

# Polish Approach to Pension Reform<sup>1</sup>

Marek GÓRA<sup>2</sup>

## 1. Introduction

The new Polish mandatory old-age pension system started on 1 January 1999. For people born after 31 December 1948, it replaced the previous system that was terminated the day before. The new system has a lot of similarities with reforms being implemented in other countries and follows many elements of the World Bank approach to pension reform.<sup>3</sup> However, both the reform design and phasing-in process are – to a large extent – different from pension reforms implemented in other countries. The paper does not discuss in detail the issues related to the reform, it only presents the new system's key features and experience of the first year of implementation.<sup>4</sup> A table in Annex provides detailed information on the new system.

## 2. New system key features

The pension reform implemented in Poland is focused on the mandatory part of the system. Additional voluntary schemes (third pillar) are very important for the new system but even if they are well developed they do not solve the problem of lack of financial sustainability of the mandatory system. The key method applied in Poland to solve that problem is introduction of individual accounts in the entire old-age (OA) part of social security. That part was separated within social security. The reform, however, have not reduced the scale or change goals of that system.

Private providers of services related to OA pensions have appeared in course of the reform. They play a very important role (more details on private pensions come later this paper). However, in Poland their involvement does not mean privatisation of social security. Other way round, private providers have been invited into social security to run a part of it. The system has been designed in the way that makes it possible and internally consistent. What matters in the new Polish OA system the most is not ownership but function of each element of the system.

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<sup>1</sup> Forthcoming in OECD Series “Private Pensions and Policy Issues”.

<sup>2</sup> Professor at the Warsaw School of Economics and Polish pension reform “Security through Diversity” author (together with Michal Rutkowski) and reform team leader.

<sup>3</sup> See Holzmann (2000).

<sup>4</sup> For more discussion of issues related to the Polish pension reform see for instance Góra and Rutkowski (1998), Chlon, Góra and Rutkowski (1999) or Góra (2000).

Instead of common opposition: first pillar versus second and third pillars – in Poland the opposition is between mandatory OA system, namely first and second pillar together versus additional voluntary arrangements called the third pillar. The first and second OA pillars play exactly the same role. There are – of course – differences in the way each of them generates resources for future pensions.

The first and the second pillars are designed in the way that links them closely to each other. They are both based on individual accounts, participants receive similar statements from both accounts, retirement age is the same, both accounts are annuitised at the day of retirement, minimum guarantee is based on the sum of both pillars annuities. Differences between the pillars (accounts) are still substantial. The most important of them is the way of generating the rate of return. The first pillar is still a kind of pay-as-you-go, which means government debt, while the second pillar is fully funded. It should be stressed that the first pillar is not a continuation of the old system. In Poland the three pillar structure refers to the OA part of social security only. Other non-old-age (NOA) elements remain outside the three pillar structure.

Due to the “bottle” shape of the demographic pyramid the OA part of social security in the pre-retirement period has the nature of savings irrespective to particular arrangements applied. The arrangement applied in Poland, namely individual accounts causes that interest earned by the money paid into the OA system is equal for all participants since there is no redistribution in the system.<sup>5</sup> Insurance starts after retirement when savings are annuitised.

#### Box 1. Polish pension reform approach

- Focusing on the mandatory part of the system
- Separation of old-age and non-old-age parts of social security
- Old-age part of the previous system has been terminated
- The sole social goal of the entire new old-age system is providing people with safe and efficient way of allocation of income over life cycle
- The old-age system is sub-divided into the first and second pillars (accounts)
- Non-old-age part of social security is outside the three pillar structure
- First and second pillars of the new system are newly born “twins” having very little in common with the previous system
- First and second old-age pillar are based on individual retirement accounts – old-age contributions are divided between two accounts/pillars
- First pillar is a kind of PAYG, second pillar is fully funded
- Both accounts are annuitised at the day of retirement
- Minimum guarantee on the top of the sum of first and second pillar annuities (financed by the state budget)

### 3. Risk diversification “Security through Diversity”

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<sup>5</sup> To be precise there is a piece of redistribution, namely the transfer from men to women due to different life expectancy by gender.

Although the first and second pillar are designed in the way that makes them very similar to each other, the two pillars are not identical. Similarity refers to individual perception of people covered by the OA system. People pay contributions in, money goes to their individual accounts, when the people retire they get back what they paid in plus interest, the entire amount is annuitised. What is different and crucial for the OA pension system it is the way in which the interest is generated.

The first pillar works along the so-called notional defined contribution (NDC) regime.<sup>6</sup> Contributions paid into the accounts have a nature of public debt. They are not spent on financial instruments traded in markets. The rate of return is generated through an increase of contribution base due to demographic growth and increasing productivity. The second pillar is fully funded which means that the rate of return is generated on regular financial instruments.

Contributions paid to the social security system are first divided into OA and NOA<sup>7</sup> and afterwards the OA part is divided between the accounts/pillars (see Table 1). It is expected the entire OA contribution will be decreasing step by step in the future together with decreases of the first pillar part of that contribution. The second pillar part of OA contribution was set at its target level at the starting date of the new system.

Table 1. Old-age and non-old-age social security contributions as a percent of wage

	Total	First pillar individual acc.	Second pillar individual acc.	Other elements of the system
OA	19.52	<b>12.22</b>	<b>7.3</b>	--
NOA	17.07 <sup>a</sup>	--	--	17.07

<sup>a</sup> In the future this rate can vary a little since one of sub-elements of NOA is defined as a bracket.

The OA contributions are divided between two accounts in order to provide people with risk diversification. Rate of return in the first pillar depends on labour market performance, while in the second pillar the rate of return depends on financial markets' performance. The difference is really substantial but in the long-run it should narrow. In the short-run risk diversification between two markets, namely the labour market and the capital market helps in reducing effects of fluctuations in each of the markets.

The aim reached at the starting date of the new system was to exchange the previous unsustainable defined benefit system for entirely new defined contribution system. Another target is fifty-fifty distribution of contributions between pay-as-you-go and funded parts of OA system together with an overall reduction of the OA contribution rate. That is to be reached in a couple of decades to come.

#### 4. Phasing the system in

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<sup>6</sup> The NDC concept is getting more and more popular. Up to now Sweden, Latvia, Poland and Italy implemented it in their pension systems. There is a lot of discussion on that issue. See for instance Disney (1999), Palmer (1999) or Chlon et al. (1999).

<sup>7</sup> NOA contribution consists of three different elements paid for disability, sickness and work injury sub-funds.

The new OA system entirely based on individual accounts is mandatory for people born after 31 December 1948. People born before that date cannot participate in the new system, people born after that date cannot stay in the old system.<sup>8</sup> People born after 31 December 1968 have two individual accounts. Their OA contributions are split between them automatically. People born before 1 January 1969 can take a decision whether to have OA contribution split between two accounts – as it is in the case of people born later, or to have entire OA contribution paid to their first pillar individual account.<sup>9</sup> The decision to split contribution between accounts is irreversible. Irrespective to that decision they taken the old system was terminated for them. There was no decision to be taken regarding participation in the new system, hence, the commonly used terms “switching to” or “opting for” the new system do not really apply to the Polish reform.

Following its name “Security through Diversity” the new system encouraged people to split their contributions. Actually a large number of them have their contributions split by law. Such approach was impossible in some other countries implementing pension reform as for instance in Hungary, where it was impossible to mandate people already in employment to participate in the second pillar. In Poland due to complex implementation of the first and second pillar nobody complained. This is really to be highlighted here. The first pillar being designed in the way so similar to the second pillar did not create any real option for the people. The first pillar was considered as being very much the same but slightly worse. So for the majority of those who had to decide it did not make sense not to have their OA contributions split.

Also the 50 years of age limit did not make any problem. The limit was well chosen. People around 50 were just indifferent. In order to strengthen that attitude a public education campaign was used. It was promoted that for people below 50 new system does not bring any danger but also little benefit if any. For people over 50 participating could have even been risky. The campaign was successful.<sup>10</sup> The phasing in schedule is presented in Figure 1.

Figure 1. Phasing-in schedule

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<sup>8</sup> There is a small number of transitory rules for certain categories of people who can temporarily stay in the old system even being born after 31 December 1948 (small group) and for 6 yearly cohorts of women who can have the so-called mixed pensions.

<sup>9</sup> The decision on whether to split OA contribution or not was to be made by 31 December 1999.

<sup>10</sup> The campaign did not discourage people from splitting their OA contributions. It simply promoted the fact that the younger somebody is the more beneficial is splitting the OA contribution.

under 30	31-50	over 50
<b>Two accounts</b>	<b>One or two accounts</b>	<b>No accounts</b>
<div style="background-color: #00FF00; padding: 5px; text-align: center;"> <b>mandatory entry into the new system (1<sup>st</sup> and 2<sup>nd</sup> Pillars)</b> </div>	<div style="background-color: #00FF00; padding: 5px; text-align: center;"> <b>mandatory entry into the new system (1<sup>st</sup> pillar only or 1<sup>st</sup> and 2<sup>nd</sup> pillar)</b> </div>	<div style="background-color: #00FF00; padding: 5px; text-align: center;"> <b>stay in the old system</b> </div>
<b>New old-age system</b>		<b>Old system</b>

## 5. First year experience

In this and consecutive sections of the paper I focus on developments related to the second pillar of the new OA pension system. Following the rules presented in the previous section splitting OA contributions within the new system was obligatory or optional beginning from 1 April 1999 until 31 December 1999. That period was focused on division of the market rather than on regular long-term pension funds' activities. Box 2 provides basic information on the effects of the initial phase of the second pillar of the new OA pension system in Poland.

### Box 2. The pension funds' market (2000)

<ul style="list-style-type: none"> <li>➤ 21 funds operating on the market</li> <li>➤ approx. 9 million participants by the end of 1999</li> <li>➤ around 60% of people 31-50 joined pension funds</li> <li>➤ Concentration of participation: <ul style="list-style-type: none"> <li>• 60% of participants in 3 biggest funds</li> <li>• 90% of participants in 10 biggest funds</li> </ul> </li> <li>➤ Winners: insurance-based funds</li> <li>➤ Losers: banks and investment funds</li> <li>➤ Key to success: good sales agents</li> <li>➤ Projected annual flow of contribution: 1.5 - 2% of GDP</li> <li>➤ approx. 2.5 billion PLN (around \$0.6 billion)<sup>11</sup></li> <li>➤ approx. 30 percent of pension funds' assets invested in stocks (around 1 percent of Warsaw Stock Exchange capitalisation)</li> <li>➤ Implementation difficulties: <ul style="list-style-type: none"> <li>• delays in contribution transfer</li> </ul> </li> </ul>
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<sup>11</sup> After the first half of year 2000 total assets are around 7 billions zlotys (slightly above \$1.5 billions).

- supervision problems

### Many people split their OA contributions

The first year of the new OA system operation was the success. The idea of splitting OA contributions was widely accepted by the people. A large number of people – around 9 million – decided to choose the new system in its target two account version. This is good for the process of maturation of the system since the advantages of “Security through Diversity” will appear sooner. This also means that transition financing of implementation of the new system will be more concentrated in time. This is usually perceived as the most important problem of any plan to reform pension systems. Here I would like to present a different view.

For many reasons privatisation in Poland was slower than in most other transition economies. Paradoxically, it turned into an advantage. The financial gap in the old system is covered by privatisation revenues. That makes the problem of financing less difficult. Large amounts coming from privatisation are available now. They will disappear in the future. So sharper shift towards split OA contributions means creating the financial gap in the period when privatisation still provides the state budget with additional revenues. That is the view from the reform viewpoint. Is it the same from the ministry of finance one? The answer is yes. The more people split their contributions the larger part of privatisation revenues is saved instead of being consumed. We can even say that the pension reform is needed in the period of privatisation. Without the financial gap caused by the reform we would observe a substantial decrease of savings in the economy.<sup>12</sup> Moreover, financing the gap means crowding out some other expenditure, which contribute to reduction of that part of budget deficit that create inflationary pressure. Money transferred to second pillar pension funds is repaid by the budget subsidy. That money does not appear in the consumer goods and services market. Hence with the same level of budget deficit inflationary pressure after introduction of the reform is lower even if the deficit stays unchanged.<sup>13</sup>

### Many second pillar pension funds operate in the market

From the very beginning of implementation of the reform, Poland with its around 40 million inhabitants and quick schedule of covering people with the new system was a very promising place to operate for many potential asset management firms and financial groups. By the end of 1999 twenty one pension funds were registered. Even taking into account the scale of the market, this is a lot – probably too many. The process of market consolidation is urgently needed. Otherwise bankruptcies of a number of managing firms (PTE) will probably happen. Pension funds’ assets are separated from PTEs’ assets. Members of pension funds are protected by law. Nevertheless, bankruptcies would create a very bad signal for the members. They are not yet familiar with the new system and some panic may occur if a number of PTEs went bankrupt. Consolidation would help in avoiding that scenario and moreover it would contribute to maturing of the market.

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<sup>12</sup> The only chance for not spending privatisation revenues for consumption is repaying public debt. However, this option is politically much more difficult.

<sup>13</sup> That issue needs more discussion, see Góra (2000).

### Implementation problems

There are two main implementation problems. First is improper operation of system's transfer agent that is built-in into the social security institution (ZUS). Computerisation of ZUS is still not completed which creates delays in transferring information. Because of that also transferring of money to second pillar pension funds is not in time. The delays are bad for the system and its participants. Moreover, that delays create bad image of the entire new system.

Another problem is weakness of pension funds' supervision agency. It is heavily criticised by Polish and international experts. Moreover, that institution is totally politicised instead of being professionally oriented. That is a very undesirable situation that creates another piece of bad image.

### Pension funds' portfolio structure

Pension funds' assets are growing very quickly. Figure 2 illustrates that growth in 1999. The growth was so sharp since the year 1999 was the year of taking decisions on splitting OA contributions. People were taking their decisions throughout the year. Beginning from 2000 that process is over, hence, the pace of the growth is slower but still quick since new cohorts are entering the labour market while nobody retires from the new system and will not do so for at least 10 years. According to estimates<sup>14</sup> in the year 2020 pension funds' assets will be higher than 30 percent of GDP.

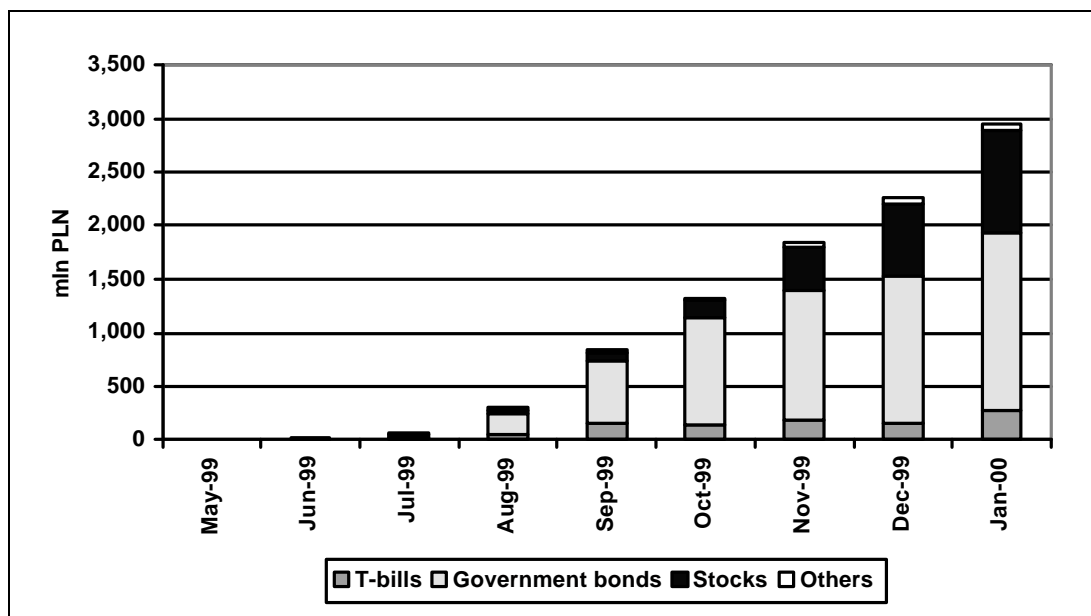
Polish pension funds invest pretty large part of contribution money in financial instruments other than government bonds. In comparison to other countries running funded pension schemes (see for instance Hungary) purchasing government bonds is less dominant. Since late 1999 stocks have created around 30-35 percent of their portfolio (see Figure 2). That effect is in line with the "Security through Diversity" pension system design. Within that design the most desired situation would be if there was no, or very little, government bonds in pension funds' portfolios since buying government bonds is just rolling debt. There is no capital behind that bonds which is very similar to the pay-as-you-go pension system. In the new Polish OA system the rolling debt role is left for the first NDC pillar. First pillar accounts have economic nature of government bonds. – There is no need for issuing and trading that bonds since there is only one "asset manager" and only one type of instrument.

Figure 2 illustrates developments in 1999. In 2000 the share of instruments other than government bonds is maintained. It is expected that this process will – step by step – led to even stronger reduction of government bonds in pension funds' portfolios.

Figure 2. Portfolio structure of pension funds

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<sup>14</sup> See Chlon and Tidner (2000).



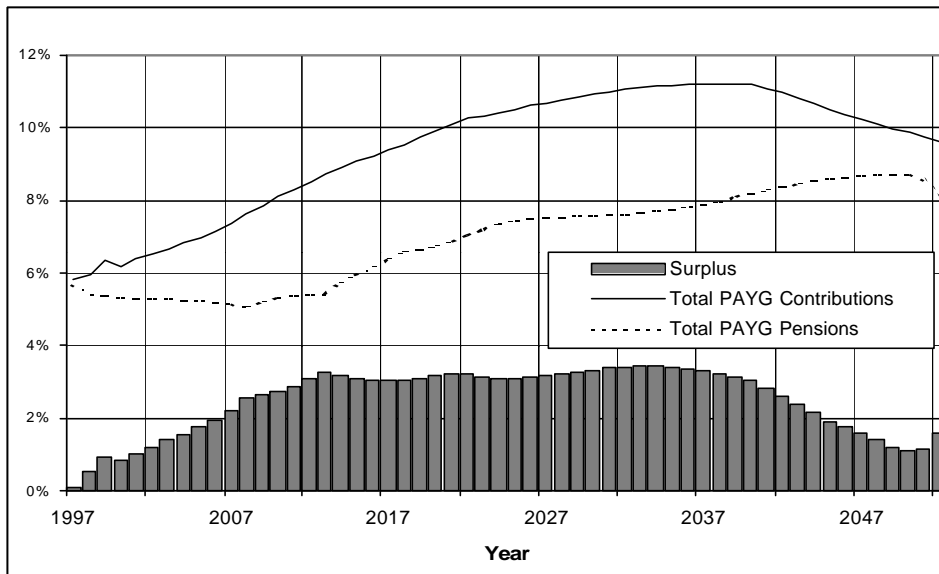
## 6. Long-run perspective

The previous pension system was actuarially bankrupt. This is why it was closed down. That was done in advance before it actually went bankrupt. The reform caused that, although the debt already created will need to be covered, from 1 January 1999 new debt is not created any more. The new system is actuarially neutral which follows OECD recommendations. This section provides a quick look at long term projections of financial situation of the new Polish pension system.

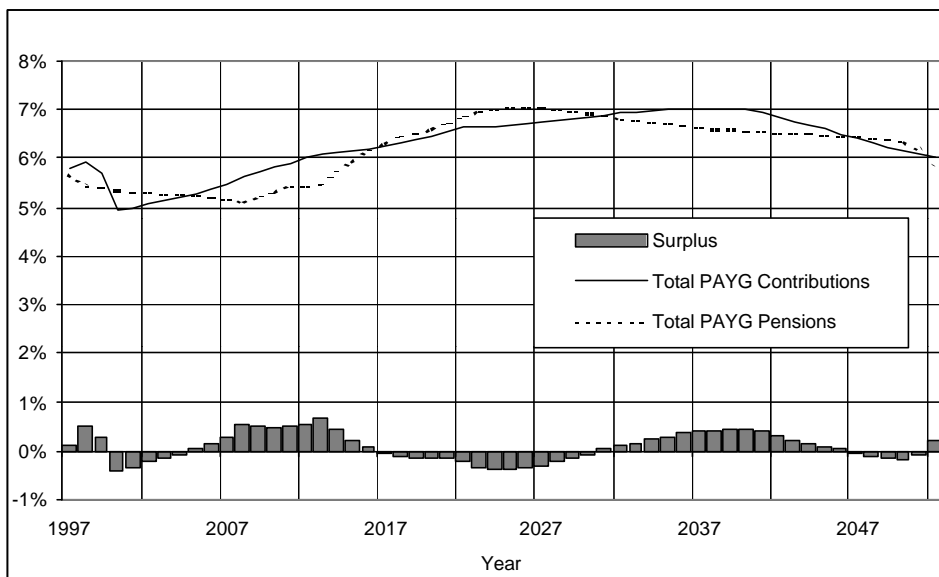
Figure 3 has two panels. Panel (a) illustrates projections for the system entirely based on NDC individual accounts without second pillar type funding. The system – which in this case is just one individual account – runs a surplus. That is very remarkable effect. However, the first pillar, at least in its current design, which means being run by ZUS, is much more sensitive to political decisions. In longer run it would be difficult to keep that surplus within the pension system. Shifting a part of OA contributions to private pension funds will much better protect pension money. At the same time shifting that part of contribution to second pillar balances first pillar revenue and expenditure (see Panel (b)). The surplus is in second pillar accounts.

Figure 3. Revenue, expenditure and balance of the new (NDC) first pillar of pension system in Poland, 1997-2052 with and without introduction of the second pillar (% GDP)

(a) Without the second pillar introduction



(b) With the second pillar introduction



Source: Chlon and Tidner (2000)

## 7. Concluding remarks

There are two issues I would like to highlight at the end of this paper.

1. In the new Polish system functional separation of the OA and NOA parts of social security goes before other changes. This priority applies even to the involvement of private providers in running social security. This does not mean that private providers are not important. Other way round, their involvement is crucial for the new system. Actually, there is no reason why all social security services cannot be provided by the private sector. This is the way to go in the future. The first step will probably be separation and selling out of the part of Social

Security Institution (ZUS) responsible for collecting all types of social security contributions – irrespective to whom the contributions are collected for.<sup>15</sup> Second step will be separation of the part of ZUS that runs the first pillar accounts. That latter activity can also be contracted out to the private sector.

2. Implementation of the Polish reform was perfectly suited in time. The following factors work in favour of the reform due to that timing.

- Demography, although bad in medium and long run, is pretty favourable still for around 7-9 years;
- Economic growth has been quick for almost a decade and good prospects for at least a couple of years to come;
- Privatisation revenues, although available only for a limited time, are still available;
- Strong public support for the reform;
- Political window of opportunity.

The advantages listed above are not granted for ever, hence – since the reform was inevitable – postponing its start would be the worse possible policy.

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<sup>15</sup> This is crucial for the entire social security to collect all types of contributions through the same channel.

## References

Chlon, Agnieszka, Marek Góra and Michal Rutkowski. 1999. "Shaping Pension Reform in Poland: Security through Diversity", World Bank Pension Primer, No. 9923.

Chlon, Agnieszka and Gunnar Tidner (2000), Polish pension system simulation model (mimeo).

Disney, Richard (2000), "Notional accounts as a pension reform strategy: An evaluation", The World Bank Primer, No. 9928.

Góra, Marek and Michal Rutkowski (1998), "The Quest for Pension Reform: Poland's Security through Diversity", World Bank Pension Primer, No. 9815.

Góra, Marek (2000), "Going beyond economic transformation", in George Blazyca and Ryszard Rapacki [eds], Poland into the New Millenium, E.Edgar [forthcoming]

Holzmann, Robert (2000), "The World Bank approach to pension reform", International Social Security Review, 53, No.1, pp.11-34.

OECD Economic Surveys: Poland, 1998 and 2000.

Palmer, Edward (1999), "The Swedish pension reform – framework and issues", National Social Insurance Board, Stockholm (mimeo).

**Table. Old and new old-age pension system in Poland**

	Old system	New system
<b>Participation in the old social security system</b>	Dependant workers and self-employed.  Exemptions: army, police, border guards, firemen, farmers, judges and prosecutors	n.a.
<b>Participation in the new old-age system</b>	n.a.	Everybody born after 31 Dec. 1948. Splitting old-age contributions between two accounts mandatory for those born after 31 Dec. 1968.  Exemptions: farmers, judges, prosecutors, armed forces in force prior to January 1, 1999
<b>Switching between old and new system</b>	n.a.	Non-existent. Exemption: people entitled to early retirement in the old system who will meet necessary criteria by 31 Dec 2006 can choose the system but only if they have not signed up for the 2 <sup>nd</sup> pillar.
<b>Old-age formula</b>	Defined benefit for the entire social security system  $P=0.24W+W*I*0.013*L+W*I*0.007*S$  W - national average wage for previous quarter I - individual wage index L - total length of service S - additional years accepted for insurance benefits	Defined contribution in the entire old-age system (non-old-age parts of social security work along defined benefit)  <b>P=K/G</b>  K – pension capital of insured, composed of imputed, registered and old-age contributions  G – life expectancy coefficient at pension allotment
<b>Qualifying service</b>	Employment, self-employment, military service (non professional), time repressed, unemployment period; additional non-contributory periods: education, maternity, taking care of disabled child.	Only contributions paid matter. No pension right is acquired because of any other reason. In specific situations such as unemployment, maternity, taking care of disabled child. State budget pays contributions calculated out of the minimum wage.
<b>Minimum length of service</b>	At least 20 (men), 15 (women) years of qualified service.	Non-existing
<b>Minimum guarantee</b>	Minimum: In nominal terms, indexed as other pensions for every pensioner that worked for a qualifying period, paid from the Social Insurance Fund. In 1998 – approx. 70% of minimum wage.  Additional condition: 25 (men), 20 (women) years of qualified service.	Minimum: In nominal terms, indexed as other pensions, topping up pension from the first and second pillar and financed from the State Budget.  Additional condition: 25 (men), 20 (women) years of full-time contribution period.
<b>Maximum benefit</b>	Maximum: replacement rate not higher than 100%, individual's wage factor not higher than 250% of average wage.	No maximum benefit

	Old system	New system
<b>Taxation of benefits</b>	Taxed	Taxed
<b>Indexation of benefits</b>	Since 1996 – at least price indexation. The real growth defined annually in the state budget law.	From 1999: mixed price-wage formula, with 80% share of prices and 20% share of wages.
<b>Normal pension age</b>	60 for women, 65 for men with a lot of exclusions. Average retirement age in 1998 – 55 for women and 59 for men.	Minimum retirement age: 60 for women and 65 for men.
<b>Credit for deferred pension</b>	No special credit, only increase of 0.0013 of individual wage per each year worked.	Actuarial adjustment
<b>Early retirement</b>	Granted for disabled, miners, teachers, railway workers, people working in special conditions (list including 250 different categories) – approx. one quarter of population covered. Also early retirement at 55 for women with at least 30 years of contributing.	No early retirement in the mandatory system.
<b>Bridging pensions</b>	Non-existing	Limited in time, financed by additional contributions paid by employers, designed for people performing special types of work (defined by a special Commission of Work Medicine Experts).
<b>Additional credits</b>	Special multipliers for miners and railway workers.	Only through participation in the third pillar schemes.
<b>Working pensioners</b>	Allowed with wage limitations, pension recalculated by adding extra contributory years to the formula.	After reaching retirement age – allowed without limitations. Pension recalculated by adding additional contributions divided by life expectancy at the recalculation moment. No second pillar participation after retirement
<b>First pillar (first account)</b>	Non-existing	Run by ZUS; 12.22% of wage paid to the 1 <sup>st</sup> pillar old-age individual account (similar to funding through non-tradable indexed government bonds); <u>no investment</u> .
<b>First pillar benefits</b>	n.a.	Annuities paid by ZUS
<b>First pillar rate of return</b>	n.a.	Covered wage bill growth (similar to indexed government bonds interest)
<b>Second pillar (second account)</b>	Non-existing	Run by private open pension funds; 7.3% of wage paid to the 2 <sup>nd</sup> pillar old-age individual account ( <u>up to 40% of collected money can be invested in stocks</u> ).
<b>Second pillar fee structure</b>	n.a.	Two kinds of fees: (1) distribution fee [no limit]; (2) asset fee [upper limit: 0.5 percent of assets annually]
<b>Second pillar benefits</b>	Non-existing	Annuities paid by private annuities companies

	Old system	New system
<b>Second pillar rate of return</b>	n.a.	Profits on financial market instruments
<b>Other than 1<sup>st</sup> and 2<sup>nd</sup> pillar elements of mandatory system</b>	No-pillar mandatory PAYG system; contribution 45% of wage	17.07% - non-old-age benefits (disability, survivor and short-term benefits)
<b>Redistribution</b>	Yes, in entire system	No redistribution in the 1 <sup>st</sup> and 2 <sup>nd</sup> pillars; (redistribution exists only in non-old-age elements of the system)
<b>Contribution financing</b>	Contributions paid by employer, not divided into different categories; tax exempt.	Paid partially by employer and employee [old-age (50:50), disability (50:50), sickness (employee) and work injury (employer) contribution] contributions are tax exempt.  <u>Note:</u> Wages were raised in 1999 by 23% to compensate for the split of contribution.
<b>Ceiling and floor levels</b>	Minimum base: minimum wage for workers, 60% of average wage for self-employed;  no maximum	Minimum base: minimum wage for workers, 60% of average wage for self-employed;  Maximum: 250% of average wage
<b>Taxation of mandatory system contributions</b>	Exempt (paid before taxation)	Exempt (paid before taxation – EET)
<b>Contribution collection</b>	Social Security Institute (ZUS)	ZUS collects contributions for entire social security including mandatory old-age system (1 <sup>st</sup> and 2 <sup>nd</sup> pillar)
<b>Third pillar</b>	Mostly life-insurance combined with investment fund	Life-insurance combined with investment funds. New element: employee pension programs in four basic forms (live insurance, investment fund, mutual insurance, employee pension fund). Contribution up to 7% not covered by social security tax, but covered by income tax. Benefits not taxed. Benefits available from the age of 60.
<b>Third pillar taxation</b>	After taxation (TEE)	After taxation (TEE)