated to be larger initially. All people under age 30 at the time

of the reform's introduction must participate, and people aged between 30 and 50 will have the option of diverting part of their contribution to a second-pillar account.

### **5.1. Pension-fund regulations in the accumulation phase**

During the accumulation period, pension fund assets will be protected by

- separation of the pension fund's assets, to be held by an independent custodian or depository), from those of the pension-fund company
- rules for the diversification of a fund's investment portfolio and limits on particular investments, especially those considered risky by international standards
- a minimum required rate of return for pension funds, relative to the average return of all funds
- the right to change funds with no charge or penalty after a statutory minimum 12 month period of contribution to a fund
- independent monitoring of the system by a new pension fund supervision office (UNFE)
- a legal requirement to inform members of the activities of the fund

Each person can select only one fund. There will be free choice between the funds: they will not be permitted to refuse entry or restrict the right to transfer to another funds, either directly or indirectly, through the imposition of charges.

### **5.2. Funded pension benefits**

Members must purchase an annuity from an insurance company when they retire (defined as the time they draw their first-pillar pension). Only licensed insurance companies will be allowed to participate. This market, too, will be regulated strictly, because pension assets will accumulate tax-free and the public sector will guarantee the benefits. Thus

- fully paid-up share capital of at least Ecu 25m will be required to obtain a licence (which can be increased as the discretion of the council of ministers depending on the insurance company's commitments)
- insurance companies offering annuities will not be able to sell other types of insurance
- annuity-company licences will not be issued until one year before the first participants reach the minimum retirement age (around 11 years after the implementation of the reform)

- in addition to prudent norms defined in the Insurance Act, the council of ministers should be able to introduce investment limits for insurers
- an insurance guarantee fund (along the lines of the Pension Benefit Guarantee Corporation in the United States) will ensure full payment of benefits in the event of an insurance company's bankruptcy, underwritten by treasury guarantee
- the state insurance supervision office (PUNU) will be able to monitor insurance companies' reserves and order capital increases and restrict investments as it sees fit

To protect the pension's purchasing power, benefits must be indexed at least to consumer prices, although increases up to and including average wages will be permitted. The annuity rate offered can vary only with the age of the purchaser, not by sex, health or region. Companies will be unable to refuse to provide an annuity. All companies will offer a set of standard pension benefits

- single life annuities, paid until the death of the annuitant
- guaranteed (or survivorship) annuity, where benefits will be paid out for at least ten years, to the annuitant's survivors in the case of death during that period
- joint annuity, paid until the death of the second spouse, with survivors' pensions at least 75 per cent of the original annuity
- joint, guaranteed (or survivorship) annuity, where benefits are paid out for at least ten years, even in the case of the death of both spouses during that period

Longer periods of guaranteed benefits and different spouses' benefits will also be possible. However, all contracts must be lodged with the insurance supervisory agency (PUNU), which will have the right to prohibit certain contracts.

Individual annuities may only be sold with the written consent of the (uninsured) spouse. At the request of an annuitant, the insurance company is obliged to convert an individual to a joint life annuity. For example, if one spouse retires while the other continues working, the couple may choose to take a single life annuity until the second spouse retires.

Companies will also be responsible for withholding personal income tax due on benefits.

### **5.3. Regulation and supervision**

Licences will be issued to managing companies by the pension-fund supervision office (UNFE). Pension funds must meet a number of requirements

- a minimum of Ecu 4m fully paid-up capital
- requirements for the probity of shareholders and board members of managing companies (for example, they may not be convicted criminals or in arrears with tax or social security payments)
- shareholders may not directly or indirectly hold stakes in more than one pension-fund company
- individuals holding influential positions in capital markets cannot serve as a director of a fund or work for the supervisory agency

Any changes to the fund's shareholders, board members, articles of association or custodian must be reported immediately to the supervision office. Initially, each company will be able to manage only one pension fund, except in the case of liquidation or merger, when more than one fund may be operated for a transitional period of a year.

The fund's articles of association must be submitted to the supervision office for approval. Any proposed amendments must be published five months before introduction, and again must be approved, except when a shorter period would be in members' interests.

### **5.4. Pension fund operations**

Pension funds will operate much as other open investment (mutual) funds. Contributions will be converted into 'settlement units' (or a share of the fund) on a date of conversion, at least four times a month. This will generate a relatively smooth flow of assets into the fund and prevent monthly cycles in securities markets because of periodic demand from funds. (There will be a substantial surplus of contributions over benefit withdrawals for at least 20 years.)

The fund's value will be assessed primarily on market prices, according to standard rules set by the supervision office. The balance on retirement will be calculated as the number of accumulated shares (or settlement units) multiplied by the unit value five days before the funds are withdrawn.

#### ***5.4.1 Pension-fund assets of married couples***

Accumulated pension assets will constitute a part of a married couple's common assets. In the case of divorce, the family and guardianship code will specify the division of assets. Assets will not be paid out, but transferred to the spouse's account with the fund. During the first 12 or so years after reform, a spouse who does not participate in any fund will be entitled to participate in a divorced or deceased participant's pension fund.

#### ***5.4.2 Transfers between funds***

Transfers of all assets accumulated in one fund to another fund will take place only on the last day of the last month of each quarter. This allows a clearing-house mechanism for settlement of transfers out of funds net of transfers into a fund, restricting the need to sell assets to finance transfers. The clearing house will be the national securities depository, which already acts in this capacity for brokers.

#### ***5.4.3 The legal form of pension funds***

Pension funds will be a legal entity, which clarifies ownership, and the rights and obligations of participants and managers. The alternative — that the fund is commonly owned by the participants — would demand major modification of the joint property concept of the civil code. Currently, Polish law regulates trusts through contract law, but this does not adequately cover the relationship between beneficiaries and trustees. Having the fund as a single legal entity ensures that the property of the fund, the participants and the pension-fund company are all kept separate. It strengthens participants' rights in the case of insolvency of the managing company. Regulations affecting the managing company should not affect the fund's property.

#### ***5.4.4 Portfolio decisions***

The investments of the pension funds will be the decision of the managing company, but the minister of finance will determine the maximum level of foreign investment. The council of ministers will be able to impose other restrictions. Assets must be bank deposits or publicly traded securities, including securities issued or guaranteed by the treasury or the central bank (the national bank of Poland) and open-ended investment funds. Funds may also invest in non-traded bonds, but not derivatives, except as a means of limiting exchange-rate risk in foreign investments.



Pension funds will not be able to hold more than 5 per cent of assets in the securities of one issuer, except for mutual funds, short-term bank deposits and public-sector securities. This is designed to ensure a prudent level of diversification. To avoid possible conflicts of interest, the fund may not be invested in securities issued by a pension-fund company or its shareholders, as well as their controlled, controlling or associated entities.

From 1 January 2005, every pension company will be able to operate two types of fund. Type 'A' will invest as above, while type 'B' will be restricted to fixed-income securities. People approaching retirement age will then be able to select a lower risk fund, albeit at the cost of lower expected returns.

#### ***5.4.5 Management fees***

Fund assets may only be used to finance some of the fund's operations, such as capital market activities and safekeeping of assets, including the custody fees. The pension-fund company can also pay management fees from the fund's assets, but these must not exceed 0.05 per cent of asset value per month and the fee must be defined in the articles of association. The only other fee will be a defined percentage commission deducted from contributions by the company, which must be the same level for all participants, with reductions permitted for longer-standing contributors. The goal is a transparent fee structure, to allow members and potential members to compare costs. The reduction for long tenures in a fund is to discourage transfers.

#### ***5.4.6 Custody***

The fund's assets must be held by a custodian or depository, selected by the fund and confirmed by the supervisory agency. The depository must be a bank with at least Ecu 100m of assets and no capital affiliation with the pension-fund company. The national securities depository will also be allowed to play this role. The custodian will be liable for damages resulting from the pension fund's failure to comply with legal requirements, and must inform the supervisory agency of any irregularity. This should guard against misappropriation of pension-fund assets, with additional security provided by the assets of the custodian.

#### ***5.4.7 Rate-of-return guarantee***

At the end of each quarter, the supervisory agency will calculate the average rate of return, weighted by size of fund, achieved for the last 24 months by all pension funds in operation. Any

fund management company which fails to achieve a return 50 per cent or four percentage points (whichever is the larger) below the average real return for all funds will immediately make additional payments to the fund. These payments will be made in the first instance from a special reserve of between one and five per cent of total fund assets, depending on the size of the fund. These assets will be managed as an integral part of the fund. From 2005, the returns for type 'A' and type 'B' funds will be calculated separately. If the reserve and the assets of the fund-management company itself do not meet the shortfall in the return, then the managers will be declared bankrupt.

In the case of insolvency, the guarantee fund financed by all the pension-fund companies will make up the shortfall. The custodian will take over management of the assets and participants will then be free to choose another fund.

#### **5.4.8 Disclosure**

Pension fund companies will be obliged to inform both participants and the supervisory agency (UNFE) of their activities. Participants have the right to a prospectus containing the fund's articles of association and the rights of fund participants (as defined by UNFE). They must also be told of changes in the prospectus and the financial results of the fund. Every 12 months and on demand, the fund must give participants a statement of account showing the number of units held and their total value on the last valuation day.

Reporting to UNFE will include information about the state of assets and the results of investment policy. UNFE can also demand other information related to the fund's activity.

#### **5.4.9 Taxation**

Contributions will be tax deductible, as in the first pillar. The fund's investment earnings will be tax exempt. The pension-fund company will be subject to tax. Assets transferred to claim pension benefits on retirement will not be taxed. Only when participants begin to receive their pension will they begin to pay personal income tax on the benefits on a current basis. Thus, the second pillar will have an expenditure-tax or EET (exempt-exempt-taxed) treatment.

Following the death of a participant, assets transferred to the spouse's account in a fund will be exempt from tax. These assets will be taxed when the spouse begins to collect benefits. In all other cases, such as payments to other beneficiaries, including close family members, the assets will be subject to personal income tax at a fixed-rate of 20 per cent.

## **6. The third pillar**

A voluntary third pillar will supplement the universal, mandatory part of the pension system (the first and second pillars). This makes the system more flexible, allowing each individual to reallocate income across the lifecycle according to their own preferences and needs. Eventually, the third pillar is expected to form a substantial part of retirement income.

The third pillar is more flexible than the first two pillars, with choice over the timing and amount of saving and the ability to bequeath the capital without restriction. It will consist of a number of long-term savings plans and occupational-pension programmes.

The last feature of the third pillar is new, building on present schemes. Many employers currently take out group insurance with a life insurance company, with the plans negotiated individually for each workplace. This insurance is attractive to employees because they avoid the information cost selecting from available products and assessing the risks of different insurers. Because of the pooling of risks among the employees of a particular company, the adverse selection risk for then insurer is reduced, so there is no need for individual medical interviews or health examinations. The cost is deductible to employers, but employees are taxed on the employer contribution as a benefit in kind. This system will continue as part of the employee pension programs.

Growing awareness of the uncertainty over the *real* solvency of the present pension system is the reason why employees are increasingly willing to agree to exchange current wages for future pension benefits. Group life insurance policies with a set time for benefit withdrawal with optional life insurance are becoming popular. Group life insurance is definite progress in improving security and diversity of people's future retirement incomes. Nevertheless, because it requires employers voluntarily to establish schemes, it is limited in scope.

### **6.1 The new occupational pension plans**

After the reform, employers will have the right to direct employee contributions to group insurance with a joint-stock or mutual life-insurance company, an occupational pension fund or to open investment funds.

An occupational plan must meet the following criteria

- all eligible employees have an opportunity to participate
- eligibility conditions can include only the employee's tenure or status in the company and at least half of employees must be eligible
- payments on behalf on an individual employee cannot exceed seven per cent of earnings assessable for social security contributions
- benefits cannot be paid out until age 60, except in cases of death or permanent disability

The detailed rules for the functioning of an occupational plan must be defined in a company pension contract negotiated with employees' representatives.

Contributions paid on behalf of the employee will be a deductible expense for the employer. They will be included in personal income when the employee is taxed, but up to the seven per cent ceiling, they will not be assessable for social security contributions.

Although the terms of group insurance will be negotiated between the employer and the insurance company, there will be some legal requirements to qualify as an employee pension programme.

Occupational pension funds will operate along similar lines to second-pillar schemes. However, there will be fewer portfolio restrictions, no minimum rate of return, more influence for participants on the fund's investment policies, including the possibility of investing all the assets in an open investment fund.

Employers will also be able to make employee participation dependent on the contribution of a (uniform) proportion of the company's shares received during privatisation of the enterprise within five years. This limits the risk that a large part of the company's shares return to the market following an initial public offering after the two-year waiting period imposed on employees. This overhang of shares is a significant fear among potential investors.

The legislation also aims to make occupational pensions portable when employees change jobs. The employee will have the right to transfer the assets to the pension plan of the new employer or to an insurance company, open investment fund or a non-employer-sponsored plan.

## **6.2 Regulation, supervision and taxation**

Since the third pillar involves a range of different institutions, supervision will be spread across different authorities: bank supervisors, the state insurance supervision office (PUNU) and the securities and exchange commission (SEC). The pension-fund supervision office (UNFE) will cover employees' rights in occupational schemes.

The third pillar will be taxed using the pre-paid expenditure tax approach, where contributions are made out of taxed income, but investment returns and benefit withdrawals will be tax free (*i.e.*, taxed-exempt exempt or TEE). Although this means a similar or even the same present value of tax will be paid, it brings forward the revenues to government to the time contributions are made rather than the time benefits are received (see Whitehouse, 1998).

## **7. Special cases and other benefits**

### **7.1 Sector privileges**

The reform aims to eliminate all privileges in the old universal pension system, with equal treatment of all participants with regard to retirement age, means of paying contributions and calculating benefits. Sector privileges were largely an inheritance from the planned economy era — many were introduced in the 1980s during the period of martial law — but some had a much earlier provenance (railway workers were privileged by the Austro-Hungarian emperor in the 19th century). Successful elimination of all privileges would improve the pension system's finances enormously. The 'cost' of early retirement alone is equivalent to 12 percentage points of the total 45 per cent contribution.

The problem of privilege-based early retirement is compounded by the ability to work after drawing early pensions, almost without restriction. There is an enormous incentive to take the early retirement pension, but then continue to work.

The draft second part of the pension reform package presented to parliament allows for special regulations for groups that need them, but any privileges must be financed in a transparent way. Additional rights will be created only if an additional contribution paid, by employees, employers or the government. First and second pillar pensions will be paid from the normal retirement age. Additional contributions will finance a 'bridge' pension paid from the early retirement age to the normal age. The contributions for bridge pensions can be paid into the first or

third pillar, although the first is only an option for government. This will make the trade-offs in granting special privileges clearer.

The problem is the treatment of special privileges relating to people's accrued rights. One extreme position would be to recognise that all people in a particular occupation own the privilege from the day they begin work. The current proposal requires a minimum of five years employment in a privileged job for accrued rights to be recognised.

## **7.2 Uniformed services pensions**

The uniformed services, mainly the army and police, have a special pension system with completely different rules. The scheme is non-contributory and benefits are paid directly from the general state budget. The reform plans to include them in the universal system, but the question of the age groups covered by the new scheme has not been settled. Although the uniformed services do have different pensions needs, having an entirely separate system could reduce mobility between the uniformed sector and other jobs. Including the uniformed services in the universal system will not impose substantial additional costs.

## **7.3 Other benefits financed from the social security fund**

The social security fund (FUS) will establish separate funds for sickness (including maternity leave and rehabilitation), work-related illness (including accidents) and a reserve fund. Contributions for work-related illness will be paid by employers, and the contribution rate will vary according to actuarial estimates of the risk of accident or disease in particular occupations. The reserve fund will hold the surplus of contribution revenues over benefit payments, and will be available to cover shortfalls in the other two funds.

The rules for disability benefits will also be reformed. Disability benefits will only be granted for permanent incapacity to work. If there is any possibility that the individual's health might improve, then a temporary benefit will be paid. Partial benefits will be paid if residual working is below 50 per cent. A pre-pension rehabilitation system will also be established.

## **8. Financing the transition**

The new pay-as-you-go pension pillar will only affect people age 50 or below who do not meet the conditions for early retirement. Those who will be eligible for early retirement within three years of the introduction of the new system are similarly unaffected. As described above, special

rights for workers under age 50 will be eliminated, with extra contributions required to pay for special rights in the new system. In 1997, almost all employees 35 had not yet earned early retirement rights and would not acquire them within three years. In total, 24 per cent of employees have these rights. Women will lose the right to retire early, at age 55. People with category I and II disabilities will no longer have the right to retire 5 years early. Finally, the plan will forbid *early* retirees from working and drawing a pension.

### **8.1. Switching from the old system to the new**

People who are under 50 (with the above exceptions) will be able either to choose the pay-as-you-go, notional defined-contribution system alone or to divert one fifth of contributions to a funded, second-pillar pension. There is no option to remain in the old defined-benefit, pay-as-you-go plan.

Two transition paths were originally proposed that were both thought to be easily financed. First, all employees under 40 would have to take the two-pillar, partially funded option, but people aged over 40 would not be allowed the second-pillar option. Secondly, compulsory participation in the two-pillar system for new labour-market entrants, while people aged 50 or younger already in the labour market could choose between the partially funded option and remaining in the reformed pay-as-you-go system. In the first, the transition would last around 30 years, and in the second, 45 years. A faster transition reduces the administrative cost of maintaining two systems side-by-side, but it also implies a higher fiscal impact: approximately 1.5 per cent of GDP a year, compared with 1 per cent for the second, slower option.

In the end, a third way was taken. Participation in the second pillar will be compulsory for people aged up to 30, and voluntary for people aged between 30 and 50. This option introduces an element of choice, which is socially, economically and politically desirable (Palacios and Whitehouse, 1998). However, this raises the problem of predicting how many people will choose different options and makes it more difficult to get a clear picture of the time path of fiscal obligations (Holzmann, 1997, 1998).

### **8.2. Short- and medium-term financial consequences**

Predicting the decisions of people aged between 30 and 50 on whether to switch from the first pillar to the mixed first and second pillar option is a difficult task. One possible source of information is opinion polls. These suggest that most people will choose to join the second pillar.

A second source is experience in other countries, of which the most relevant is Hungary. Opinion polls there suggested people were very optimistic about funded pensions and pessimistic about the state scheme (see Palacios and Rocha, 1998 and Palacios and Whitehouse, 1998).

Three projections of participation were prepared — low, medium and high — as shown in Table 4. We anticipate that participation will decline with age. The compound-interest effect means that younger workers will get a higher return from the funded pension, and so have a larger incentive to switch. This age-related pattern also occurred in all other countries introducing a reform involving some element of individual choice: Argentina, Chile, Colombia, Hungary, Peru, the United Kingdom and Uruguay (Palacios and Whitehouse, 1998).

**Table 4. Expected participation in the second pillar by age**

<i>per cent</i>	-30	31-35	36-40	41-45	46-50	50-
Low	100	90	60	20	10	0
Medium	100	90	60	30	20	0
High	100	90	80	80	80	0

During the first year of the reform, the speed at which people switch to the second pillar will have a large impact on the finances of the system. We expect a large number of people to join initially, followed by a plateau, followed by a second rush at the year-end. Younger people, who are forced to switch, have six months to choose between different funds. Some of them will delay the decision towards the end of this period, and in the meantime, their contributions will continue to flow into the social insurance fund. Table 5 shows the expected effect of all the elements of the reform in the first year, 1999 and the fifth year of the reform. The loss of revenues from contributions diverted to the second-pillar accounts is the largest item in the Table, costing 0.82 per cent of GDP in the first year and 1.68 per cent in 2003. Most savings will come from price indexation of benefits, which of course compound over time. By 2003, this is expected to save more than 1 per cent of GDP. Overall, spending cuts balance out the cost of the second pillar, leaving a small yield from the reform of 0.06 per cent of GDP following a small net cost in the first four years of the new scheme. The alternative projections for participation in the second pillar give a range for the total cost depending on individuals' decisions.

If participation exceeds expectations, the effect will not be disastrous. As we argued in the *Security through Diversity* proposal, much of the revenue diverted to funded pensions will return to the state treasury through increased demand for bonds, allowing non-inflationary financing of the



increased deficit. The other part will be invested in the capital market. In other words, higher household saving offsets the reduction in public sector net saving. These arguments were supported by the OECD's (1998) analysis of the reform in its economic survey of Poland.

Privatisation revenues will be used to help finance the deficit in the social-security system, as specified by the first part of the pension reform package (1997). According to the treasury's plans, PLN 53bn will be available to support the reform (about 14 per cent of GDP), with PLN 4bn allocated in the preliminary 1999 budget.

**Table 5. Expected effect of reform on revenues, 1999 and 2003**

<i>per cent of GDP</i>	<i>1999</i>	<i>2003</i>
<b>Change in revenues</b>	<b>-0.82</b>	<b>-1.98</b>
second pillar	-0.66	-1.68
contribution ceiling and third pillar	-0.16	-0.30
<b>Change in spending</b>	<b>-0.65</b>	<b>-2.04</b>
uniformed services	-0.08	-0.38
work restrictions	-0.04	-0.32
price indexation	-0.23	-1.04
group lay-offs and sickness benefits	-0.30	-0.30
<b>Overall effect (- cost/+ yield)</b>	<b>-0.17</b>	<b>+0.06</b>
<i>Low second-pillar participation</i>	-0.12	+0.15
<i>High second-pillar participation</i>	-1.34	-0.70

## 9. Preliminary conclusions and lessons for other countries

It is too early to draw conclusions from the Polish pension system. The reformed system will begin operating in 1999 and the first pensions will be paid about ten years later. However, it is well worth the factors that enabled such a fundamental reform to be put together and legislated after a long period of fruitless discussions.

First, **the contents of the reform package**. There was broad popular support for a pension reform that included a closer link between contributions and benefits and a greater role for the private sector at the expense of the social insurance institution (ZUS).

Secondly, **the leadership**. The governments of prime ministers Cimoszewicz and Buzek recognised the need for a plenipotentiary for pension reform with an office independent from political influences and free of the task of day-to-day management of the pension system. The plenipotentiaries —Baczkowski, Hausner and Lewicka — have successfully shielded the office for pension reform from political fights, enabling it to focus on its professional tasks.

Thirdly, **co-operation with trade unions**. *Security through Diversity* was consistently supported by the Solidarity trade union and OPZZ (at least until the end of 1997) and both were intimately involved through several consultations. Solidarity had published its own reform proposal in 1995, which included the creation of mandatory funded pillar.

Fourthly, **moving quickly to grasp opportunities**. All three of the plenipotentiaries understood the need to move quickly and decisively to take advantage of the public consensus behind pension reform, as the old system became discredited and the implications of demography became widely known. Mistakes can always be corrected later. It is vital to remain ahead of opponents to avoid the reform being postponed indefinitely.

The main conclusion from Polish pension reform is that when an opportunity presents itself it should be seized. Politicians should foster appropriate conditions both for experts to design and implement the proposal and for a broad consultative process to foster support.

## 10. References

- Barr, N. (1998), *The Economics of the Welfare State*, third edition, Oxford University Press.
- Hausner, J. (1998), *Security through Diversity: Conditions for Successful Reform of the Pension System in Poland*, Collegium Budapest Working Paper, March.
- Holzmann, R. (1997), 'On the economic benefits and fiscal requirements of moving from unfunded to funded pensions', American Institute for Contemporary German Studies, Research report no. 4, Washington D.C.
- Holzmann, R. (1998), 'Financing the transition to multi-pillar', Social Protection Discussion Paper no. 9809, World Bank.
- James, E. (1998), 'New models for old-age security: experiments, evidence and unanswered questions', *World Bank Research Observer*, vol. 13, no. 2, pp. 271-301, August.
- Kolodko, G.W. (1996), *Poland 2000: The New Economic Strategy*, Poltext, Warsaw.
- Ministry of Labour and Social Policy (1995), pension reform proposal [in Polish].
- Ministry of Finance (1995), pension reform proposal [in Polish].
- OECD (1998), *Economic Survey: Poland*, OECD, Paris.
- Office of the Government Plenipotentiary for Social Security Reform (1997a), *Polish Pension Reform Package: Part One*, Warsaw.
- (1997b), *Polish Pension Reform Package: Part Two*, Warsaw, forthcoming after adoption by Parliament.
- (1997c), *Security through Diversity: Reform of the Pension System in Poland*, Warsaw.
- (1998), *Polish Pension Reform Package: Execution Law (Decrees)*, Warsaw, English version forthcoming.
- Palacios, R. and Rocha, R. (1998), 'The Hungarian pension system in transition', Social Protection Discussion Paper no. 9805, World Bank, Washington, D.C.
- and Whitehouse, E.R. (1998), 'The role of choice in the transition to a funded pension system', Social Protection Discussion Paper no. 9812, World Bank, Washington D.C.
- Palmer, E. (1998), 'The Swedish pension reform model: framework and issues, mimeo., National Social Insurance Board, Sweden.
- Rutkowski, M. (1998), 'A new generation of pension reform conquers the East — a taxonomy in transition economies', *Transition*, vol. 9, no. 4, pp. 16-19, August.
- Sunden, A. (1998), 'The Swedish pension reform', Social Protection Discussion Paper, World Bank, forthcoming.
- Thompson, L. (1998), *Older and Wiser: The Economics of Public Pensions*, The Urban Institute Press, Washington, DC.
- Whitehouse, E.R. (1998), 'The tax treatment of funded pensions', Social Protection Discussion Paper, World Bank, Washington, D.C.