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## Research Report

# The analysis of the evolution of EU social policies in the last three years - supplementary/private pensions and the impact of an ageing population

Strategy and Policy Studies (SPOS), No. 2011,4

## Provided in Cooperation with:

European Institute of Romania, Bucharest

*Suggested Citation:* Vasile, Valentina; Tache, Ileana; Tudor, Cristiana; Volintiru, Clara (2012) : The analysis of the evolution of EU social policies in the last three years - supplementary/private pensions and the impact of an ageing population, Strategy and Policy Studies (SPOS), No. 2011,4, ISBN 978-6-06-820224-2, European Institute of Romania, Bucharest

This Version is available at:

<https://hdl.handle.net/10419/74683>

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## Annex 1 Private pensions' importance in EU member states. Country fiches

	GDP/capita (2010)	Social expenses (% in GDP) (2009)	Pensions expenses (% in GDP) (2009)	Private pensions funds – Total, % in GDP (2010)
EU 27	24.400	29.51(p)	13.07 (p)	:
Denmark	42.200	33.44	12.06	49.7
France	29.800	33.06(p)	14.51(p)	0.2
Sweden	37.000	32.12(p)	:	:
Netherlands	35.400	31.60(p)	12.83(p)	134.9
Germany	30.300	31.38(p)	13.14(p)	5.2
Austria	34.100	30.76	15.06	5.3
Belgium	32.600	30.44	12.14	3.8
Finland	33.600	30.26	12.57	82.1
Italy	25.700	29.82(p)	16.03(p)	4.6
United Kingdom	27.400	29.20(p)	12.53(p)	86.6
Greece	20.100	27.97	:	0
Ireland	34.900	27.88	:	49
Portugal	16.200	26.94	14.12	11.4
Spain	22.800	25.04(p)	10.10(p)	7.9
Slovenia	17.300	24.26(p)	10.89(p)	2.5
Hungary	9.700	23.41	:	14.6
Luxembourg	79.500	23.11	9.45	:
Lithuania	8.400	21.25(p)	:	:
Cyprus	21.600	20.93	:	:
Czech Republic	14.200	20.43	:	6.3
Malta	14.800	20.01	:	:
Poland	9.300	19.71	:	15.8
Estonia	10.700	19.19	:	7.4
Slovakia	12.100	18.81(p)	:	7.4
Bulgaria	4.800	17.21	8.80	5.7
Romania	5.700	17.08	9.41	0.9
Latvia	8.000	16.85(p)	:	0.9

:=Not available; p=provisional value

Source: by C Volintiru based on Eurostat data (available 28.10.11) and OCDE Pension Markets in Focus No. 8, July 2011 (available 2.08.2011)

## Country fiches

A synthetic country profile of the pension system will be presented, based on the following aspects:

- A briefly presentation of the social model and other related significant aspects on economic and social development;
- The main features and the structure of the pension system;
- Main recent reform measures, with a special focus on private pensions.



### AUSTRIA (1995)

#### GENERAL PRESENTATION

GDP per capita 2010 (current prices)	33900.00	
Total population at 1 January 2011	8.404.252	
Expenditure on social protection (as % GDP) 2009	30.76	
Expenditure on pensions (% GDP) 2009	15.05	
The importance of private pension funds in the total economy % of GDP (2010)	5.3	
Monthly minimum wage	Established	by
	collective	
	arrangements	
Median age 2010	41.7	
Old-age-dependency ratio ( %) 2010	26.10	
Projected Old-age-dependency ratio (%) 2060	50.73	
Total age dependency ratio 2010	48.13	
Share of the total population aged 65 years or over, 2010	17.56	
Share of the total population aged 65 years or over, 2060	28.98	

Source: Eurostat

#### CHARACTERISTICS

In 2008 Austria allocated approximately 13.88% of GDP on public pensions, corresponding to a decrease of 0.42 percentage points compared to its 2000 level, but still a level higher than the average EU pension expenditures of 11.66% of GDP in 2008. This percentage is equivalent to 4023.76 Euros (2000 prices) per capita, compared to the EU average of 2551.27 Euros. The last recorded value for the aggregate replacement ratio was 0.64 in 2009 (according to Eurostat), above the EU average of 0.51. The poverty threshold in Austria is estimated at 11,318 PPS in 2009 (according to Eurostat), reflecting an increase with 30.69% from the level of 8660 registered in 2000. The population situated below the threshold of poverty as defined by Eurostat (60% of median income) represented 17% of the total population in 2009. In that same year the percentage of the elderly (people aged over 65) situated below the poverty line was 15.1%, below the EU average (17.88% in 2009). While in the European Union the median income of the elderly equals about 88% of the median income for the rest of the population, in Austria this percentage is higher, namely 91%. The average exit age from the labour market is 60.9 years, below the EU average (61.4 years). The Austrian government debt represented 72.3% of GDP in 2010 (while EU average is 80%), up by 5.8 percentage points as compared to the value registered in 2000. While the government deficit in the European Union in year 2000 represented 6.4% of GDP on average, in Austria it is lower, namely 4.6% of GDP.

## **PENSION SYSTEM (GENERAL STRUCTURE)**

Austrian pension system consists of three pillars:

- Pillar 1 consisting of state pensions is by far the most important. According to the Law on the harmonization of pensions (Pensionsharmonisierungsgesetz) of 2005, all occupational sectors should be integrated into a single scheme: a pay-as-you-go scheme, mandatory for all employees.
- The second pillar consists of occupational pension schemes. There are two types of occupational pensions in Austria: the first is a system of mandatory severance payments and the second is represented by voluntary occupational pensions.
- The third pillar comprises voluntary private pensions.

### **Pillar I: Public Pensions**

Austrian public pension system is a "pay-as-you-go" system, financed by mandatory contributions from both employers and employees which amount to a rate of 22.8% of the gross salary of the employee, divided between the employer who supports 12.55% and the employee who contributes with 10.25%. There are no employer contributions for employees from the public service sector, where only the employee makes contribution ranging from 12.55% to 10.25% of the salary.

Pension calculation formula is based on the best 15 years in terms of earnings (extending gradually to the best 40 years until 2028), the duration of contributions and the retirement age. After reaching the minimum required contribution, the benefits will rise to 80% of the salary earned at the moment of retirement, up to a predefined ceiling.

Within the 2004 reformed pension system the 45/65/80 formula applies. Thus, after 45 years of contributions and retirement at the age of 65, the maxim pension will reach 80% of average salary incomes over a certain period of active life. Pension reforms could be considered successful in terms of taxation, as public expenditure on pensions has substantially decreased. According to the Austrian Central Bank, before reforms the projected pension expenditure was 17% of GDP for 2050. Following the reforms, they estimated this indicator at only 12.2% of GDP in 2050 (OeNB, 2006). Paid contributions are capped at 3132 Euros per month, while the maximum monthly pension is 2480 Euros. Benefits are adjusted with the inflation.

Average state pension among pensioners in the private sector amounted to 870 Euros in 2007. This value is quite low because in calculating this average value very small pensions were also included (about 250,000 in number) which are mainly paid to non-residents. Pensions of those who worked in public service have higher values, with an average of 2320 Euros in 2007. To prevent poverty among the elderly, pensioners which are only entitled to pension below a certain minimum level, are also granted access to the so-called "equalization grants" or "Ausgleichszulagen", financed exclusively from federal tax revenues. Thus, if the total income of a pensioner is under a statutory minimum level (called "Richtsatz"), the pensioner receives an "equalization grant" funded by the state in order to reach this threshold (indexed to the price evolution). The legal minimum monthly level was equal to 772.40 Euros for a single pensioner in 2008 and to 1158.08 Euros for a married couple.

Currently, the benefits of equalization or "Ausgleichszulagen" are provided to approximately 240,000 pensioners (about 10% of retirees). The total amount of equalization allowances amounted to approximately 0.3% of GDP in 2007<sup>1</sup>.

The purchasing power of pension benefits is maintained due to annual adjustments based on the consumer price index (CPI). Occasionally, these adjustments deviated from past CPI evolution.

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<sup>1</sup> [http://www.bmask.gv.at/cms/site/attachments/2/3/9/CH0982/CMS1304403432073/workingpaper\\_012009.pdf](http://www.bmask.gv.at/cms/site/attachments/2/3/9/CH0982/CMS1304403432073/workingpaper_012009.pdf)

On 24 September 2008 the Austrian parliament decided to adjust more consistently the pension benefits, and also provided for a lump sum allocation. This measure was taken in order to support the purchasing power of pensioners with low incomes, in compensation for the increasing oil and food prices. Thus, in 2008 the public pensions were adjusted as follows: pensions with a value lower than 747 Euros were adjusted by 1.7%, pensions from 747 to 1050 Euros were adjusted by an amount equal to 21 Euros, pensions between 1050 Euros and 1 700 Euros by 2.0%, while pensions between 1700 Euros and 2161.50 Euros were adjusted downward with percentages from 2.0% to 1.7%, while the pensions above 2 161.50 Euros were adjusted with 36.75 Euros<sup>2</sup>.

Normal retirement age is 65 years for men. For women, the retirement age is currently 60, but it will be increased to 65 between 2024 and 2033. There is also a condition of coverage: 180 months (15 years) in the last 30 years or 300 months (25 years) during the complete life. Alternatively, 180 months of contributions actually paid (as opposed to months of coverage) are sufficient. In 2005, the number of contribution years needed to receive pension was reduced from 15 to seven years, providing that the rest of the minimum required period of eight years could be covered, for example, by periods devoted to child rearing.<sup>3</sup>

## **Pillar II**

### **Payment of mandatory compensation**

Traditionally, employees have received severance payments in Austria at retirement or termination of employment. This system was called *Abfertigung* and normally it was funded internally. In 2002, a new severance pay system was introduced (called *Abfertigung neu*). In this case, the employer contribution is invested in a fund for employees or *Mitarbeiterversorgungskasse* (MVK). This system is mandatory and applies to all employees who started working in 2003 or later. It can also be extended to existing employees, provided that both parties agree. Since 2008, the self-employed are also included in his system. The contribution amounts to 1.53% of employee salary and contributions are made only by the employer. Benefits can be paid either as a lump sum or annuity when employees reach the official age of retirement. Mandatory contribution is not taxed. However, if employers make additional contributions, then they are taxed. Capital gains and benefits paid in the form of annuity are tax free. If employees opt for a lump sum, an income tax of 6% applies.

MVKs are independent entities and selected by an agreement between the employer and the employees union. If no MVK is selected in this way, the Association of Social Security Institution allocates contributions. There are nine MVKs on the market, and they are managed mainly by financial institutions. They provide "defined contribution" funds. The law stipulates that insurance funds shall guarantee the paid capital; in addition, other voluntary guarantees are possible. Assets under management of MVKs amounted to 1.6 billion Euros in 2007 and 2.4 million members were involved in this system, representing about two thirds of employees in Austria.

### **Voluntary occupational pensions**

There are five types of voluntary occupational pensions: pension funds (Pensionskassen), direct insurance, occupational groups plans, accounting provisions and support funds<sup>4</sup>.

Until 1990, voluntary occupational pensions were held almost exclusively as the company's accounting provisions. Since 1990, this situation changed with the introduction of pension funds,

<sup>2</sup><http://www.oecd-ilibrary.org/docserver/download/fulltext/8111011ec047.pdf?expires=1308756776&id=id&accname=guest&checksum=7A0F158AED57E7A47EC79CF6B56CD2FC>

<sup>3</sup><http://www.oecd-ilibrary.org/docserver/download/fulltext/8111011ec047.pdf?expires=1308756776&id=id&accname=guest&checksum=7A0F158AED57E7A47EC79CF6B56CD2FC>

<sup>4</sup> pension funds, direct insurance, occupational group insurance, book reserve, and support funds.

known as *Pensionskassen*. In addition, companies can use the accounting provisions or support funds for occupational pension funds, but these alternatives are used very rarely.

A pension fund (*Pensionskassen*) can be established for a particular employer or a group of employers, given that it takes at least 1,000 beneficiaries to establish a pension fund. This is an independent legal company and its assets and liabilities are separate from those of the parent company or companies.

Pension funds (*Pensionskassen*) are subject to specific supervision, which differs from that which applies to banks and insurance companies. In addition, another requirement is that they must have at least 2,000 members no later than two years after their establishment.

At the end of 2010 there were six pension funds set up by groups of employers and 11 single employer funds.

The assets managed by pension funds have seen an upward trend in recent years: from 11.9 billion in 2008 to 13.8 billion in 2009 to 15 billion Euros in 2010<sup>5</sup>, but more important was the increase in the number of members. For example, approximately 210,000 new members joined the various pension funds (*Pensionskassen*) in 2009, with a total of 711,349 beneficiaries at the end of 2009.<sup>6</sup>

The market is dominated by the top three largest market participants, namely APK-Pensionskasse AG, ÖPAG Pensionskassen AG, and VbV Pensionskasse AG, which own about two thirds of the market.<sup>7</sup>

### **Pillar III**

In the private sector we can distinguish between concrete pension directed provisions and the general accumulation of savings during lifetime.

Concrete pension directed provisions are subsidized by the State, in order to stimulate the development of the third pillar.

Traditionally, life insurance plays a significant role in private pensions. Private life insurance contracts continued to show a strong upward trend in recent years. While a private life insurance generally leads to a single payment, pension insurance contracts are usually concluded in order to obtain a pension through the entire span of life. The most attractive private pension is represented by the new pension with bonus ("prämienbegünstigte Zukunftsvorsorge"), known by the acronym PZV. This product was introduced in 2003 and can be seen as a form of life insurance (including a capital guarantee) subsidized by the state. State contribution in 2008 equaled 9.5% of the beneficiary's contribution and the maximum subsidized annual contribution amounted to 2165 Euros. Any taxpayer under the age of 62 years may participate in this system. After a minimum investment of 10 years, the taxpayer may exercise his rights. If he chooses to receive these rights as a sum of money, half of the state contributions must be returned, a 25% tax on capital gains must be paid retroactively, and the capital guarantee is lost. If the rights are transferred or used for payment of pensions, no tax will be due. This system has grown stronger since its launch in 2003. In 2003, 281000 contracts were opened. Their number has quadrupled over the next three years, reaching 1,186,500 contracts in 2007.

There are investment limits for PZVs. For example, at least 40% of assets must be invested in stocks and the capital investment may be made only on the so-called "undercapitalized" markets, including the Vienna Stock Exchange. Other markets in which managers can invest PZVs

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<sup>5</sup> <http://www.oenb.at/isaweb/report.do?lang=EN&report=3.16>

<sup>6</sup> [http://www.pensionskassen.at/Country%20Reports/CR\\_2010\\_01.pdf](http://www.pensionskassen.at/Country%20Reports/CR_2010_01.pdf)

<sup>7</sup> IOPS COUNTRY PROFILE: AUSTRIA, January 2011

include 10 stock exchanges in Eastern Europe, Portugal and Cyprus. However, the percentage share in total assets of non-Austrian exchanges amounted to only 0.8% in 2006 (FMA 2007). Therefore, it could be argued that the introduction of PZVs was aimed at the Austrian capital market development<sup>8</sup>.

In addition to PZV, there is a pension plan under the third pillar, called *prämienbegünstigte Pensionszusatzversicherung* (state-subsidized supplementary pension insurance). Started in 2004, this plan is available only for those who already have a PZV. Contributions of up to 1.000 Euros are supplemented by a bonus. Payment can only begin when the participants begin to receive a state pension as an annuity.

## REFORMS

With the pension reform of 2004, Austria has made an important step in rebuilding its generous pillar I, by driving the development of occupational and private pensions. In April 2004 the Austrian Parliament adopted a pension reform that provides for the elimination of the generous early retirement system, the gradual alignment of the statutory retirement age for men and women, the expansion of the basis for calculation and the reduction of the pension multiplier, together with the reduction of pensions.



## BELGIUM (1952)

### GENERAL PRESENTATION

Out of the total population of 10,289 thousand inhabitants, 17.1% are aged 65 years and over, and the economic dependence rate of the elderly is 38.3%<sup>9</sup>. GDP per capita is 34% over the EU-27 average (Eurostat, 2010).

The standard age of retirement is 65 years for both genders and the life expectancy at birth is almost 78 years for men and 84 years for women.

The social model in Belgium is continental type, strongly focused on social protection, which is by and large the dominant European one (similar to the models in France, Germany, Austria, Hungary, Slovenia, the Czech Republic and Poland). The model is characterized by promoting moderately subsidized, social services social dialogue and moderate intervention of the state in supporting employment and other services on the labour market.

### THE PENSION SYSTEM<sup>10</sup>

The pension insurance system is specific to promoting the welfare state in particular, based on a public wide PAYG-type pillar and with the lowest retirement age in Europe. The individual insurance pensions and the private pension system, in general, were less developed for a long period of time, and the reforms started slowly, the mitigation of the demographic ageing being low, i.e. by means of a government debt retirement program. The surplus budget of the preceding period (transferred to Silver Fund) will sustain the recent deficits, yet the vulnerability of insured increases.

The transfer rate on retirement is over 60 to 75%, of which about 40% from the public sector and the rest from voluntary occupational pensions.

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<sup>8</sup> <http://publications.allianzgi.com/en/PensionResearch/CountryDatabase/Documents/WE/Austria2009.pdf>

<sup>9</sup> OECD(2009) - Private Pensions Outlook 2008

<sup>10</sup> Current legislation: 1967 (Royal decree No. 50 of 24 October, on old-age and survivor pensions for employees); 1994 (Coordinating Law of 14 July, on mandatory health insurance and benefits); 2001 (Law of 22 March, on guaranteed income for the elderly).

This system insures employees (for miners and fishermen there are special provisions) and the self-employed.

The contribution to the insurance system includes:

- For insured persons: 7.5% of the insured income, the pensioners and early pensioners contribute 0.5%-2% of the pension/early pension (the reference income for insurance is 100% of gross earnings for public officers and 108% for workers). If the employer is affiliated to all branches, then the lump sum due to insurance is paid to the National Social Security Office and redistributed according to necessities.

- the employer contributes 8.86% of the insured income and this amount finances full career and survivor pensions.

- the government makes annual contributions

The pension system structure<sup>11</sup> consists of:

- a) Pillar I - The minimum guaranteed pension (GRAPA-IGO); social security pensions related to earnings; pension schemes for persons with disabilities for employees within the private sector and for self-employed and early retirement systems (early pension) by means of the unemployment system to which a supplement paid by the employer is added.

The retirement age pension is granted at 65 years of age and for a complete contribution period of 45 years. The early pension is granted at 60, with at least 35 years of contribution (conditions valid as of the beginning of 2010).

The pension insurance system includes separate pension schemes for employees in the public and private systems and for the self-employed and pension schemes for public officers. All these schemes include a minimum pension based on contributions made during the entire career. The schemes based on wage earnings imply the calculation of the minimum for each year of work.

- b) Pillar II – Developed under the form of sectoral pension schemes. The law passed in 2003 improves the access of workers to these schemes and provide them with more guarantees. The pensions of this pillar represented 1.1% of the GDP in 2007.

- c) Pillar III - Private and voluntary pension schemes, of small expansion.

**The public pension pillar** is based on a system that relates the level of obtained pension to individual earnings and the minimum pension. The pensions are indexed by inflation, their increase being lower than that one of wages.

The total contribution is of 37.84% of which 13.07% is paid by the employee and the rest by the employer. From these contributions payments are made for pensionable age pensions and survivor pensions. The invalidity pensions and death indemnities are borne by the fund for medical, maternity and child care leaves. The contributions to pensions are fiscally deductible if the statutory and supplementary pensions do not exceed 80% of the annual gross wage. The contribution of the employer is 4.4%, yet fiscally non-deductible. There are separate pension schemes for the private sector, for the self-employed and for the public sector employees (considered as more generous than the others). All these schemes are based on the PAYG system with DB.

One of the weaknesses of the public system is represented by the early retirement schemes, after the age of 50, strongly developed during the eighties (being created at that time for ensuring jobs

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<sup>11</sup> [http://ec.europa.eu/economy\\_finance/publications/publication14992\\_en.pdf](http://ec.europa.eu/economy_finance/publications/publication14992_en.pdf)



for the youths). A little more than one third of the population aged 55 to 64 years is still active, the effective average retirement age being 58 years for men and 56 for women<sup>12</sup>.

**The private pension system** includes: a) occupational, voluntary pensions represented by *Instellingen voor bedrijfspensioenvoorziening* (institutions for occupational pensions) and group insurance schemes of the life-insurances type; and b) voluntary private pensions based on savings accounts for individual or collective pensions.

There are 258 pension funds, with an investment asset of about 4% of the GDP (2007) and the contributions and benefits represent each approximately 0.2% of the GDP (2007).

### **Occupational pensions**

In 2003, the general framework law for complementary pensions was passed.

The voluntary occupational pension consists of: pension plans at company or sectoral level, social pension plans and individual plans of savings for employer-sponsored pensions<sup>13</sup>.

The pension plans at company or sectoral level are predominant in Belgium and mainly DB-type. In 2006 they represented about 60% of occupational pensions. In the last years more DC-type based funds were developed.

Occupational pensions are supplied by a pension fund or an insurance company or by a collective savings account managed by a collective investment institution, or by an individual savings account.

In 2006, over half of the active population participated in an occupational pension plan. The participation was assured by sectoral pension insurance plans, if the companies opted for that, or individual plans were developed by collective agreements, at least at a level equivalent to the ones of the plans existing at branch level.

The DC-type pensions were developed mainly after 2004 and were based on a contribution of 0.6% to 4.2% borne entirely by the employer. The benefits are of the annuity type and the funds are as a rule managed by an insurance company.

The pension funds are taxed at a level of 0.17% and the incomes from investments by 15% (or 25% in the case of dividends from shares).

The social pension plans are pension plans that include a solidarity clause regarding: amounts paid for unemployment, invalidity pension payment in case of severe disease that generated permanent invalidity; benefit indexing, a contribution of minimum 4.4% to limit administrative costs, etc. They can be constituted by collective agreements and, in this case, they are extended to all workers.

The individual insurance plans are granted by the employers as an insurance supplement for a collective plan and are constituted at least 3 years before the retirement age; they are only partially fiscally deductible. The same schemes are applied to the same category of workers.

### **Individual voluntary pensions**

They are constituted as individual savings schemes by an insurance or savings fund, being open to any person aged 18 to 64 years. The individual contracts establish the minimum contribution amount (810 Euros in 2007, for instance) with a duration of at least 10 years of which at least 5 years of contribution. The benefits are granted without penalties, after 60 years of age. Fiscal deduction can be granted to about 30-40% of the paid amounts, but not more than the periodically established ceiling (for instance, 780 Euros in 2005).

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<sup>12</sup> OECD, "Key Statistics: Extending Opportunities: How Active Social Policy Can Benefit Us All," p. 3. Available at <http://www.oecd.org/dataoecd/39/12/34607634.pdf>

<sup>13</sup> <http://www.oecd.org/dataoecd/63/53/42565572.pdf>

## RECENT REFORMS

In 2005 the first measures of limiting access to early pensions were initiated and the maintenance on the labour market was stimulated by increasing the benefit rate on retirement for persons aged 62 to 65 years who remain in the active life.

In 2006, the law “Solidarity Pact between Generations” facilitated a change in behaviour on labour market for the elderly for stimulating active ageing: the participation rate to labour market increased by postponing retirement and increasing the standard retirement age from 58 to 60 years, and remaining on labour market after 62 years of age is stimulated by financial incentives.

In 2007, following of the European Parliament and the Council Directive of 2003, the legislation regarding occupational pensions was adjusted by which the institutions are regulated, the activities and control mechanisms are established. It was pursued to create legislation for an efficient Pillar II.

Three years later, as a result of the crisis early retirement is restricted by increasing the contribution rate of the employer who uses early retirement schemes. The early retirement schemes provide for the payment of up to the full legal retirement age, under the form of a pension scheme sponsored by the employer. The workers may receive an additional amount from the public pillar after the age of 60, if they make a contribution for at least 35 years. The workers contribute 7.5% of the earnings and the employers, 8.86%, and the government supplements yearly the costs up to 10%.



## BULGARIA (2007)

### GENERAL PRESENTATION

In 2009, Bulgaria recorded a 4600 Euros (44 PPS) GDP per capita, significantly below the 24 500 Euros GDP per capita EU average for the same year. Bulgaria's economic dependency rate was in 2010 25.4%, coming close to the EU average of 25.9%. Predictions for 2060 show this indicator to reach 63.6% in Bulgaria, surpassing at that point the projected EU average of 53.4%. UN estimates for the current year show a demographic dependency rate equal to 57.65%, which constitutes the lowest value for this indicator recorded for Bulgaria since the 50s. The median age in Bulgaria was 41.4 in 2010, according to Eurostat data.

### Concepts and Characteristics

Bulgaria, like most EU member states isn't accurately captured in the European Social Model (ESM) defined by Sapir (2006)—Nordic, Continental, Anglo-Saxon, and Mediterranean. The evaluation of the ESM in Eastern European countries (Neesham and Tache 2009) hasn't lead to a clear delimitation of a new model for these countries, but rather to the identification of the prevailing tendencies of each country in this category toward either the Continental, or the more liberal Anglo-Saxon model. Thus, the relevant indicators show us that Bulgaria's policies are better captured by the liberal ESM (Anglo-Saxon), with a low governmental spending level, especially in social protection expenditures, a big income dispersion and limited fiscal coverage.

In Bulgaria, social protection expenditure (SPE) has recorded a progressive increase over the past decade, starting at 174.39 Euros (549.6 PPS) per capita, in 2000, and reaching 719.22 Euros (16660.73 PPS) per capita, in 2008<sup>14</sup>. Still, the current level of SPE is well beneath the EU average of 6603.59 Euros per capita, which would represent 26.35% of the country's GDP<sup>15</sup>. As

<sup>14</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>15</sup> Source: Eurostat (last updated on November 8, 2011)

opposed to 2008, when social spending constituted 15.4% of Bulgaria's GDP, in 2009 it represented 17.26% of its GDP<sup>16</sup>. The corresponding general governmental expenditures (GGE) were 38.3% of the GDP, in 2008, 40.7% of the GDP in 2009, and 38.1% of the GDP in 2010<sup>17</sup>. In accordance with the liberal ESM, big efforts weren't made in Bulgaria to thwart social disparities: the Gini ratio was 33.4 in 2009, increasing from 25, in 2000, but it was still within the EU average of 30.4<sup>18</sup>. In 2011, the minimum wage was 122.71 Euros per month. Although it is the lowest in the EU, it recorded a substantial increase from 1999, when it was only 31.19 Euros per month<sup>19</sup>. Bulgaria's social protection expenditures decreased by 2 percentages in 2009 and by another 2 percentages in 2010<sup>20</sup>. These measures were congruent with the liberal ESM, but the national GDP still decrease by 0.59% in 2010<sup>21</sup>.

## THE PENSION SYSTEM

### General Structure

Over the past 16 years, Bulgaria has adopted a new multi-pillar system. Starting with 1995, voluntary private pensions became an option in this market, but it wasn't until 2000 that the most significant legislation package was passed in support of the development of multi-pillar system. Other landmarks were realized in 2002, when the mandatory private pension schemes came into being, and in 2006, when a special reserve fund was set up to support the financial stability of the public pension system—1<sup>st</sup> pillar. Effectively, Bulgaria has four different dimensions of the pension system: the public pensions, the individual mandatory private pensions, the individual voluntary private pensions, and the voluntary occupational pensions.

The 1<sup>st</sup> pillar is structured along the universal PAYG format for all the employees and self-employed Bulgarians. In 2009, 2.83 million people, the equivalent of 37.3% of the total Bulgarian population, were covered by the public pension scheme. Starting with the 1<sup>st</sup> of January 2010 contributions to the "Pension Fund", which is the public pension system, were decreased from 18% to 16%<sup>22</sup>. Thus, the employer pays 8.9%, while the employee pays the remaining 7.1%. For the self-employed contributions to the public pension system is still 16% of total gross revenues<sup>23</sup>. Currently, there are discussions amongst decision-makers to restore the original coverage of the public pensions system by reinstituting the original contribution level, and extending the contribution period.

The classic 2<sup>nd</sup> pillar occupational private pensions do not exist in Bulgaria. Rather, there are two types of pension funds: universal—the UPF, and professional—the PPF<sup>24</sup>. Employees and self-employed born after 1960 are obliged to become members of the universal pension fund (UPF). In 2009, 2.89 millions persons were enrolled in UPFs, which is the equivalent of 38.1% of the total Bulgarian population. At the same time, only 224 873 persons—2.97% of Bulgarians, were enrolled in PPFs<sup>25</sup>. Since 2007, the UPF contribution was raised to 5%, and is evenly supported by both the employer, and the employee. The self-employed will put forward this contribution by themselves. For PPFs the contributions varies between 7% and 12%, depending on the labour category in which the employee is placed. In this case, the entire contribution is paid by the

<sup>16</sup> Source: Eurostat (last updated on October 28, 2011)

<sup>17</sup> Source: Eurostat (last updated on October 28, 2011)

<sup>18</sup> Source: Eurostat (last updated on October 21, 2011)

<sup>19</sup> Source: Eurostat (last updated on 21.10.2011)

<sup>20</sup> Source: European Commission (2011) Taxation trends in the European Union: Data for the EU Member States, Iceland and Norway

<sup>21</sup> Source: European Commission (2011) Taxation trends in the European Union: Data for the EU Member States, Iceland and Norway

<sup>22</sup> European Commission (2010) Joint Report on Pensions

<sup>23</sup> European Commission (2010) Joint Report on Pensions

<sup>24</sup> Allianz Global Investors, Pension Funds Online

<sup>25</sup> Allianz Global Investors, Pension Funds Online

employer. Each employee may participate to only one universal pension fund (UPF) and only one occupational pension fund (PPF).

Voluntary private pension funds (VPF) constitute the 3<sup>rd</sup> pillar. In 2009, only 600 465 persons—7.92% of the population, opted for VPFs. Voluntary occupational private pensions (VPFOS) are also an alternative within the 3<sup>rd</sup> pillar<sup>26</sup>. This option covers a small number of people—4 641, in 2009. Those insured by these two systems can benefit from the income resulted from the accumulation phase by up to 5 years earlier than the actual retirement age. The 2<sup>nd</sup> and 3<sup>rd</sup> pillars are currently provided by 9 insurance companies, which together manage a total asset value of 1.1 bill. Euros. These companies are under the tight supervision of a Financial Control Commission.

## **Funding**

Bulgaria is currently allocating 8.08% of the GDP to public pensions expenditures, which constitutes a 1 percent increase over the past decade, but remains significantly below the EU average pension expenditures of 13.06% of GDP. The last recorded value of his replacement rate was in 2009 of 0.34, which is also below the EU average of 0.51.

In Bulgaria there is a minimum guaranteed pension called “social pension for old age”, which is set annually by the Ministers’ Council.

## **Sustainability & Efficiency**

Analyzing the adjustment needs of the current balance in order to meet budgetary constraints, Bulgaria meets a sustainability gap of 0.2% of GDP, being situated well below the EU average of 6.5% of GDP in 2009<sup>27</sup>. Thus, Bulgaria is shown to be sustainable on a long term, having a low risk level in terms of the stability of public finances. The adjustment required in order to stabilize the debt ratio is negative (- 0.6% of GDP), well below the European average of 3.3% of GDP<sup>28</sup>. What mainly contributes to the costs of population aging is the high increase of public pension expenses, estimated at 2.2 percentage points by 2060 (compared to 2010).

Poverty limit in Bulgaria is estimated at 3452 PPS in 2009, according to Eurostat, scoring an encouraging growth compared to the value of 1643 PPS in 1999. However, this limit was reached in 2009 by 21.8% of the population of Bulgaria. In addition, as a measure of inadequacy of the Bulgarian pension system, the poverty limit was reached by 36.5% of pensioners in 2007.

Regarding the benefit rate of the Bulgarian pension system in 2007 was 45, estimations by 2060 expecting a slight decrease of 4%, thus reaching 43. The decrease of the public pension system’s benefit rate wouldn’t be an issue in so far as the private pension system’s benefit rate would compensate with an increase. Unfortunately, at this point, no reliable date is available to test this hypothesis.

## **RECENT REFORMS**

Bulgaria didn’t have significant changes in what concerns the retirement age, as it remains 63 for men and 60 for women. Early retirement isn’t a general option for Bulgarians, except for workers under dangerous or unhealthy conditions. Even more, the legislation was recently modified to encourage the delay of retirement. Thus, for persons who meet the retirement age, but choose to continue working, receive a supplementary 3% of their pension value as a bonus for every year they defer retirement.

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<sup>26</sup> Allianz Global Investors, Pension Funds Online

<sup>27</sup> European Commission, Economic and Financial Affairs (2009) EU Sustainability Report

<sup>28</sup> European Commission, Economic and Financial Affairs (2009) EU Sustainability Report



## **CYPRUS (2004)**

### **GENERAL PRESENTATION**

Cyprus, a small EU country with a population of about 900 thousand inhabitants has a per capita GDP of about 12.5% lower than the EU average (2010), yet on increase even during the economic and financial crisis.

The population of 65 years of age and over represents 13.2% of the total and the economic dependence rate is high, i.e. 44.1%. The average life expectancy is 78 years for men and 83 years for women. The average retirement age is 65 years.

The social model is of Mediterranean type, similar to the one of Italy, Portugal, Malta, Greece and Spain. It is characterized by moderation – for social services, state intervention and involvement of social partners.

### **THE PENSION SYSTEM<sup>29</sup>**

The transfer rate is 50% of the last wage after 33 years and 4 months of contribution. On retirement lump sums of 4.7 times the annual pension are paid for retirement at 60 years of age and 5.2 annual pensions for retirement at the age of 63 years.

The system of early retirement at the age of 63 is practiced under certain conditions and by granting a diminished pension. For postponing pension, incentives are received (0.5% of the pension for each month of postponement after 65 years of age up to 68 years of age) and the pensioners at age limit can continue working by maintaining their pension.

All persons aged 16 to 65 years and voluntary citizens working abroad can contribute to the insurance system.

Persons aged 65 years of age (miners at the age of 63 years) and with at least 5 years of contribution have access to old-age pension, the insured basic earnings covering at least 260 times the weekly basic earnings paid weekly at the level of at least 25% of the insured basic earnings (162.22 Euros) as of 1964 or the age of 16 years.

Paid contributions: the mandatory contributions for employees represent 6.8% of earnings and 6.8% for employers; for voluntary contributions, 11% for those working in Cyprus, and 13.6% for those working abroad; for the self-employed it is 12.6% of the total insured earnings. The weekly earnings ceiling according to which contributions to pensions are calculated is 973 Euros.

The pension system structure<sup>30</sup> includes:

- a) Pillar I – minimum guaranteed pension by “Social (means-tested) Pension Scheme” and by special allocations, and social insurance pensions represented by 2 general pension schemes. The first general scheme includes all employees and self-employed and supplies the pension for age limit, the sickness/disability pension and the survivor pension. There is a pension scheme for public officers (Government Employees Pension Scheme) paid from the state budget and pension schemes for employees of the local administration.
- b) Pillar II is represented by Voluntary Provident Funds, of DC-type, with benefits under the form of lump sums for about 103 thousand employees.
- c) Pillar III - none

<sup>29</sup> Current legislation: 1980 (Social Insurance Law No. 41 of 6 October), with amendments; 1995 (Social Pension Law No. 25(I) of 17 March), with amendments.

<sup>30</sup> [http://ec.europa.eu/economy\\_finance/publications/publication14992\\_en.pdf](http://ec.europa.eu/economy_finance/publications/publication14992_en.pdf)

**The pension system is dominated by the public pillar represented by two pension schemes:**

- a) The General Social Insurance Scheme (GSIS) managed by the Social Security Fund (SSF) for workers of the public and private sector. The expenditures on pensions amount to about 6% of the GDP. The scheme was constructed to include a capitalization component, but it practically operates as a PAYG system. The annual fund surplus is capitalized and this amount cannot be less than the level of the pension fund for 2 aggregated years (in 2010 it represented 40% of the GDP, 93% consisting of governmental bonds).
- b) The Government Employees Pension Scheme (GEPS) managed by the Ministry of Finance includes occupational pensions for central government system of 2.5% of the GDP. These two funds cover about 85% of all pensions in 2010, the rest being public schemes that cover pensions for local administration and other public institutions, such as public corporations (about 0.5% of the GDP) and non-contributive pensions (1% of the GDP)<sup>31</sup>,

The private pension schemes include provident funds and occupational pension schemes and represent less than 5% of total expenditure on pensions.

GSIS ensures social benefits on short term sickness, maternity, unemployment indemnities, marriage grants and labour accidents, and those on long-term are represented by the pensions for age limit, invalidity and survivor ones. They also cover the self-employed but have different employee contribution schemes. The contributions for employees represent 13.6% of gross earnings, borne in equal shares by employees (of which 1% for unemployment) and employer, and the contribution for the self-employed is 12.6%. The government as employer pays additionally a contribution of 4.3%.

The level of the pension depends also on the contribution state and the level of the taxable earnings. Earnings are divided into two categories, high and low, the “lower band” being established up to the level regarded as “basic” and “upper band” up to the maximum for contributions. There is a maximum earnings ceiling for which pension contributions are calculated, i.e. 6 times the minimum level for the lower band. Each person is attributed insurance points, and their value is yearly established by the government, similarly to the algorithm applied in Romania. The basic pension is indexed annually, depending on the level of the average reference earnings for social contributions, and the supplementary pension is indexed according to inflation.

In the last years, the GSIS system recorded small deficits (if we exclude the supplementary contribution paid by the state as employer).

The GEPS system assures supplementary old-age pensions and survivor pensions for the central administration employees (public officers, education, police and defence personnel), and is regarded as being more generous. It was funded up to August 2011 almost entirely by general taxes, and the contribution of the employees represented 0.8% of the gross earnings for financing the survivor pension.

The GSIS can pay supplementary pensions to the public and private sector, the amounts corresponding to public employees being regarded as part of the GEPS system. For central administration employees, the retirement age is differentiated by trades: public officers 63 years of age, teachers 60 years of age, police 60 to 61 years of age, and for defence staff, depending on rank and position between 52 and 60 years.

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<sup>31</sup> <http://www.imf.org/external/pubs/ft/scr/2011/cr11332.pdf>

## RECENT REFORMS

In 2009 the GSIS system was reformed for ensuring financial stability. It was provided for an increase of contributions to the system of 1% for employee and employer every 5 years, up to 19.6% in 2039. The minimum contribution period increased from 3 to 6 years. It is expected to have an increase in the GSIS deficit, especially after 2040, and as of 2050 it is expected to become the most costly pension system in Europe<sup>32</sup>.

The last reform of the GEPS system was made in August 2011 to diminish costs within the system and increase equity as compared to pensioners in the private system. The main measures aimed to: increase contribution from 0.8% to 5.1% and the interdiction of entering the system for new employees of the central administration. A temporary supplementary contribution was instituted and it is paid by employees and pensioners of the public system. Even though currently the transfer rate is generous as compared to the contributions, and the estimates show a significant diminution in the latter, and an increase in the costs and deficits of the fund. Another factor aggravating deficits is represented by pension's indexation in relation to the increase in public employees' wages.

It is considered that the reform of the system is necessary for ensuring financial sustainability. The targeted measures refer to: increasing employees' contributions from 5% to 10%, increased incentives for postponed retirement, increasing the standard retirement age to 67 years, and relating it to the life expectancy on retirement, less generous benefits, indexing pensions by prices, gradual diminution up to eliminating the lump sum paid on retirement, increasing the contribution period and determining the contribution history.



## CZECH REPUBLIC (2004)

### GENERAL PRESENTATION

GDP per capita 2010 (current prices)	13800,00
Total population at 1 January 2011	10.532.770
Expenditure on social protection (as % GDP) 2009	20,43
The importance of private pension funds in the total economy (% of GDP) (2010)	6.3
Monthly minimum wage	319.22
Median age 2010	39.4
Old-age-dependency ratio (%) 2010	21.6
Projected Old-age-dependency ratio (%) 2060	55.00
Total age dependency ratio 2010	41.84
Share of the total population aged 65 years or over, 2010	15.39
Share of the total population aged 65 years or over, 2060	33.38

Source: Eurostat

### Characteristics

In 2008 the Czech Republic allocated approximately 8.51% of GDP on public pensions, corresponding to a decrease of 0.02 percentage points from its 2000 level, below the average EU

<sup>32</sup> <http://www.imf.org/external/pubs/ft/scr/2011/cr11332.pdf> based on OECD (2011), "Pensions at a Glance 2011: Retirement-Income Systems in OECD and G20 Countries" OECD Publishing

pension expenditures of 11.66% of GDP in 2008. The percentage corresponds to the sum of 1010.28 Euros (2000 prices) per capita, compared to the average figure for the European Union of 2551.27 Euros. The last recorded value for the aggregate replacement ratio was 0.51 in 2009 (according to Eurostat), below the EU average of 0.51. The poverty threshold in the Czech Republic is estimated at 6064 PPS in 2009 (according to Eurostat), reflecting an increase with 57.67% from the level of 3846 PPS registered in 2000. The percentage of population below the threshold of poverty as defined by Eurostat represented 14% of the total population in 2009. That same year the percentage of the elderly (people aged over 65) situated below the poverty line was 7.2%, below the EU average (17.88% in 2009). While for the European Union the median income of elderly is about 88% of the median income for the rest of the population, in the Czech Republic this percentage is lower, namely 78%. The average exit age from the labour market is 60.5 years, below the EU average (61.4 years). The Czech government debt represented 38.5% of GDP in 2010 (EU average is 80%), up 20 percentage points as compared to the value registered in 2000. While the government deficit in the European Union represented 6.4% of GDP in 2000, in the Czech Republic it is lower, namely 4.7% of GDP.

### **PENSION SYSTEM (general structure)**

The Czech pension system consists of two pillars:

- The first pillar is a mandatory PAYG defined-benefit public system;
- The third pillar is a voluntary, defined-contribution private system.
- There are no occupational pensions in the Czech Republic (which usually form the second pillar), but there is a proposal to introduce such a system from 1 January 2013, with the new pension reform.

#### **Pillar I (mandatory PAYG public system)**

The first pillar comprises all persons economically active and does not provide any special pension scheme for any economic sector. The only exceptions are the so-called armed forces (e.g. soldiers, policemen, customs officers, fire-fighters) whose pension insurance is administered by their respective ministries. All other sectors are managed by the Czech Social Security Administration.

The only funding source for the pension system consists of contributions. The contribution rate amounts to 28% of the gross salary and is borne in a proportion of 21.5% by the employer and 6.5% by the employee.

To be entitled to an old age pension, a person must acquire an insurance period of at least 25 years and reach a retirement age set by law, or at least 15 years of insurance and 65 years of age. Non-contribution periods are also included in the insurance period (e.g. periods of study after the age of 18 years, periods of unemployment, periods allocated to child care or to provide for disabled or persons over 80 years old, military service). In addition to the solidarity of financially active individuals with those non-actives, there is another kind of solidarity within a generation - solidarity in terms of revenue. This is accomplished by the formula used to calculate the pension, which leads to higher replacement rate for low-income persons as compared to those with higher incomes. This prevents certain groups of people to fall into poverty.

A person can retire up to three years before the legal retirement age if he or she accumulated at least 25 years of contributions, but the pension will be smaller over the whole retirement period. Retirement at an older age than the legal retirement age is accompanied by additional bonuses.

#### **Pillar III (Voluntary fully funded private system)**

This pillar (known as the third pillar) is voluntary, supplementary, fully funded, subsidized by the state and based on defined contributions (DC). It also includes life insurance, a product of the



commercial insurance companies. Insurance may be contracted by any citizen of the Czech Republic or other EU citizen aged at least 18 years, who is participating in the state pension or health insurance system in the Czech Republic. In addition to the state subvention, any employee can support employees with an additional contribution made to the employee's fund.

### **Pension calculation**

The law on which the pension calculation is based is The Pension Insurance Act (No. 155/1995). The pension consists of two main parts:

- A fixed component which is the same for all pensions, regardless of the period of insurance and income accumulated.
- A component based on earnings, tied to the period of insurance and the earnings obtained. It is calculated as a percentage of the base calculation, which takes into account individual income over a period of up to 30 years prior to the retirement, but not earlier than 1986. Therefore, the period of 30 years will be reached in 2015.<sup>33</sup>

### **PENSION REFORMS**

Since 1989 the pension system underwent several reforms, most of them occurring immediately after the political changes. Here are some of them:

- All economically active persons began to acquire pension rights by eliminating discrimination against persons with independent activities. The pension system has thus become uniform in terms of rights.
- Administration of pension insurance and the health insurance administration merged into the Social Security Administration of the Czech Republic.
- Rules for indexing of the pensions were introduced.
- Pension insurance contributions have been established. These contributions have become revenues for the state budget.
- In 1994 the *Law on state-subsidized, supplementary pension* was adopted, thus introducing the two-pillar pension system.
- In 1995 the new *Law on pension insurance* was approved, which is in force since 1996. This brought a series of important measures: the gradual increase of the retirement age, the salary evolution started being taken into account in calculating the pension, equal treatment between men and women in terms of pension rights, especially for the survivor's pension.
- Incomes and expenditures of the state pension system have been separated from the state budget, but only in an accounting sense - these revenues and expenses are still a part of the state budget, but revenues in excess of expenses cannot be used to fund other expenses. Accounting separation allowed the monitoring of pension balance and imposed the use of assets only to increase benefits or to cover pension deficits.
- Solidarity with inactive persons was reduced by introducing restrictions regarding crediting periods of non-contribution.
- The third pillar was encouraged by an amendment to the *Law on state-subsidized, supplementary pension* which included enhancing safety (it set stricter conditions for pension plans) and encouraging private deposits (introducing fiscal incentives for participants and increasing state subventions)
- Gradual increase of minimum base for contributions paid by persons with independent activities.

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<sup>33</sup> [http://www.mfcr.cz/cps/rde/xbcr/mfcr/Studie\\_Czech\\_pension\\_system\\_eng.pdf](http://www.mfcr.cz/cps/rde/xbcr/mfcr/Studie_Czech_pension_system_eng.pdf)

- Indexing has become regular, taking place in January of each year, and its underlying rules are stricter. Decision on the index is based on statistical indicators, rather than estimates of key indicators (as was the case before). It allows for an exceptional indexing (other than the stated one) in case of a substantial increase in prices.
- Increasing the retirement age, so it will reach 63 years for men and women without children. The age limit for women remains differentiated according to the number of children.
- Early retirement conditions became stricter.

In addition, since 1 January 2013 the Czech pension system will have a second pillar of occupational pensions, formed by the voluntary transfer of 3% of the pay-as-you-go social security contributions (first pillar) - now amounting to 28 percent of the gross salary, provided that the employee would add at least 2 percentage points of his own funds.



## DENMARK (1973)

### GENERAL PRESENTATION

Denmark is a country with a mixed market economy and a very developed welfare state. The highest level on income equality and the lowest corruption in the world are Denmark's distinguishing features.

Denmark is also one of the few countries in the world that performs in providing its citizens with both a flexible labour-market and an old-age pension system that is also fiscally sustainable. The complex combination of the Danish *flexicurity* concept and old age protection (which has characterized the last two decades) led to the so-called employment Danish miracle. From over 12% in the early 1990, the unemployment rate arrived at mere 1.7% in 2008, while securing decent income replacement rates for most of the population.

With a GDP/inhabitant of USD 36,130 and a total population of 5.5 million inhabitants<sup>34</sup>, Denmark registers a total demographic dependency rate<sup>35</sup> of 52.6 in 2010<sup>36</sup>, an economic dependency rate of 28 in 2007, estimated at 40 for 2020<sup>37</sup>, and an old age dependency ratio of 25.0 in 2010<sup>38</sup>. The median age in Denmark is 40.9 years<sup>39</sup>.

### PENSION SYSTEM

#### General structure and financing

Denmark is one of the first countries that adopted a multi-pillar pension system consisting of both Beveridgean (a flat-rate residence-based national pension) and various Bismarckian features, of which private occupational pensions based on collective arrangements have the biggest share. The universal character of basic income security in old age, associated with quasi-mandatory supplementary pension savings constitutes a shelter against social exclusion for most of the elderly.

<sup>34</sup> According to International Social Security Association, <http://www.issa.int/Observatory/Country-Profiles/Regions/Europe/Denmark>

<sup>35</sup> A measure showing the number of dependents (aged 0-14 and over the age of 65) to the total population (aged 15-64). It is calculated by:  $\frac{\text{Number of Dependents}}{\text{Population (ages 15-64)}} \times 100\%$ .

<sup>36</sup> Source: Eurostat, EUROPOP 2008.

<sup>37</sup> Source: Commission Services, EPC (2009 Ageing Report).

<sup>38</sup> Source: Eurostat, EUROPOP 2008.

<sup>39</sup> Source: NationMaster.COM, <http://www.nationmaster.com/graph/>

The main problem concerning the occupational pensions is directly related to their linkage to collective agreements. The contributions are not paid by persons temporarily found outside the labour market (situations such as: parental leave, unemployment or sickness). This aspect is corrected by augmented contributions to the funded components of the first pillar, but the respective loss of income is not entirely compensated. The system could be thus improved, but the Danish social security system's deficiencies are insignificant in a comparative perspective.

### **The first pillar**

The first pillar is a state and mandatory pillar, which is universal in coverage and consists of two tiers.

*The first tier* is a residence-based national pension (*folkepension*) and is made up of two different components: a) the basic amount, which is a flat rate and depends on the length of residence and b) the income-tested pension supplement.

*The folkepension* is a PAYG pension, its financing being assured from the general budget revenues – the central government reimburses municipal administrations for their pension expenditures. The normal exit age is at present 65 years for women and men but it will arrive at 67 years during the interval 2024-2027, increasing by 6 months each year. The minimum requirement of residence for Danish citizens is 3 years between 15 and 65/67 years and 10 years for non-Danish citizens (including the least five years before retirement).

The total basic amount is earned after 40 years of residence and is reduced for each year missing till 40. The gross maximum monthly rate in 2009 was DKK 5,254. The basic amount is subject to means-testing, which is to income evaluation (but only derived from work, other pensions are not considered). In 2008, the basic amount was reduced for annual earnings bigger than DKK 259,700 (in case of living with a partner, DKK 179,400).

The maximum gross monthly rate of the pension supplement was in 2009 DKK 5,289 for singles and DKK 2,470 for couples. The actual amounts are tested for all sources of personal income, excluding the public pension. For example, in 2008, in the case of yearly individual earnings bigger than DKK 57,300, the pension supplement was reduced by 30% of the excess income. For couples the income test was applied on incomes more than DKK 115,000 at a rate of 15%.

*The second tier* consists of a number of funded supplementary schemes (and a smaller PAYG one) with different operational structures and purposes.

The supplementary Labour Market Pension Fund (Arbejdsmarkedets Tillaegspension-ATP) is addressed to all employees between 16-67 years old if working time exceeds 9 hours per week. The ATP system operates from 1960. This system is financed by fixed-sum contributions (decided by social partners as part of collective contracts) paid by both employers (2/3 of total) and employees (1/3). The contributions depend on the number of hours worked. For instance, in the case of a full time employee who works 37 hours per week the contribution was DKK 3,240 in 2009 (about 1% of the average national wage).

In ATP the age conditions are the same as in the *folkepension*, so the exit age is 65 years old (67 in 2027) and there is no minimum required period. The ATP benefits are paid depending on the pension level at 67 years old. A monthly benefit is received if the pension is greater than DKK 2,480 per year, an annuity (yearly) if the pension belong to the interval DKK (1240 -2480) and a lump sum if the pension is lower than DKK 1240 per year.

The ATP system has an important social function, which cannot be achieved by the occupational private schemes because of their employment-related character. Actually, persons on maternity leave or unemployment sums beneficiaries register a discontinuity of their contributions to the second pillar. In order to compensate this aspect, the ATP contribution is doubled with respect to the parental or unemployment benefit.

Maternity, paternity and parental benefits are received for up to 52 weeks. In this interval, beneficiaries pay 1/3 of the contribution and 2/3 is paid by the municipal administration. Those carrying for children after the maternity period and are not employed, usually move to another scheme, which also implies the ATP contribution. During the unemployment period (which can last two years and a half), an employment insurance fund (or municipal administration if the person is not insured) takes over the payment of ATP contributions. The government pays 2/3 of the total contributions when the unemployment benefit is over and the individual is not yet employed. A full ATP benefit after 40 years of employment provides, on average, a replacement rate of 7%. This amount seems indeed insignificant, but it is of crucial importance for low-income workers.

### **The second pillar**

This pillar consists of privately managed fully funded occupational schemes with quasi-mandatory character. The schemes are based on collective agreements stipulated by social partners. Their coverage has exponentially increased in the 1990s, when the private sector was officially launched. The collective agreements grant supplementary pensions to an amazing percentage of 93% of Danish wage-earners aged 30-60 years (about 80% of total), which outruns even Netherlands, the other performing country in occupational pensions coverage. Even more impressive is that the remaining 20% does not represent a special pressing problem for the future social adequacy of the Danish pension system. Actually only two categories of workers are not at present under the incidence of collective agreements: a) young workers with a precarious situation, who, in the context of the Danish flexicurity system, will surely find a job with occupational pension perspectives; and b) high-income employees from the private sector, usually occupying management positions, who do not require this type of arrangement and resort to other individual forms of supplementary saving.

The exit age is the same as in the first pillar, 65/67 years, but possibilities exist to retire at 60 years. In the case of occupational pensions, contributions represent 9-17% of gross wages and are to a large extent tax exempted.

Benefits are determined using actuarial principles, based on paid contributions, interest rate, average life expectancy and the risk profile of the individual fund. Since 2000, the annuity calculation must use unisex mortality tables.

The main problem with the occupational pensions is that they do not cover other labour market risks. Periods with no employment do not entitle to any contributions and thus compensation is transferred to other schemes of the pension system.

### **The third pillar**

This pillar consists of voluntary supplementary pension schemes, administered by banks or insurance companies. Investments are regulated and indexation is not compulsory. Contributions are tax exempted but interest and benefits not. Participation in this pillar is very large, it comprises about 1 million persons.

### **The administrative structure**

The Danish pension system having a multi-tiered character, its management is realized by multiple administrative levels. The national pension is managed by municipalities, supervised by the Ministry of the Interior and Social Affairs. The central government finances national pension expenditures and municipalities have no influence on the nature and level of pension benefits.

ATP is a private organization set up by law and governed by the social partners under the supervision of the Ministry of Employment.

The Ministry of Finance manages the civil servants' pension for persons working in the central government institutions. Local governments, on the other hand, set up a special institution – Kommunernes Pensionsforsikring, which administers their employees' pensions.

As regards the occupational pension schemes which fall under collective agreements, usually there is one pension fund per agreement. All funds boards are made up of employee and employer representatives.

The individual supplementary schemes are rather fragmented. There are two associations that cover private insurers: one for insurance companies and one for banks.

Both second and third pillar funds are monitored by the Danish Financial Supervisory Authority (Finanstilsynet) under the supervision of the Ministry of Economic and Business Affairs.

### **Sustainability, efficiency and performance**

The Danish pension system is sometimes described as a World Bank pension scheme because of its multi-tier structure.

In general, it can be said that Denmark, together with a very small number of other countries, like Netherlands, propitiously mixes the fiscal sustainability of its pension system with quasi-universal social adequacy. There are very few categories of people who are not covered by the system or do not enjoy benefits of social inclusion. This is not only the merit of the very complex and articulated pension legislation, but also to the flexicurity based model which was implemented in the 1990s. The Danish model illustrate that the old age problems must be treated both at the pension substantiation level and labour market functioning side in order to obtain good results.

Public expenditures with pensions will increase from 9.1% of GDP at present to 106% in 2030 and fall back to 9.2% in 2060<sup>40</sup>. Relatively stable public pension expenditure will be accompanied by increasing importance of occupational pensions, which will rise from 5.6% of GDP in 2007 to 8.9% in 2060.

The average income of people aged 65+ relative to the 0-64 age group stands at 70%<sup>41</sup> in 2007, which is lower than in most other European states. The risk of poverty for the elderly population of 18% is lower than the EU average (19%), but higher than for the total population (12%).

The non-contributory, residence-based old age pension ensures a minimum level of income for Denmark's old persons. This pension keeps at a moderate level the risk of poverty for old people, but the theoretical replacement rates are low as compared to most of the other EU countries. The aggregate replacement rate of 39% (in 2007) must be correlated with the supplementary benefits (housing allocations, heating and health benefits) and free services for pensioners (health and long-run care, free home help). In addition, as voluntary and occupational schemes mature, the replacement rates will significantly increase.

In 2008, the net and gross replacement rates (including statutory and occupational schemes) for a theoretical worker retiring at 65 years old after 40 years contribution career arrived at, respectively, 73.7% (including the means-tested housing allowance) and 52.5%.

### **RECENT REFORMS AND IMPACT OF THE CRISIS**

The marked decrease in the value of fund assets resulted from the financial crisis in 2008 had a limited effect on existing pensioners as the majority of occupational schemes are still immature. It was also very important that solvency rules were simplified, so as funds could avoid losses

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<sup>40</sup> According to 2009 Ageing Report.

<sup>41</sup> The Danish pension system indicators were extracted from Eurostat, [http://eurostat.ec.europa.eu/portal/employment\\_and\\_social\\_policy\\_indicators/omc\\_social\\_inclusion\\_and\\_social\\_protection/pension\\_strand](http://eurostat.ec.europa.eu/portal/employment_and_social_policy_indicators/omc_social_inclusion_and_social_protection/pension_strand)

concerning housing bond portfolios and the mortgage market was not significantly affected. However, pensions from personal schemes suffered and high risk premiums appeared for the transfer out of the schemes. Fortunately returns in 2009 were satisfactory and losses recorded in 2008 could be compensated.

The employment rate dropped from 78.1% in 2008 to 75.7% in 2009. The employment rate for old workers was not affected by the crisis, but, as unemployment increases, it is possible a rise-up in the proportion of those opting for early retirement alternative. The increase in unemployment from 3.3% in 2008 to 6.9% in 2010 has been less accentuated than in many other EU countries. But the upward tendency of unemployment threatens to become a long run phenomenon. As a consequence, the risk exists that the adequacy of the supplementary defined contributions pensions could be reduced.

In spite of a high degree of privatization, at least in a formal sense, the reconciliation between economic and social policy goals seems quite satisfactory in the Danish pension system. However, the system has not reached anything like a “deep equilibrium”<sup>42</sup>. For example, in the period 1998-2008, Special Pension savings was introduced, changed from actuarial fairness to equality, reversed to actuarial fairness, and finally suspended. Contributions to labour market pensions have increased to a higher level than originally envisaged. A completely new scheme – the supplementary pension benefits – has been introduced. Tax rules concerning deductibility for capital pensions, and taxation of current returns on all pensions, have been modified.

Considering all these changes just within a decade, it does not seem very likely that the pension system will “freeze” in the near future<sup>43</sup>.



## **ESTONIA (2004)**

### **GENERAL PRESENTATION**

The social Baltic model presents similar features with the liberal model. The area of the social security system in Estonia, Latvia and Lithuania is rather narrow. Welfare state financment takes place mainly through wages taxation. Labour market regulation is similar to the European average, while unions have low power, wages being negotiated rather at individual level. The small share in GDP of total government expenditures, reduced social protection and limited role of unions lend the liberal character to the social Baltic model<sup>44</sup>.

With a GDP/inhabitant of USD 20,361 and a total population of 1.3 million inhabitants<sup>45</sup>, Estonia registers a total demographic dependency rate<sup>46</sup> of 47.2% in 2010<sup>47</sup>, an economic dependency rate of 32% in 2007, estimated at 37% for 2020<sup>48</sup>, and an old age dependency ratio of 25.0% in 2010<sup>49</sup>. The median age in Estonia is 40.5 years<sup>50</sup>.

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<sup>42</sup> See Pierson, P. (2004) *Politics in Time*. Princeton, NJ: Princeton University Press.

<sup>43</sup> See Andersen, J.G. (2008), “From people’s pension to an equality-oriented multi pillar system. The silent revolution of the Danish pension system”, CCWS, Centre for Comparative Welfare Studies, paper prepared for NOPSA Conference, Tromsø, 6-8 August 2008.

<sup>44</sup> An analysis of the Baltic model is presented in Neesham, C. and Tache, I. (2010), „Is there an East-European social model?”, *International Journal of Social Economics*, Vol. 37, No. 5, Emerald Group Publishing Limited.

<sup>45</sup> According to International Social Security Association:

<http://www.issa.int/Observatory/Country-Profiles/Regions/Europe/Estonia>.

<sup>46</sup> A measure showing the number of dependents (aged 0-14 and over the age of 65) to the total population (aged 15-64). It is calculated by: =Number of Dependents/Population (ages 15-64)x100%.

<sup>47</sup> Source: Eurostat, EUROPOP 2008.

<sup>48</sup> Source: Commission Services, EPC (2009 Ageing Report).

<sup>49</sup> Source: Eurostat, EUROPOP 2008.

<sup>50</sup> Source: NationMaster.COM, <http://www.nationmaster.com/graph/>

## **PENSION SYSTEM**

### **General structure and financing**

The pension system in Estonia aims at maintaining the previous income and life standards after retirement. Estonia has a pension system based on 3 pillars. The first pillar is a renewed pension scheme; the second pillar is a funded mandatory scheme, and the third pillar is a voluntary supplementary pension scheme supported by the government through tax deductions.

#### **First pillar: state pensions**

State pensions are financed by a social tax paid by all employers for their employees and by the self employed. The social tax represents 33% of the gross payroll. The share allocated for pensions is 20% and the difference of 13% is directed to health insurance. State pensions are based on the redistribution principle, which means that social tax paid by today's employees covers the pensions received by today's pensioners.

The legal document that rules a state pension is State pension Insurance Act (1.01.2009).

State pensions are divided into two categories: a) employment related pensions (old age pension, incapacity for work pension and survivors' pension) and b) minimum or national pensions.

a) Employment-related pensions were modified from a system in which pensions were based on the length of activity to a system based on contributions paid as social taxes.

The old age pension is received by a person that worked in Estonia at least 15 years. In 2010, the legal retirement age was 63 years for men and 61 years for women. Starting with 2017, the legal age will increase gradually at 65 years old till 2026.

The old age pension has 3 components:

- The basic amount, which is at present 114.6575 Euros;
- The pensionable length-of-service component

Its level depends on the employment length (years of effective employment and years assimilated with employment, such as child care, compulsory military service, etc.), that entitles the pensioner to receive the benefit. These years are taken into account till 31 December 1998. The value of one year of employment in the monthly pension is 4.343 Euros.

- The insurance component

The amount associated to this component depends on the level of social tax paid since 1 January 1999. It is calculated by summing up the annual factors of pension insurance. An annual factor shows the ratio of the social tax paid on the person's wage during the calendar year and the social tax of the state paid on the average wage. If the social tax is paid on the average wage, the annual factor is 1,0 and its value in a monthly pension is 4.343 Euros. The relative importance of the insurance component increases every year, which means that the state old age pension depends more and more on the amount of the social tax paid for each person or the level of his (her) wage during the whole employment period.

Accounting of the wage calculation for a pension is still relative – the amount of social tax paid on the person's wage is compared with the amount of social tax paid on the average wage of the state. The State Pension Insurance Register stores information on the social tax paid on each person's wage, but no actual money is collected – social tax amounts are paid out to pensioners as soon as received.

The solidarity state pension insurance involves also redistribution of income from people with high wages to the persons with low wages. First, the basic component of a pension is equal to all,

no matter the person's wage. Then, the law also allows the minimum level of the old age pension (in kroons 990), irrespective of the paid social tax.

#### b) The national pension

The national pension assures a minimum pension to people that are not entitled to receive pension according on the work contribution, with the condition to have lived in Estonia for at least 5 years before applying for the pension.

In 2010 the national pension was 2008.8 kroons and since 1 January 2011 it is 128.45 Euros.

There two other pension possibilities, namely:

- Early retirement pension
- Postponed retirement pension.

A person can retire with the early-retirement pension up to 3 years before the legally stipulated retirement age, but in this case the pension level is reduced by 0.4% for each month missing of the legal pension age.

As regards the postponed retirement pension, the pension is increased by 0.9% for each month by which a person postpones the application for the pension.

Indexation of pensions since 1 April 2002 allows the increase of state pensions in order to correspond to the cost of living and receipt of social tax (growth of the wage fund). In other words, once in a year pensions are multiplied by the index that depends both on the modifications of the consumer price index (living cost) and on the yearly increase in received social tax.

#### **Second pillar: Mandatory funded pensions**

The funded pensions represent the main support to the state pension, providing supplementary incomes for pensioners. They are a retirement savings plan, where an employed person saves for his or her pension, contributing by 2% of the gross wage to the pension fund. The state contributes an additional 4% of the 20% of the social tax used for pensions to the individual's personal account and retains the remaining 16% for members of the first pillar.

Subscription to the second pillar is mandatory for taxpayers born in 1983 or later. The funded pensions are voluntary for the persons born before 1983.

Once a year a person may choose a different pension fund to which new contributions are made. The individuals can also change units of one fund to the other. If the form is submitted till 1 November at any year, it becomes valid since 1 January the next year. Savings are registered in individual pension accounts, thereby representing personal assets which are inherited.

The social tax contributions made by the employer will remain the same no matter the employer joins the second pillar or not.

The funded pension system was introduced in Estonia in 2002. In October 2009, around 590,000 persons, representing about 86% of the labour force, joined the second pillar funded pension plan.

Because of the global economic crisis and the difficult financial situation of Estonia, state contributions to funded pensions have been suspended from 1 June 2009 to December 2010. In 2011 the system of contributions was resumed on a 1+2% basis, and at the beginning of 2012 the initial 2+4% system will be restored.

The estimates are that the payments and the funded pension together will be the equivalent of around half of the pensioner's income before retirement. Normally, in order to maintain the same living standard, a person's pension should be 65-70% of his or her previous income.



A person who applied to a funded pension cannot give up anymore, that application meaning that he or she assumed an obligation.

### **The third pillar: supplementary pensions**

The supplementary pension scheme is based on voluntary contributions. The third pillar exists since 1998, when the necessary legal framework was created.

The participation in the supplementary pension scheme can have two forms:

- The purchase of pension insurance offered by licensed private life insurance companies
- The purchase of voluntary pension fund units managed by private fund managers.

In order to encourage participation in the supplementary pension scheme, the following tax incentives have been applied:

- Contributions (premiums paid on the basis of pension insurance policy or sums paid for purchasing fund units) in the limit of 15% of the annual gross income, can be deducted from one person's taxable income.
- Incomes obtained from a private pension insurance policy or from the redemption of pension fund units are taxed at a lower rate (10%) of income tax, instead of the normal rate of 21%, but only if the collected money is taken as a single payment at retirement. In the situation of purchase of a life annuity when payouts are made regularly once a month or quarterly, payouts are not taxed.

In the supplementary pension scheme, the retirement age is negotiated between the individual and the insurance company, except that the minimum contractual age is 55 years, when tax exceptions apply.

In conclusion, the third pillar has the following characteristics: voluntary participation, individual flexibility, private management, savings contributions before retirement, free choice between insurance and fund instrument and advantageous tax incentives offered by the state.

### **Sustainability, efficiency and performance**

Pension expenditures in Estonia have represented about 6.0% of GDP for the last 10 years (as compared to EU27 in 2007: 11.8% - ESPROSS data). Pension's adequacy constitutes a problem for Estonia, as the relative living standard for old people and replacement rates are rather low. The median income of people over 65 years to income of people aged 0-64 years diminished from 73% in 2005 to 62% in 2008, becoming the lowest in the EU (EU27 average being 84% in 2008). The poverty rate in the elderly category was 39% in 2008, one of the highest in EU27 (18.7%). The national pension of 128 Euros in 2009 which serves as a minimum guaranteed pension (lower than the absolute poverty threshold of 150 Euros per month) covers the minimum food basket, but was ever under the national minimum cost of living and under the relative poverty threshold.

The net theoretical replacement rate for a worker with 40 years career retiring at 65 years old in 2008 was 39.5% (according to ISG<sup>51</sup> calculation). In 2009, the average gross old pension was 278 Euros (38% of the average gross wage). Taking into account the decreasing tendency of wages in 2010 and 2011, the net replacement rate could reach 50% in the next years. The formula of pension calculation advantages the persons with low wages, who will benefit of relatively higher replacement rates.

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<sup>51</sup> ISG (Indicator Sub-Group) Report on theoretical replacement rates, available at [ec.europa.eu/employment\\_social/.../isg\\_repl\\_rates\\_en.pdf](http://ec.europa.eu/employment_social/.../isg_repl_rates_en.pdf)

Estonia offers good financial incentives for continuing the active life after retirement, as pension can be received in combination with wage. As a consequence, the indicators that reflect old people's employment are bigger than the EU average. In 2009 the employment rate was 60.4% for persons aged 55-64 years (far higher than EU27 average of 46%). Pensioners show an increasing tendency of remaining on the labour market after the legal exit age, thus contributing to the increase of the retirement age of the present labour force.

Unemployment of 55-64 years group increased from 4.1% in 2008 to 9.4% in 2009\* (as compared to EU27 average – from 5.1% to 6.3%) because of the financial crisis. But the employment rate has remained high even in crisis period – 66.7% as compared to 49.1% in the EU in 2009.

## **CRISIS IMPACT AND RECENT REFORMS**

After a period of moderate economic decline in the first quarters of 2008, the financial crisis was followed by a severe economic recession, which was intensively felt in the last quarter of 2008. Reduced production led to decreasing employment and unemployment rise. In 2009, the employment rate diminished at 63.5% (in the 15-64 years group), after attaining 69.8% in 2008. The employment rate of old people also dropped to 60.4% in 2009 (with 2% lower than in 2008)<sup>52</sup>.

Due to constraint in public expenditure, in February 2009 a change of pension indexation rules was operated. In accordance with the old rules (just adopted in 2008), the pension index depended on increase of social tax revenues and increase of the consumer price index with respectively relative shares of 80% and 20%. The modification allows the government to adopt an index smaller than that determined according to the above formula in situations in which the expected GDP growth for the respective year is negative or when the deficit of the state pension insurance budget (the difference between expenditures with state pensions and revenues from social tax) is greater than 1% of GDP. The application of this rule led to an increase of state pensions at 1 April 2009 by only 5%, instead of 13.8% calculated according to the old formula. However, the pension expenditures increased on the back of a decreasing GDP and therefore their share in GDP jumped to 9% in 2009, attaining the greatest level after Estonia's independence regaining.

The mandatory private pension scheme was also affected due to the decrease in assets value. In 2008, the weighted average rate of return of the mandatory funded pension scheme was -24%, which was partly counterbalanced by an increase by 14.8% in 2009.

In order to assure a continuous payment of state pensions, the government decided to temporarily suspend contributions to the mandatory funded scheme (both the individual contribution of 2% and the 4% share transferred from social tax) in the interval 1 June 2009 – 31 December 2010. The contributions to the funded scheme were partly resumed in 2011, when contributions of 1+2% were practiced. In 2012 the normal system of 2+4% will be reapplied.

The economic crisis and the associated decline in social tax revenues acted as a catalyst for implementation of long-run reforms that influence the pension system. Besides increasing the exit age that was approved in April 2010, there already on debates agenda the proposals of adopting a flexible retirement age, eliminating the special pension rights and introducing of occupational pensions.

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<sup>52</sup> Figures in this section were extracted from European Commission (2010), Interim EPC – SPC Joint Report on Pensions, Brussels, 31/05/2010, available at: [http://ec.europa.eu/economy\\_finance/publications/occasional\\_paper/2010/pdf/ocp71\\_country\\_profiles\\_en.pdf](http://ec.europa.eu/economy_finance/publications/occasional_paper/2010/pdf/ocp71_country_profiles_en.pdf)

The pension reform in Estonia, begun in 1998, changed the PAYG scheme and introduced new mandatory and voluntary funded components. The reformed system contributes to limit in the future public pension expenditure, but does not avoid the risk that persons with short professional careers may have insufficient resources to assure a decent subsistence at retirement.

The European commission qualified Estonia as a low risk country<sup>53</sup> as regards the long-term sustainability of public finance in the context of the ageing phenomenon. The replacement rates are projected to increase, in the long run, from a relatively low level, but will be anyhow the lowest in the EU. The mandatory funded scheme will somehow compensate the diminished replacement rate of the public pension system. Given the low replacement rates, insuring pension's adequacy will represent a major challenge, especially in the case of persons with very short professional careers. In the mandatory funded pensions system, solutions should be found which protect workers close to retirement against the potential volatility of financial markets.

Maintaining sound public finance, in accordance with the current budgetary plans, would help to limit the already low risks concerning long term sustainability of public finance, Estonia being thus well prepared to confront the demographic challenges.



## FINLAND (2004)

### GENERAL PRESENTATION

Finland, together with the Scandinavian countries – Denmark, Norway and Sweden, belongs to the so-called Northern social model. The distinguishing features of this model are linked to promoting equality, full employment, public responsibility and welfare state and to assuring pronounced income redistribution through transfers and progressive taxation. Social services in these countries are universally provided.

While inequality of disposable income in Finland remains among the lowest in the European countries, it has increased in recent years despite a substantial decline in unemployment rates since the 1990s recession. Like in most other EU countries this reflects rising globalisation and shifting demographics.

With a GDP/inhabitant of USD 34,526 and a total population of 5.3 million inhabitants<sup>54</sup>, Finland registers a total demographic dependency rate<sup>55</sup> of 52.6% in 2010<sup>56</sup>, an economic dependency rate of 34% in 2007, estimated at 47% for 2020<sup>57</sup>, and an old age dependency ratio of 25.7% in 2010<sup>58</sup>. The median age in Finland is 42.5 years<sup>59</sup>.

### PENSION SYSTEM

#### General structure and financing

Pension system in Finland consists of two types of schemes:

- An *earnings-related pension scheme* that tries to maintain a reasonable degree of income and

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<sup>53</sup> See 2009 Sustainability Report

<sup>54</sup> According to International Social Security Association, <http://www.issa.int/Observatory/Country-Profiles/Regions/Europe/Finland>.

<sup>55</sup> A measure showing the number of dependents (aged 0-14 and over the age of 65) to the total population (aged 15-64). It is calculated by:  $\text{=Number of Dependents/Population (ages 15-64)} \times 100\%$ .

<sup>56</sup> Source: Eurostat, EUROPOP 2008.

<sup>57</sup> Source: Commission Services, EPC (2009 Ageing Report).

<sup>58</sup> Source: Eurostat, EUROPOP 2008.

<sup>59</sup> Source: NationMaster.COM, <http://www.nationmaster.com/graph/>

- A *basic national pension scheme* that aims at guaranteeing a minimum income for pensioners with low wage or short working career.

These schemes are interdependent because the level of the national pension depends on the size of the earnings-related benefits.

Pension management in the private sector is delegated to private pension companies, pension trusts and pension funds.

The national scheme assures a minimum pension based on residence and can, after 40 years of residence, attain a monthly level of about 584 Euros for a single person (approximately 21% of the average wage). The amount decreases as the person's earnings-related pension increases with a phasing-out rate of 50%. The retirement age for the national basic pension is 65 years old but in certain circumstances the early retirement is allowed at 62 years old. The proportion of pensioners that receive only the national basic pension is decreasing. Since 1 January 2010 national pensions are financed only from general taxes. Before this date part of the costs were supported from employer contributions.

The earnings-related scheme is addressed to all employees (with no income ceilings) and the self-employed. The exit age is flexible between 62-68 years, accompanied by higher accrual rates for the last years of work: 1.9% a year between 53-62 years and 4.5% a year between 63-68 years instead of the standard accrual rate of 1.5%. The level of pension is determined on the basis of the salaries received during the whole professional career (since 2005).

The benefit calculation takes into consideration a life expectancy coefficient which reduces the monthly pension benefit according to increases in longevity. Persons from groups with higher life expectancy must work longer in order to compensate the impact of life expectancy coefficient.

Earnings-related pensions' financing represents a mix of a PAYG system and a pre-funded system based on pension contributions from both employers and employees. About  $\frac{3}{4}$  of the earnings-related pensions are financed through PAYG and the pre-funded scheme covers the rest. In 2009, the market value of the pension funds' assets represented 73% of GDP.

The national pensions are indexed with the consumer price index and the earnings-related pensions are indexed with a weighted index including 20% of wage and 80% of price evolutions.

Early retirement from activity was very widespread but the recent years access to early retirement schemes and minimum pensions has been largely reduced. At present it is possible to exit from activity at 60 years old by benefiting an unemployment pension<sup>60</sup> or by receiving a partial old-age pension.

The government and the social partners recently have decided that supplementary actions should be implemented in order to increase the average effective age by at least three years till 2025. Initiatives in the pension system were stimulated by the government through creating tri-partite committees which proposed measures for well being at work and improved transition from school to work and other additional reforms.

Given the large coverage of the statutory schemes, the relatively big replacement rates and the absence of a pension ceiling, the supplementary pension coverage is modest, even though the number of individual plans has recently increased.

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<sup>60</sup> The unemployment pension addressed to the persons born before 1950 has lost its importance and will be completely eliminated till 2014. The most frequent reason of early retirement is disability, with about 215,000 beneficiaries.

## **Sustainability, efficiency and performance**

Pension expenditures in Finland represent 10.8% of GDP<sup>61</sup>, which places the country slightly below EU27 average. Taking into consideration Finland's relatively young earnings-related system, the low basic pension and the reduced participation rate of old women in the labour market, poverty rate for population over 65 years is higher than EU average (23% as compared to 19%) and than population under 65 years old (23% as compared to 12%).

In 2008, the net and gross replacement rates for a theoretical worker retired at 65 years old after a 40 years contribution career were of, respectively, 69.5% and 61.5%.

The challenge confronted by Finland regarding the long-run sustainability of public finance (in the ageing population context) was evaluated by the European Commission<sup>62</sup> as at medium risk. The projected rise in long-term pension expenditures (3.3%) is higher than EU average (2.4%). Pension reform implementation contributed to mitigate expenditures increase. In addition, the great value of assets accumulated in the public pension system partially offsets the long-term budgetary impact of population ageing. In order to keep the benefits levels as *baby boomers*<sup>63</sup> exit the active life, the contribution rates are to increase from 22% at present to approximately 27% on 2025.

In Finland there is a company – Arek - specialized in services for the pension insurance sector. The company is streamlining its service structure continuously with the aim of improving cost efficiency and speeding up the development of existing services.

Based in Helsinki, Finland, Arek is enabling the Finnish pension earnings system to realize high performance through the design, delivery and ongoing management of a centralized registry for pension earnings. The new solution—whose funding is being shared by a consortium of Finnish pension insurance companies, the government and municipal pension organizations—has been developed to meet legislated pension standards that went into effect in 2007. The drive behind the government of Finland's pension legislation was the need to address the complexity of Finland's pension earnings system, emerging workforce shortages and increasing pension expenditures. In brief, the legislation encourages Finnish workers to have a longer working life: under the new legislation, Finnish workers will be able to first access their pensions between the ages of 63 and 68 only.

## **CRISIS IMPACT AND RECENT REFORMS**

The immediate impact of the crisis (2008) was a reduction by 16.4% (a negative rate of return) of the value of assets in the pension funds of the earnings-related system. To avoid the situation in which funds would have to lock in their losses by selling assets, the government relaxed solvency rules until the end of 2010 and recently extended this temporary provision till 2012. Unrecovered losses would have led to a contributions rise by about one percentage point. An average return rate of 15% in 2009 permitted however to the funds to recover great part of the losses.

And yet the financial crisis demonstrated the sensitiveness of the public pension system of the country to the financial markets volatility. Before the crisis outbreak, high returns have kept a relatively low level of contributions, an extra percentage point in long-run return being equal to about two percentage points in contributions. The contributions will grow, annually, between 2011 and 2014, by 0.4% percentage points.

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<sup>61</sup> Data linked to Finland's pension system were extracted from European Commission (2010), Interim EPC-SPC Joint Report on Pensions, Brussels, 31/05/2010, available at: [http://ec.europa.eu/economy\\_finance/publications/occasional\\_paper/2010/pdf/ocp71\\_country\\_profiles\\_en.pdf](http://ec.europa.eu/economy_finance/publications/occasional_paper/2010/pdf/ocp71_country_profiles_en.pdf).

<sup>62</sup> See 2009 Sustainability Report.

<sup>63</sup> Persons born during the demographic explosion produced after the second world's war.

Finland's labour market, which had attained an employment rate of 70%, has witnessed, because of the crisis, a deeper decline than EU average. In 2009, the employment rate of persons aged 15-64 years arrived at 68.3%, a decrease by 2.43 % as compared to 2008 (at the EU level the decrease was 1.3%, reaching 64.6%).

The crisis influenced first the export oriented sectors, in which male labour force dominates. Women, employed mostly in social and healthcare sectors, were also affected, due to the fact that these fields depend on the public financing, which deteriorated a lot during the crisis. Budget deficits worsened in 2009 and 2010.

The 2009 Ageing Report estimations<sup>64</sup> show that, in the crisis context, pension expenditures will increase further unless corrective measures are taken.

Through the comprehensive reform applied in 2005, which has introduced the life expectancy coefficient and strong financial incentives for active life prolongation, Finland managed to create a solid basis for achieving the equilibrium between adequacy and sustainability in the pension system. And yet the country is still far from realizing a corresponding balance between the number of working years and years spent in pension and long term success depends on a significant rise of the effective exit age.

In spite of the last decade substantial improvements, employment rates of old workers and the retirement age are low in comparison with the Scandinavian standards. Using early exit from activity through unemployment and disability benefits is still rather widespread. This is the reason why government, together with the social partners, should discuss measures for rising the exit age and active life duration.



## **FRANCE (1952)**

### **GENERAL PRESENTATION**

The population is over 61.3 million persons, of which 27.575 million are included in the labour force, the employment rate being high, i.e. 91%. The population aged over 65 years represents 16.4% the demographic dependence rate in 2007 being 36.5%. In 2010 GDP per capita was 22% higher than the EU-27 average, with a slight variation during the crisis period<sup>65</sup>. The standard retirement age is 60 years. The average life expectancy is almost 79 years for men and 85 years for women.

The social model is continental; similar to that in Belgium as in the field of pensions a strong involvement of the social partners being felt, in particular in organizing and managing occupational pension funds, which are mandatory.

### **THE PENSION SYSTEM<sup>66</sup>**

The French pension system may be characterized as generous and costly, with a weak administrative control, widely distributed between social partners, making the system resistant to substantial reforms.

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<sup>64</sup> See Table 76 in 2009 Ageing Report, p. 239.

<sup>65</sup> <http://www.oecd.org/dataoecd/63/62/42565911.pdf>

<sup>66</sup> Legislation in force in 2010: 1945 (Ordinance No. 45-2454 of 19 October, social insurance scheme for non-agricultural professions); 1975 (Law No. 75-534 of 30 June, on handicapped persons), with 2005 (Law No. 2005-102 of 11 February, on rights and chances, equality, participation, and citizenship of handicapped persons) amendment; 1996 (Ordinance No. 96-344 of 24 April, on social security organization); 2001 (Law No. 2001-647 of 20 July, on dependency benefits); 2003 (Law No. 2003-775 of 21 August, on pension reform); 2006 (Law No. 2006-1640 of 21 December, on retirement reform); and 2009 (Amendment to the Social Security Code allowing for combination of disability benefit and gainful activity).

Contributions paid to the system include: 6.65% of the income but no higher than 2885 Euros/month and 0.10% for the subsistence allocation. The unemployed with benefits higher than the minimum wage pay 11.37% of the indemnity as old-age benefits. Voluntary contributors pay quarterly contributions according to a schedule of earning instalments (the same maximum insured earnings as for employees). The old-age pension and part of the survivor pension are taken from the sickness and maternity fund.

Employers pay lower contribution for wages less than 1.6 minimum wage, and contributions for new employees less than 23 years of age can be returned under certain conditions.

The pension system structure<sup>67</sup> includes:

- Pillar I – Means-tested minimum pension scheme; the social insurance pension covering old-age pension, early pension and survivor pension. There is a large number of schemes of pensions for various activity sectors or occupational groups that supply pensions related to earnings, mandatory “second tier” supplemental funds, which add to the pension. In 2004 a balancing was achieved for the level of pensions granted through these schemes. Sickness pensions are supplied by health insurance systems.
- Pillar II – voluntary occupational schemes for private sector employees (PERE and PERCO) were implemented by the 2003 reform and cover about 250 thousand persons with total earnings of 769 million Euros in 2006; an old occupational pension fund (Art. 82 and 83, and Art. 39 of CGI) that covers 2.7 million persons and a total contribution fund of 59 billion Euros in 2006; the occupational scheme for the self-employed (Law 94 and 97) that covers one million persons and includes contributions amounting to 15 billion Euros in 2006.
- Pillar III – individual voluntary pensions (introduced by the reform of 2003) that cover 1.8 million individuals and include total contributions of 2.3 billion in 2006; individual voluntary schemes for public employees (PERFON, COREM etc) cover 816 thousand individuals and reach 11 billion Euros in 2006.

The General Regime is financed by a combination of contributions related to wages and incomes from other taxes. In 1999, (under the Lionel Jospin Government) a reserve fund was created for financing the future costs with pensions “Fonds de Réserve pour les Retraites,” (FRR), from any surplus of the pension funds to which half of the saved amount from fiscal incomes of the state is added for which it was estimated to create a reserve up to 2020 of about 10% from the GDP of France in 2002<sup>68</sup>.

Currently, the pension system includes besides to the public pillar and mandatory occupational pensions (ARRCO and AGIRC) voluntary occupational pensions, individual pensions, savings or investments. The total investment funds represent 1.1% of the GDP.

The potential average pension as percentage of the last earnings is 40% of the public pillar and another about 15 percent from the mandatory occupational pensions. These benefits can be completed by incomes from mandatory occupational pensions or from individual savings accounts.

### **Mandatory occupational pensions**

There are two types of mandatory pensions, ARRCO for workers and AGIRC (*Association générale des institutions de retraites des cadres*) for public employees and managers, of the DC-type; they are the outcome of collective negotiations, based on the PAYG principle and managed by pension institutions.

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<sup>67</sup> [http://ec.europa.eu/economy\\_finance/publications/publication14992\\_en.pdf](http://ec.europa.eu/economy_finance/publications/publication14992_en.pdf)

<sup>68</sup> [http://csis.org/files/media/csis/pubs/pension\\_profile.pdf](http://csis.org/files/media/csis/pubs/pension_profile.pdf)

The contribution ceilings are different: a) for the first fund, from 6% to the ones with incomes under the social security threshold (established in 2007, for instance, at 32184 Euros) and up to 16% for those with incomes up to three times the social threshold; b) the second fund consists of contributions of 6% for incomes under the public pension scheme threshold, and up to 16.24% of incomes up to eight times the social security threshold. The contributions are changed into pension points by dividing the contribution to the cost of one pension point annually adjusted. The value of a pension point is determined by the trade unions and takes into account the evolution of average earnings and inflation.

The integral pension can be paid up to the age of 60 years, if all conditions required by the public system are met. In general, annuities are paid, but other forms can exist as well, under certain conditions, for instance, as lump sum.

The companies are compelled to pay an indemnity (*Indemnité de Fin de Carrière*) of a defined amount on retirement.

The contributions are fiscally deductible and the pensions taxed as incomes.

Mandatory occupational pensions (*Plan d'épargne retraite*) constituted in 2003 as PERCO were previously savings plans at company level. For the savings plans there is no participation limit for PERCO it is 10%. The employers must provide for employees at least 3 collective investment funds, managed by banks or insurance companies, with different portfolios. All employees with a length of service of over 3 months within the company can participate to these systems.

Contributions can be up to 25% of the gross yearly wage to which the employer adds up to a ceiling of 5149 Euros per year, or 3 times the contribution of the employees. The contribution of the employer is mandatory, without providing for a minimum ceiling.

The PERCO schemes cover a larger number of employees than the companies' savings plans.

PERCO can be organized as DB and DC and the benefits are paid as annuities or lump sums, not before 60 years of age (the insurance schemes can grant the amounts earlier, on request).

The amounts up to 4600 Euros for employees and the contributions of the employers up to 2300 Euros (the difference up to 4600 is taxed by 8.2% and paid by the employer) are fiscally deductible. The voluntary contributions of the employees are taxed at the standard level, and the benefits of pension-type are not taxed and social contributions are not calculated.

There are also other arrangement for old-age savings, as supplementary occupational pensions – insurance or savings accounts managed by insurance companies, mutual funds, DC pension funds and supplementary pension institutions.

The individual savings plans (*PERP-Plan d'épargne retraite populaire*) ensure supplemental old-age funds under the form of annuities payable once the public pension is constituted or after the age of 60 years. The participation is voluntary and does not depend on the employment status of the individual. They are payable as annuities or lump sums and cannot be released before pensioning, and the insurer must guarantee the progressive growth of the benefits, but the portfolio includes increasingly safer investments closer to the retirement age – two years before retirement safe investments must reach 90% of all assets held.

The contributions are deductible up to a ceiling of 10% of the earnings of the preceding year, or up to 8 times the social security ceiling. If the benefits are paid as lump sums, they are taxable in a single instalment or distributed over a period of up to 5 years. If the benefits are paid as annuities, the taxation is similar to the one on amounts paid from the ARRCO/AGIRC systems.

The institutions for managing pensions are private, non-profit and established by collective contracts with the purpose to implement the ARRCO or AGIRC schemes, but not both at the same time. The system is widely developed: ARRCO has about 18 million active members and



10 million beneficiaries, with 36 pension institutions; AGIRC has 3.6 million active members, 2.1 million beneficiaries and 23 institutions.

The PERCO plans are managed by 60786 companies (first quarter, 2008).

## **RECENT REFORMS**

As of 2002, a series of adjustments were made in the system, such as: increasing the standard period of contribution from 37.5 years to 40 up to 2008, and to 41 years up to 2012; pension indexing to inflation and not to the average wage, diminishing the replacement rate of the wage with pension.

Within the EU, the French are the most attached citizens to the PAYG system, regarding it as a symbol of social solidarity and showing reticence towards initiatives of shifting to a model closer to the Anglo-Saxon one.

2008- The reform of the special pension schemes with the purpose of harmonising the main parameters of the existing schemes, but still not reformed in 2003, and ensuring equality between French citizens at the time of retirement. The special schemes were initially created for meeting the demands specific to some jobs, trades or professions – at the time of the reform they included 1.1 million pensioners in payment, and 500 thousand employed contributors. The advantages referred to a lower retirement age (already even under 60 years), for a shorter contribution period (less than 40 years required by the general system) and the calculation formula for different pensions. Due to the increasing difference between contributors and beneficiaries, many of these schemes faced deficit (which totalled 5 billion Euros in 2007). The reform affected, among others, 3 large pension schemes: la Société nationale des chemins de fer français, la Régie autonome des transports parisiens and the pension scheme of the gas and electricity industry. The reform aimed at savings of 2 billion Euros on long term. The reform seeks among others: increasing the contribution period from 150 to 160 quarters, also for the pension scheme of public employees; a bonus for those extending their activity period; indexing to inflation the scheme for public employees. The other differences were renegotiated with the social partners.

2009 - measures for managing the transition to retirement by promoting part-time employment and access to labour market also after the retirement age, up to 70 years of age (with the obligation of retirement at the age of 65, and calculating all pension rights), eliminating the wage earnings limit for those cumulating integrally pension and wage; increasing the supplementary bonus per year for pension by 5% for those continuing to work after the age of 60. The measures seek to counter-act accelerated demographic ageing (the ratio of employees to pensioners will increase from 2.2 to 1 in 2005 and from 1.5 to 1 in 2050).

2010 - Pension reform, new legislation which includes as major measures:

- increasing the retirement age from 60 to 62 up to 2018, also for public employees;
- the minimum age for payment of integral pension is 65 years and will increase as of 2016 up to 67 years till 2023 (with certain exceptions – mothers of more than 3 children, etc);
- increasing the standard contribution period to 41 years;
- increasing the contribution share for insured incomes over the maximum level;
- increasing taxation on high pensions;
- also the dividends paid by companies will be taxed;
- the contribution share for public employees will increase from 7.85% to 10.55% up to 2020.



## GERMANY (1952)

### GENERAL PRESENTATION

GDP per capita 2010 (current prices)	30600.00
Total population at 1 January 2011	81,748,892
Expenditure on social protection (as % GDP) 2009	31.37 (interim data)
Expenditure on pensions (% GDP) 2009	13.14 (interim data)
The importance of private pension funds in the total economy (% of GDP) (2010)	5.2
Monthly minimum wage	Collective contracts
Median age 2010	44.2
Old-age-dependency ratio ( %) 2010	31.40
Projected Old-age-dependency ratio (%) 2060	59.89
Total age dependency ratio 2010	51.55
Share of the total population aged 65 years or over, 2010	20.57
Share of the total population aged 65 years or over, 2060	32.47

Source: Eurostat

### Characteristics

In 2008 Germany allocated approximately 12.28% of GDP on public pensions, corresponding to a decrease of 0.69 percentage points compared to its 2000 level, but still higher than the average pension expense on EU of 11.66% of GDP in 2008. This percentage is equivalent to 3302.28 Euros (in 2000 prices) per capita, compared to the EU average of 2551.27 Euros. The last recorded value for the aggregate replacement ratio was 0.47 in 2009 (according to Eurostat), below the EU average of 0.51. The poverty threshold in Germany is estimated at 10775 PPS in 2009 (according to Eurostat), reflecting an increase with 27% from the level of 8484 registered in 2000. The population situated below the threshold of poverty as defined by Eurostat (60% of median income) represented 20% of the total population in 2009. In that same year the percentage of the elderly (people aged over 65) situated below the poverty line was 15%, below the EU average (17.88% in 2009). While in the European Union the median income of the elderly equals about 88% of the median income for the rest of the population, in Germany this percentage is similar (around 88%). The average exit age from the labour market is 62.2 years, above the EU average (61.4 years). The German government debt represented 83.2% of GDP in 2010 (EU average is 80%), up by 23.5 percentage points as compared to the value registered in 2000. While the government deficit in the European Union represented 6.4% of GDP in 2000, in Germany it is lower, namely 3.3% of GDP.

### PENSION SYSTEM (general structure)

The German pension system consists of three pillars:

- **Pillar I** (mandatory and public system)
- **Pillar II** (voluntary and privately managed) consists of occupational schemes offered by a variety of sponsors and subsidized by tax cuts
- **The third pillar** comprises voluntary private pensions.

**The first pillar** (mandatory and public) is divided into: mandatory statutory pension insurances for employees (blue collars - *Arbeiter* or white collars - *Angestelltenversicherung*); pension

system for farmers (*Altershilfe für Landwirte*); a pension system for civil servants and judges - funded from fees (*Beamtenversorgung*) and several professional insurance schemes.

Statutory pension insurance (*Gesetzliche Rentenversicherung, GRV*) covers all German employees (around 82% of total employment), but only certain categories of self-employed. Thus, those professionals who are self-employed and members of professional chambers are covered by occupational institutes - funded by contributions (*berufsständige Versorgungswerke*), while artists, artisans, publicists are mandatorily covered. Other categories of employees who are self-employed can join GRV voluntarily.

Pillar I is funded by PAYG type contributions with defined benefits and it has a contingency reserve (*Nachhaltigkeitsrücklage*) between a minimum of 0.2 and a maximum of 1.7 times the monthly expenses. The formula for calculating benefits is based on a points system that is similar to that of a defined contribution system. Thus: Pension = APV\*PP\*PF, where APV is the real value of the pension (this amount differs in the eastern provinces from those in the west), PP = personal points, and PF = pension factor. A personal point indicates the proportion of a person's salary to the national average wage and the average takes into account the entire period of work.

The real value of pensions is calculated / indexed to gross wages, but also depends on two other factors: the changes in contribution rates in the mandatory and the subsidized voluntary pension systems, and a sustainability factor that makes the connection between these adjustments and the dependence factor. These factors that limit indexation are meant to keep contribution rates under control. In 2001, for example, the increase was limited to 20% by 2020 and to 22% by 2030.<sup>69</sup>

In 2008/2009 total contributions amounted to 19.90% and were equally divided between employer and employee. The insured person thus contributed:

- With 9.95% of his monthly income,
- Nothing, if his monthly income is less than 400 Euros per month (but voluntary contributions can be made);
- A reduced contribution, if the monthly income is between 401 and 800 Euros.

There is an annual ceiling of 63,600 Euros (in the eastern provinces 54,000 Euros). Self-employed also contribute with 19.9% of their monthly income. The minimum monthly contribution is 79.60 Euros and the maximum is 1054.70 Euros (or 895.50 in the east) or a lump sum of 494.52 Euros (417.90 Euros in the east). The employer normally pays 9.95% of the gross monthly salary and 15% of salaries below 400 Euros.

The minimum contribution period is of 5 years. The legal retirement age will gradually increase (with one month per year until 2024 and two months per year thereafter) between 2012 and 2029 from 65 to 67 years for both men and women. Early retirement is possible from age 63 to 65 (67 since 2029) if the beneficiary has accumulated a period of 35 years of contributions. However, early retirement benefits are permanently reduced by 0.3% per each month of absence from the statutory retirement age up to a maximum of 14.4% (the problem is that low income and unskilled workers are often forced to resort to early retirement and are the first affected by these permanent cuts). Since 2012, an exception will be made for pension with 45 years of contribution (consisting of employment, self-employment, time devoted to child-raising up to the age of 10, but not of periods of unemployment) and the minimum age of 65. Postponing retirement after age 65 (67) brings a gain of 0.5% for each additional month of work.

Women are relatively well protected (both during child rearing, care for others, and in case of divorce - because they share the rights with ex-husband), as are people with disabilities. On the other hand, the unemployed, especially those who seek long-term unemployment are not as well

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<sup>69</sup> [http://www.ose.be/files/publication/2010/country\\_reports\\_pension/OSE\\_2010\\_CRpension\\_Germany.pdf](http://www.ose.be/files/publication/2010/country_reports_pension/OSE_2010_CRpension_Germany.pdf)

protected. Credits for apprenticeship and those for higher education have been drastically reduced.

With regard to the unemployed, their coverage by a pension scheme has deteriorated since the adoption of the Hartz IV law. Thus, unemployment benefits were paid before 2006 for a period of 32 months, and after (*Arbeitslosengeld I, ALG I*) for no longer than 12 months (24 months if the age is above 55 years). When this period ends, an unemployed person is receiving ALG II. Since July 2009, this provides a base of 359 Euros for contributions (which generates benefits right of less than 5 Euros per month).

**The second pillar** (voluntary and privately managed) is an occupational scheme offered by a variety of sponsors and subsidized by tax cuts. German employers must provide at least one type of occupational pension (*Entgeltumwandlung*) and they have five different options: they can manage the system themselves (*Direktusage*) through security institutions (*Unterstützungskasse, Pensionskasse or Pensionsfond*) or they can provide for an insurance policy directly with an insurance company on behalf of their employees (*Direktversicherung*).

The Federal Institute for Financial Services (*Bundesanstalt für inanzdienstleistungsaufsicht, BaFin*) monitors this system.

Although Germany is said to be "a newcomer" in the world of private pensions, life insurance has been widely adopted. Supplementary pensions have been designed especially for employees with higher incomes, male, coming from large companies, and they are used for two purposes: as a human resource management tool to attract highly skilled workers and as a cheap way of financing by using accounting provision that are exempt from taxes.

Reduced development of occupational pensions is due to relatively harsh regulations. Before 2001 only defined benefit systems had been allowed, and employers had strict obligations of information, administration, and various tax requirements. Indexing was mandatory, as well as reinsurance against insolvency. Rules of eligibility (10 years of contributions and contributions for a period of 35 years) were a disadvantage for women.

The Riester reform of 2001 changed most of the rules. This gave employees the right to require employers to allocate a portion of gross income (exempt from taxes and contributions) to occupational schemes. However, due to the incurred losses this provision was eliminated in 2009. Minimum vesting periods have been reduced in order to help women: 5 years of participation and 30 years for the contribution period.

Finally, **the third pillar** consists of voluntary individual plans, subsidized, which were encouraged by the Riester reform of 2001 and Rürup reform in 2004. The so-called *Riester-Rente* serves to encourage low-income workers to save. Government recommends that 4% of the gross salary to be invested in these plans (and granted tax subsidies for contributions). There are several conditions which make the *Riester-rent* less attractive (it was simplified in 2005): a guaranteed rate of returns, small commissions, consumer information requirements.

## REFORMS

Since the late 1980s and especially after the reunification, the debate on pensions in Germany focused on fiscal aspects of the system and mainly on the following two issues: reducing the financial burden for the state and maintaining a stable rate of future contributions by reducing non-salary costs.

Since then, a series of reforms weakened the redistribution feature of the German pension system and abandoned the principle of maintaining adequate income to stable contribution rates, leading to a decoupling of the pension policy from the labour market, which is becoming more flexible, but also poorer. In particular, the time periods spent out of the labour force (care for the elderly

or children, unemployment, military service, higher education, disease, disability) are treated very differently.

Since the early 2000s several attempts were successfully made to supplement public benefits needs with several occupational and individual savings plans (Riester and Rürup reforms in 2000 and 2004). These measures have worked only in syndicated sectors under collective agreements. Therefore, Germany has gone from a (professional fragmented) system which protects individuals from social exclusion to a (fragmented sector) system whose results are subject to random variables and which leaves open the possibility of old age poverty.

Germany has recently changed the law on social assistance. For people with low earnings, including pensioners, benefits are designed to guarantee a basic income. In 2006, it amounted to 8172 Euros per year in the western lands, including benefits for housing and fuel, or the equivalent of 19.3% of the average wage.



## **GREECE (1981)**

### **GENERAL PRESENTATION**

In 2010 Greece recorded a GDP per capita of 20 400 Euros. The rate of economic dependence of Greece in 2010 was 28.4%. UN estimates for the same year a demographic dependency rate of 38.1%, being the lowest value since the 1950s to the present. The median age in Greece is estimated by Eurostat to 41.7 in 2010.

### **PRINCIPLES AND CHARACTERISTICS**

Greece, along with Spain, Portugal and Italy are characterized by Sapir (2006) according to a Mediterranean European Social Model (MSE). The features of this type of system include large expenditures on pensions and social protection, early retirement projections and reflect the social /cultural family-centred system of these countries. However, due to the financial crisis and the increasingly problems of Greece recorded in recent years, fiscal policy no longer reflects entirely the theoretical characteristics of Sapir set for this group of countries.

In Greece, social protection expenditure (SPE) recorded a sustained growth in the last decade, evolving from 2315.97 Euros (2854.21 PPS) per person in 1997 to 5446.1 Euros (6048.16 PPS) per person in 2008<sup>70</sup>. Social protection expenditure in Greece increased to 27.96% of GDP in 2009, thus maintaining a level comparable with other European countries, the EU average being 29.5%<sup>71</sup>. To these it corresponds a level of general government expenditures (GGE) of 50.6% of GDP in 2008, 53.8% of GDP in 2009 and 50.2% of GDP in 2010<sup>72</sup>. In contrast to the Mediterranean social model, social inequality persists in Greece, registering a 33.1 Gini indicator value in 2009<sup>73</sup>. It falls above the EU average of 30.4 in 2009. In 2011 the gross minimum wage in Greece is 862.83 Euros per month, registering a substantial increase compared to 1999, when the gross minimum wage was 356.72 Euros<sup>74</sup> per month. Thus, despite financial difficulties in recent years, Greece maintains a superior minimum wage compared too many of the other Member States.

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<sup>70</sup> Source: Eurostat

<sup>71</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>72</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>73</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>74</sup> Source: Eurostat (last updated on November 8, 2011)

## PENSION SYSTEM

### *General structure*

The Greek pension system is constituted mainly of public pension pillar. As for Greece, this type of generous coverage of the state system is in accordance with the Mediterranean MSE. There is the option of voluntary occupational pensions on the market, but they are less significant. A high replacement rate and permissive traditional rules regarding early retirement (especially for women) have created a great pressure on the Greek public pension system, and therefore on public finances of this country.

The Greek pillar I is one of the most complex in Europe. Thus, it is made up of three different pension structures: primary pension based on income, additional pension based on income and minimum pension. The system of financing is the classic PAYG, covering both public and private sector employees and also self-employed workers. The contribution levels vary according to activity field. Normally, the employee's contribution is 6.67% and the employer's is 13.33% of the gross income. In particularly dangerous occupations, the contribution to pension increases to 8.87% for employee and 17.73% for employers<sup>75</sup>.

More than 130 separate funds currently offer coverage for primary and supplementary pension<sup>76</sup>. Depending on fund, different benefit schemes are applied to different occupational sectors. The new reforms involve reduction in number and administrative structure of pension funds in a substantial manner. The most important fund for private sector employees is IKA (Social Insurance Institute), which covers more than 5.53 million employees. Employees in the public system are paid directly from the state budget.

### *Funding*

The normal retirement age in Greece is 65 both for men and women. In order to retire with full benefits at this age, people are required to have accumulated at least 4,500 days of contributions in advance, which means 15 years of experience in the labour market<sup>77</sup>. Workers who have made 11,100 working days, which means 37 years in the labour market, can retire with full benefits, regardless of age. The minimum social pension requires 15 years of work experience.

### *Sustainability & Efficiency*

Analyzing the adjustment needs of the current balance in order to meet budgetary constraints, Greece meets a sustainability gap of 14.1% of GDP, being situated well above the EU average of 6.5% of GDP in 2009<sup>78</sup>. Thus, Greece is shown not to be sustainable on a long term and with a high risk in terms of stability of public finances. The adjustment required in order to stabilize the debt ratio is positive (2.6% of GDP), but below the European average of 3.3% of GDP. In contrast, long-term costs of an aging population, 11.5% of GDP, exceeds by far the EU average of 3.2% of GDP. What mainly contributes to the costs of population aging is the high increase of public pension expenses, estimated at 12.5 percentage points by 2060 (compared to 2010). However the most worrying aspect that threatens sustainability on medium and long term, is public debt. The latest estimations show that its value is 142.8% of GDP in 2010, above the predictions of 108% and way below the EU average of 80%, or criterion of the Maastricht Treaty. It records, for Greece, the highest value throughout Europe.

Poverty limit in Greece is estimated at 7578 PPS in 2009, according to Eurostat, scoring an encouraging growth compared to the value of 4621 PPS in 1999. However, this limit was reached in 2009 by 19.7% of the population of Greece. In addition, as a measure of inadequacy

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<sup>75</sup> European Commission (2010) Joint Report on Pensions

<sup>76</sup> Allianz Global Investors, Pension Funds Online

<sup>77</sup> OECD (2011) Pensions at a glance 2011: Retirement-income systems in OECD and G20 countries

<sup>78</sup> European Commission, Economic and Financial Affairs (2009) EU Sustainability Report

of the Greek pension system, the poverty limit was reached by 18.4% of pensioners in 2009, being still an improvement over the situation in 2004 when 28% of pensioners reached the poverty line.

Regarding the benefit rate of the Greek pension system, it reveals a different situation from most European countries: public pension system develops, while the private pension system contracts. The benefit rate of public pension system in 2007 was 73, estimations being even more positive and, by 2060, expecting an increase of 29% and reaching 80. On the other hand, when we look at the rate of pension benefit as a whole (public and private), we notice a decrease of benefit rate, of 8% by 2060, reaching around 57. The replacement rate in Greece was 0.41 in 2009, below the European average of 0.51.

## **RECENT REFORMS**

As a result of the financial crisis and increased difficulties faced by Greece, in June 2010, the government accepted, despite massive popular protests, a legislative package which reforms the unsustainable pension system. This reduces pension benefits, their formula taking into account the average incomes throughout their entire working life, instead of taking into account only the last salary, as it was previously. The number of years of contributions increases from 35-37 to 40, and the retirement age for men and women equalizes to 65 years. The survivor's pension of the adult children of civil servants and bank employees is cut. The state funds that manage pensions will restructure by 2013, their number being reduced to only 3<sup>79</sup>.



## **HUNGARY (2004)**

### **GENERAL PRESENTATION**

Hungary recorded in 2010 a GDP per capita of 9800 Euros, considerably below the European average of 24 500 Euros. Hungary's economic dependency rate in 2010 was 24.2 %. UNO estimates for the same year a demographic dependency rate of 59.3%, the lowest scoring from the 50's to the present. Median age in Hungary is estimated at 39.8 in 2010. The average income is 2.34 million HUF or 13 600 USD (OECD 2011).

### **PRINCIPLES AND CHARACTERISTICS**

Hungary, like most new EU Member States, is not captured in the categories of European social model (MSE) proposed by Sapir (2006) - Northern, Continental, Anglo Saxon and Mediterranean. MSE evaluation in the countries of Eastern Europe (Neesham and Tache 2009) did not lead to the outline of a specific model for this area, but to the distinguish of each country's trends towards continental MSE or the Anglo-Saxon (liberal). Thus, relevant indicators shape the social policy of Hungary as being inclined towards continental MSE- a high level of public expenditure (especially in social spending) in order to prevent social inequality, a high degree of protection in the labour market and increased tax.

In Hungary, social protection expenditure (SPE) recorded sustained growth in the last decade, evolving from 913 Euros (1975.1 PPS) per person in 1999, to 2406 Euros (3693.4 PPS) per person in 2008<sup>80</sup>. Social protection expenditure in Hungary increased by 2 % compared to 1999, reaching 22.7% of GDP in 2008. To these it corresponds a level of general government expenditures (GGE) of 49.2% of GDP in 2008, 51.4% of GDP in 2009 and 49.5% of GDP in 2010<sup>81</sup>.

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<sup>79</sup> Allianz Global Investors, Pension Funds Online

<sup>80</sup> Source: Eurostat

<sup>81</sup> Source: Eurostat (last updated on November 8, 2011)

The budget expenditures seem to give good results in terms of improving social disparities, because Hungary recorded in 2009 the lowest value of the Gini Index in recent years– 24.7%<sup>82</sup> Hungary's Gini index is also below the EU average of 30.4% in 2009 .In addition, in 2011 the gross minimum wage in Hungary is the equivalent of 280.63 Euros per month by enrolling in a upward sustained trend since 1999 ,when the monthly minimum gross wage was equivalent to only 89.15 Euros.

In contrast with classic continental model, Hungary recorded in the last two years a decrease of 5 percentage points of employers' social contributions. This measure can be due to the change of ruling parties, in 2010 elections being won by centre-right Fidesz union. Also, once in 2005-2006 they reduced VAT from 25% to 20%, now it returned to the initial rate of 25%<sup>83</sup>.

## **PENSION SYSTEM**

### General structure

Since 1998 Hungary has undergone a series of reforms of its pension system, and currently reached to combine all three specific pillars. A recent study (Milliman 2010) suggests that the Hungarian pension system should be structured on four pillars instead of three. Thus, they describe the voluntary private pension pillar (traditionally Pillar III) as being divided on the one hand composed of voluntary pension funds (VPF's), introduced in 1993 that may be established by employers or other organizations, and individual voluntary pension accounts (NYESZ's), introduced in 2006<sup>84</sup>. This new system includes both defined benefit schemes (DB), state (pillar I), and also defined contribution schemes (DC) under private funding (Pillar II).

However, workers with advanced age still have the option of PAYG classic state pension system. As regards the second pillar, there is not the option to abandon the system of contributions to the fund. But members can choose to change the fund to which they make pension contributions. There is no fee for the enrolment to a mandatory private pension fund. Nowadays, the monthly defined contribution (DC) of the employees is of 8% of gross salary, which represents an increase from 6% (1998- 2002) or 7% (2003)<sup>85</sup>.In the new mixed system it is also maintained the BD system, which is characteristic to Pillar I ,derived from the PAYG system in which employers' contribution is 24 % and employees' is 1.5%.Thus,the total pension contribution of gross salary is 33.5 %.

### Funding

Hungary currently allocates 10.92 %<sup>86</sup> of GDP for the expenditures on state pensions, which implies an increase of about 2 percentage point over the past 10 years. The last recorded value of the replacement rate was 0.62, in 2009 according to Eurostat. In Hungary, the guaranteed minimum pension is equivalent to (means-tested) social assistance.

### Sustainability & efficiency

Analyzing the adjustment needs of the current balance to meet budgetary constraints, Hungary presents a negative sustainability gap of -0.1% of GDP placing itself well below the EU average of 6.5% of GDP<sup>87</sup>, in 2009.Surprisingly, this negative value is not due to necessary adjustments because of population aging costs, as these show a value of 1.5% GDP, below the EU average of 33% of GDP. More likely, the sustainability deficit for Hungary is generated by the public debt

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<sup>82</sup> Source: Eurostat (last updated on November 8,2011)

<sup>83</sup> Source: European Commission (2011) Taxation trends in the European Union: Data for the EU Member States, Iceland and Norway

<sup>84</sup> Milliman Research Report (2010) Private Pension Systems in Central and Eastern Europe

<sup>85</sup> European Commission (2010) Joint Report on Pensions

<sup>86</sup> Source: Eurostat (last updated on October 21,2011)

<sup>87</sup> European Commission, Economic and Financial Affairs (2009) EU Sustainability Report



that they record - 80.2 % of GDP in 2010<sup>88</sup>, way above the 60% of GDP limit imposed by EU to Member States. However, the sustainability report of the European Commission in 2009 records a encouraging progress of Hungary, estimating not only the improvement in its budgetary position, but also a reduction in the cost of long-term aging.

The poverty limit in Hungary is estimated at 4103 PPS in 2009, according to Eurostat, scoring an encouraging increase from the value of 2747 PPS in 2000<sup>89</sup>. However, this threshold was reached in 2009 by 12.4% of the population of Hungary.

## **RECENT REFORMS**

According to the evaluations made by World Bank (2007) and European Bank of Reconstruction and Development (EBRD) (2010), Hungary faces the problem of aging population with a range of economic and institutional reforms, whose performance is appreciated by these international bodies. Since 1998 it has become a valid option for employees to join a mixed pension system that combines pension pillar I (public) with pillar II (mandatory private). During this period of transition from the classic PAYG system to a mixed system, appreciatively 50% of current employees have chosen to make the transition to the latter. Within this mixed system, 75% of the final benefit will be derived from pillar I, the rest being derived from contributions made to Pillar II.

Beginning with 2009, Hungary adopted a new package of laws for private pension system. Thus, the fees for management of pension's funds could no longer exceed 0.8 %, between 2009-2010, 0.7% in 2011, intending that in 2012 the ceiling would reach 0.6%, in 2013 to reach 0.5%, and in 2014 to 0.4%. Tax deduction is also shaped in such a way to encourage private pension's deposits. The qualification for tax deductibility is conditioned by a maximum annual individual income of 3.4 million HUF(12 878 Euros). Thus, 25% of the contribution paid to a mandatory private pension fund, based on contracts, are deductible ,but the amount deducted by an individual may not exceed 100 000 HUF (378 Euros) per year.

The retirement age suffers a gradual increase toward the ceiling of 65 years for both genders (until 2022). The balancing to a common ceiling of 62 years was reached in 2000 for men (compared to a previous retirement age of 60 years), and in 2009 for women (compared to a previous retirement age of 55 years old). From 2009 ,the option of early retirement is possible for men at the age of 66 years, and for women at the age of 59 years. According to the new laws, early retirement age will also be gradually increased up to the ceiling of 63 years. Thus, early retirement is allowed in Hungary two years before the standard age, with a decrease of 0.3% per each lack month until the fulfilment of the actual retirement age. The postponing of retirement is also possible, increasing the value of the pension income by 0.5% monthly.



## **IRELAND (1973)**

### **GENERAL PRESENTATION**

Ireland is a small EU country with a population of 4339 thousand inhabitants of which the labour force represents almost 2202 thousands. GDP per capita in 2010 was of 34900 Euros, on decrease by 20% against the year 2007, yet by 43% higher than the EU-27 average. It is a relatively young country, with a population aged over 65 years of only 10.8% and an economic

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<sup>88</sup> Source: Eurostat (last updated on October 21.,2011)

<sup>89</sup> Source: Eurostat (last updated on October 21,2011)

dependence rate of 21.4% (2007)<sup>90</sup>. The standard retirement age is 65 years for both genders. The average life expectancy is 78 years for men and 83 years for women.

The social model combines the “active welfare state” specific to continental Europe with the liberal Anglo-Saxon model, which before preceding the crisis proved efficient. Ireland enjoyed a prosperity period, by creating new jobs, increasing productivity and social expenditures.

## **THE PENSION SYSTEM<sup>91</sup>**

The pensions are generated by the public and private systems, and the conversion rate on retirement being about 35% of the public pillar and a complement of about 70% of occupational DB and DC pensions (with a somewhat lower transfer rate for the DC plans). The incomes can be completed from other sources, like individual pensions, savings or investments.

The insurance system covers individuals between 16 and 65 years of age, with weekly earnings of minimum 38 Euros, and self-employed with annual earnings of at least 3174 Euros.

The contributions are paid by insured individuals with shares determined by earnings instalment and insured categories, the maximum instalment being taxed with 5%. A similar calculation is made for employers, up to a share of 10.75%. The contribution periods are of minimum 260 weeks (increasing to 520 weeks after April 2012 for newly entered into the system) and maximum, on average, 48 weeks per year starting in 1979 and up to the time of reaching the age of 66 years.

The pension system structure<sup>92</sup> includes:

Pillar I: a) the minimum pension and the insurance pension for the length of service for non-contributors; b) the social assistance schemes; the insurance pension in fixed amount and benefits depending on age (for age limit, for transition period, invalidity, survivor, disabilities); c) public pension schemes (occupational).

Pillar II: voluntary occupational schemes for the private sector (31.6% of all pensioners in payment benefit of occupational pensions that cover almost ¼ of the earnings from pensions.

Pillar III: the individual voluntary scheme (of contract-type for annuities and personal savings accounts PRSAs)

Total investments of the pension funds represented, in 2007, about 46% of the GDP (86.6 billion Euros).

**Occupational pensions**, initially defined as DB, were subsequently changed into DC, and in the year 2006 68% of the members participated in the DC system. The coverage degree was about 55%.

The average contribution to DC plans was 10% of the gross earnings, equally divided between employer and employee. Supplementary contributions at this level are allowed if the fund includes such provisions, otherwise there it is only possible to contribute to PRSA. This supplementary contribution is allowed if the employee has an additional income from labour or another income source.

The benefits become payable after the age of 65 years and it is also possible to make payments for early retirement after the age of 50 years. On retirement 2/3 of the last wage is received if the contribution period is minimum 10 years, and a net fixed sum amount of 1.5 times the last wage for a length of service of 20 years and a lower supplementary pension.

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<sup>90</sup> OECD (2009) – OECD Private Pension Outlook 2008), <http://www.oecd.org/dataoecd/0/3/42566066.pdf>

<sup>91</sup> Law in force: 2005 (Social Welfare Consolidation Act).

<sup>92</sup> [http://ec.europa.eu/economy\\_finance/publications/publication14992\\_en.pdf](http://ec.europa.eu/economy_finance/publications/publication14992_en.pdf)

Contributions to pensions are fiscally deductible if the pension scheme was approved by the Revenue Commissioners. The ceiling of the fiscal deduction is 15% of the earnings for those up to 30 years of age and increases for those of 60 years of age and over up to an earnings ceiling of 262382 Euros. Pensions in payment are taxed as income and also the health contribution is calculated.

PRSA was introduced in 2003 and represents a personal contract for pension of DC type. Both employers and employees can contribute, if no additional payments are allowed by occupational plans. The benefits are paid between 60 and 75 years, yet they can be granted, on request, also before, after 50 years, including here sickness cases. A quarter of the benefits are payable as fixed amounts and contributions can continue also in the period of receiving benefits.

The contributions are fiscally deductible within the age limits, and received annuities are taxed and health contributions are paid as well.

Retirement Annuity Contracts are DC, similar to a pension fund. Any person who is a member of a company pension fund can participate. Also, employers can contribute. A minimum contribution amount is established.

## **RECENT REFORMS**

2006 – Stimulating participation in private pensions by individual accounts or by constituting an individual account of investments – Personal Retirement Savings Accounts (PRSA). PRSA (introduced in 2003) is dedicated to investments on long-term for employees and non-employees. Employers failing to supply an occupational pension plan must ensure a PRSA account for employees, the contribution to the fund being fiscally deductible. Half of the Irish workers have private accounts of investments for pensions.

The recommendations made by the Pension Board in the National Pension Review Report refer to:

- Increasing fiscal deductibility for all contributors (previously the fiscal deduction was 15 to 30%, depending on age) to 30% for all;
- Implementation of matching contribution - up to a certain level, for each Euro of the contributor, the government shall contribute with one Euro;
- The increase in rewards granted for postponing the request for public pension.

A series of other proposals were included in the political agenda, including the implementation of a mandatory private pension system – the target of the government was to ensure that 70% of the labour force over 30 has enough savings for pensions so as to be able to obtain a transfer rate of 50% on pensioning. Also, the necessity for realising a Green Paper on Pensions Policy was discussed.

Another measure was taken to increase the level of pension for non-contributors to the system and an allocation of 100 Euros/week for those with low pensions (under 5200 Euros per year) for supplementing the pension they receive.

The names of the pension funds were changed, after consultations with the stakeholders: a) “Old Age Contributory” and “Old Age Non-Contributory Pensions” turned into “State Pension (Contributory)”, and “State Pension (Non-Contributory)”; b) “Retirement Pension” became “State Pension (Transition)”; c) “Orphan's (Contributory) Allowance” and “Orphan's (Non-Contributory) Pension” turned into “Guardian's Payment (Contributory)” and “Guardian's Payment (Non-Contributory)”. These changes reflect partly the modernisation of the system, and the change towards active policies for stimulating return on the labour market.

**2009 – Measures for ensuring financial sustainability of the pension funds for persons working within public sector**, by extending the mandatory contribution to all workers in the system (previously the contribution of 5% was mandatory only for those entering the public sector after 1995, and the pensions were paid from the general funds of taxes collected by the state). The contribution was established by instalments (between 3% and 10%) on average representing about 7.5% of the gross wage.

On retirement, employees of the public sector receive a pension representing 50% of the last earnings, which is indexed depending on the level of the average wage within the public sector to which a net fixed amount of 150% of the last wage is added. The retirement age is 60 years for those entered the system before 1 April 2004 and 65 years for those who entered the system after this date.

By the Social Welfare and Pensions Act (2009), measures were taken to increase protection for workers covered by pension plans of the DB-type, because official estimates indicated that over 90% of the DB plans were going to be bankrupt as of the end of the year (the estimated deficit would have increased from 20 to 30 billion Euros). The regulation was applied to funds with deficits and limited pension indexing. Also, an assistance scheme is instituted (a Pensions Insolvency Payment Scheme -PIPS) – based on annuities granted for the pension plans by the government.

Sanctions were instituted for the persons delaying the payment of social contributions.

2010 – the National Pensions Framework<sup>93</sup> stipulates the changes in the Irish system of pensions for ensuring the sustainability of the system up to 2050, a system which shall face the tripling of the number of persons over 65 years of age, the increase in public expenditures on pensions from 5% to almost 15% of GDP and the diminution in the number of workers per pensioner from 6 to less than 2. An increase in the degree of coverage of pension plans is projected for those with low and average incomes, maintaining the government support for the latter. The main changes are:

- the gradual increase in the pensioning age up to 68 years in 2028; transitory pension from 65 to 66 years shall be enforced up to 2014;
- the public pension shall be mainly a source of pension incomes, the replacement rate of the public pension shall remain 35%;
- Instituting the mandatory nature of participating to the complementary pension plan for employees aged 22 and over with earnings over certain established level (DC plan that supplements the public pension). The employees can leave this plan after 3 months, but they will be registered again after 2 years; a bonus shall be granted for participation to a fund for more than 5 years, without interruption. The contribution rate from earnings of the employee for the new plan shall be 4% and for the employer 2%. The employers ensuring DC plans with higher contributions or have DB plans cannot be compelled to participate in the new system. Similarly to the existing plans sponsored by employer and administered by the government, contributions shall be collected within the Pay Related Social Insurance (PRSI) system. It is estimated that this program ensures a pension equivalent to 58% of the last wage for an employer having an annual wage of 30000 Euros. By this measure is expected to increase the coverage rate by insurances for citizens with low and average incomes (this scheme was applied in New Zealand – Kiwisaver – and will also be applied in the United Kingdom as of 2012 – National Employment Savings Trust. The reform shall generate effects before 2014.

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<sup>93</sup> <http://www.pensionsgreenpaper.ie/downloads/NationalPensionsFramework.pdf>.

- Occupational pensions. Fiscal deduction for employees' contributions to the pension system (20-41%) will be 33% for all DC or DB plans. As of 2011 provisions were instituted for the standardisation of DC plans;
- In 2010 a new pensioning system was instituted: the pension is based on average earnings during the active life period. The minimum age for pension is 66 years, up to maximum 70 years, correlated with the program for gradually increasing the pensioning age;
- The measures were initiated to diminish costs with pensions and change the system of fiscal deductions, including the elimination of the pension fund pre-financing with up to 1.5% of the GNP (initiated in 2001).

The initiated measures are part of the reform package negotiated with IMF and EU for fighting the effects of the financial crisis.

Major changes the fiscal system refers to:

- Employers' contributions to public and private pensions are no longer integrally deductible for the employer and are taxable for the employee;
- Eliminating the exemption from the contribution to the system for those with incomes lower than 352 Euros per week. All employees will contribute to the public pension system.
- Gradual diminution (from 41% to 20% in 2014) of the fiscal deductibility for contributions paid by the insured to the private pension system. Also the maximum ceiling of deductibility is diminished from 150 thousand Euros annually to 115 thousand for contributions made after 31 December 2010. Also, the upper limit is lowered for earnings subject to tax incentives (for the entire contribution period) from 5.4 million Euros to 2.3 million Euros.
- Reducing the limit of lump sums withdrawn after December 2010 that is exempt from taxation to 200 thousand Euros (from 575 thousand Euros) with a transitory period of taxation in 2011 by 20% of the difference between 575 thousand and 200 thousand. Everything exceeding this amount shall be taxed with 41%.
- Eliminating as of 2014 the transitory pension at the age of 65 years (the pensioning age was 66 years and if the integral contribution conditions were met, this pension could be requested for one year).
- Temporary change in employers' contribution (July 2011- December 2013) for social insurance from 8.5% to 4.25% (contributions for public pension, sickness, maternity, labour accidents, and unemployment are included). The contribution of employees of 4% or 5% depending on earnings remains unchanged.
- An additional tax of 0.6% on the assets of occupational pensions applicable for 4 years (2011-2014) will affect 65 thousand of pensioners/beneficiaries of occupational pensions and another 700 thousand employees/contributors to occupational funds. The collected amounts (estimated to amount to 1.88 billion Euros) shall be used for creating about 20 thousand new jobs and financing training courses (the New Job Initiative).



## ITALY (1952)

### GENERAL PRESENTATION

Italy recorded in 2010 a GDP per capita of 25 600 Euros. Italy's economic dependency rate in 2010 was 30.8%. UN estimates for the same year a dependency rate of 64.7%, being the highest value in the last decade. The median age in Italy is estimated by Eurostat to 43.1 in 2010.

### PRINCIPLES AND CHARACTERISTICS

Italy, along with Portugal, Greece and Spain are characterized by Sapir (2006) according to a Mediterranean European Social Model (MSE). The features of this type of system include large expenditures on pensions and social protection, early retirement projections and reflect the social / cultural family-centred system of these countries. However, as a result of the financial crisis and the problems faced by Italy in recent years, the fiscal policy does no longer reflect the theoretical characteristics of Sapir set for this group of countries.

In Italy, social protection expenditures (SPE) have recorded a sustained growth in the last decade, evolving from 4614.66 Euros (4815.78 PPS) per person in 1997 to 7281.77 Euros (7090.05 PPS) per person in 2008<sup>94</sup>. Social protection expenditures in Italy have increased to 27.78% of GDP in 2008, maintaining a level comparable to that of other European countries, the EU average being of 26.35%<sup>95</sup>. To these it corresponds a level of general government expenses (GGE) of 48.6% of GDP in 2008, 51.6% of GDP in 2009 and 50.3% of GDP in 2010<sup>96</sup>. In contrast to the Mediterranean social model, social inequality persists in Italy, registering a 31.5 in 2009 14 on the Gini indicator value. This figure marked a continuing improvement in the situation of Italian social disparities, compared to the record value of 34.7 in 2004<sup>97</sup>. However, it remains significantly above the EU average of 30.4 in 2009.

### PENSION SYSTEM

#### *General structure*

Italy, like other Mediterranean countries, is dominated by public pension system, corresponding with Pillar I. This is financed by contributions of 33% of the gross income of an employee. Contributions are divided between employer and employee, the first supporting 23.8%, and the latter 9.2%<sup>98</sup>. For self employed workers the contribution to the pension fund is 20%. For workers with atypical employment contracts (para subordinated), the contribution is 26% of gross income. However the Italian public pension system was one of the earlier inclined to reform, starting with 1995, when by law no. 335/95, they introduced the new formula for calculating benefits based on individual defined contribution system (Notional Defined Contributions - NDC), which takes into account several additional factors along with the level of income during the active life, such as life expectancy level in Italy, or economic growth. This reform implies a gradual implementation, being applied in full only to those who have entered the labour market after 1996. Those who in 1995 had 18 years of experience on the labour market, continue to benefit from the old scheme of calculation (more generous) of defined benefit type (DB). To those who do not fall into any of these two categories, the pension is calculated using a mixed formula. Pension system reform was continued and re-confirmed through a series of legislative packages that have addressed issues of retirement age, eligibility for special pensions, possibility and calculation of early retirement pension, or deferred, etc. (law no.449/97, no. 243/2004, no. 127/2007, no. 247/2007, no. 102/2009, or no. 122/2010).

<sup>94</sup> Source: Eurostat

<sup>95</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>96</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>97</sup> Source: Eurostat (last updated on October 21, 2011)

<sup>98</sup> European Commission (2010) Joint Report on Pensions

There is also the option type II pillar of private occupational pensions. But since the pillar I is very generous, very few people adhere to this alternative formula, at the end of 2005, only 3 million contributors were involved in this area of supplementary pensions, which corresponds to a coverage rate of only 13%. There are two types of private pension funds: closed pension funds (or contract) and open pension funds. The contractual pension funds are implemented by a single company as a pension fund for its employees or by an association of employers, or by a trade union for all employees in a particular sector. Open funds, which are equivalents with a pillar structure type III, are offered by banks or insurance companies for a generic group of participants, such as the freelancers. The most popular option of this type is life insurance. The Italian life insurance market is the fourth in Europe and is continuously growing.

### *Funding*

Minimum pension has been removed from the new Italian pension system. However, for those older than 65 and with lower income than the limit of social assistance, there is the possibility to claim social assistance benefits (social assegno) with a value of 5310.63 Euros. Its value increases for those older than 70 years, to 7540 Euros. These amounts represent the equivalent of 20% and respectively 29% of the Italian average income<sup>99</sup>.

The replacement rate in Italy in 2009 was equal to the European average of 0.51.

### *Sustainability & Efficiency*

Analyzing the current balance adjustment needs to meet budgetary constraints, there can be noticed for Italy a sustainability gap of 1.4% of GDP, far below the average of EU, which was 6.5% of GDP in 2009<sup>100</sup>. Thus, Italy is shown to be sustainable on a long-term and it has a low risk in terms of stability of public finances. The adjustment required to stabilize the debt ratio is negative -0.1%, lower than the European average of 3.3% of GDP. In addition, long-term costs of the aging population are lower than the EU average: 1.5% of GDP for Italy to 3.3% of GDP<sup>101</sup>. One of the few EU countries can be found in this position, Italy is expected to lower public pension expenditure as part of the GDP by 0.4 percentage points by 2060 (compared to 2010). Italian government public debt causes more concern, being of 119% of GDP in 2010, more than previous estimations (116%) and far above the EU average of 80%, or Maastricht Treaty requirements.

The poverty limit in Italy is estimated at 9122 PPS in 2009, according to Eurostat, scoring an encouraging growth to the value of 5889 PPS in 1999. However, this limit was reached in 2009 by 18.4% of the population of Italy. In addition, as a measure to improve the adequacy of the Italian pension system, the poverty limit was achieved by 13.7% of pensioners in 2007, less than 15.4% in 2004.

The benefit rate of the public pension system in 2007 was 68, and it is estimated that by 2060, it will seriously drop by 31%, reaching 47. The decrease of benefit rate of the public pension system is natural, as long as it is doubled by an increase of the benefit rate resulting from the private pension system. Unfortunately there is no official data, at present, which could confirm this.

## **RECENT REFORMS**

Italy, as well as Greece, suffered a series of reforms in the last three years on its pension system. These were partly dictated by the financial crisis, but mostly are caused by long-term lack of sustainability of the previous architecture of state pension system.

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<sup>99</sup> OECD (2011) Pensions at a glance 2011: Retirement-income systems in OECD and G20 countries

<sup>100</sup> European Commission, Economic and Financial Affairs (2009) EU Sustainability Report

<sup>101</sup> European Commission, Economic and Financial Affairs (2009) EU Sustainability Report

Starting with 2008, the retirement age became 60 years for women working in the private sector, and 65 for men and women working in public sector. It eliminates the guaranteed minimum pension. Also, the formula for calculating the benefits begins to take into account life expectancy. This was in Italy 84.5 years for women and 79.1 years for men in 2008. These values place Italy above the European average of the same year, which was 82.4 years for women and 76.4 years for men. In addition, the profitability rate of contributions will be correlated with GDP growth.



## **LATVIA (2004)**

### **GENERAL PRESENTATION**

The social Baltic model presents similar features with the liberal model. The area of the social security system in Estonia, Latvia and Lithuania is rather narrow. Welfare state financment takes place mainly through wages taxation. Labour market regulation is similar to the European average, while unions have low power, wages being negotiated rather at individual level. The small share in GDP of total government expenditures, reduced social protection and limited role of unions lend the liberal character to the social Baltic model<sup>102</sup>.

With a GDP/inhabitant of USD 16,337 and a total population of 2.2 million inhabitants<sup>103</sup>, Latvia registers a total demographic dependency rate<sup>104</sup> of 45.0% in 2010<sup>105</sup>, an economic dependency rate of 32% in 2007, estimated at 38% for 2020<sup>106</sup>, and an old age dependency ratio of 25.2% in 2010<sup>107</sup>. The median age in Latvia is 40.6 years<sup>108</sup>.

### **PENSION SYSTEM**

#### **General structure and financing**

Pension system in Latvia, as the other countries of the region, is based on 3 pillars:

- A *state pensions* scheme composed of earnings – related pensions financed in the PAYG system through notional individual accounts<sup>109</sup> (NDC – notional defined contribution);
- A fully *funded*, defined contribution, *mandatory pension scheme*;
- *Private voluntary* occupational and individual *pension arrangements*

#### *State pensions*

The NDC PAYG system is in operation since 1996 and covers persons aged 50 and over at the time of implementation in 1996. Persons between 30 – 49 years could choose whether to operate under the NDC system or to join the funded pension system, while persons under 30 years had to join the funded system.

<sup>102</sup> An analysis of the Baltic model is presented in Neesham, C. and Tache, I. (2010), „Is there an East-European social model?”, *International Journal of Social Economics*, Vol. 37, No. 5, Emerald Group Publishing Limited.

<sup>103</sup> According to International Social Security Association, <http://www.issa.int/Observatory/Country-Profiles/Regions/Europe/Latvia>

<sup>104</sup> A measure showing the number of dependents (aged 0-14 and over the age of 65) to the total population (aged 15-64). It is calculated by:  $\text{Number of Dependents} / \text{Population (ages 15-64)} \times 100\%$

<sup>105</sup> Source: Eurostat, EUROPOP 2008.

<sup>106</sup> Source: Commission Services, EPC (2009 Ageing Report).

<sup>107</sup> Source: Eurostat, EUROPOP 2008.

<sup>108</sup> Source: NationMaster.COM, <http://www.nationmaster.com/graph>

<sup>109</sup> When the new scheme was introduced, workers were credited with initial, notional capital for compensating them the work performed before the reform. In order to simplify implementation, the initial capital was based on the number of prior years of work and their salaries in the years immediately following the reform. Given that salaries typically increase with age and experience, this can be viewed as an over-estimate of what would have been in the accounts if the workers had been contributing to NDCs for the whole active life.



The public system is based on the inter-generation solidarity principle and on realized contributions.

Pensions are calculated according to a formula that is based on social insurance contributions. Participants are eligible to receive pension benefits after at least 10 years of insurance and upon reaching the statutory minimum exit age, which arrived at 62 years in 2009 (both for women and men). In general, women's pensions are lower than men's pensions, as a result of smaller incomes, especially derived from fields like education, health and public institutions (where women are over-represented). Employees contribute 9% of gross monthly earnings. Employers pay 24.09% of employee's gross wages, of which 16% is attributed to the PAYG system and 4% to the funded mandatory individual account system. The remaining contributions of 4.09% finance other social insurance benefits. The percentage of contributions that is directed towards the funded mandatory individual account system was scheduled to rise at 10% in 2010. The total contribution amount will however remain the same, as the amount of contributions towards the NDC scheme will decrease correspondingly.

There are pension credits for periods without wage, the state paying during childcare, military service and unemployment.

Social insurance benefits are adjusted in line with the consumer price index (CPI) and changes in average contributory earnings in October of each year. Since 1997, benefits paid under the state pension scheme are subject to income tax. But old age pensions attributed before January 1996, when the new law came into force, are not subject to taxation.

A state social security benefit is paid to those who do not qualify for old age pension benefits (LVL 45 in 2006). The minimum pension depends on the insurance period.

Early retirement is possible, 2 years before the normal exit age, and, unfortunately, women choose this alternative, obtaining thus a low pension.

#### *Private mandatory pension system*

The second pillar of pension system in Latvia came into force in July 2001, aiming at pension increase, without raising the contribution rate. The initial contribution rate for this pillar was 2%, and then it was increased at 4% in 2007, 8% in 2008, 9% in 2009 and 10% in 2010. As a consequence, a worker participating in both pillars contribute with a total of 20% equally divided between the two pillars.

This pillar is mandatory for workers younger than 30 years in July 2001 and voluntary for those aged between 30 – 49 years at the respective moment; it is expected that this pillar would become fully mandatory till 2035. This system is completely financed and initially managed only by the Latvian Treasury. Nonetheless, since 2003 workers have been allowed to choose the preferred company for financial investment and management, which should offer larger alternatives of investment and more diversified portfolios.

Contributions are income tax deductible. Pension benefits are taxed at the ordinary income tax rate of 25% when they exceed LVL 1,200 for the year. Pensions are not subject to social security contributions. Investment income is tax exempted.

At the retirement age, participants have two alternatives, either an annuity contract on life at an insurance company on the open market, or to combine the sums accumulated in the two pillars and receive a pension by summing up the two funds.

In 2008 the assets of the mandatory private pension funds arrived at Euros 513 million, 49% more than by the end of 2007, according to the data published by the Financial and Capital Market Commission of Latvia, FKTK. The number of participants in the mandatory private pensions funds attained 1.03 million, representing 35,000 more than by the end of 2007. At the

same time, the funds are more and more cautious with investment, a tendency present in the whole region. Latvia is one of the smallest markets of private pensions of the Central and Eastern Europe with a pension system similar to that of Romania.

As a matter of fact, the assets of the mandatory funds almost doubled in 2008, a rhythm explained by the relatively recent start of the second pillar in Latvia. The assets are very cautiously invested on the back of the financial crisis: 48.6% in bank deposits, 31.4% in government warrants and bonds, 18.5% in mutual funds and 1.5% in listed stocks and other investments. A percentage of 65% of all investments is made on the Latvian financial market and the remaining of 35% is invested abroad.

The main entities involved in the management of the mandatory funded state pensions are State Social Insurance Agency, companies of investment management and banks. The participants can change the assets manager once a year and can also freely change twice a year the investment plan with the same manager. The scheme members are free to make a choice for an investment plan which is constant, equilibrated or active. On the Latvian market of mandatory private pensions there are now 9 managers, who administer 25 pension funds.

#### *Voluntary (optional) private pensions*

The optional pension scheme, adopted in July 1998 is based on optional contributions of the employer or the employee and operates through investment on the financial capital market. The minimum exit age in this scheme is 55 years and it is possible that at retirement the person either receives a lump sum or continues participation.

Participation in the optional private pillar is stimulated by some tax exemptions. By the end of 2009, this type of pensions covered about 16.3% of the economically active population.

#### **Sustainability, efficiency and performance**

At-risk-poverty rate of people aged 65 and over increased in Latvia in the pre-crisis period (2005-2007) and in 2008 attained much higher levels than the EU average (47.5% in Latvia as compared to 19% in EU27<sup>110</sup>). People aged 75 years and over are exposed at a higher risk of poverty (56% for women and 50% for men). This is also explained by the fact that the recently retired persons receive considerably higher benefits than pensioners from previous years.

The gross theoretical replacement rate in 2008 for a male worker retiring at 65 years after a 40 years career of contributions (47.5%) is low as compared to the European average. The net replacement rate is 63.8%.

Before the crisis the relative pension expenditure was on decline in Latvia, from 9.5% of GDP in 2000 to 5.3% in 2007, which can be partly due to the very dynamic economic growth registered before 2008. But the supplementary payment measures applied in 2006 for the persons with low old age pensions (in order to repair the perceived inequities in the system) were extended, in 2009, to all old age and disability retirees, thereby raising very much pension expenditures.

Latvia confronts the challenge of ensuring the sustainability of public finance in the context of the ageing population phenomenon. In this regard, Latvia was assessed to be at “high” risk by the European Commission<sup>111</sup>.

Despite of reforms of the last 15 years, implementing further reforms in the pension system would contribute to an increased sustainability. Adopting measures that increase participation rates would help the sustainability and the adequacy. In particular, a corresponding equilibrium should be found between active life and pension period. Additionally, making the retirement age automatically adaptable to future increase in life expectancy would enhance system stability.

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<sup>110</sup> Figures for Latvia were extracted from ESPROSS database.

<sup>111</sup> See 2009 Sustainability Report.

## **CRISIS IMPACT AND RECENT REFORMS**

Latvia's GDP dropped by 4.6 in 2008, 18% in 2009 and 3.5% in 2010, being thus the worst hit European country in the crisis context. The crisis cancelled all progress registered by the employment rate in the last decade. The employment rate of population aged 15-64, which reached 68.8% in 2008, dramatically diminished in 2009 at 60.9%, a level close to that recorded in 2000 (57.4%). The real return on contributions to the mandatory funded pension scheme was negative at the end of 2008.

Latvia's parliament adopted some austerity measures in order to fight the crisis challenges, such as abolishing of pension indexation in 2009 and 2010. However, this can mean an increase in real terms due to deflation. Also, a part of contribution to the funded defined contribution was diverted to NDC-PAYG scheme. In 2008, out of 20% pension contribution 8% fed into funded DC scheme and 12% into NDC-PAYG, the government intending to increase the share allocated to funded scheme to reach the proportion of 9-11% in 2010 and 10-10% in 2011. But in order to control the deficit of the social insurance budget and to maintain the long-term financial stability, the government decided to decrease the cost of prefunding of ageing expenditures, so that in 2009, out of 20% pension contribution only 2% went to the funded DC scheme and 18% to NDC-PAYG. In 2011 the planned proportion was 4-16% and in 2012 is 6-14%.

Another restrictive measure was the reduction of old age pensions by 10%. Pension benefits for active pensioners were reduced by 70%, and early retirement pensions from 80% to 50% of the value of old age pension. But in December 2009 the Constitutional Court declared that the cuts of 10% and 70%, given the way in which the respective legislation was adopted, breached the principle of legitimate expectations and decided that the pension reduction should be cancelled. The reduction was stopped at 1 February 2010 and deductions operated in the period 1 July 2009 – 1 February 2010 were reimbursed in April 2010.

Latvian population is at present slightly younger than the EU average. The old age dependency ratio (comparing the number of persons aged 60 and more to the number of persons aged 20-59) will be more favourable in Latvia than in EU27 until the beginning of 2040, but afterwards ageing in Latvia will increase, so that in 2060, there will be 90 persons aged 60 or more for every 100 persons aged 20-59 (as compared to 79 in EU27)<sup>112</sup>.

The fundamental pension reforms of 1996 and 2001 introduced strong contributory principles and working incentives by implementing the NDC scheme supplemented by the mandatory, fully funded scheme. This is why Latvia made important steps towards achieving equilibrium between sustainability and adequacy in its pension system. However, the financial and economic crisis caused severe contractions of the economy with significant consequences for public finance. The decrease in employment rates brought the problem of evasion from contributions and emergency measures were needed.



## **LITHUANIA (2004)**

### **GENERAL PRESENTATION**

The social Baltic model presents similar features with the liberal model. The area of the social security system in Estonia, Latvia and Lithuania is rather narrow. Welfare state financment takes place mainly through wages taxation. Labour market regulation is similar to the European average, while unions have low power, wages being negotiated rather at individual level. The

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<sup>112</sup> Europop 2008 Projections.

small share in GDP of total government expenditures, reduced social protection and limited role of unions lend the liberal character to the social Baltic model<sup>113</sup>.

With a GDP/inhabitant of USD 17,575 and a total population of 3.3 million inhabitants<sup>114</sup>, Lithuania registers a total demographic dependency rate<sup>115</sup> of 44.5% in 2010<sup>116</sup>, an economic dependency rate of 33% in 2007, estimated at 34% for 2020<sup>117</sup>, and an old age dependency ratio of 23.2% in 2010<sup>118</sup>. The median age in Lithuania is 40.1 years<sup>119</sup>.

## PENSION SYSTEM

### **General structure and financing**

The Lithuanian pension system consists of two pillars:

- a state pension PAYG with defined benefits
- a mandatory funded pension scheme with defined contributions

#### *The state social insurance pension system*

This system was reformed in 1995 with introduction of a flat-rate basic pension and a supplement depending on the number of working years, individual salary and average insurable income in the country. The system is based on contributions, 23.3% of gross wage being paid by the employer and 3% by the employee (data of 2010<sup>120</sup>).

#### *The mandatory funded pension scheme*

It was introduced in 2004. Though opting out after joining the scheme is not allowed, this scheme is actually voluntary. It operates with defined contributions and is financed by a fraction of the social insurance contribution (5.5% of gross wage in 2007, reduced at 2% in 2009, the respective reduction being continued in July 2010). The decision to restore the contribution rate will be implemented when the country's financial and economic situation will be improved. At retirement, the participant must purchase a pension annuity from an insurance company.

*Supplementary voluntary pension scheme* exists as well but it remains still marginal, representing only 0.1% of the labour force in 2008. The number of participants has further diminished by 1.4% (in 2009). It is also possible the establishment of occupational pension schemes, though none was created till now (despite of adopting, in 2006, a special law regarding the funded occupational pensions).

The persons not having the required working period for a social insurance pension can receive a *social assistance pension* when they are old. In 2006 this pension was extended to all old and disabled persons that are not entitled for the social insurance system.

The legal exit age is 62.5 years for men and 60 years for women. The necessary period for receiving the full pension is 30 years (the minimum period being 15 years), a full year being made up of at least 12 minimum monthly wages. In 2004, an early retirement scheme was introduced for the long-term unemployed persons. According to this scheme, pensions are reduced by 0.4% for every full month remaining till the exit age, the reduced pension being fixed

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<sup>113</sup> An analysis of the Baltic model is presented in Neesham, C. and Tache, I. (2010), „Is there an East-European social model?“, *International Journal of Social Economics*, Vol. 37, No. 5, Emerald Group Publishing Limited.

<sup>114</sup> According to International Social Security Association, <http://www.issa.int/Observatory/Country-Profiles/Regions/Europe/Lithuania>

<sup>115</sup> A measure showing the number of dependents (aged 0-14 and over the age of 65) to the total population (aged 15-64). It is calculated by:  $\text{Number of Dependents} / \text{Population (ages 15-64)} \times 100\%$ .

<sup>116</sup> Source: Eurostat, EUROPOP 2008.

<sup>117</sup> Source: Commission Services, EPC (2009 Ageing Report).

<sup>118</sup> Source: Eurostat, EUROPOP 2008.

<sup>119</sup> Source: NationMaster.COM, <http://www.nationmaster.com/graph/>

<sup>120</sup> Figures in this country profile were extracted from ESPROSS database. Where other sources were used they will be specified.

at this level. Delayed retirement from activity (without claiming pension benefit) is rewarded by a pension increased by 8% per year.

### **Sustainability, efficiency and performance**

In 2007 pension expenditures in Lithuania were lower than EU average (6.6% of GDP as compared to 11.8%). This is explained by a more favourable structure of the population and by the fact that in the period of rapid economic growth preceding the crisis the pensions increased in a lower rhythm than GDP. If in 2000, the share of pensions in GDP was 7.8%, recently, during the financial crisis, this share increased, on the back of economic contraction (7.2% in 2008 and 8.95% in 2009<sup>121</sup>).

In general, there is no automatic mechanism of pension indexation, they are increased or diminished on an *ad-hoc* basis.

The insufficient coverage with full pensions and their relatively low levels resulted in an at-risk-of-poverty rate for people above 65 years of 29% in 2008, more than EU average (19%) and the rate for the population of 0-64 years (18%). Between 2005-2007 poverty of elderly people increased, women being more exposed at poverty (36% in 2008). The gross theoretical replacement rate in 2008 for a man with average earnings retired at 65 years after a 40 years contribution career (49%) is low as compared to EU average. The net replacement rate is 66%.

In 2009 the employment rate of old workers (55-64 years) was higher than EU average (51.6% as compared to 46%), which is mainly a consequence of the 55-64 years group in Lithuania, in which the younger have a relatively higher share.

Despite the reforms aiming at achieving a balance between adequacy and sustainability, Lithuania faces severe challenges regarding the long-term solidity of public finance, being qualified by the European Commission as a “high” risk country<sup>122</sup>.

### **CRISIS IMPACT AND RECENT REFORMS**

Funded schemes faced negative returns as a consequence of the financial crisis but as funds are still immature, the main problem derived from income reduction and expenditures increase that weakened public finance.

Lithuania represents one of the EU countries the most affected by the crisis. GDP dropped by 15% in 2009 and the economic growth was re-established only in 2011. The economic downturn had repercussions on the labour market. Unemployment increased from 5.8% in 2008 at 18.1% in the first quarter of 2010. In 2009 the employment rate (15-64 years) decreased by 4.2% to 60.1%. Employment rates for women and old workers (55-64 years) resisted better the general decline, and employment rate of old women even increased by 0.5% to 48.3% (EU level: increase by 1% to 37.8%). Public finance strongly worsened, even if some substantial measures of consolidation aiming at expenditure decrease were taken.

Pensions and other social benefits were temporarily reduced in 2010-2011 (on average by 4-5% in January 2010) in order to mitigate the deficit of the state social security fund. The progressive character of reductions tried to protect those with the lowest benefits. Because of the average salary decline in 2009, the relationship between the average old pension and the net average salary (replacement rate at macro level) significantly increased (from 46.5% in 2008 to 50.7% in 2009).

In the crisis context Lithuania also reduced the contribution rates to the funded pillar from 5.5% to 2% of gross salary, the difference being directed to the social insurance scheme and to reducing the deficit of the social security fund.

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<sup>121</sup> Annual National Report 2010, Pensions, Health and Long-Term Care (Lithuania), May 2010 (T. Medaiskis, D. Jankauskiene).

<sup>122</sup> See 2009 Sustainability Report.

In Lithuania a new pension reform is now implemented. The government adopted a reform in June 2010, according to which the reform will take place in two stages. The objectives of the reform are the increase of the exit age to 65 years for women and men till 2026, a stronger relationship between contributions and benefits, a reduction of privileged pensions and some autonomy of social security from the state budget by creating some reserves and by the state budget taking over the costs of non-contributory pensions.

A Lithuanian specific problem is the emigration phenomenon, which can undermine the long term employment rate. Lithuania has one of the highest negative migration rates in the EU (-4.6% as compared to 1.9% in EU27). Most of the emigrants belong to the group of 20-34 years. Continuing this tendency in the long run could severely worsen the contributions and benefits rates.

Lithuania relies in the future on private mandatory pensions, being at present at a negligible level, they are projected to arrive at 2% of GDP in 2060. This will considerably contribute to the adequacy of pensions. The benefit ratio, which compares the average pension with the average wage, is projected to drop from 33% in 2007 to 28% in 2060 if only social insurance pensions are taken into account and to 32% if the mandatory funded scheme is considered.

Projections of replacement rates which compare the first pension with the last wage of a man retiring at 65 years after a 40 years career, illustrate as well the increasing importance of the funded schemes. Between 2008 and 2048 the gross replacement rate in the state social insurance tier will decrease from 48% in 2008 to 35% in 2048. The development of the funded tier will bring a rise of the gross replacement rate from 1% in 2008 to 13% in 2048, as workers get seniority in the respective schemes.

In Lithuania the high economic growth rhythms before the crisis were not sufficient for hindering poverty among pensioners, especially women. Lithuanian authorities should take into consideration transparent indexation rules for protecting the elderly against the poverty risk without creating problems for the system sustainability. There exists a large diversity in pension generosity between the main working force and some privileged groups. The special regimes of some pensions and the retirement ages must be revised and made transparent.



## **LUXEMBOURG (1952)**

### **GENERAL PRESENTATION**

GDP per capita 2010 (current prices)	82100.00
Total population at 1 January 2011	511,840
Expenditure on social protection (as % GDP) 2009	23.10
Expenditure on pensions (% GDP) 2009	9.45
Monthly minimum wage	1,757.56
Median age 2010	38.9
Old-age-dependency ratio ( %) 2010	20.40
Projected Old-age-dependency ratio (%) 2060	45.05
Total age dependency ratio 2010	47.57
Share of the total population aged 65 years or over, 2010	14.28
Share of the total population aged 65 years or over, 2060	23.57

Source: Eurostat

## CHARACTERISTICS

In 2008 Luxembourg allocated approximately 8.26% of GDP on public pensions, corresponding to a decrease of 1.01 percentage points compared to its 2000 level, lower than the average EU pension expenditures of 11.66% of GDP in 2008. This percentage is equivalent to 6587.84 Euros (2000 prices) per capita, compared to the EU average of 2551.27 Euros. The last recorded value for the aggregate replacement ratio was 0.62 in 2009 (according to Eurostat), above the EU average of 0.51. The poverty threshold in Luxembourg is estimated at 16226 PPS in 2009 (according to Eurostat), reflecting an increase with 25.12% from the level of 12968 registered in 2000. The population situated below the threshold of poverty as defined by Eurostat (60% of median income) represented 17.88% of the total population in 2009. In that same year the percentage of the elderly (persons aged over 65) situated below the poverty line was 6%, below the EU average (17.88% in 2009). While in the European Union the median income of the elderly is about 88% of the median income for the rest of the population, in Luxembourg this percentage is higher at around 101%. The average exit age from the labour market is 59.4 years, below the EU average (61.4 years). The Luxembourg government debt represented 18.4% of GDP in 2010 (EU average is 80%), up by 12.2 percentage points as compared to the value registered in 2000. While the government deficit in the European Union represented 6.4% of GDP in 2000, in Luxembourg it is lower, namely 1.7% of GDP.

### PENSION SYSTEM (general structure)

The Luxembourg pension system has three pillars:

- Pillar 1 consisting of public pensions is by far the most important. The net replacement ratio equals approximately 96% for a median-income employee who retires at the age of 60 after a career of 40 years. For male citizens with an income less than half the minimum wage, the replacement rate can exceed 107% (IGSS 2009, 56).
- The second pillar is represented by the company-based supplementary pension plan.
- The third pillar consists of private pensions offered individually by financial institutions.

From a total of Euros 3.789 million of estimated contributions in 2008 for all pension systems, the public system represents 92.15% of total investment, followed by the company-based supplementary pension plan with 6.3%, while private insurance plans that form the third pillar represents only 1.55 %. Although about 25% of the working population has supplementary pension, only 15% of the population benefits from the third type of pension plans. For the year 2009, the insurance supervision institutions (*Commissariat aux Assurances*) reported an increase of 18.52% of annual contributions for the third pillar.

### Pillar I

The public pension system in Luxembourg is based on the solidarity principle and guarantees generous pension benefits; the system is funded as a "pay-as-you-go" (PAYG) mandatory system, with a large participation from the government. Except for civil servants and other employees of the Government, local authorities, public institutions and railways employees, which have their own pension system and law, all those who are covered by a pension insurance in Luxembourg are part of the overall pension system.

Pension benefits are determined according to the length of contributions, as well as age and are related to two indices: the consumer price index and the wage index. Indexing is done automatically with the evolution of prices, because the size of pensions will directly increase the consumer price index. If the cost of living index reflecting a six-month period exceeds its previous level by 2.5%, then the following month there will be an increase of pensions. Indexing with the increase in wages, on the other hand, is made bi-annually by a specific law. Every two years, the government proposes an indexing to the Chamber of Commerce, taking into account

the financial resources of the pension system and the evolution of the average level of wages and income. The last such adjustment took place on 1 January 2009.

A retirement pension is composed of three main parts, which are paid in instalments of 1 / 12<sup>123</sup>:

- A flat rate of 27% of the minimum income for a period of up to 40-years, taking into account the contribution periods as well as those without contribution, but still eligible (studies, parental leave, etc.)
- A pro-rata increase of 1.85% of the salary and other contributing income
  - A further increase of 0.01% of the pro-rata increase for each contribution year in excess of the age of 55 years and in excess of 38 years of contributions (up to a maximum total of 2.05%).

To become eligible for retirement at age 65, a minimum 10-year period of contributions must be accumulated. Early retirement is possible from age 60 for those who meet a total of 40 years of activity, of which at least 10 years of mandatory insurance. When 40 years of mandatory insurance are accumulated, a person can benefit from early retirement from the age of 57 years.

Minimum pension is set for a career of 40 years, and its level is reduced by 1 / 40 for each year missing from the total of 40, provided there is a minimum of 20 years.

The financial model of the public system is based on a fixed contribution rate for a period of seven years, the participation of the Government of one third of the individual pension contribution (= 24% of total gross salary) and a reserve fund for compensation . Due to extraordinary economic growth in previous decades, and also due to the low dependency rate for the elderly and to the significant proportion of foreign residents and cross-border workers in total employment, accumulated reserves exceeded annual expenses by 3.56 times in 2008, rising to 28% of GDP. In addition, cautious investment rules (less than 2% invested in stocks) for the pension funds kept the system away from the path of global economic downturn and negative financial events.

## **Pillar II (company-based supplementary pension plan)**

The legal framework of the law from 8 June 1999 puts the various supplementary pension plans on equal footing in terms of financing and tax rules. Contributions for additional pensions come from taxable income and therefore pensions are not subject to tax. Personal contributions made by the employee, if any, are deductible up to an annual amount of 1,200 Euros.

## **Pillar III (individual private pensions)**

Private pension plans are offered as financial products for individuals. Each employee can supplement the public pension with a private pension that allows a tax deduction for an amount between 1,500 Euros and 3,200 Euro per year, depending on age. Benefits are paid no earlier than the age of 60 years. The beneficiary may elect to receive up to 50% of the accumulated savings as a lump sum payment. The remainder is paid as an annuity, and 50% of the lump sum and of annuity benefits are taxable when received.

## **RISKS AND REFORMS**

Despite a good current financial situation, the pension insurance system is subject to a number of risks that have the potential to destabilize it in the long term in the absence of countermeasures. Such risks are:

- the low actual retirement age due to early retirement.

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<sup>123</sup> Jürgen Hohmann , Annual National Report 2010:Pensions, Health and Long-term Care, On behalf of the European Commission DG Employment, Social Affairs and Equal Opportunities  
[http://www.socialprotection.eu/files\\_db/901/asisp\\_ANR10\\_Luxembourg.pdf](http://www.socialprotection.eu/files_db/901/asisp_ANR10_Luxembourg.pdf)



- the high unemployment and disability for people aged 55 - 64 years
- the changes in the demographic pattern, such as the high life expectancy combined with an exceptional number of pensioners expected for 2020, due to disproportionately young workforce today.
- the very generous pension benefits with at an average replacement ratio of almost 100%.

In order to maintain the financial system in equilibrium, the General Inspection of Social Security (IGSS) reviews the financial situation of the pension fund every seven years, and last time this happened in 2005. In 2005, IGSS estimated that the public pension expenditure will amount to approximately 14.2% of GDP in 2030 and 23.9% of GDP in 2060, far exceeding the EU average at the time. This estimate gave birth for the first time to doubts regarding the financial sustainability of the system.

In its conclusions, a 2008 OECD study highlighted the potential remedies to address the problems which the pension system is facing on the long-term, and these solutions are entirely consistent with current national debate:

- Further increase of the pre-financing of the system in order to keep it stable given a time horizon of forty years instead of the current seven years outlook.
- Increasing the actual retirement age by eliminating the possibility of early retirement and thus by increasing the funding base.
- Reducing the replacement ratio on the long-term in order to reduce costs and induce people to change their saving behaviour.



## **MALTA (2004)**

### **GENERAL PRESENTATION**

GDP per capita 2010 (current prices)	15000
Total population at 1 January 2011	417,608
Expenditure on social protection (as % GDP) 2009	20.00
Expenditure on pensions (% GDP) 2009	NA
The importance of private pension funds in the total economy (% of GDP) (2010)	NA
Monthly minimum wage	664.95
Median age 2010	39.2
Old-age-dependency ratio ( %) 2010	21.30
Projected Old-age-dependency ratio (%) 2060	55.56
Total age dependency ratio 2010	43.59
Share of the total population aged 65 years or over, 2010	14.76
Share of the total population aged 65 years or over, 2060	32.43

Source: Eurostat

### **CHARACTERISTICS**

In 2008 Malta allocated approximately 9.27% of GDP on public pensions, corresponding to an increase of 1.01 percentage points compared to its 2000 level, a level lower than the average EU pension expenditures equal to 11.66% of GDP in 2008. This percentage is equivalent to 6587.84 Euros (at 2000 prices) per capita, compared to the EU average of 2551.27 Euros. The last recorded value for the aggregate replacement ratio was 0.47 in 2009 (according to Eurostat),

under the EU average of 0.51. The poverty threshold in Malta is estimated at 7713 PPS in 2009 (according to Eurostat), reflecting an increase with 35.06% from the level of 5711 registered in 2000. The population situated below the threshold of poverty as defined by Eurostat (60% of median income) represented 20.2% of the total population in 2009. In that same year the percentage of the elderly (people aged over 65) situated below the poverty line was 19%, above the EU average (17.88% in 2009). While in the European Union the median income of the elderly equals about 88% of the median income for the rest of the population, in Malta this percentage is lower at around 78%. The average exit age from the labour market is 60.3 years, below the EU average (61.4 years). The Malta government debt represented 68% of GDP in 2010 (while EU average is 80%), up by 12.1 percentage points as compared to the value registered in 2000. While the government deficit in the European Union in year 2000 represented 6.4% of GDP on average, in Malta it is smaller, namely 3.6% of GDP.

### **PENSION SYSTEM (general structure)**

**The current pension system** in Malta is based on the Social Security Act, Chapter 318 of the Laws of Malta. The law provides for two basic schemes: the contributory and non-contributory system. In contributory scheme, the basic requirement in order to benefit from all the rights is that certain conditions related to contributions be satisfied. For the non-contributory scheme, the basic requirement is that certain conditions related to the livelihood be satisfied.

**The non contributory scheme** made it possible to allocate several benefits at the same time, thus simultaneously offering coverage in certain cases. Through the targeting process, the system was able to provide additional assistance to certain categories, such as persons with disabilities or single parent families.

**The contributory scheme** is universal, as it covers virtually all the layers of the Maltese society. Under this system, employees and self employed persons acquire social insurance rights through the payment of a weekly contribution established by the Social Security Act.

Contributions are paid by all individuals aged between 16 years and the legal age of retirement. The system allows for different types of contributions, in order to expand coverage to include all employed people, including self-employed persons. For each individual, the contribution shall be paid as follows: the employee, the employer and the state will each pay 10 percent of the base salary of the employee. The contribution is capped at a maximum retirement income amounting to €16,419 in 2007, which is 25 percent higher than the average wage. The rate of contributions made by self-employed individuals is supported jointly by the State and by those respective persons, where the beneficiary pays 15 percent and the state pays 7.5 percent of his annual revenue (subject to the same ceiling as the one applicable to employees).

#### ➤ Defining the retirement age

One of the main changes announced by the pension reform from December 2006 concerns the statutory retirement age. Before the reform, the retirement age was sixty years for women and sixty-one years for men. Following the implementation of reform, the retirement age was raised to 65 years, but some exceptions apply:

- In the case of a man born on or before December 31, 1951 the retirement age will be sixty-one years, while for women the retirement age will be sixty years;
- in the case of an individual born between 1952 and 1955, the retirement age is sixty-two years,
- for persons born between 1956 -1958, the retirement age is sixty-three years;
- for persons born between 1959-1961, the retirement age is sixty-four years.

#### ➤ Retirement before reaching the statutory retirement age

Before the entry into force of the reform, the entire pension could be granted to a person who has paid or been credited with an annual average of 50 contributions for a period of thirty years before reaching the retirement age. Fewer years of contribution lead to a linear reduction of the pension and at least 10 years of contributions were required in order to receive pension. Following the reform, a person who has attained the age of sixty-one years, but has not yet reached the retirement age may request pension if that person is no longer employed.

#### ➤ Retirement Income

Before the adoption of the pension reform law, the pension was determined by the average annual base salary during the best three years of the last ten years for employees, while for persons carrying out independent activities the best ten years were taken into account. Under the law adopted after the reform, for an individual born on or after January 1, 1962, the pension is determined by considering the base salary / net income / average annual net profit, as appropriate, during the ten best calendar years from the last forty years preceding his retirement or disability. In determining the retirement income, wages and earnings are updated with the index COLA (Cost of Living Adjustment) established for those years.

#### ➤ The maximum retirement income

Before the reform, the maximum retirement income was set by the law and revised in the last years in accordance with the COLA. Following the reform, for an individual born on or before 31 December 1961, who retires on or after January 1, 2007, the base salary / net income / and the income after retirement may not exceed 16,207.78 Euros and shall increase in time with the amount assigned by the government according to the increase of the cost of living.

The following provisions are in force:

- for a person born on or before December 31, 1951, the retirement income, including any cost of living adjustment shall not exceed the sum of 17,470.30 Euros;
- for a person born between 1952-1961, the retirement income, including any cost of living adjustment shall not exceed the sum of 20,964.36 Euros;
- for a person born on or after January 1, 1962 whose age limit is reached on or after January 1, 2007, the retirement income results shall not exceed:
  - 16,207.78 Euros, increasing in time with the amount assigned by the government according to the cost of living increase for 2007-2010,
  - 16,207.78 Euros, increasing on 1 January each year between 2011-2013 with one third of the difference between the amount mentioned above and 20,964.36 Euros;
  - 20,964.36 Euros, increasing annually with 70 percent of the average salary percentage increase for the previous calendar year plus 30 percent of the inflation rate for the same year.

This applies from 1 January 2014.

#### ➤ The guaranteed minimum national pension

Changes have been adopted regarding the minimum pension, which was equal to 4 / 5 of the minimum wage for a couple and two thirds of the minimum wage for a person. After adoption of the reform, a person born on or after January 1, 1962 who is not entitled to an employee pension, is entitled to a guaranteed minimum state pension (GMSP), which shall be worth at least 60 percent of the average national income. This is a rate higher than the one currently paid to

pensioners. In any case, the rate used to determine GMSP cannot be lower than the one declared for the previous year.

The non-contributory system provides pensions and indemnities for Maltese citizens aged over 60 years who meet the eligibility and residency criteria as well as the financial resources test. The test is calculated based on assets and incomes of household members.

In addition to the general scheme, pension systems are applicable to the Maltese Government employees (who were hired before January 15, 1979), which are under the administration of the Treasury Department, as well as special schemes for employees of the police force, armed forces and correction services. Schemes for government employees are no longer applicable to new entrants into the public service and are considered to be closed. The Ministry for Social Policy supervises the social security programs, while the Social Security Department administers the program.

## **REFORMS**

The occupational / voluntary pension scheme

The occupational pension scheme (Pillar 2) and the private voluntary pension scheme (Pillar 3) are still at a very early stage of development in Malta. Although the general legislative framework for their establishment was established, the regulations enabling their operation need to be elaborated by competent authorities. Currently there are no such systems in Malta.

Within the current project concerning occupational pensions, employees would be able to choose a pension fund whose assets will be completely separate from those of the employer. Contributions, which should initially be set at 2 percent for employer and employee (each contributing 1 percent), and 1 percent for self-employed persons will be increased gradually to 5 percent by 2020. Contributions will be tax deductible for the employer, initially untaxed for employees and taxed with a lump sum at maturity; other tax incentives applying to both mandatory

Accumulations in pension funds would be portable and could not be liquidated. At retirement, some of those contributions would be paid as a lump sum (about 20 percent), while most of the funds should be converted to purchase an annuity.

Both occupational and voluntary pensions will be regulated and supervised by the Malta Financial Services Authority (MFSA), which operates in accordance with the Law on Special Funds.



## **NETHERLAND (1952)**

### **GENERAL PRESENTATION**

Netherlands belongs to the Northern social model, characterized by the following defining features:

- High levels of social assistance, which is based on the “citizenship” principle and thus presents a universal character; access to social services is generalized and with reduced conditioning;
- Important expenditures directed to active policies on the labour market, aiming at the rapid unemployed workers’ reintegration;
- A high level of employment in the state sector;

- Powerful unions with a great number of members and significant decision power, which entails a low dispersion of wages level and thereby a more fairly income distribution;
- High level of taxation.

With a GDP/inhabitant of USD 38,694 and a total population of 16.7 million inhabitants<sup>124</sup>, Netherlands registers a total demographic dependency rate<sup>125</sup> of 48.9% for 2010<sup>126</sup>, an economic dependency rate of 27% in 2007, estimated at 37% for 2020<sup>127</sup>, and an old age dependency ratio of 22.8% in 2010<sup>128</sup>. The median age in Netherlands is 41.1 years<sup>129</sup>.

## **PENSION SYSTEM**

### **General structure and financing**

The Dutch pension system is characterized by a sound combination between the basic public pillar and a successful and well consolidated occupational system that supplements state pensions, leading to equilibrium in sharing risks and responsibilities between pensioners and active population. The system provides a good balance between adequacy and sustainability. However, the continuous increase of the estimated replacement rates will create problems for the financial sustainability. Netherlands has also problems in achieving an adequate equilibrium between active years and years spent in retirement.

The Dutch pension system is based on three pillars. The first pillar, named AOW (Algemene Ouderdoms Wet), includes the state pensions, the second consists is represented by mandatory supplementary pensions of occupational type and the third pillar has an optional character, consisting of individual saving programs for pensions.

#### *First pillar*

The statutory old age pension (AOW) offers to all residents of the Netherlands at the age of 65 years a flat rate pension benefit that guarantees in principle net sums representing 50% of the net minimum wage for each partner in couples and 70% for single persons. All residents of the Netherlands with ages between 15-65 years are insured by the AOW system. During the insurance period the entitlement to pension increases by 2% for every insured year. Thus 100% is reached at the age of 65 years, if there are no interruptions during the insurance period. By the correlation with the minimum wage, the AOW benefit enjoys also an indexation to the contractual wages increases. The indexation does not apply in cases of rise in contributions to social insurance that affect economic growth or employment. AOW is a PAYG system. The persons qualified for a partial AOW benefit and have, together with other sources of income, a total income under the subsistence level, will receive the social assistance.

#### *Second pillar*

Private occupational pensions are very well developed in Netherlands. The pension scheme can be organized either at the company level or at the sector or industry level. Occupational pensions are subject to negotiations between social partners and are financed by capital of the funds. In principle, participation in an occupational pension scheme is not compulsory, but in practice it is, arranged either by the employer or the government. The mandatory participation in a pension

<sup>124</sup> Data of International Social Security Association, <http://www.issa.int/Observatory/Country-Profiles/Regions/Europe/Netherlands>.

<sup>125</sup> A measure showing the number of dependents (aged 0-14 and over the age of 65) to the total population (aged 15-64). It is calculated by:  $\text{Number of Dependents} / \text{Population (ages 15-64)} \times 100\%$ .

<sup>126</sup> Source: Eurostat, EUROPOP 2008.

<sup>127</sup> Source: Commission Services, EPC (2009 Ageing Report).

<sup>128</sup> Source: Eurostat, EUROPOP 2008.

<sup>129</sup> Source: NationMaster.COM, <http://www.nationmaster.com/graph/>

scheme at sector level for professional groups is actually imposed by the Ministry of Employment and Social Affairs after being required by the sector representatives. This led to coverage of over 90% of the employees.

The total pension benefit can represent about 70% of the final career wage or 80% of the average career wage. Occupational pension schemes are considered as a supplement to AOW. This is the reason why the AOW benefit is included in many calculations linked to the occupational pension schemes, in order to reach the objective of 70% or 80% after 40 years of contribution. The way in which contributions are shared between social partners is different in different pension schemes.

The supplementary occupational pensions are indexed to wages or prices levels if the financial position of the pension fund allows it. In the same manner, the yearly adjustment (at the level of contractual wages increases) of the acquired rights of active participants depends also on the financial position of the funds. Usually, if the funds assets cover less than 125% of the liabilities value, the indexation of both pensions and acquired rights will be less than 100%. It becomes 0% if the coverage rate arrives at 105% or less.

### *Third pillar*

The Dutch pension system also includes voluntary individual pensions, through annuity insurance, which are stimulated by tax deductions in certain limits (annuity contributions are tax exempted and the pension payments are taxed).

### **Sustainability, efficiency and performance**

The level of the median income of persons over 65 years old as compared to the general population is 84% (this indicator is based on equivalent household disposable income). The average gross (public) pension to the average gross wage represents 43%. The above first indicator is equal with the EU27 average and the second is slightly under EU27 average. The second indicator includes also disability and survival pensions received by persons under 65 years old. If we take into consideration only the AOW benefits, the rate is 28.3%. Together with private pensions, the rate reaches 58.6% in 2007. The at-risk-of-poverty rate of persons above 65 years old (10%) is 9 percent lower than the EU average and slightly lower for persons below 65 years old. As regards the adequacy, the pension system of Netherlands offers a good protection against poverty and a high replacement rate, which helps old population to keep their living standards. In 2008, the gross theoretical replacement rate for a male with average income retiring at 65 years old after a 40 years contribution (92.4%) is great as compared to the EU average. The net replacement rate arrives at 103.8%.

Even though the Dutch pension funds face problems as regards solvency requirements, their liquidity is not in danger, given that total contributions exceeds expenditures with pension benefits.

Netherlands belongs though to the European group of countries that will face significant rises in the public pension expenditures (from 6.6% of GDP in 2007 to 10.6% of GDP in 2060, in accordance with the projections of 2009 Ageing Report), due to the impact of demographic factors. In order to mitigate this impact, restrictions regarding the eligibility for pensions were introduced. At the same time, the share of occupational pensions will increase from 5.2% of GDP in 2007 to 12.1% of GDP in 2060, which will also lead to adequate replacement rates.

### **CRISIS IMPACT AND RECENT REFORMS**

Despite of the crisis, the employment situation in Netherlands was rather good as compared to the other EU countries. In 2009, the employment rate of persons between 15+65 years decreased, as compared to 2008, only by 0.2%, reaching 77% (at the EU level it decreased by 1.3%, arriving at 64.6%). Employment rate for men dropped by 0.8% becoming 82.4%. Despite of the

crisis, the employment rate for women increased by 0.4%, reaching 71.5% (EU: for men decrease by 2.1%, arriving at 70.7% and for women decrease by 0.5%, arriving at 58.6%). The employment rate of old men (55-64 years) increased by 1.7%, reaching 65.4% (as compared to EU: decrease by 0.2% arriving at 54.8%), while the employment rate for old women registered an increase by 2.5%, arriving at 44.7% (EU: increase by 1% at 37.8%).

The pension funds in Netherlands experienced considerable asset losses in the crisis context. By the end of 2007, the value of their total assets was 684 billion Euros (120% of GDP). In 2008 this value decreased to 578 billion Euros (97% of GDP). The average coverage rate diminished in this period from 144% to 95%. This is the reason why pension funds either restricted or cancelled indexation and in some cases contributions were increased in 2009 and 2010.

The government intervened by reducing restrictions as regards the re-establishing of the coverage rates of the pension funds (they have presently 5 years instead of 3 years for restoring the minimum rates of 105), avoiding thus too severe measures. In 15 years all funds must arrive at a coverage ratio of about 125%. In 2009 the pension funds benefited the revival of capital markets, by which total assets could rise from 666 billion Euros (120% of GDP) by the end of 2009. The average coverage ratio reached 109%. There existed however two factors that acted against a constant recovering: an unexpected increase in life expectancy and a further decrease in the swap inter-bank rate. Both factors increased pension funds obligations in 2010 and thereby the coverage ratio dropped again. In these conditions, 14 pension funds whose coverage ratio is much below the solvency requirements were obliged to reduce the pension benefits since 1 January 2011. About 150,000 pensioners will be thus affected.

In Netherlands, besides the funded occupational pensions, there are also early retirement private pension schemes in the PAYG system, founded by the social partners in the aftermath of the first oil crisis. Since 1995 social partners started to reform the respective schemes by gradually adopting early retirement funded pension systems and immediately applying the actuarial methods for cases of working longer. In 2006 the government stopped the favourable fiscal treatment of the early retirement pension schemes financed through the PAYG system, with a transition period till 2015. This reform obliged the social partners to integrate the early retirement schemes in the traditional occupational schemes.



## **POLAND (2004)**

### **GENERAL PRESENTATION**

Poland recorded in 2010 a GDP per capita of 9300 Euros, considerably below the European average of 24 500 Euros. Poland's economic dependency rate in 2010 was 19%, a percentage that falls below the European average of 25.9%. But estimations are less optimistic, the European Commission expecting it to rise to 68.97% in 2060. UN estimates for 2010 a rate of democratic dependency of 53.7%, but this, in return scoring the lowest value since the 1950's so far. Median age in Poland is estimated by Eurostat to 37.7 in 2010.

### **PRINCIPLES AND CHARACTERISTICS**

Poland, like most new EU member states, is not captured in the categories of the European social model (MSE) proposed by Sapir (2006) - Northern, Continental, Anglo-Saxon and Mediterranean. MSE evaluation in Eastern European countries (Neesham and Tache 2009) did not lead to the outline of a specific model of this area, but to the distinguishing of each country towards continental MSE or the Anglo-Saxon one (liberal). Thus, the relevant indicators shape Poland's social policy as being inclined towards continental MSE - a high level of public

expenditure (particularly in social spending) in order to prevent social inequality, a high degree of protection regarding the labour market and increased tax .

In Poland, social protection expenditures (SPE) recorded a sustained growth in the last decade, evolving from 949 Euros per person in 1999, to 1768 Euros (2629.6 PPS) per person in 2008<sup>130</sup>. Social protection expenditures in Poland have dropped by more than 2 percent compared to 2002, reaching 18.5% of GDP in 2008<sup>131</sup>. To these it corresponds a level of general government expenditures (GGE) of 43.2% of GDP in 2008, 44.5% of GDP in 2009 and 45.4% of GDP in 2010<sup>132</sup>. These budget expenditures seem to give good results in terms of improving social disparities, as Poland has recorded in 2009 the lowest value of the Gini Index in recent years - 31.4%<sup>133</sup>. The gross minimum wage in Poland, in 2011, is the equivalent of 348.68 Euros per month, placing itself in an upward trend compared to 1999, when the gross minimum wage per month was equivalent to 158.94 Euros<sup>134</sup>.

Polish tax system has not undergone substantial changes recently, having a progressive tax system for income taxes. For those with annual incomes less than 3 089 PLN (783.51 Euros) income taxes are 0% , for income between 3 089 PLN (783.51 Euros) and 85 528 PLN (21 693.76 Euros), taxes are 18%, and for those with income above 85 528 PLN (21693.76 Euros), the taxes rise to 32% of income<sup>135</sup>. However, Poland has also got a unique optional ceiling of income tax of 19%. As regards social contributions, both employers and employees are required to pay 9.76% for this purpose, both contributions being deductible. For a long time this country has been an example of good practice in terms of pension's reform, started in 1999, currently, private pension funds effectively representing 7% of the turnover of the WSE (Warsaw Stock Exchange). Nevertheless, this year, facing budget problems, Poland reduced the contribution from salaries to funds from 7.3% to 2.3%. This measure has destabilized the capital flows for Polish private pension funds<sup>136</sup>.

## **PENSION SYSTEM**

### General Structure

Starting with 1999, Poland went through a series of reforms of its pension system, currently combining all three specific pillars. Pillar I, the public pension system - Zakład Ubezpieczeń Społecznych (ZUS), covers all employees and freelancers in Poland. Only for farmers, there is a distinct public pension system (KRUS), which supports from the state budget up to 90% of the payment of pensions, these subsidies representing 1.8% of GDP in Poland nowadays. ZUS is a defined benefit system (DB) for those born before 1949 and a defined contributions system (CD) for those born after 1948<sup>137</sup>. Thus, for the latter, public pension will only be constituted of the capital accumulated by a person throughout his life. The capital stored in ZUS will be adjusted by a factor determined by the Minister of Labour and Social Policy of Poland, based on consumer price index (CPI). Pillar I in Poland is based on the PAYG system, which means that state pensions are currently paid from current contributions. Based on these compulsory contributions, totalling 19.52% of the gross salary (12.22% for those who are also enrolled at a private fund type pillar II), people earn the right to individual public pension.

With regard to private pensions, population size and the early incidence of reforms which establish private funded pensions, make from Poland the largest market of its kind in the area,

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<sup>130</sup> Source: Eurostat

<sup>131</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>132</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>133</sup> Source: Eurostat (last updated on October 21, 2011)

<sup>134</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>135</sup> Source: European Commission (2011) Taxation trends in the European Union: Data for the EU Member States, Iceland and Norway

<sup>136</sup> Cienski, J. (19 aprilie 2011) Funds: Fiscal problems limit the flow of pension money, Financial Times

<sup>137</sup> European Commission (2010) Joint Report on Pensions



capturing 60% of Central and Eastern Europe<sup>138</sup>. The latest estimations position the Polish pillar II to 31 billion Euros, with an estimated growth of 17% per year until 2015. Pillar III is estimated to worth 571 million euros, with an estimated increase of 17-23% per year until 2015.

Pillar II is traditionally accepted as being composed of occupational pension schemes, but they are extremely limited in Poland, covering only 2% of employees. Thus, pillar II is actually constituted by private mandatory contributions, which are managed by private investment companies / open pension funds (OPF), supervised by the state. To set up a private pension fund, it must receive certification from the Commission for the Supervision of Pension Funds (KNF). Through the public pension system, it is currently transferred 7.3% of an individual's gross salary to the OPFs, to financial management. OPFs can invest money from pension funds in proportion of maximum: 40% in shares of companies traded on the stock exchange, 10% in shares of companies that are not traded on stock exchanges, 20% in bank deposits and securities, 5% in foreign investments.

OPFs cannot invest in real estate. Instead, they are allowed to unlimitedly invest in bonds.

Pillar III, of optional private pensions can be divided into two categories: that of voluntary occupational pension funds - Pracowniczy Emerytalny Program (EPP) and voluntary private pensions-Indywidualne Kont Emerytalne (IKE)<sup>139</sup>. This pillar was reformed in 2004 based on a more covering package. Voluntary personal pension (IKE) is managed as in the Polish second pillar pension funds. The market, with more than a decade of experience, currently comprises 14 such companies (initially restricted to 21). The largest companies in terms of market share, are Aviva, ING and DAM. Management costs of pension fund greatly vary, from under 8 Euros (Polsat) to 15.5 Euros (AXA). Voluntary occupational funds (EPP) have not been successful so far. They were designed as an additional level of safety, to ensure pension income. EPPs have greater freedom to select portfolio than the IKEs, but the lack of deductibility has made them largely unattractive to polish people.

The pension reform in recent years has not changed the retirement age, which remained at 60 years for women (20 years work experience) and 65 for men (25 years work experience)<sup>140</sup>.

### Funding

Poland currently allocates 11.61% of GDP on state pensions expenditures. These costs have had a very large fluctuation in Poland, registering only 6.5% in 1989 and then rising to a record level of 15.6% of GDP in 1995, due to a wave of early retirements resulting from an economic restructuring process. As a result of these unsustainable escalation public pension expenditures, Poland has started the process of reforming the pension system, in accordance with the recommendation of the World Bank, based on a multi-pillar structure. It is expected that the pension expenditures continue to decline, estimations being of only 9.3% in 2050. The last value of the replacement rate recorded was 0.56 in 2009, according to Eurostat.

### Sustainability & Efficiency

Analyzing the current balance adjustment needs to meet budgetary constraints, Poland meets a sustainability gap of 3.2% of GDP, far below the recorded EU average, 6.5% of GDP in 2009<sup>141</sup>. The necessary adjustments due to population aging costs register a negative figure of -1.2% of GDP, far below the EU average of 3.3% of GDP. Poland also records a public debt of 55% of GDP in 2010<sup>142</sup>, far below the 60% of GDP required by the EU Member States. The report of Sustainability of the European Commission in 2009 evaluates a medium risk on long-term

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<sup>138</sup> Allianz Global Investors, Pension Funds Online

<sup>139</sup> Milliman Research Report (2010) Private Pension Systems in Central and Eastern Europe

<sup>140</sup> European Commission (2010) Joint Report on Pensions

<sup>141</sup> European Commission, Economic and Financial Affairs (2009) EU Sustainability Report

<sup>142</sup> Source: Eurostat

sustainability of Polish finances, because the low costs on aging are caused by lower spending in this respect - up to 2 percentage points by 2060. Such a strategy may prove non feasible on a long term.

Poverty limit in Poland is estimated at 4427 PPS in 2009, according to Eurostat, recording a promising increased value compared to 2552 PPS in 2000<sup>143</sup>. However, this limit was reached in 2009 by 17.1% of the population of Poland. In addition, as a measure of adequacy of the Polish pension system, the poverty line is reached by 14.6% of pensioners. The benefit rate in 2007 was 56, and it is estimated that by 2060, it will decrease by 54%, reaching only 26.

The financial crisis in recent years did not precipitate the application of a set of special measures for Poland. It continued at a steady pace the pension system restructuring, the decrease of government spending on a long-term and private pension market development. A compelling reason for which we can not correlate specific reforms with the crisis is that Poland has not been as affected as other European countries. Thus, even if economic profitability declined, there was no negative growth. However, private pensions market is suffering a crisis of confidence. In 2008, pension fund assets have lost value in proportion of 14.3%, and although they recovered in 2009, registering growth of 13.7%, Polish people remain sceptical about the safety of their investments in OPFs. This lack of trust, more than the financial crisis, is likely to affect the private pensions market in Poland.



## **PORTUGAL (1986)**

### **GENERAL PRESENTATION**

Portugal recorded in 2010 a GDP per capita of 16 200 Euros. Portugal's economic dependency rate in 2010 was 26.7%. UN estimates for the same year a demographic dependency rate of 62%, being the lowest scoring since the 50s up to present. Median age in Portugal is estimated by Eurostat to 40.7 in 2010.

### **PRINCIPLES AND CHARACTERISTICS**

Portugal, along with Spain, Greece and Italy are characterized by Sapir (2006) according to a Mediterranean European Social Model (MSE). The features of this type of system include large expenditures on pensions and social protection, early retirement predictions and reflect the social / cultural family-centred system of these countries. However, due to the financial crisis and the increased problems of Portugal in recent years, the fiscal policy does no longer reflect the theoretical characteristics of Sapir set for this group of countries.

In Portugal, social protection expenditures (SPE) recorded sustained growth in the last decade, evolving from 1991.4 Euros (2510.01 PPS) per person in 1997 to 3942.35 Euros (4791.4 PPS) per person in 2008<sup>144</sup>. The social protection expenditure in Portugal has increased to 24.33% of GDP in 2008, maintaining a level of comparison to other European countries, the EU average being 26.35%. To these it corresponds a level of general government expenditures (GGE) of 44.8% of GDP in 2008, 49.8% of GDP in 2009 and 50.7% of GDP in 2010<sup>145</sup>. In contrast with the Mediterranean social model, social inequality persists in Portugal, registering a Gini indicator value of 35.4, in 2009<sup>146</sup>. This value has marked a continuing improvement in the situation of Portuguese social disparities, compared to a record value of 38.1, in 2005. However, it remains significantly above the EU average of 30.4 in 2009. In 2011 the gross minimum wage in

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<sup>143</sup> Source: Eurostat

<sup>144</sup> Source: Eurostat

<sup>145</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>146</sup> Source: Eurostat (last updated on October 21, 2011)

Portugal is 565.83 Euros per month, recording a substantial improvement compared to 1999, when the gross minimum wage was 365.72 Euros per month<sup>147</sup>.

## **PENSION SYSTEM**

### General Structure

Portuguese pension system is dominated by pillar I of public pensions. In addition, there is also a voluntary option of some occupational pension plans or of personal deposits in order to provide retirement income.

Pillar I, which have a PAYG structure type, is one of the largest in the EU. Its general coverage is a characteristic feature of the Mediterranean MSE. It is based on defined benefits (DB) correlated with the income level of wage period. Contributions rise to 11% of gross income for employees and to 23.75% for employers<sup>148</sup>.

The third pillar of voluntary additional pension, although it exists in Portugal, is one of the lowest in Europe. The supplementary pensions market is estimated to have in the future an increase of 6.9% per year, reaching in 2020 a total of 150 billion Euros, due to lower pension benefits from the public system. Voluntary occupational pension schemes cover only 3.7% of the workforce nowadays. With regard to individual voluntary additional pension, only 1.5% of the active population is registered to this type of financing the retirement income, life insurance being the main formula<sup>149</sup>.

### Funding

Retirement age is 65 years both for men and women. Early retirement is possible from the age of 55 years, provided that they have 30 years of contributions. Retirement can also be delayed until the age of 70, benefiting this way from a monthly growth of the rate of pension income, depending on the years of contributions (of a 65 years old person): 15-24 years - 0.33% , 25-34 - 0.5%, 35-39 years -0.65% , or more than 40 years of work -1%. All pensions are also adjusted to the Consumer Price Index (CPI)<sup>150</sup>.

In recent years, there have been introduced and extended a series of measures related to ensuring a medium minimum income for all older people. Such approaches are not surprising in a state adhering to Mediterranean MSE, but are inconsistent with the constraints of the economic crisis, Portugal being one of the most seriously-hit EU states. There is a minimum pension based on the age of the contributions made, whose value is between 236.47 Euros and 363.81 Euros.

For those who do not qualify for the pension system based on contributions, the monthly social pension in 2008 was 181.91 Euros per month. In addition, those receiving social pension are entitled to receive also the Extra Supplement of Solidarity, whose addition is 16.83 Euros per month for those whose age is less than 70 years, and 33.65 Euros per month for those older than 70 years. An additional measure to combat poverty among the elderly is the Solidarity Supplement for the Elderly (ESS), which came into effect in 2008 and is intended for those whose age is over 65 years old. ESS is the difference between the beneficiary's income and certain reference amounts (RA): 4800 Euros per year for a single person, or 8400 Euros per year for a couple.

### Sustainability & Efficiency

Analyzing the adjustment needs of the current balance to meet budgetary constraints, it shows that Portugal has got a sustainability gap of 5.5% of GDP, being situated below the EU average

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<sup>147</sup> Source: Eurostat (last updated on October 21, 2011)

<sup>148</sup> European Commission (2010) Joint Report on Pensions

<sup>149</sup> European Commission (2010) EU Ageing Report

<sup>150</sup> OECD (2011) Pensions at a glance 2011: Retirement-income systems in OECD and G20 countries

of 6.5% of GDP in 2009<sup>151</sup>. Thus, Portugal is shown to be sustainable on a long-term and with a low risk in terms of stability of public finances. The adjustment required to stabilize the debt rate is positive (3.7% of GDP), but slightly higher than the European average of 3.3% of GDP. In contrast, long-term costs on aging population are lower than the EU average: 1.9% of GDP in Portugal compared to 3.2% of GDP. The thing that primarily contributes to the costs of population aging is the increase of expenditures with public pension and health, which are estimated at 1.5 and respectively 1.8 percentage points by 2060 (compared to 2010). However, the most worrying aspect that threatens sustainability on medium and long term is debt. Latest estimations show that its value was 93.0% of GDP in 2010, above the predictions of 81% and well below the EU average of 80%.

Poverty limit in Portugal is estimated at 5646 PPS in 2009, according to Eurostat, scoring an encouraging growth to the value of 4229 PPS in 1999. However, this limit was reached in 2009 by 17.9% of the population of Portugal. In addition, as a measure of inadequacy of the Portuguese pension system; the poverty limit was reached by 17.4% of pensioners in 2009, being still an improvement over the situation in 2004 when 25.8% of pensioners reached the poverty line.

The benefit rate of the public pension system in 2007 was 46, but estimations are negative, by 2060 expecting a decrease of 29%, reaching the value of 33. When we analyze the benefit rate of the pension system as a whole (public and private), we notice an even more pronounced decrease in the benefit rate of 31% by 2060. The replacement rate in Portugal was 0.5, in 2009, very close to the European average of 0.51.

## **RECENT REFORMS**

The most recent reforms of the Portuguese pension system pre-date the financial crisis. Thus, although they are restructuring measures in terms of restraining, they have been caused by a necessity of saving, endogenous to the Portuguese construction of public pension system. The first restructuring directive was adopted by the Portuguese government in 2006.

The new law of the social security system came into force on January 17th, 2007. It stipulates a correlation of pension benefits to life expectancy. Thus, in 2008, in the formula for calculating the pension benefits is included sustainability factor which will adjust the resulted amount according to average life expectancy. In 2008, life expectancy was 82.6 years for women and 76.5 for men, both increasing. According to these new forecasts, the higher life expectancy will be in Portugal, the lower individual pension quantum will become. On the other hand, the new legal stipulations include the extension of pension calculation base – the benefits being calculated based on the best 10 years of the last 15 payroll years. In addition, beginning with early 2008, pensions are indexed based on the consumption prices indicator (KPI) and GDP dynamics.



## **ROMANIA (2007)**

### **GENERAL PRESENTATION**

Romania recorded in 2010 a GDP per capita of 5700 Euros, far below the EU average for the same year, 24500 Euros. Romania's economic dependency rate in 2010 was 21.4%, forecasts for 2050 being of 49.6%. However, it is still under the estimations of growth at EU level, which positions the average rate of economic dependency to 52% in 2050. UN estimates for the same

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<sup>151</sup> European Commission, Economic and Financial Affairs (2009) EU Sustainability Report

year a demographic dependency rate of 55.4%, the lowest scoring since the 1950s to the present. The median age in Romania is estimated by Eurostat to 38.3 in 2010.

## **PRINCIPLES AND CHARACTERISTICS**

Romania, like most new EU member states, is not captured in the categories of the European social model (MSE) proposed by Sapir (2006) - Northern, Continental, Anglo-Saxon and Mediterranean. MSE evaluation in Eastern European countries (Neesham and Tache 2009) did not lead to the outline of a specific model to this area, but to the distinguish of each country's trends towards continental MSE or the Anglo-Saxon (liberal). Thus, relevant indicators shape Romania's social policy as being inclined toward the liberal MSE - a low level of spending (especially in social area), high dispersion of income, and low taxation.

In Romania the costs of social protection (SPE) recorded sustained growth in the last decade, moving from 236.1 Euros (646.7 PPS) per person in 2000 to 925.98 Euros (1715.82 PPS) per person in 2008<sup>152</sup>. Social protection expenditure in Romania increased slightly to 14.25% of GDP in 2008, but maintained a much lower level than other European countries, the EU average being 26.35%. They correspond to a level of general government expenditures (GGE) of 39.3% of GDP in 2008, 41.1% of GDP in 2009 and 40.9% of GDP in 2010<sup>153</sup>. According to liberal MSE, little has been done to improve the social disparities, as Romania recorded in 2009 a value of Gini Index of 34.9, down from 37.8 in 2007, but still significantly above the EU average of 30.4<sup>154</sup>. In 2011 the gross minimum wage in Romania is equivalent to 157.2 Euros per month, scoring a substantial improvement from 1999, when the monthly gross minimum wage was equivalent to only 89.15 Euros, but remains much lower than other member states<sup>155</sup>.

Fees were less than 30% of its GDP in 2008. With regard to taxation in Romania, the last two years policy has been somehow inconsistent with liberal MSE, since the VAT in 2010 increased from 19% to 24%, generating thus an economic shock of a growth of 5 percentage points in one year. There is a unique fee for tax on profit and income of 16%, whose tax base also increased in 2010, from tax on meal tickets to tax on profits or capital (e.g. bank interest on deposits)<sup>156</sup>. Social security contributions (SSC) increased for both employers and employees, but in 2009, the deductibility ceiling of voluntary contributions to private pension funds increased from the equivalent of 200 Euros to 400 Euros.

## **PENSION SYSTEM**

### General structure

Romania went through a series of reforms of its pension system, currently combining all three specific pillars. Besides the public pension system, in Romania came into force the voluntary private pension system (pillar III) in May 2007, and the mandatory private pension system (pillar II), in May 2008.

Pillar I in Romania consists of a PAYG system, based on intergenerational solidarity, and defined benefit type (DB). This system has been affected by a number of problems in recent years: the rise of unemployment rate and hence the number of contributors, early retirements, as a measure of avoiding the rising of unemployment, that ended up yielding even more pressure on intergenerational balance, the lack of transparency regarding the correspondence between the level of contribution and the level of benefits received at retirement - many discrepancies in the formula of calculating the state pension, the segmentation of pension level on different

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<sup>152</sup> Source: Eurostat

<sup>153</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>154</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>155</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>156</sup> Source: European Commission (2011) Taxation trends in the European Union: Data for the EU Member States, Iceland and Norway

occupational groups, etc.. Because of these problems, it has become necessary the extension of pension market in Romania on a multi- pillar system.

According to Law no. 852 of 2010, Article 27, the shares of social insurance contributions are:

- a) 31.3% for normal working conditions, indebted by employer and employees, of which 0.5% indebted by employees and 20.8% indebted by employers;
- b) 36.3% for special working conditions indebted by employer and employees, of which 10.5% indebted by employees and 25.8% indebted by employers;
- c) 41.3% for special conditions and other conditions of employment, from the national defence field, public order and national security, indebted by employers and employees, of which 10.5% indebted by employees and 30.8% indebted by employers.

For self-employed people, the full amount of social security contributions from gross income is supported by themselves. Between 2001 and 2010 the public pension was adjusted to nominal wages. According to art. 94 of the new pension law, the pension amount is determined by multiplying the annual average score achieved by the insured with the value of a standard pension point. When this law entered into force, the value of the pension point was 732.8 lei. The value of the pension point increases annually with 100% of the inflation rate, to which we add the real growth of average gross earnings, made in the previous year.

The classical system of Pillar II, which is private mandatory occupational pension type, is very low in Romania. The only institution that offers this type of coverage is Lawyers' Insurance House, representing only 0.1% of all employees. Pillar II is thus made up of mandatory individual private pensions, as in other countries of Central and Eastern Europe. This defined contribution system (DC) became operational on 1st January 2008. According to Law no. 411 (of privately managed pensions) from 2004 (republished in 2007), the participation in the second pillar is mandatory for those under 35 years old, and optional for those aged between 35 and 45. Of all employees born after December 31st, 1972, 65% are currently covered by Pillar II.

Those who adhere to this system can choose to which fund management entrust their pension contributions. Also they can transfer from one fund to another if they wish. Currently the contributions to the second pillar are 2% of gross salary, and will grow by 0.5 percent per year over the next eight years; so, in 2010, the contribution to pillar II will represent 6% of gross salary of an individual. The fees for management of private pension funds can not exceed 5% of the contributions made.

According to the current legislation, the investment limits of the pension fund assets, both mandatory and optional, are: 20% in money market instruments, 70 % in state securities of Romania, the EU member states and other countries from the European Economic Area, 30% in bonds and other securities issued by local public administration authorities in Romania, EU member states or European economic Area, 50% in securities traded on regulated markets in Romania, European Union Member States or belonging to European Economic Area, 15% in securities issued by third countries, regardless of the term to maturity, 10% in bonds and other securities issued by local public administration authorities in third countries, 5% in securities issued by collective investment bodies in transferable securities in Romania, EU member states or European Economic Area and third countries, and 15% in bonds issued by the World Bank (WB), European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), traded on regulated markets. In addition, in order to reduce the investment risk, through diversification and dispersion, CSSPP introduced new instruments whose limits are: 2% (for Pillar II) / 5% (for Pillar III) in private equity to companies in Romania, member states of the European Union or European Economic Area, 3% (for Pillar II) / 5% (for Pillar III) into goods and goods derivatives, such as : crude oil and its derivatives, cotton, coffee, wheat, copper,

aluminium, zinc, valuable metals, which are traded on regulated and specialized stock exchanges in the EU and U.S.

Pillar III, of voluntary private pensions is still under-developed in Romania, being mainly based on life insurance. There are 13 funds that currently provide such services. The contribution is well defined, being allowed to allocate up to 15% of gross salary to such a program. Any employee who has at least 90 months before the age of 55 years can choose a pension fund from pillar III. Currently, the Romanian market of privately managed pension (optional and mandatory), is dominated by two big companies: ING OPTIM (29%) and BCR PRUDENT (27.34%)<sup>157</sup>.

### Funding

Romania currently allocates 7.45%<sup>158</sup> of GDP to expenditures on state pensions, remaining again below the EU average of 11.6%. Although in the "lost decade" scenario<sup>159</sup> (lost decade) of the aging report of EPC / AWG from 2009 it is also taken into account the decrease in expenditures with state pensions in Romania, the most plausible hypothesis remains that of the growth of state pensions expenditures. This increase is estimated to 7.4 percentage points by 2060, positioning it well above the European average estimated at only 2.4 percentage points.

The last recorded value of the replacement rate was 0.55 in 2009, according to Eurostat. Estimations are not very encouraging, because the gross replacement rate in 2046, for an individual who retires at 65 years old, and with 40 years experience in the labour market, is predicted to be 66.2% (88.6% net). Between 1990 and 2004, the number of pensioners almost doubled, increasing from 3.5 million to 6.1 million. At the same time, the number of contributors dropped from 8 million to 4.5 million.

Since October 2009, the minimum guaranteed social pension is 350 RON, covering about 650 000 people across the country. Estimations are that the number of people eligible for this pension will substantially increase in coming years (EC 2010). Since July 2010, the term "minimum guaranteed social pension" was replaced with the term "social allowance for pensioners".

### Sustainability & Efficiency

Analyzing the current balance adjustment needs to meet budgetary constraints, Romania shows a sustainability gap of 9.1% of GDP, placing itself far above the EU average of 6.5% of GDP in 2009<sup>160</sup>. The necessary adjustments due to population aging costs register a value of 4.9% of GDP, also far above the EU average of 3.3% of GDP. Long-term costs of population aging are caused mainly by the increase of 7.4 percentage points of expenditures on pensions, expected to occur by 2060. Romania also registers a public debt of 30.8% of GDP in 2010, far below 60% of GDP required to the Member states by the EU. The Sustainability Report of the European Commission in 2009 assesses a high risk in the long term sustainability of the Romanian Finance because it registers high costs regarding aging.

The poverty limit in Romania is estimated at 2066 PPS in 2009, according to Eurostat, scoring a promising increased value compared to 1726 to PPS in 2007. However, this limit was reached in 2009 by 22.4% of the population. In addition, as a measure of inadequacy of the Romanian pension system, the poverty limit was reached by 24.1% of pensioners in 2007, with growth forecasts<sup>161</sup>. The benefit rate of the pension system (public and private) was in the same year of

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<sup>157</sup> CSSPP data for June 2011

<sup>158</sup> The indicator value is taken from the Eurostat data base, available at 12th June 2011 for the year 2008

<sup>159</sup> See table 76, from pg 237, from 2009 Ageing Report: Economic and budgetary projections for the EU-27 Member States (2008-2060)

<sup>160</sup> European Commission, Economic and Financial Affairs (2009) EU Sustainability Report

<sup>161</sup> Source: Eurostat

only 29, and it is estimated that by 2060, it will increase by 41%, reaching the value of 41. The increase of the benefit rate of the pension system is based mostly on the expanding of the private pension system.

## RECENT REFORMS

The new Pension Law (Law no. 263/2010), in force from 1st January 2011, stipulates the raise of the retirement age to 65 years for men and women. Thus, retirement age will increase gradually until reaching this limit in 2030. The minimum age for full pension rights also increased from 25 to 30 years for women and from 30 to 35 years for men. In 2010, the retirement age for men was still 63 years and 10 months, and for women 58 years and 10 months.

Also in the new law, there are stipulations for special pension recalculation and reduction of incentives for early retirement. Another novelty is the calculation of the state pension based on contributions made throughout the active period, unlike the previous calculation based on salaries in the last years of activity. The new points-based system is calculated from monthly gross income during working life. Thus, an individual's state pension is calculated by multiplying the value of his pension points with the value that the social security budget law gives them each year. In order to encourage the private pension system, the level of deductibility of contributions to it increased from 200 Euros to 400 Euros.



## SLOVAKIA (2004)

### GENERAL PRESENTATION

GDP per capita 2010 (current prices)	12100	
Total population at 1 January 2011	5.435.273	
Expenditure on social protection (as % GDP) 2009	18,81	(provisional value)
Expenditure on pensions (% GDP) 2009	NA	
The importance of private pension funds in the total economy (% of GDP) (2010)	7.4	
Monthly minimum wage	317	
Median age 2010	36.9	
Old-age-dependency ratio ( %) 2010	16.90	
Projected Old-age-dependency ratio (%) 2060	61.80	
Total age dependency ratio 2010	37.88	
Share of the total population aged 65 years or over, 2010	12.29	
Share of the total population aged 65 years or over, 2060	36.12	

Source: Eurostat

### CHARACTERISTICS

In 2008 Slovakia allocated approximately 7.12% of GDP on public pensions, corresponding to a decrease of 0.35 percentage points compared to its 2000 level, a level lower than the average EU pension expenditures equal to 11.66% of GDP in 2008. This percentage is equivalent to 594.86 Euros (at 2000 prices) per capita, compared to the EU average of 2551.27 Euros. The last recorded value for the aggregate replacement ratio was 0.55 in 2009 (according to Eurostat), under the EU average of 0.51. The poverty threshold in Slovakia is estimated at 4713 PPS in 2009 (according to Eurostat), reflecting an increase with 96.87% from the level of 2394 registered in 2000. The population situated below the threshold of poverty as defined by Eurostat (60% of median income) represented 19.6% of the total population in 2009. In that same year the percentage of the elderly (people aged over 65) situated below the poverty line was 10.8%,



below the EU average (17.88% in 2009). While in the European Union the median income of the elderly equals about 88% of the median income for the rest of the population, in Slovakia this percentage is lower at around 81%. The average exit age from the labour market is 58.8 years, below the EU average (61.4 years). The Slovakia government debt represented 41% of GDP in 2010 (while EU average is 80%), down by 9.3 percentage points as compared to the value registered in 2000. While the government deficit in the European Union in year 2000 represented 6.4% of GDP on average, in Slovakia it is higher, namely 7.9% of GDP.

### **PENSION SYSTEM (general structure)**

The Slovak pension system consists of three pillars:

- Pillar 1 is comprised of the state pensions and it is a pay-as-you-go system, mandatory for all employees;
- The second pillar consists of individual occupational pensions, it is a mandatory "defined contribution" system, introduced following the reform of 2005;
- The third pillar consists of supplementary private pensions, of a voluntary nature.

#### **Pillar I (the state pension system)**

The system in force before the pension reform applied since 2005 (but enacted since 2003) was affected by major financial difficulties. These were the result of a high unemployment rate and low employee motivation to contribute to this system. There was a weak connection between contributions and benefits, the retirement age was relatively low and the trend of labour migration was increasing. The state pension system was in deficit since 1997, which caused a steady decline in the real value of pensions throughout this period. In 2003, the average pension was about 45% of the average salary, compared with 54% as it was in 1991.

The main objectives pursued by the pension reform consisted in restoring long-term sustainability of public pension system and strengthen and promote the principle of merit in determining the compensation.

The introduction of Pillar II (compulsory) had, of course, implications for the state pension system. The measures adopted by the reform will weaken on the long-term the financial pressure under which the system is functioning right now. However, on the short term, this radical transformation of the system generates considerable costs related to transition. Pillar I will have to face a substantial reduction in contributions, so it is very likely that additional transfers of funds from the state budget or reserve fund to the public pension system will be required. The Slovak government intends to use the additional income from privatization to cover the estimated deficit. Total costs generated by this transition are estimated by the European Union at the value of 50, up to 70 billion Euros, 15-20% of the present value of the GDP.

Faced with these high transition costs, the government took a step back and in November 2007 enacted possibility that the pension the funds for Pillar II could be used to cover the existing deficit in Pillar I, allowing participants to give up the Pillar II in favour of the state pension system.

#### **Pillar II (occupational pension system)**

This compulsory system is of defined contribution type, 9% of the gross salary being directed to the individual accounts of its members. The funds are administered by companies with the sole object of activity the administration of pension fund assets (PAMC). These are private stock companies, with a minimum capital of SKK 300 million ( 7.1 million Euros). Another condition that the funds they manage must satisfy is that the number of members should be at least 50,000 in a period of 18 months from the creation of the Fund. Also, each company must provide at least three funds with different risk / return profiles:

- A conservative fund that does not have exposure on stocks and with an allocation of 100% on bonds and money market instruments
- A balanced fund with a stock exposure up to 50% and with an allocation of at least 50% in bonds and money market instruments
- A fund focused on growth with a stock exposure of up to 80%.

In general, members of pension funds are free to choose any of the above options, provided they have more than 15 years until they reach the legal retirement age. If they have less than seven years until retirement they may invest only in the conservative fund and if they have between seven and 15 years until retirement they can invest both in the conservative and in the balanced fund, but not in the fund focused on growth. Pillar II participants can be members of only one investment fund at a given time.

Another important provision that the Slovak pension funds must satisfy is that they invest at least 30% of assets in investment instruments of Slovak issuers. This regulation is intended to prevent capital outflows and support the local capital market. On the other hand, it constitutes an obstacle to the diversification and may result in sub-optimal allocations and returns. Also, this provision may lead to excessive liquidity creation or to artificially raising the prices of domestic assets (asset bubble).

Asset management companies of pension funds should also guarantee a minimum return for each of the three pension funds offered. After 24 months from the launch of the fund, the minimum return reached should be higher than one of the following two values.

- For a conservative fund - 90% of the average return during the last 24 months or the average return minus one percentage point
- For a balanced fund - 70% of the average return during the last 24 months or the average return minus three percentage points
- For a growth fund - 50% of the average return during the last 24 months or the average return minus five percentage points

Funds focused on growth have attracted the most participants (approximately 65.5% in 2005), 30% chose balanced funds and only 4.6% have chosen a conservative fund. Despite the dominance of the growth-oriented funds, the management companies have not exploited to a maximum the limits allowed regarding the allocations. Thus, growth-oriented funds have on average a stock allocation of only 7%, while balanced funds invested on average only 5% of their assets in stocks.

## **REFORMS**

### **The pension reform during the period 2003-2004**

In 2004, the pension system in the Slovak Republic has undergone a major structural reform. The pension system has been reorganized into a traditional pay-as-you-go system (Pillar I, Law 461/2003) and a new mandatory system of private administration (Pillar II, Law 43 / 2004), which became operational in 2005.

A current challenge facing the Slovak pension system is the problem of financing the transition costs. From a total of 18% which the contribution rates represent, 9% are diverted to Pillar II, so only the remaining 9% is retained to cover the costs of Pillar I. The magnitude of the redirected contribution towards Pillar II in the Slovak Republic is greater than that of any other central or eastern European country which has implemented a similar multi-pillar system through the pension reform. In addition, from a total of 2.6 million employees, 1.5 million chose to accede to Pillar II, largely exceeding the original prediction of 0.3 - 0.8 million employees.

This is partly due to the active promotion of private companies that manage pension funds. Some employees who are close to the retirement age (and therefore would not have time to accumulate sufficient savings in the Pillar II) still participated in Pillar II. Unlike other countries in Central Europe, an age limit for entry into Pillar II has not been established.

While Pillar I revenues decreased due to diversion of contributions towards Pillar II, current pensioners continue to receive pensions. Therefore, the state pension system (Pillar I) is expected to be in deficit around the year 2030.

### **Changes in the 2007-2008 period**

The government has recently implemented several amendments to address the short term problems.

1. Firstly, for the period January to June 2008, employees were allowed to move between Pillar I and Pillar II. By the end of June, about 105 000 beneficiaries have dropped Pillar II, which exceeded initial estimates. The Ministry of Labour, Social Affairs and Family estimated that about 30,000 would give up the Pillar II, while the Ministry of Finance estimated that approximately 70,000 would do so. Most of these beneficiaries were older than 40 years and earned less than SKK 100 000 per year. On the other hand, about 21,000 beneficiaries, most of them aged less than 30 years old, joined the Pillar II. Thus, the net percentage of employees who have given up the Pillar II is about 3%
2. Secondly, the minimum pension contribution period has been extended from 10 to 15 years for both Pillar I and Pillar II. As Pillar II has been launched in 2005, this implies that workers who were more than 47 years old in 2005 cannot receive pensions. The Ministry of Labour, Social Affairs and Family estimates that approximately 600,000 employees may not accumulate 15 years of contribution. As far as the number of employees who have migrated from one system to another is concerned, this measure has a much more significant impact than the previous one.
3. Thirdly, the contribution ceiling has been increased from 3 to 4 times the base salary. This increase of the ceiling was suggested by the Ministry of Finance. This will have an immediate effect in raising revenues from contributions to the pension system.
4. Fourthly, measures have been implemented to limit the increase in benefits. Indexation of pensions is made to the average of price inflation and wage growth (the so-called Swiss indexation). Qualification requirements for early retirement were tightened.
5. Fifthly, for disabled workers the state will subsidize their contributions only if they remain in Pillar I.
6. Sixthly, women with children younger than 6 years old can voluntarily join the Pillar II.
7. Seventhly, at the end of 2007 the government approved a law project which granted an allowance for Christmas to 1,051,936 pensioners with small pensions. This allowance has been between 1500 SKK and 2000 SKK per pensioner, depending on the pension level and it was paid to pensioners receiving less than SKK 11 257 per month. Total expenditure for this allowance amounted to SKK 1.7 billion.

### **Long-term sustainability of the pension system in the context of the aging population**

The long term sustainability of the current Slovak pension system raises concerns in the context of severe aging of the population which will peak around the year 2050. According to a 2006 UN report on population projection, the dependency ratio of the people aged over 65 years and people aged between 20 and 64 years is currently 18.3% and expected to grow rapidly to a level of 25.4% by 2020, to 33.3% by 2030, to 40.5% by 2040, and to 55.3% by 2050. One the main reasons for population aging is the rapid drop of the fertility rate in the 1990s, preceded by a

period in which the fertility rate has been relatively high in the 1980s. A long-term prognosis of the Social Insurance Agency indicates that a deficit of 1-1.5% of GDP is expected by 2035, and then its size is expected to rise at around 2.0% -2.5% of GDP by 2055.

### **Other reforms = Supporting the employment of older workers**

Early retirement is granted from 1 January 2011 only to individuals who do not have incomes from other activities (excluding income corresponding to arrangements for the work performed outside an employment contract) or who do not have a compulsory insurance. This means that pensions are paid primarily to persons with no employment opportunity and who are unable to increase their income through work.



### **SLOVENIA (2004)**

Slovenia has a population of about 2 million inhabitants and a GDP per capita of 170% of the average EU-27 level in 2010. 16.4% of the population are individuals over 65 years of age and the life expectancy is 75 years for men and almost 83 years for women. The statutory retirement age is of 63 years for men and 61 years for women.

The social model is the continental one, otherwise the most developed in Europe, with moderate social services and the involvement of social stakeholders. The public pension expenditures in GDP represented about 11% in 2004, and an increase to 12.4% is foreseen for 2020.

### **GENERAL PRESENTATION**

The social security system implies the participation with contributions for all employees and includes also self-employed. All the insured are recorded with the central registry managed by the Health Insurance Institute of Slovenia. Total contributions to social insurance represent 16.1% for the employer, and 22.1% for the employee, and the shares for pensions are 8.85% for the employer and 15.5% for the employee. Insurance for pensions and disabilities is compulsory and uniform for all the insured. For supplementary pension insurance, authorised pension suppliers take out insurances, i.e., a mutual pension fund or an insurance company. Also, the employer can provide for individual or collective insurance.

For supplementary pensions the fiscal deductibility is 5.844% of the gross wage.

Pensions in Slovenia are not subjected to taxation. They are indexed depending on the wage increase (with an element of trans-generational equity). The replacement rate of the wage with pension was 82% of the public pillar in 2005 and is projected to decrease to 60% in 2050<sup>162</sup>.

Access to pension is conditioned by:

- Reaching 65 years of age for men and 63 years of age for women with 15 years of contribution;
- Reaching 63 years of age for men and 61 years of age for women with 20 years of contribution;
- Reaching 58 years of age for men/women with 40/38 years of contribution.

Early retirement is provided only for certain categories of labour force and under special conditions.

There is no higher age limit for pensioning.

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<sup>162</sup> [http://www.ose.be/files/publication/2010/country\\_reports\\_pension/OSE\\_2010\\_CRpension\\_Slovenia.pdf](http://www.ose.be/files/publication/2010/country_reports_pension/OSE_2010_CRpension_Slovenia.pdf)

## THE PENSION SYSTEM<sup>163</sup>

The pension system structure<sup>164</sup> includes:

Pillar I – minimum guaranteed pension (national, means-tested pensions) and social insurance pensions, i.e. a social insurance scheme that covers all employees and self-employed supplying pensions for age limit, sickness pensions and survivor pensions. The farmers and military staff receive a fixed pension. The general covering is ensured by the public pillar; DB-type pension scheme.

Pillar II – mandatory supplementary pension for high risk professions (about 26 thousand workers), collective voluntary supplementary pensions. The occupational pension schemes cover half of the employees – 56% in 2005.

It is compulsory for public employees and voluntary for private sector employees. It is based on capitalization.

Pillar III – individual supplementary pensions, voluntary (low expansion).

The reform of the system was initiated in 1999 (the system faced deficit after 1996). The pension insurance system combines the provisions of insurance with the ones of assistance services (minimum pension) for ensuring the minimum safety.

The public pillar is based on the insurance schemes related to obtained earnings. The Zero Pillar, i.e. the state pension, has a universal character and was implemented in 1999 addressing those that have not contributed to the system (access is conditioned by age – 65 years – and residence for at least 30 years in a member state in the period of 15-65 years). It covers about 18% of the net average wage.

The public pillar is PAYG type and the enforcement of measures as of 1999 triggered the diminution in the transfer rate for the old-age pension to 67.1% in 2008.

The occupational pillar, reformed after 2004, becomes mandatory for the public sector, as for employees within the private sector it remains voluntary. The occupational schemes can be supplied by: mutual pension funds, pension companies, insurance companies, and are facilitated by the pension plan *Kapitalska družba*. Each of these entities is regulated by special laws, authorized and monitored by various agents/institutions and therefore it is difficult to make a comparison between them.

The pension schemes are approved by the Ministry of Labour, Family and Social Affairs, the mutual funds by the *Securities Market Agency*, and for the pension and insurance companies by the *Insurance Supervision Agency*.

*Kapitalska družba* is 100% state-owned and under special regulations and manages 4 pension funds: “Capital Mutual Pension Fund” – voluntary, supplementary pension fund which is the oldest and still open; “Closed Mutual Pension Fund for Civil Servants” – for public officers; “Compulsory Supplementary Pension Insurance Fund of the Republic of Slovenia” – mandatory, the employers paying additional contributions in case of early retirement; “First Pension Fund of the Republic of Slovenia” for those changing pension coupons for insurance policies as outcome of the privatization.

Aggregated assets represented 11.3% of the GDP in 2007.

Pillar III, private and voluntary pensions, is based on individual savings. It is poorly developed, even though it enjoys tax incentives as against occupational funds.

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<sup>163</sup> Current legislation in the field of pension is given by the Law of 1999 (Act on Pension and Invalidity Insurance), implemented in 2000 with subsequent amendments in 2000, 2001, 2002, 2003, 2005, 2006, 2008, 2009.

<sup>164</sup> [http://ec.europa.eu/economy\\_finance/publications/publication14992\\_en.pdf](http://ec.europa.eu/economy_finance/publications/publication14992_en.pdf)

The pension system is managed by an autonomous public financial institution based on tripartite organization “*The Institute for Pension and Invalidity Insurance*” (ZPIZ). The contributions are collected by *Tax Administration* (DURS) and the Ministry of Labour is responsible for the legal framework and policies in the field.

## RECENT REFORMS

2004 - Regulation of insurance companies: Insurance Act;

2005 - Investment Funds and Management Companies Act regulates establishment and operation of mutual pension funds.

2006 - Pension and Disability Insurance Act regulates the insurance schemes that supplement the insurance by the public pillar.

2010- The Government initiated a reform proposal for the pension system, which was under public debate. The main provisions pursued: gradually increasing and equalising the retirement age to 65 years, and of early retirement to 60 years; extending the active life period and instituting incentives and penalties, changing the calculation formula by increasing the base from 18 to 34 best years of contribution; a new method of correlating pension increase with wage and cost of life. Thereafter, in June 2011 a referendum rejected the pension reform by 72.18%<sup>165</sup> of the votes. Even though it is considered necessary for creating adequate pensions and ensuring the sustainability of the system, the reform is postponed.



## SPAIN (1986)

### GENERAL PRESENTATION

Spain recorded in 2010 a GDP per capita of 23 100 Euros. Spain's economic dependency rate was of 24.7 % in 2010. ONU estimates for the same year a demographic dependency rate of 58%, the lowest scoring from the 50's to the present. The median age in Spain is estimated at 39,9 in 2010.

### PRINCIPLES AND CHARACTERISTICS

Spain, along with Portugal and Greece are characterized by Sapir (2006) according to an European Mediterranean Social Model (MSE). The features of this type of system include large expenditures on pensions and social protection, early retirement projections and reflect the social /cultural family centred system of these countries. However, due to the financial crisis and the problems recorded in Spain recently, the fiscal policy does no longer reflect entirely the theoretical characteristics of Sapir for this group of countries.

In Spain, social protection expenditure (SPE) recorded a sustained growth over the past decade, evolving from 2656.69 Euros (3147.84 PPS) per person in 1997 to 5424.96 Euros (5846.01 PPS) per person in 2008<sup>166</sup>. Social protection expenditure in Spain increased reaching at 22.71 % of GDP in 2008 having a slightly lower level compared to other European countries, the EU average being 26.35%. They correspond to their level of general government expenditures, (GGE) of 41.5 % of GDP, in 2008, 46.3 % of GDP in 2009 and 45.6 % of GDP in 2010<sup>167</sup>. In contrast to the Mediterranean social model, social inequality persists in Spain, registering a Gini value of the indicator of 32.3, in 2009<sup>168</sup>. This value marked a continuing improvement of the situation of Portuguese social disparities to a record of 33 in 2005. However, it remains

<sup>165</sup> <http://www.slovenia.si/en/slovenia/society/social-care/pension-system-reform/>

<sup>166</sup> Source: Eurostat

<sup>167</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>168</sup> Source: Eurostat (last updated on November 8, 2011)

significantly above the EU average of 30.4, in 2009. In 2011, the gross minimum wage in Portugal is about 748.3 Euros per month, placing on a substantial improvement, compared with 1999, when the gross minimum wage was 485.71 Euros per month<sup>169</sup>.

## **PENSION SYSTEM**

### General structure

Spain has a multi-pillar pension system, but is dominated, like other Mediterranean countries, of public pension system. This domination is according to the characterization made by Sapir (2006) Mediterranean MSE, but it is a problem for the sustainability of public finances of these countries. In addition to state pensions there is the option of voluntary occupational pensions or private pensions, but both these systems are rather Pillar III than Pillar II. Spanish state did not make too much effort to expand the private pension system, fact which is supported by the reduction in 2007 of tax incentives of adherence to the private occupational pension funds.

The Pillar I is financed through a PAYG system, based on a structure on defined benefit system (BD). There are special pension schemes for employees of central state administration, for justice system workers or soldiers. Joining the state pension fund is mandatory for all Spanish employees and freelancers. Individual contribution is 28.35 for both employees and for freelancers. In the first group, this percentage is divided between the employees - 4.7% from the gross income, and employers, who support 23.6%<sup>170</sup>. To receive a full pension, a retiree must have at least 15 years work experience (one of the lowest limits in the EU) of which 2 must be in the last 15 years before retirement. In addition to the benefits system based on contributions made, there are pensions for people over 56 years old which do not have the needed work age to qualify. These guaranteed minimum pensions are given under the condition that they lived in Spain at least 10 years after the age of 16 and 5 consecutive years before claiming guaranteed state pension. This pension scheme is financed exclusively from the state budget. State pensions are adjusted annually based on Consumer Price Index (CPI).

Pillar II of small occupational pensions is limited in Spain. It is an attractive system for employers, because contributions are 100% deductible, but is not necessarily searched by employees because their contributions are not deductible. In the case of defined benefit schemes (BD), the employer bears full financial responsibility of establishing and running the system. In the case of defined contribution schemes (DC) (more common), the responsibility is shared between the employer and employee. The private pension system, in its entirety (occupational and individual) is only 8% of PIN far below the OECD average of 60%. Thus, the value of this pillar is now reduced, displaying a small attractiveness to potential Spanish contributors.

### Funding

The annual average pension in Spain in 2010 was 10.923 Euros. There is a minimum pension for people older than 65 years. Its value is 530.63 Euros per month, which is equivalent to 32% of the median Spanish income. The minimum pension increases to 661.34 Euros per month for those who have a dependent spouse. The maximum public pension in Spain, in 2008 was of 2393.87 Euros per month<sup>171</sup>.

### Sustainability and efficiency

Analyzing the adjustment needs of the current balance in order to meet budgetary constraints, Spain shows a sustainability gap of 11.8 % of GDP, above the EU average of 6.5% of GDP in 2009<sup>172</sup>. Thus, Spain is shown to be problematic in terms of long-term sustainability and with an

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<sup>169</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>170</sup> European Commission (2010) Joint Report on Pensions

<sup>171</sup> OECD (2011) Pensions at a glance 2011: Retirement-income systems in OECD and G20 countries

<sup>172</sup> European Commission, Economic and Financial Affairs (2009) EU Sustainability Report



increased risk in terms of stability of public finances. The adjustment required to stabilize the rate debt of 6.1 %. is almost doubling compared to the European average of 3.3% of GDP. In addition, long-terms costs of population aging are also above the EU average: 5.7% of GDP (Spain) to 3.3% of GDP (EU). Like most of EU countries, Spain is expected to increase the public pension expenditure as a share of GDP, by 6.2 percentage points in 2060 (compared to 2010). The public Spanish government debt in 2010 is 60.1% of GDP, below the previous estimations of 62% and below the EU average of 80%<sup>173</sup>.

The poverty limit in Spain is estimated at 8387 PPS in 2009, according to Eurostat, scoring an encouraging increasing from 5162 PPS in 1999. However, this threshold was reached in 2009 by 19.5% of Spain's population, an approximately constant rate over the last decade. In addition, as a measure of improving the adequacy of pension system in Spain, the poverty limit was reached by 19.3% of pensioners, in 2007, decreasing from 24.4 % in 2004<sup>174</sup>.

The benefit rate of the public pension system in 2007 was 58, and it is estimated that by 2060, it will seriously fall by 10%, reaching 52. The decrease of the benefit rate of public pension system is natural since it is doubled by an increase of the benefit rate resulting from the private pension system. Unfortunately there is no official record, at present, to confirm this.

## RECENT REFORMS

At the end of January 2010, the Spanish government presented a reform program for pension system. The basis for this decision, as in other Mediterranean countries case, weighed much more the endogenous problems than the incidence of financial crisis. Thus, some of the most acute problems of the Spanish pension system are the extended cover of a public pension system and a lack of private pension market, increased life expectancy (second largest in the world), coupled with the possibility of retirement based on few years of contributions, or the fast pace of growth in the number of pensioners, which is expected to double until 2040. This reform program is supported by cross-party parliamentary committee responsible for the pensions, established by Toledo Pact, in 1995. The reform program includes: extension of activity, by discouraging early retirement and raising the retirement age gradually from 65 to 67 years, closer correlation of pension benefits with the contributions made during life or encouraging the development of supplementary pension sector. These expected measures were not materialized yet in a legislative form.



## SWEDEN (1995)

### GENERAL PRESENTATION

Sweden belongs to the Northern social model, whose objective in the matter of welfare state is represented by reducing gaps between various social groups, assuring to its citizens protection, evolution opportunities and a reasonable economic standard. Eliminating social exclusion is an important goal of the Swedish government, mainly delegated to the Ministry of Health and Social Affairs.

With a GDP/inhabitant of USD 36,712 and a total population of 9.3 million inhabitants<sup>175</sup>, Sweden registers a total demographic dependency rate<sup>176</sup> of 53.1% in 2010<sup>177</sup>, an economic

<sup>173</sup> OECD (2011) Pensions at a glance 2011: Retirement-income systems in OECD and G20 countries

<sup>174</sup> Source: Eurostat (last updated on November 8, 2011)

<sup>175</sup> According to International Social Security Association, <http://www.issa.int/Observatory/Country-Profiles/Regions/Europe/Sweden>

<sup>176</sup> A measure showing the number of dependents (aged 0-14 and over the age of 65) to the total population (aged 15-64). It is calculated by: =Number of Dependents/Population (ages 15-64)x100%.

<sup>177</sup> Source: Eurostat, EUROPOP 2008.



dependency rate of 34% in 2007, estimated at 40% for 2020<sup>178</sup>, and an old age dependency ratio of 27.8% in 2010<sup>179</sup>. The median age in Sweden is 42.0 years<sup>180</sup>.

## PENSION SYSTEM

### General structure and financing

The old Swedish pension system combined both Beveridge features (in the form of a tax-financed flat-rate basic pension – *folkpension* and pension supplements) and Bismark features (the earnings-related contribution and defined benefits) - *allmän tilläggspension* – ATP. This system guaranteed a very encompassing and generous protection at old age.

In the 1980s the scheme met serious difficulties, necessitating a ten years reform which radically changed pension system of OECD countries. The new system is based on many pillars, the first combining a minimum flat-rate guaranteed pension (*garantipension*), A Notional Defined Contribution earnings-related pension (NDC), the income pension (*inkomstpension*) and a private fully-funded premium pension (*premiereservsystem*). These schemes are topped up by quasi-mandatory occupational pensions.

The reform was possible only because of the existence of National Pension Funds (AP – Fonden), which invested the ATP surpluses during the years, thereby reaching the capacity to cover 5 consecutive years of benefits. Three important objectives were achieved by the reform:

- Stabilizing the long-term financial perspectives of the public pension system;
- Introducing wage-related indexation, thereby stopping the erosion of ATP benefit ceilings;
- Eliminating the perverse redistribution of the best-year formula by calculating the assessment base over an individual's life-time.

#### *The first pillar (state and mandatory)*

This pillar includes three tiers.

*The zero tier* – the guarantee pension, replaced in 2003 the old basic pension and associated supplements. It is a universal pension, tax-financed, flat-rate and indexed to prices. Eligibility is based on residence (40 years) and age (over 65 years). It is conceived to assure both a source of income for people who do not qualify for public pension and as a supplement for low-income pensioners. In 2009, the guarantee pension amounted to SEK 6,777 per month for a married person and SEK 7,597 for a single person. The income ceilings were SEK 10,959 per month for a single person (approx. a quarter of gross average earnings) and SEK 9,713 per month for a married person. For those who do not comply with this condition (immigrants usually) there is a special maintenance allowance. Low-income pensioners are also eligible for the pensioners housing supplement (BTP) which covers 93% of housing costs – up to the limit of SEK 5,000 per month for a single person.

*The first tier* is represented by the income pension (ATP), a very sophisticated NDC system introduced in 1998 for those born after 1954 (a mixed system is applied for those born between 1938 and 1953) and which takes into consideration lifetime income. It is financed by a total contribution rate of 18.5% of the pensionable pay, *i.e.* the gross wage minus the 7% employee contribution for pension insurance. Out of these, 16% go to ATP and 2.5% to the funded premium pension. Hence the effective contribution rate on gross wages is 17.21% in total,

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<sup>178</sup> Source: Commission Services, EPC (2009 Ageing Report).

<sup>179</sup> Source: Eurostat, EUROPOP 2008.

<sup>180</sup> Source: NationMaster.COM, <http://www.nationmaster.com/graph/>

14.88% to ATP and 2.33% to the premium pension. The state covers the contributions for inactive periods – childrearing, military service, higher education, sickness and unemployment.

The individual accounts are adjusted according to per capita wage growth – an income index (*inkomstindex*), based on modifications in pension-carrying income for wage-earners aged 16-64 years (hence the divergence with total wage growth, for example as in the situation of a declining workforce, may create fiscal imbalances).

The exit age is flexible and a person can retire whenever after 61 years old but collective agreements and employers' behaviour do not favour employment after 67 years old.

The annuity is calculated with respect to the individual age and is based on gender-neutral mortality tables (and so the redistribution to women). The rate of return associated to the annuity is 1.6% and then it is adjusted for deviations linked to wage growth.

*The second tier* is represented by the fully-funded premium pension, financed by the remaining 2.5% of the total contributions. Contributions are collected by the National Tax Board and managed by the Premium Pension Authority (PPM - *Premiépensiönsmyndigheten*). This serves as a clearing house, managing individual contributions and distributing annuities. The new members can choose between circa 800 funds. Annuities are either fixed with a minimum rate of return of 3% or variable. After death, assets cannot be inherited, being transferred to the birth cohort.

#### *The second pillar*

This pillar consists of supplementary quasi-mandatory occupational funded schemes.

These schemes are based on collective agreements and cover 90% of employees. The contribution level is usually between 2 and 5% of wages. The pension plans are either defined-contribution or defined-benefit. They are meant for white-collar workers, blue-collar workers, central government and local administrations. The schemes of the all 4 categories were transformed from defined benefits (DB) into defined contributions (DC) for the new entrants. Private sector schemes are entirely DC plans, but many white-collar workers from the private sector who are already employed will receive a pension according to a previous DB plan. The occupational pension schemes for public sector employees are DC plans up to the income ceiling in the social insurance pension system, and for income above that ceiling a combination of DB and DC plans. Contributions are exempted as long as certain conditions are met.

Some of these schemes allow early retirement from activity, at only 55 years old, but beneficiaries often claim them at 65 years old.

#### *The third pillar*

It consists of voluntary, supplementary pension schemes. The pensions are accumulated in pension funds for old age or at insurance companies. The third pillar's development is favoured by tax incentives.

### **Administrative structure**

Before the launching of the new system of individual accounts, the Swedish government initiated a 3-year information campaign addressed to potential participants. For achieving this goal, the media and the Internet were extensively used. The members received the annual account statement for the pension scheme – the “orange envelope”, together with a brochure explaining the system. This campaign was crucial to increase financial literacy and individual responsibility. Each orange envelope contains the projections regarding the first pillar benefits (both the NDC and individual accounts) if the person retires at 61, 65 and 67 years old. PPM also sends an annual information on profits and investment in the premium pension.

The public pension system is under the responsibility of Ministry of Social Security and Labour. The National Insurance Board (*Försäkringskassan*) manages the guarantee pension and the income pension. PPM administers the individual accounts and annuities in the premium pension. Private managers administer the funds. All non-insurance elements have been moved to the state budget (contributions for years outside the labour market, the guarantee, disability and survivor pensions). The National Tax Board collects contributions for income-related schemes.

### **Sustainability, efficiency and performance**

Sweden spends about 12% of GDP on pensions<sup>181</sup>. These expenditures have stabilized over the last years, being close to EU average. According to the budgetary projections of 2009 Ageing Report, public expenditures on social security pensions will remain stable in the next decades (as compared to 9.5% of GDP in 2007, it will be 9.4% in 2060). The reason of these evolutions is the fact that the demographic factors will be counterbalanced by a higher employment, more restricted pension eligibility and a significant decrease in the level of public pension benefits. The benefit ratio, which compares the average public pension benefit to an average wage, is projected to drop from 49.3% in 2007 to 30.1% in 2060. The increasing importance of the mandatory funded DC scheme (premium pension) and occupational pension will mitigate the above mentioned drop: the benefit ratio including premium and occupational pensions will change from 64% in 2007 to 46% in 2060.

The Swedish system is often considered as one of the most stable and consolidated systems of the world. The implementation of the NDC system will on average decrease replacement rates, but this will not determine anymore risks for old people, due to large coverage (including occupational pensions), extensive pension credits, means-tested benefits and very high labour participation rates.

And yet there are some challenges. The first one relates to ways to improve the existing system. The major problem is one of awareness. Information campaigns must be a constant component of an adult's life. Actually, even the financially literate Swedish people do not fully understand the basic mechanisms of the NDC system and the importance of an adequate selection of a pension fund. The second challenge concerns the would-be reformers who try to adopt the Swedish system abroad. Sweden has indeed some favourable conditions (such as broad parliamentary consensus, ten years of debate, rich investment funds and a very active labour force) that helped implementing such a radical reform. Not many countries in the world enjoy at present these advantages.

The medium income of people aged above 65 years in relation to the age group 0-64 years amounted to 75% in 2008, lower than in 2005 (80%) and lower than the EU27 average (84%). The rate of poverty risk of population aged above 65 years (16%) has increased since 2005 but it is still 3 percentage points lower than the EU average. This indicator is much higher for women (21%) as compared to men (10%). In 2008, the net and gross replacement rates (including statutory and occupational schemes) for a worker retired at 65 years after a 40 years contribution career arrived at, respectively, 65.0% and 66.0%.

The effective retirement age in Sweden (63.8 years) is well above the EU average (61.4 years).

### **CRISIS IMPACT AND PERSPECTIVES**

The financial crisis reduced the value of assets in all funded schemes. Losses in personal schemes affected pension entitlements and payment of pensions in 2009. In occupational

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<sup>181</sup> The source of data linked to the Swedish pension system is European Commission (2010), Interim EPC-SPC Joint Report on Pensions, Brussels, 31/05/2010, available at: [http://ec.europa.eu/economy\\_finance/publications/occasional\\_paper/2010/pdf/ocp71\\_country\\_profiles\\_en.pdf](http://ec.europa.eu/economy_finance/publications/occasional_paper/2010/pdf/ocp71_country_profiles_en.pdf)

schemes effects will have repercussions on future pensions as presently benefits in payment derive from DB schemes, while in the future all schemes will be DC.

The Swedish economy is largely export oriented and was thereby influenced by the external demand drop – as the financial crisis became an economic crisis. GDP decreased by 4.9% in 2009 and unemployment increased from 6.2% in 2008 to 9.2% in 2010.

Due to the prudent pre-crisis budgetary policy, the general government deficit in 2009 was relatively limited in EU perspective.

Public pensions were influenced by the adverse evolutions on the labour market which diminished incomes from contributions. Unemployment and lower pay had a negative impact on pension accruals in the income pension schemes and premium pension schemes.

As a consequence, the automatic adjustment mechanism required pension reductions; and to mitigate the magnitude of these adjustments required by the significant loss in assets value in 2008, a new legislation was adopted. This aimed at smoothing the market volatility by calculating the effect on the basis of a moving three year average instead of any single year. Sweden stands out as the only EU country where the automatic self-balancing mechanisms introduced could function in accordance with the principles. Pension reduction was also somehow compensated by a decrease of progressive income taxes for retirees and so the average net effect for them amounted to a reduction of about 1%<sup>182</sup>.

For 2011 another reduction by 4.3% is planned, but the Parliament can decide to cushion the impact by a further decrease in the tax level for pensioners' income. As regards the unemployment, one should not neglect the fact that unemployment benefit is included in pension calculation. But if young unemployed are considered and if the long-term unemployment is increasing, the pension adequacy for these groups will be affected, taking into account that its calculation is based on whole life contributions.

Ageing phenomenon will be less pronounced than EU27 average. The old age dependency ration is projected to increase from 27% in 2008 (EU27: 25%) to 47% in 2060 (EU27: 53%).

The net theoretical replacement rate (NRR) for a hypothetical worker (male) retiring at 65 years old after 40 years career will considerably decline (according to projections of 2009 Ageing Report) from 65.0% in 2008 to 48.2% in 2048. These drops reflect that young people, due to increases in longevity and thus more years spent in pension, would benefit a lower replacement rate than older people.



## **UNITED KINGDOM (1973)**

### **GENERAL PRESENTATION**

The population is about 60.6 million persons of which 30 million are included in the labour force, the employment rate being among the highest, 94.8%. The population aged 65 years and over represents 16%, and the economic dependence rate of the elderly is 32.4%.<sup>183</sup>

The Anglo-Saxon social model is the most austere within the EU, with fewer social services, low intervention of the government in the labour market, weak social partners. The model is more developed in Ireland, where it produced spectacular outcomes before the crisis and in some new member states of the EU, such as Slovenia, Latvia, Lithuania, Estonia, Romania and Bulgaria,

<sup>182</sup> See Settergren, Ole (2010) "Impact of the Financial and Economic Crisis on the Swedish Pension System", *Social Security Observer*, no. 10 (September), [http://news.issa.int/eng/newsletter/newsletter\\_repository/observer\\_en/social\\_security\\_observer\\_10/\(article\)/4547](http://news.issa.int/eng/newsletter/newsletter_repository/observer_en/social_security_observer_10/(article)/4547), last accessed June 15, 2011.

<sup>183</sup> <http://www.oecd.org/dataoecd/0/0/42566007.pdf>

but the results in these countries are different as impact and effectiveness in the field of pensions and of other types of old-age insurances<sup>184</sup> as well.

The standard retirement age is 65 years for men and 60 for women. The life expectancy is almost 78 years of age for men and 82 years for women.

## **THE PENSION SYSTEM<sup>185</sup>**

The structure of the pension system<sup>186</sup> includes:

- Pillar I – the fixed minimum pension and the social insurance pension – state pension schemes (state second pension schemes, for occupational pensions, pensions for public officers paid by the state budget; pensions for disabilities and survivor pensions organized separately);
- Pillar II – a large number of funds supplying occupational pensions to which about 60% of the employees contribute;
- Pillar III – introduced in 1998 for those who have not access to occupational pensions; introduced in 2001 for those who lack access to individual company pensions.

The pension system was under constant reform since the mid-seventies promoting a public pension system that ensured a safety net, completed by individual pensions financed by the employer. Yet, this system ensured low incomes, uncertain for many contributors, which made the reforms after 2005 focus on state involvement in ensuring old-age incomes.

The potential pension, as percentage of the last wage, reaches 80% of the DB-type pension schemes (under 20% of the public ones and the rest from private, occupational and voluntary pensions) and little over 60% from the DC-type pension scheme (about 30% from the public system and the rest from private funds).

### **Public pillar**

Persons aged 16 to 65 years (60 for women) with monthly earnings of 97-844 pounds can participate (April 2010) and the self-employed with yearly earnings of at least 5075 pounds (they don't have access to the state second pension). The mandatory contribution is 11% of the weekly earnings and for the voluntary one 12.05 sterling pounds per week, the period of contribution for the integral pension being of 30 years.

The basic pension is fixed and does not exceed 97.65 pounds per week (April 2010).

The state second pension (SSP) is determined depending on the indexed average earnings.

A pension for non-contributors aged over 80 years' amounts to less than 60% of the basic state pension.

In general, the public pension ensures low incomes.

By means of the Speeding Review 2010 reform measures were taken to reform the public pillar providing for: gradual increase in the contribution to the basic state pension at a fixed contribution level; gradual increase in the contribution to the public sector pension, in particular for those with higher incomes.

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<sup>184</sup> <http://hadjinikolov.pro/wp-content/uploads/2010/02/Social-models-and-social-dialog-in-the-EU.pdf>

<sup>185</sup> Current legislation: 1992 (Social Security Contributions and Benefits Act, Chapter 4 of 13 February), 1995 (Pensions Act, Chapter 26 of 19 July), 1999 (Welfare Reform and Pensions Act, Chapter 30), 2000 (Child Support, Pensions, and Social Security, Chapter 19), 2002 (State Pension Credit Act, Chapter 16), 2004 (Pensions Act, Chapter 35), and 2007 (Pensions Act, Chapter 22); <http://www.issa.int/Observatory/Country-Profiles/Regions/Europe/United-Kingdom/Scheme-Description>

<sup>186</sup> [http://ec.europa.eu/economy\\_finance/publications/publication14992\\_en.pdf](http://ec.europa.eu/economy_finance/publications/publication14992_en.pdf)

The private pension system includes occupational pensions and individual pensions, both voluntary. Occupational pensions are of two categories: a) regulated by the Pension Law of 1995 (DB), and occupational pension schemes for governmental employees (DC). Individual pensions are individual pension plans or stakeholders'.

Private pensions are organized into about 87 thousand funds, the investors of which represent around 86% of the GDP (2006), and the contributions and, total contributions respectively, represent each about 3% of the GDP.

The occupational pensions are popular because the yield of the public pension is very low. Traditionally, funds are DB-type, yet in the last years also DC systems are developed, which gradually replace the previous DB schemes. A large part of the DB funds are closed, allowing the new comers on labour market to contribute to DC-type funds.

Occupational pension plans are constituted by the employer and operate for 47.1% of the employed population (2006).

For DC pensions the contribution is 6% for the employer and 5% for the employee, which is also fiscally deductible. The voluntary contributors pay a fixed sum of 12.05 pounds per week.

Individual pensions, called "stakeholder pensions", are managed by life insurance companies or by banks. The employers can offer such forms of supplementary insurance as group plans. Contributions may be made by persons up to the age of 75 years, including employees, temporary workers, self-employed, but also persons who do not work.

Employers who do not provide an occupational pension plan or an individual plan to contribute with at least 3% of the wage fund may provide a "stakeholder pension". The contributions are not limited by a ceiling and may be paid weekly, monthly or in a onetime payment.

Benefits can be paid as lump sum of up to 25% and the rest as annuities, as of the age of 55 years.

The individual pensions are similar to the stakeholder plans but provide more options for investment, and there are models of investment during the entire active life depending on age, with safer investment before retirement (up to 5 years before).

### **Private pensions**

In 2004, a new authority was established by the Pension Act for approving and monitoring pension funds, and the registry for occupational and individual pension schemes was instituted; the pension protection fund was constituted for compensating the members of the pension schemes when the sponsor employer becomes insolvent.

In 2007, new changes in the pension law provide for institutional development by setting up the "Personal Accounts Delivery Authority", increasing the level of payments from the Financial Assistance Scheme. In 2008 increased responsibilities are instituted for the employer in constituting the individual mandatory pension insurance funds or an occupational scheme; the role of Personal Accounts Delivery Authority increases.

The funding of DB occupational pensions is done by employees' contributions or without their contribution, depending on the financing plan of the employer. The employer can pay a defined amount or as much as required in accordance with the provisions of the pension scheme. In case of DC schemes, the employer contributes by a fixed percentage of the employees' earnings, in accordance with the rules on defining the pension scheme.

The employees may additionally contribute to occupational pensions or other individual pension plans; there is no contribution limit. For any contribution over a certain amount (245 thousand pounds in the fiscal year 2009/10) is perceived a tax of 40% is imposed.

The participation in pension plans is not limited. For 2012, it is provided that the participation in individual savings plans shall be at least 4% of the income, under certain conditions.

## **RECENT REFORMS**

The Conservative Reform (initiated by Thatcher and continued by John Major) was meant to expand private pension funds as a substitute for diminishing benefits from the public pensions. The solution was to create a contracted - out option system that would allow for developing personal DC schemes, sponsored or not by employers. The outcomes were poor, because benefits are lower and administration costs more.

In May 2006, the White Paper of Pension Reform (drawn up by the Pension Commission) recommended an old-age protection threshold by re-indexing pensions to wages as of 2012. All workers not included in pension systems covered by the employer shall be automatically enrolled in the new system (Basic State Pension) that will be extended, implying adequate contributions.

The low replacement rate of the wage with the pension from public funds and the limits provided by voluntary DB-type pensions have triggered reform measures related to: increasing the retirement age, establishing the standard period of contribution to 30 years, reinstating the correlation between pension and average income (the initial provision was put forward as of April 2011).

An agenda of reform measures for the pension system was set out for the period 2010-2013, The Corporate Plan, which provides also for implementing the mandatory participation to the occupational pension system based on the pension plan on the job, encouraging youths<sup>187</sup> enrolment, diminishing the risk of DB-funds and gradual shifting to DC-type pension systems.

The reform of the public system is based on the provisions of “the Government’s Green Paper: A State Pension for the 21<sup>st</sup> Century” (April 2011)<sup>188</sup>. The simplification of the system is pursued along with creating financial sustainability elements.

Based on the reform initiated in 2007-08, the Pension Bill 2011 stimulates the extension of active life and an increase in the saved amounts for pension by developing pension schemes sponsored by the employer. The most important provisions of the law took into consideration:

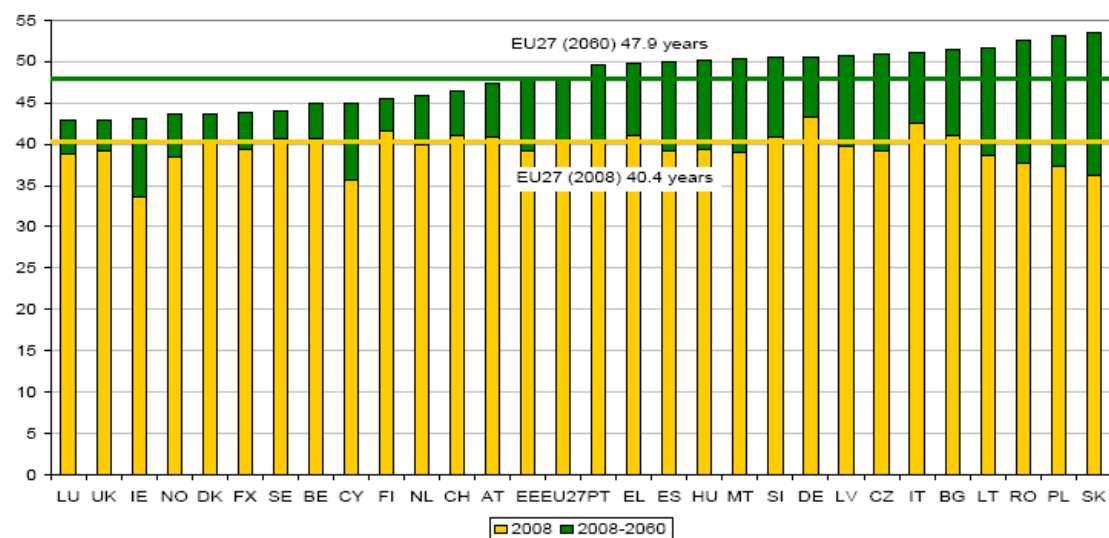
- Equalizing the retirement age to 65 years for men and women, earlier than in the initial provisions (2018 instead of 2020).
- Automatic participation of the public sector employees to pension insurance schemes sponsored by the employer, determining a minimum contribution threshold.
- Re-evaluating and indexing occupational pensions within the private sector and stimulating participation of new comers, three months after employment.

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<sup>187</sup> <http://www.thepensionsregulator.gov.uk/docs/corporate-plan-2010-2013.pdf>.

<sup>188</sup> [https://www.pensionspolicyinstitute.org.uk/uploadeddocuments/2011/20110628\\_PPI\\_NAPF\\_An\\_assessment\\_of\\_the\\_Governments\\_options\\_for\\_state\\_pension\\_reform.pdf](https://www.pensionspolicyinstitute.org.uk/uploadeddocuments/2011/20110628_PPI_NAPF_An_assessment_of_the_Governments_options_for_state_pension_reform.pdf)

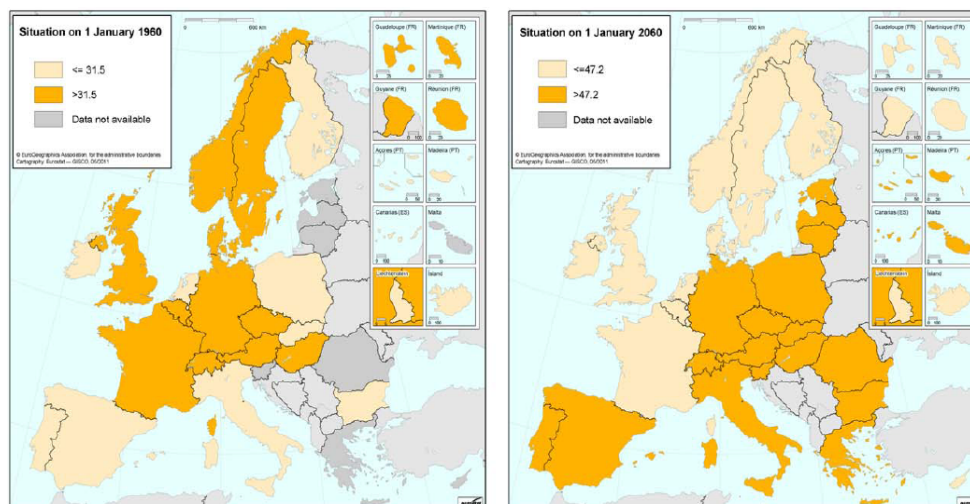
## Annex 2 The median age of total population for the EU, Norway and Switzerland



Source: Eurostat, EUROPOP2008 convergence scenario



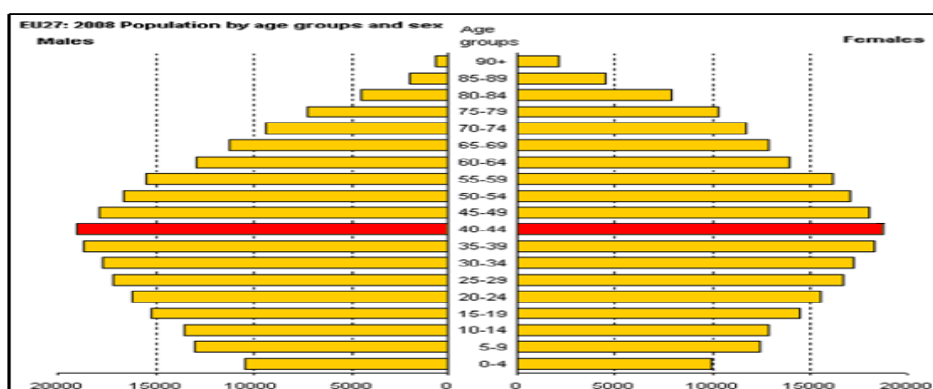
### Annex 3 Countries over or under the median age for selected years



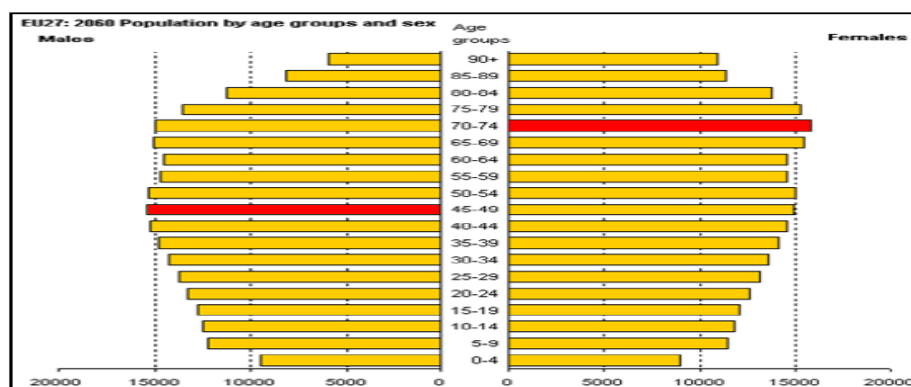
Source: Eurostat, *Statistics in focus* – 23/2011.

## Annex 4 Demographic structure of the population, EU 27, in 2008 and 2060

2008

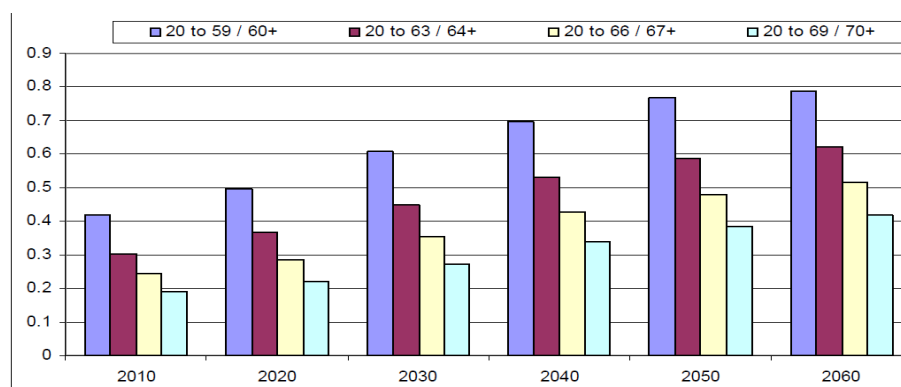


2060



Source: European Commission (2010), *Interim EPC-SPC Joint Report on Pensions*, Brussels, 31/05/2010.

## Annex 5 Old age dependency ratios in the EU with 4 exit scenarios, 2010-2060

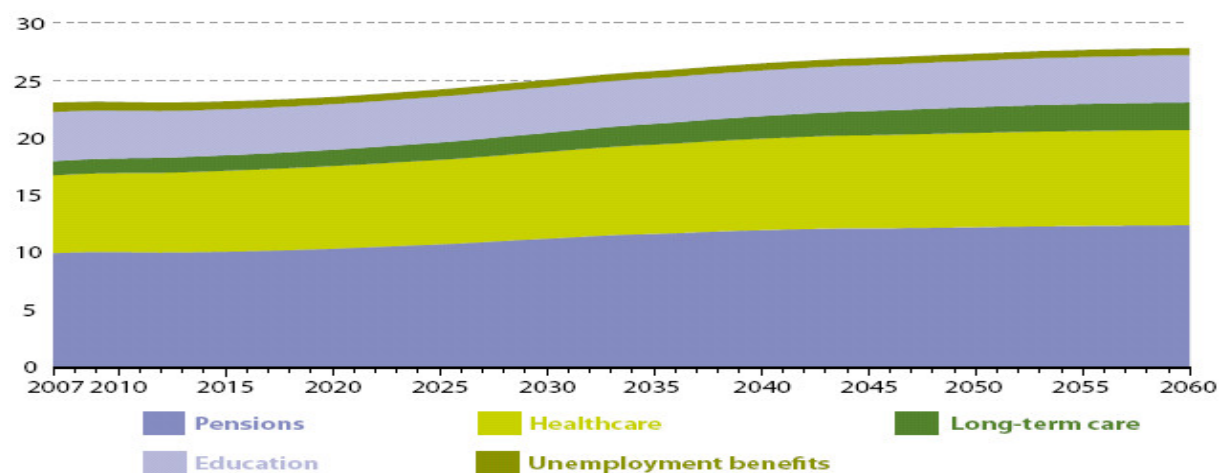


Source: Eurostat, Population projections, 2008 data

## Annex 6 List of countries included in the analysis

Austria	Germany (including former GDR from 1991)	Poland
Belgium	Greece	Portugal
Bulgaria	Hungary	Romania
Croatia	Iceland	Slovakia
Cyprus	Ireland	Slovenia
Czech Republic	Italy	Spain
Denmark	Latvia	Sweden
Estonia	Lithuania	Switzerland
EU 15	Luxembourg	Turkey
EU 27	Malta	United Kingdom
Finland	Netherlands	
France	Norway	

## Annex 7 Projected evolution of EU-27 age-related public spending



Source: EUROPOP2010

## Annex 8 Equations of the VAR system where the estimated coefficients have been introduced

$$\begin{aligned}
 \text{ARR} = & 0.700195850941 * \text{ARR}(-1) + 0.134966600621 * \text{ARR}(-2) - \\
 & 0.0205995065933 * \text{DEPEND}(-1) + 0.0172880440588 * \text{DEPEND}(-2) + \\
 & 0.00844526170534 * \text{EMPLOLD}(-1) - 0.00544113971254 * \text{EMPLOLD}(-2) - \\
 & 0.0296935200522 * \text{EXPENDOLD}(-1) + 0.0210065892984 * \text{EXPENDOLD}(-2) + \\
 & 0.0672913793136 * \text{LIFEFEM}(-1) - 0.0509194516382 * \text{LIFEFEM}(-2) - \\
 & 0.0654293202455 * \text{LIFEMEN}(-1) + 0.0634966775212 * \text{LIFEMEN}(-2) - \\
 & 0.0043953445012 * \text{RISKPOV}(-1) + 0.00275525212781 * \text{RISKPOV}(-2) - \\
 & 0.0245840704935 * \text{EXIT}(-1) + 0.00689553150182 * \text{EXIT}(-2) + 0.833845939612
 \end{aligned}$$

$$\begin{aligned}
 \text{DEPEND} = & 0.412747188162 * \text{ARR}(-1) - 0.780240852377 * \text{ARR}(-2) + \\
 & 1.19065553569 * \text{DEPEND}(-1) - 0.18180216178 * \text{DEPEND}(-2) + \\
 & 0.0213261873557 * \text{EMPLOLD}(-1) - 0.0322573087331 * \text{EMPLOLD}(-2) - \\
 & 0.576074725958 * \text{EXPENDOLD}(-1) + 0.675126050327 * \text{EXPENDOLD}(-2) + \\
 & 0.0762980045276 * \text{LIFEFEM}(-1) - 0.101016444548 * \text{LIFEFEM}(-2) - \\
 & 0.214853385417 * \text{LIFEMEN}(-1) + 0.193050454536 * \text{LIFEMEN}(-2) + \\
 & 0.0273197638507 * \text{RISKPOV}(-1) - 0.0383836716125 * \text{RISKPOV}(-2) - 5.10449126373e- \\
 & 05 * \text{EXIT}(-1) + 0.0044941888265 * \text{EXIT}(-2) + 1.33610329339
 \end{aligned}$$

$$\begin{aligned}
 \text{EMPLOLD} = & - 3.47753763362 * \text{ARR}(-1) + 5.64944448042 * \text{ARR}(-2) + \\
 & 0.53737189315 * \text{DEPEND}(-1) - 0.650198072842 * \text{DEPEND}(-2) + 1.13110966994 * \text{EMPLOLD}(- \\
 & 1) - 0.191559378303 * \text{EMPLOLD}(-2) - 2.92216230399 * \text{EXPENDOLD}(-1) + \\
 & 2.72990433471 * \text{EXPENDOLD}(-2) + 0.00485785418323 * \text{LIFEFEM}(-1) + \\
 & 0.2837112674 * \text{LIFEFEM}(-2) + 0.306052425839 * \text{LIFEMEN}(-1) - \\
 & 0.720052229662 * \text{LIFEMEN}(-2) + 0.0736785069703 * \text{RISKPOV}(-1) - \\
 & 0.113335204904 * \text{RISKPOV}(-2) + 0.327193642917 * \text{EXIT}(-1) + 0.212786820996 * \text{EXIT}(-2) - \\
 & 26.257150923
 \end{aligned}$$

$$\begin{aligned}
 \text{EXPENDOLD} = & - 0.422506007457 * \text{ARR}(-1) + 0.65574580878 * \text{ARR}(-2) + \\
 & 0.0544067354545 * \text{DEPEND}(-1) - 0.0634686332721 * \text{DEPEND}(-2) - \\
 & 0.0193998780595 * \text{EMPLOLD}(-1) + 0.0192813537266 * \text{EMPLOLD}(-2) + \\
 & 0.862230384694 * \text{EXPENDOLD}(-1) + 0.0891711749908 * \text{EXPENDOLD}(-2) - \\
 & 0.0902497595169 * \text{LIFEFEM}(-1) + 0.126714215753 * \text{LIFEFEM}(-2) + \\
 & 0.0216984484934 * \text{LIFEMEN}(-1) - 0.0670290366539 * \text{LIFEMEN}(-2) - \\
 & 0.00987827442814 * \text{RISKPOV}(-1) + 0.00549459948173 * \text{RISKPOV}(-2) - \\
 & 0.0317709407893 * \text{EXIT}(-1) + 0.0447750067397 * \text{EXIT}(-2) - 0.533766899585
 \end{aligned}$$

$$\begin{aligned}
 \text{LIFEFEM} = & 0.572952745799 * \text{ARR}(-1) - 0.106932053143 * \text{ARR}(-2) + \\
 & 0.0685321364265 * \text{DEPEND}(-1) - 0.093993672726 * \text{DEPEND}(-2) - \\
 & 0.015448250402 * \text{EMPLOLD}(-1) + 0.00645695843339 * \text{EMPLOLD}(-2) - \\
 & 0.40603414897 * \text{EXPENDOLD}(-1) + 0.404957399034 * \text{EXPENDOLD}(-2) + \\
 & 0.658029107802 * \text{LIFEFEM}(-1) + 0.371504313159 * \text{LIFEFEM}(-2) - \\
 & 0.288405528413 * \text{LIFEMEN}(-1) + 0.209143680545 * \text{LIFEMEN}(-2) -
 \end{aligned}$$

$$0.0200380298653 * \text{RISKPOV}(-1) + 0.0229843367608 * \text{RISKPOV}(-2) - 0.0127013582027 * \text{EXIT}(-1) + 0.000954373468138 * \text{EXIT}(-2) + 2.54450559904$$

$$\begin{aligned} \text{LIFEMEN} = & 0.781226736647 * \text{ARR}(-1) - 0.611007950493 * \text{ARR}(-2) - \\ & 0.0853253631261 * \text{DEPEND}(-1) + 0.0705450955871 * \text{DEPEND}(-2) - \\ & 0.0537028224952 * \text{EMPLOLD}(-1) + 0.0354436610702 * \text{EMPLOLD}(-2) - \\ & 0.28849578238 * \text{EXPENDOLD}(-1) + 0.39822478273 * \text{EXPENDOLD}(-2) + \\ & 0.215433980399 * \text{LIFEFEM}(-1) - 0.22690382068 * \text{LIFEFEM}(-2) + \\ & 0.235786619789 * \text{LIFEMEN}(-1) + 0.733820293724 * \text{LIFEMEN}(-2) + \\ & 0.0115853699631 * \text{RISKPOV}(-1) - 0.0121003070564 * \text{RISKPOV}(-2) + \\ & 0.0571138456379 * \text{EXIT}(-1) - 0.0179153157066 * \text{EXIT}(-2) - 0.192790370134 \end{aligned}$$

$$\begin{aligned} \text{RISKPOV} = & - 14.8964567471 * \text{ARR}(-1) + 9.97292960691 * \text{ARR}(-2) + \\ & 0.0191805830091 * \text{DEPEND}(-1) + 0.517481720828 * \text{DEPEND}(-2) - \\ & 0.142360754045 * \text{EMPLOLD}(-1) + 0.115290647546 * \text{EMPLOLD}(-2) - \\ & 12.9477446832 * \text{EXPENDOLD}(-1) + 13.4278610325 * \text{EXPENDOLD}(-2) - \\ & 0.688446965644 * \text{LIFEFEM}(-1) + 2.00443882807 * \text{LIFEFEM}(-2) - 1.74392550165 * \text{LIFEMEN}(-1) \\ & - 1.85158945445 * \text{LIFEMEN}(-2) + 0.574890123454 * \text{RISKPOV}(-1) + \\ & 0.36780426935 * \text{RISKPOV}(-2) + 1.73433540805 * \text{EXIT}(-1) - 1.32876367159 * \text{EXIT}(-2) - \\ & 0.00239640610701 \end{aligned}$$

$$\begin{aligned} \text{EXIT} = & - 4.13791865073 * \text{ARR}(-1) + 3.90188584327 * \text{ARR}(-2) - 0.161171243478 * \text{DEPEND}(-1) \\ & + 0.111286331106 * \text{DEPEND}(-2) - 0.102705866027 * \text{EMPLOLD}(-1) + \\ & 0.0793476363409 * \text{EMPLOLD}(-2) - 3.86422313786 * \text{EXPENDOLD}(-1) + \\ & 3.75141846835 * \text{EXPENDOLD}(-2) - 0.359053451447 * \text{LIFEFEM}(-1) + \\ & 0.629115096375 * \text{LIFEFEM}(-2) + 0.787631509159 * \text{LIFEMEN}(-1) - \\ & 1.12018794645 * \text{LIFEMEN}(-2) - 0.04511118443 * \text{RISKPOV}(-1) + \\ & 0.0156141454455 * \text{RISKPOV}(-2) + 0.856518499315 * \text{EXIT}(-1) + 0.259044119764 * \text{EXIT}(-2) - \\ & 3.83040346369 \end{aligned}$$

## Annex 9 Private managed pension funds

Private managed pension funds at the end of the random distribution process: December 2007

No	Managing Company	Pension fund	Market share (December 2007)
1	ING FOND DE PENSII (ING Pensions Insurance)	ING	33,21%
2	ALLIANZ-ȚIRIAC PENSII PRIVATE (ALLIANZ-ȚIRIAC PRIVATE PENSIONS)	AZT VIITORUL TĂU (AZT YOUR FUTURE)	25,64%
3	GENERALI FOND DE PENSII (GENERALI PENSION FUND)	ARIPI (WINGS)	9,37%
4	AVIVA SAFPP	PENSIA VIVA (VIVA PENSION)	7,36%
5	INTERAMERICAN SAFPP	INTERAMERICAN	6,35%
6	AIG FOND DE PENSII (AIG PENSION FUND)	AIG	6,28%
7	BT AEGON FOND DE PENSII (BT AEGON PENSION FUND)	VITAL	3,16%
8	BCR ADMINISTRARE FOND DE PENSII (BCR Private Pension Fund)	BCR	2,98%
9	BRD FOND DE PENSII (BRD PENSION FUND)	BRD	2,38%
10	OMNIASIG PENSII SAFPAP (OMNIASIG PENSIONS SAFPAP)	OMNIFORTE	1,52%
11	BANCPOST FOND DE PENSII (BANCPOST PENSION FUND)	BANCPOST	0,56%
12	OTP FOND DE PENSII (OPT PENSION FUND)	OTP	0,49%
13	PRIMA PENSIE FOND DE PENSII (PRIMA PENSIE PENSION FUND)	PRIMA PENSIE	0,41%
14	KD FOND DE PENSII (KD PENSION FUND)	KD	0,17%
15	MKB ROMEXTERRA FOND DE PENSII (MKB ROMEXTERRA PENSION FUND)	FIDUCIA	0,05%
16	ZEPTER FOND DE PENSII (ZEPTER PENSION FUND)	ZEPTER	0,04%
17	AG2R FOND DE PENSII (AG2R PENSION FUND)	ALFA	0,03%
18	MARFIN-FOND DE PENSII (MARFIN PENSION FUND)	MARFIN	0,00%

Source: compiled by the authors based on CSSPP data



**2<sup>nd</sup> Pillar mandatory private pension funds ranking: June 2011**

No	Pension fund	Market share (June 2011)
1	ING	31.77%
2	AZT VIITORUL TAU (AZT YOUR FUTURE)	24.78%
3	ARIPI (WINGS)	9.50%
4	PENSIA VIVA (VIVA PENSION)	7.27%
5	EUREKO	7.08%
6	BCR	6.66%
7	ALICO (former AIG)	6.48%
8	VITAL	3.48%
9	BRD	2.98%

*Source: compiled by the authors based on CSSPP data*

**3<sup>rd</sup> Pillar mandatory private pension funds ranking: June 2011**

No	Private managed fund	Market share (June 2011)
1	ING OPTIM	29.00%
2	BCR PRUDENT	27.34%
3	AZT MODERATO	12.19%
4	ING ACTIV	10.46%
5	AZT VIVACE	8.01%
6	PENSIA MEA	4.17%
7	RAIFFEISEN ACUMULARE	3.00%
8	EUREKO CONFORT	1.50%
9	STABIL	1.50%
10	BRD PRIMO	1.39%
11	BRD MEDIO	1.18%
12	CONCORDIA MODERAT	0.13%
13	OTP STRATEG	0.12%

*Source: compiled by the authors based on CSSPP data*

## **Annex 10 Risk allocations in defined contribution (DC) schemes or defined benefit (DB) schemes**

<b>Risk type</b>	<b>Risk bearer in DB schemes</b>	<b>Risk bearer in DC schemes</b>
Investment Risk	Employer, indirectly	Participant
Implicit Risk	Participant	No risk for the participant
Longevity Risk	Employer, indirectly	Participant
Income Variance Risk	Participant	Low Risk
Career Variance Risk	Participant	Low Risk: portability (transfer option)

*Source: CSSPP (2009) Pensii private în Europa Centrală și de Est (Private pensions in Central and Eastern Europe)*